Asean International Journal of Business

Vol.4 No.2, 2025
e-ISSN: 2809-6673
pp. 107-119

Internal Control Systems And Cash Flow Management In Commercial Banks In Rwanda

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DOI: https://doi.org/10.54099/aijb.v4i2.1181

ARTICLE INFO

Research Paper

Article history:
Received: 30 December 2024
Revised: 16 January 2025
Accepted: 17 February 2025

Keywords: Internal Control Systems, Cash Flow Management, Commercial Banks, Rwanda

ABSTRACT

The study aimed to explore whether internal control practices, such as the control environment, control activities, and risk assessment, can address cash flow management challenges at the Bank of Kigali branches in Gasabo District. A cross-sectional survey design was utilized to collect data from Bank of Kigali branches in Gasabo District and Descriptive statistics was used to present the characteristics of the bank's internal control systems as well as cash flow management indicators. A correlational research methodology was employed to describe and measure the degree of association between internal control systems and cash flow management practices. The analysis of the correlation between cash flow management practices and control activities reveals a robust and statistically significant positive relationship. The significant positive impact of risk assessment, as indicated by its unstandardized coefficient of 0.597 and standardized coefficient (Beta) of 0.491, underscores the importance of robust risk assessment procedures. Keywords: Internal Control Systems, Cash Flow Management, Commercial Banks, Rwanda

1. INTRODUCTION

Internal controls also refer to the policies, procedures, and processes put in place by the bank to safeguard assets, ensure accuracy and reliability of financial reporting, promote operational efficiency, and encourage adherence to applicable laws and regulations while Cash flow management refers to how the bank oversees its short-term liquidity needs and positions. It involves monitoring cash inflows and outflows, preparing cash budgets and forecasts, efficiently managing cash surpluses and deficits, and implementing credit and collection policies. In recent years, banks have employed advanced techniques such as funding gap analyses, contingency funding plans, and cash flow at-risk modeling, especially during uncertain conditions like the COVID-19 pandemic (Ishimwe, 2020; Mpore, 2022). Access to granular debit/credit card usage data, mobile money records, and real-time gross settlement capabilities will further optimize cash position monitoring and decision-making for sustainable long-term growth (Febrina & Fitriana, 2022; Guci et al., 2022; Iskamto et al., 2019).

Internal controls, including the control environment, control activities, and risk assessment, play a crucial role in effective cash flow management practices. Cost management, accounts receivables, and inventory management are essential for maintaining organizational liquidity and achieving financial performance. Properly implemented internal control systems improve the reporting process, ensure reliability, and support the accountability of an organization's management (Kaplan, 2008; Cunningham, 2004). Reliable cash flow information preparation is a key management responsibility, requiring internal controls that adapt to changing risks and involve all levels of the institution to provide reasonable assurance regarding operational, financial reporting, and regulatory compliance objectives. Regular monitoring of internal control's effectiveness ensures resource allocation according to priorities and that public expenditure achieves value for money (Treba, 2003).

Handling accounts receivables, particularly loans and advances to customers, was a significant challenge for the Bank of Kigali. As per the 2022 annual report, the Bank of Kigali faced increased non-performing loans (NPLs) during the pandemic, which affected cash inflows. The rise in NPLs from 6.8% in 2019 to 8.7% in 2020 is indicative of the difficulties the bank had in collecting outstanding debts, severely impacting its cash flow (BK Group Plc, 2020; 2022). Delays in collecting receivables were a significant issue for the Bank of Kigali. Extending credit without stringent collection policies led to substantial amounts of overdue receivables. These delays in accounts receivable collections directly impacted the bank's cash flow. The 2020 EFG Hermes report and subsequent 2021 BK Capital report pointed out that slow collection processes led to cash flow gaps, making it challenging for the bank to maintain liquidity and meet short-term financial commitments. During the COVID-19 pandemic, many customers defaulted or delayed payments, severely impacting the bank's cash inflows. This situation was detailed in the Bank of Kigali's 2020 financial statements, where a significant increase in non-performing loans (NPLs) was recorded. Provisions for Loan Losses significantly increased, reflecting higher expected credit losses. The financial difficulties faced by the Bank of Kigali highlight the critical importance of effective cash flow management. The challenges in cost management, liquidity (inventory) management, and accounts receivables during the pandemic underscore the need for more resilient and flexible financial strategies to handle economic shocks (Abidah et al., 2024; Agaba & Christine, 2023; Alfina & Wiwik, 2024).

At the Bank of Kigali, concerning trends in cash flow management have been observed: Overdue accounts receivable increased by 15% over the past year (Bank of Kigali Annual Financial Report, 2023). Inventory management inefficiencies led to a 10% rise in inventory holding costs (Bank of Kigali Annual Financial Report, 2023). Cost management practices saw expenses increase by 8%, affecting overall profitability. Operational expenses and investments in technology and infrastructure maintenance rose by 5% (BK Report, 2020). These inefficiencies have caused a 12% decline in the bank's cash flow over the past year, impacting its liquidity and financial stability. The loan portfolio growth rate declined from 6% to 2% (BNR, 2022). A survey by the National Bank of Rwanda (2022) found that 60% of Rwandan commercial banks, including the Bank of Kigali, cited inadequate internal control mechanisms as a primary factor contributing to cash flow challenges. Despite efforts to address these challenges through modernization, regulatory reforms, and technological advancements, issues related to cost management, inventory management, and accounts receivables persisted. The direct impact of internal control systems on cash flow management remains insufficiently understood (Bank of Kigali Annual Report, 2022; BNR, 2017, 2021).

Therefore, the study aimed to explore whether internal control practices, such as the control environment, control activities, and risk assessment, can address cash flow management challenges at the Bank of Kigali branches in Gasabo District. By evaluating the effectiveness of these internal controls, the study seeks to mitigate issues related to cost management, accounts receivables, and inventory management, ensuring optimal cash flow management. This study will explore the relationship between internal control systems (independent variable) and cash flow management practices (dependent variable) in commercial banks, focusing on the Bank of Kigali branches in Gasabo District. Through empirical analysis, the research will provide insights and practical recommendations for improving cash flow management in the banking sector. The purpose of the study was to investigate the relationship between internal control system and cash flow management practices in commercial banks of Rwanda a case of Bank of Kigali's branches in Gasabo district. The specific objectives of the study included;

1. To examine the relationship between control environment and cash flow management practices in commercial banks of Rwanda

2. To examine the effect of the control activities on cash flow management practices in commercial banks of Rwanda.

3. To determine the relationship between risk assessment and cash flow management practices in commercial banks of Rwanda.

2. REVIEW OF RELATED LITERATURE

2.1 Control of Environment and Cash Flow Management

Environmental control is the foundation of an effective internal control system. Environmental controls ascertain for employees the tone of management towards control and the control consciousness influenced by it intended to achieve the organization's goal (COSO, 2011). In the absence of an internal control environment, no design can provide meaningful assurance about the integrity of stakeholders in their organization's internal control structure. According to Mwindi (2013), the control environment includes awareness of the attitudes and actions of management and those charged with the management and control of an entity's internal control and its importance to the entity. The control environment provides the evidentiary discipline and structure to achieve the primary objectives of the internal control system. A detailed environmental control includes the integrity, ethical values and competence of its employees and provides discipline and structure for the entire control system and should reflect several factors such as the display of strong ethical values, competence to perform duties, management philosophy and work style, human resources policy including proper allocation of authority and responsibility, adequate training and guidelines for promotion and remuneration, etc. (Abiola and Oweyole, 2013).

According to the COSO (2017) and INTOSAL GOV 9100 (2004) frameworks, the guidance on internal control standards for the public sector defines the components of the control environment to include integrity and ethical values: Values of integrity and ethical behavior are established, with particular emphasis on the behavior of senior management the organization must be properly familiar with the principles and during the preparation of financial reports, these are applied as basic standards of behavior supervisory body: the supervisory body (board of directors, board of directors, supervisory body Board of Directors) is aware of them and performs the duties related to financial reporting. Organizational arrangement: The organizational set of the accounting unit supports the effective functioning of the internal control system of financial reporting. Competence in the field of financial reporting: The organization uses such persons who have the required expertise and experience in the field of financial reporting and related supervisory duties. Authority and responsibility: Managers and employees have corresponding responsibility for enabling the effective functioning of the internal control system of financial reporting. Human Resources: Resource policies and procedures are planned and implemented to enable the effective functioning of the financial reporting internal control system (Sunday *et.al*, (2019)).

2.2 Control Activities and Cash Flow Management

According to Abiola and Oweyola (2013), define control activities to include the policies and procedures maintained by the organization to ensure that management directives are carried out. Control activities, in addition to those that are part of the four components of the internal control system, are the policies and procedures that help ensure that the necessary actions are taken to address risks in achieving the entity's objectives. (Arens & Loebbecke, 2000). According to Arens & Loebbecke (2000) it categorizes into five which include; adequate segregation of duties, proper approval of transactions and activities, adequate documentation and records, physical inspection of assets and records, and independent performance reviews. These are policies, procedures and mechanisms that ensure the proper implementation of management directives (Aikins, 2011). Proper documentation of policies and procedural guidelines in these aspects helps not only to guide how control activities are to be performed, but also to provide adequate information for auditors to examine the overall adequacy of the financial performance control design (Aikins, 2011). These control activities ensure that all necessary measures should be followed in order to address risks in such a way as to achieve organizational objectives. Examples of control activities include: segregation of duties, daily deposit of cash receipts, bank account reconciliation, and restricting access to checking stock. According to Arens & Loebbecke, (2000), there are four general rules for adequate segregation of duties to prevent both fraud and error: (1) separation of escrow assets from accounting as an anti-impairment measure, (2) separation of authorization. transactions as a measure against increasing the risk of default, (3) separation of operational responsibilities from recordkeeping responsibilities to ensure that unbiased information is maintained, (4) separation of information technology from key non-information responsibilities as the level of complexity often segregated obliges. Arens & Loebbecke (1997) proper authorization is to prevent loss due to fraud by transferring assets to a fictitious customer or those who do not pay for goods, while price authorization is to ensure that goods are sold at the selling price according to organizational policy. Adequate documentation and records of physical objects on which transactions are recorded and summarized, such as invoices, receipts, orders, requisitions, subsidiary records, journals and ledgers, should then be adequately maintained (Arens & Loebbecke 2000).

Ray and Pany (2001) claim that the control activity is another of the internal controls. They recognize that controls are policies and procedures that help ensure that management directives are carried out. Control activity in the organization basically includes; performance review (comparison of actual performance with budgets, forecasts and prior period performance), information processing (necessary to check the accuracy, completeness and authorization of transactions), physical controls (necessary to ensure the security of records and other assets) and segregation of duties (where no one would should not have handled all aspects of the transaction from start to finish). They further noted that monitoring is the final component of internal control. They said the aim is to ensure that internal control continues to function as intended. This can be achieved through continuous monitoring or stand-alone assessments. Self-assessments are non-routine monitoring activities such as a periodic audit performed by internal auditors (Ray and Pany, 2001, Sunday *et.al*, (2019).

2.3 Risk Assessment and Cash Flow Management

COSO (2004) considers risk assessment to be a process used to identify and analyze risks to achieve the entity's objectives and determine the appropriate response. It includes the identification of risks from external and internal factors at the entity and activity level, risk assessment, assessment of the organization's risk appetite and development of responses to all risks in the organization. The answers have four parts to consider; transmission, tolerance, treatment and termination. An appropriate control can be preventive or detective. In a similar view, Gleiling (2005) noted that departmental level, goals and objectives should be classified into the following categories; operational, financial and compliance goals. In addition, goals and objectives should be expressed in terms that allow for meaningful performance measurement (Gleiling, 2005). In this regard, there are certain activities that are significant for all organizations, such as budgeting, purchasing goods and services, hiring and evaluating employees, and sage guarding property and equipment. A risk assessment addresses both internal and external threats, which may include the entity's employees, management philosophy and operating style; the way management allocates authority and responsibility, organizes and develops its people (Abiola & Oyewole, 2013). According to various researchers, risk assessment usually includes; financial reporting objectives, i.e. managers define the objectives of the financial reporting objectives with appropriate clarity and application of sufficient criteria to identify risks that may affect reliable financial reporting; Financial reporting risks, on the basis of which the organization identifies and analyzes risks that may affect the achievement of financial reporting objectives; determines the method of risk management; The risk of fraud, i.e. the possibility of a fundamental distortion resulting from fraud, must be taken into account when assessing risks affecting the achievement of financial reporting objectives (Janos & Jozsef, 2009& Patience, *et, al* (2022).).

3. MATERIALS AND METHODS

3.1 Research Design

A research design is the overall strategy used to integrate different components of a study in a coherent and logical way in order to ensure that the research problem is effectively addressed Agaba and Turyasingura (2022) and Byanyima *et al*, (2024). A cross-sectional survey design will be utilized to collect data from Bank of Kigali branches in Gasabo District at a single point in time and then make inferences about the population. A correlational research methodology will be employed to describe and measure the degree of association between the independent variable of internal control systems and the dependent variable of cash flow management practices.

3.2 Target Population

The target population was 158 staff members currently working at Bank of Kigali's head office in Kigali and its six branches located within Gasabo District, namely Kimironko, Kicukiro, Gikondo, Kabeza, Remera and Nyarugenge branches. This population will be selected because the study aims to analyze internal control and cash flow management practices specific to Bank of Kigali's Gasabo district operations.

3.3 Population size and Sample Size

The research used a scientific procedure in determining the sample size using the Sloven formula as below;

$$n = \frac{N}{1 + N(e)^2}$$

Where;

N= Study population;

e = Margin of error;

n = sample size.

$$n = \frac{158}{1 + 158(0.05)^2}$$

n = 113

The sample size is 113.

Table 3.1: Sample size that will be selected from respondents.

SN	Target Population	Accessible Population	Sample Size	Sampling Techniques
1	Branch managers	10	8	Purposive Sampling
2	Heads of departments	20	12	Purposive Sampling
3	Cashiers	06	05	Purposive Sampling
5	Tellers	04	03	Purposive Sampling
6	Central Bank officials	30	27	Simple random Sampling
7	Bank auditors	45	40	Simple random Sampling
8	Client managers	05	02	Simple random Sampling
9	Board of Directors	10	03	Simple random Sampling
11	Compliance officers	10	08	Purposive Sampling
13	Managing Director	10	01	Purposive Sampling
16	Board of Advisors	8	04	Purposive Sampling
	TOTAL	158	113	

Source: **Researchers Computation (2024)**

3.4 Research Instruments

A self-administered questionnaire was given out to the respondents for them to provide their responses at time of their convenience. According to (Agaba. M**.,** Mwijukye. D., *et. al*, (2019) the use of questionnaire is less expensive compared to other methods. This is because the questionnaire can be mailed to the respondents to fill in, and also be mailed back to the researcher for analysis. This method may be more efficient in terms of researcher's time and energy. Also, questionnaire is used to allow the respondents to have time to reflect on answers to avoid hasty responses (Agaba, Kaaya & Kyabarongo, 2022),

3.5 Validity of instruments

Validity tests were conducted to assess how well the instrument is representative, captures relationships between the variables for the appropriateness and measures coming to accurate conclusions to ensure this Cronbach's Alpha Coefficient will be applied to determine the internal consistence of the questionnaires. Research reliability refers to whether research methods can reproduce the same results multiple times (Turyasingura, *et al*, 2023). If the research tools can produce consistent results, then they are expected reliable and not influenced by external factors. Opinions of experts will be sought to determine reliability of the instruments

$$CVI=\frac{\text{Total number of items accepted and rated all respondents}}{Total\ number\ of\ items\ in\ the\ research\ instruments}$$

A value of 0.7 and above will be considered acceptable (Turyasingura and Chavula, 2022)

4. RESULTS

4.1. Response rate

Higher survey response rates help to ensure that survey results are representative of the target population. Table 2 below represents response rates of the targeted population.

Table 1: Showing response *rate*

Response Rate	Frequency	Percentage
Response	113	71.5
Non-Response	45	28.5
Total	**158**	**100.0**

Source: (Primary data, 2024)

Referring to table 2 above, out of the 158 questionnaires administered to the respondents, 113 respondents filled and returned the questionnaires thus creating 71.5% response rate. According to Kyabarongo *et. al*, (2024)and also Turyahebwa *et.al*, (2022), a feedback rate of amounting to 50% is enough for data analysis and concluding while equally a feedback rate of 60% is good and feedback above 70% is excellent.

4.1 Socio-demographic characteristics

4.2 Findings on the background information of the respondents

The researcher gathered demographic data from participants to explore factors such as gender, age, educational background, and tenure working with KDLG. The findings are presented through frequency distributions and percentages as showcased in the tables provided below.

Table 4.1: ***Socio-demographic characteristics of respondents***

		Frequency	Percent
GENDER	male	69	61.1
	female	44	38.9
	Total	113	100.0
AGE	20-29	8	7.1
	30-39	42	37.2
	40-49	49	43.4
	50+	14	12.4
	Total	113	100.0
EDUCATION	certificate	15	13.3
	diploma	36	31.9
	degree	57	50.4
	Masters	5	4.4
	Total	113	100.0

The Gender distribution table indicates that 69 respondents, accounting for 61.1% of the total, are male, while 44 respondents, or 38.9%, are female. This distribution shows a majority male representation in the sample. The Marital Status table reveals that 65 respondents (57.5%) are married, 39 (34.5%) are single, and 9 (8.0%) are divorced. This indicates that the majority of respondents are married, followed by singles, with a small percentage being divorced. The Age distribution table shows that the majority of respondents are between 40-49 years old (49 respondents, or 43.4%). This is followed by those aged 30-39 (42 respondents, or 37.2%), while 14 respondents (12.4%) are aged 50 and above. The smallest group consists of those aged 20-29, with only 8 respondents (7.1%).

4.3: Relationship between Control Environment and Cash Flow Management Practices

		Cash Flow Management Practices	Control Environment
Cash Flow Management Practices	Pearson Correlation	1	.274**
	Sig. (2-tailed)		.003
	N	113	113
Control Environment	Pearson Correlation	.274**	1
	Sig. (2-tailed)	.003	
	N	113	113

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

Source: (Primary data, 2024)

The Pearson correlation coefficient of 0.274 indicates a moderate positive correlation, with a significance level of 0.003, which is less than the standard alpha level of 0.01. This statistically significant correlation suggests that improvements in the Control Environment are associated with better Cash Flow Management Practices. The positive correlation of 0.274 between Cash Flow Management Practices and the Control Environment indicates that as the quality of the Control Environment improves, so do the practices related to cash flow management. Specifically, organizations with stronger control environments characterized by robust internal controls, clear policies, and effective oversight tend to exhibit more effective cash flow management practices. Organizations that invest in strengthening their control environment are likely to see improvements in their cash flow management outcomes. The control environment's impact on cash flow management practices highlights the need for a comprehensive approach to internal controls and governance. Organizations should focus on enhancing their Control Environment to improve Cash Flow Management Practices. This can be achieved by strengthening internal controls, clarifying and enforcing financial policies, and ensuring effective oversight mechanisms.

4.4: Relationship between Control Activities and Cash Flow Management Practices

		Cash Flow Management Practices	Control Activities
Cash Flow Management Practices	Pearson Correlation	1	.725**
	Sig. (2-tailed)		.000
	N	113	113
Control Activities	Pearson Correlation	.725**	1
	Sig. (2-tailed)	.000	
	N	113	113

**. Correlation is significant at the 0.01 level (2-tailed).
Source: (Primary data, 2024)

The correlation analysis between Cash Flow Management Practices and Control Activities reveals a robust and statistically significant positive relationship, as evidenced by the Pearson correlation coefficient of 0.725. This correlation is highly significant, with a p-value of 0.000, indicating that the relationship is highly unlikely to be due to chance and is significant at the 0.01 level. The Pearson correlation coefficient of 0.725 suggests a strong positive correlation between Control Activities and Cash Flow Management Practices. This implies that improvements in control activities such as the implementation of rigorous internal controls, thorough documentation, and effective monitoring are strongly associated with enhanced cash flow management practices. The significant positive correlation highlights the critical role that control activities play in influencing cash flow management practices. A strong control environment, characterized by comprehensive and well-executed control activities, is essential for achieving optimal cash flow management. This relationship underscores the importance of integrating effective control mechanisms to improve financial management practices. Organizations should prioritize the development and enhancement of their control activities to bolster their cash flow management practices.

4.5. Relationship between Risk Assessment and Cash Flow Management Practices

		Cash Flow Management Practices	Risk Assessment
Cash Flow Management Practices	Pearson Correlation	1	.763**
	Sig. (2-tailed)		.000
	N	113	113
Risk Assessment	Pearson Correlation	.763**	1
	Sig. (2-tailed)	.000	
	N	113	113

**. Correlation is significant at the 0.01 level (2-tailed).
Source: (Primary data, 2024)
The correlation analysis between Risk Assessment and Cash Flow Management Practices indicates a strong and statistically significant positive relationship, as evidenced by the Pearson correlation coefficient of 0.763. This correlation is highly significant, with a p-value of 0.000, which confirms that the relationship is highly unlikely to be a result of random chance and is significant at the 0.01 level. The Pearson correlation coefficient of 0.763 reveals a substantial positive correlation between Risk Assessment and Cash Flow Management Practices. This suggests that effective risk assessment is closely

associated with improved practices in cash flow management. The significant positive correlation between risk assessment and cash flow management practices underscores the vital role that risk assessment plays in financial management. Organizations should place a strong emphasis on developing and implementing rigorous risk assessment practices to improve their cash flow management.

5. DISCUSSION

5.1. Relationship between control environment and cash flow management practices in commercial banks of Rwanda

The high percentage of respondents who acknowledge management's commitment to integrity and ethical values (55.8% combined strongly agree and agree) resonates with James (2010), who emphasizes that environmental control is foundational to an effective internal control system. The positive mean score of 3.81 indicates that the majority of employees perceive a strong ethical tone set by management, reflecting a commitment to integrity and ethical behavior. However, the significant proportion of respondents who are uncertain or dissenting suggests potential gaps in the communication and implementation of ethical policies. This aligns with Mwindi (2013) and Abiola and Oweyole (2013), who argue that a robust control environment must ensure that ethical values are consistently demonstrated and communicated throughout the organization.

The disparity in perceptions regarding management's promotion of internal control, with only 21.2% strongly agreeing and a considerable portion of staff expressing concerns, highlights a critical area for improvement. According to COSO (2017) and INTOSAL GOV 9100 (2004), an effective internal control system requires a well-defined management philosophy and operating style that supports internal controls. The mixed responses suggest that while some employees recognize the efforts to promote internal control, others question its effectiveness. This aligns with James (2010) and Abiola and Oweyole (2013), which stress that environmental controls should reflect strong management philosophy and work style to ensure the control system's efficacy.

The mixed feedback on the organizational structure, with a mean score of 2.88, suggests that while many employees find the structure clear, there are still concerns about authority and responsibility. This reflects the principles outlined by COSO (2017) and Janos & Jozsef (2009), which emphasize that an effective internal control system requires a well-defined organizational arrangement to support the internal control environment. The lower score indicates that there may be ambiguities in how authority and responsibilities are communicated, which could hinder the effectiveness of internal controls. Ensuring clarity in organizational structure and communication aligns with the need for a supportive organizational arrangement as described in the literature. The generally positive view of the board's independence and oversight, with a mean score of 3.28, indicates that the board is perceived as effectively overseeing internal controls. This supports the COSO (2017) and INTOSAL GOV 9100 (2004) frameworks, which highlight the importance of the supervisory body in overseeing internal control systems. However, the presence of dissenting opinions suggests room for improvement in transparency and communication regarding the board's role.

5.2. The effect of the control activities on cash flow management practices

The analysis of perceptions regarding the separation of authorization from record-keeping procedures reveals a mixed sentiment among respondents. Specifically, 37 respondents (32.7%) strongly agreed that this separation is effectively implemented, indicating a significant portion of participants who believe that the control measure is functioning well. In contrast, 28 respondents (24.8%) agreed, showing additional but less pronounced support for this control measure. On the other hand, 14 participants (12.4%) disagreed and 26 (23.0%) strongly disagreed, reflecting notable concerns about the effectiveness of separating authorization from record-keeping. Furthermore, 8 respondents (7.1%) were uncertain about this control measure. The mean score of 3.14 with a standard deviation of 1.558 indicates a moderate level of agreement, accompanied by substantial variability in perceptions. This mixed perception suggests that while a considerable number of respondents believe in the effectiveness of separating authorization from record-keeping, there are significant concerns and uncertainties. This finding aligns with the concept of control activities defined by Abiola and Oweyola (2013), which emphasize the importance of clear policies and procedures to ensure management directives are executed effectively. Arens & Loebbecke (2000) highlight the importance of separating authorization from record-keeping to mitigate the risk of conflicts of interest and enhance oversight. It is recommended that the organization reviews and strengthens its processes to ensure a clearer separation between authorization and record-keeping. Providing additional training or resources to clarify these processes may help address the concerns of those who disagreed or were unsure.

5.3. Relationship between risk assessment and cash flow management practices in commercial banks of Rwanda

The survey results indicate that 24.8% of respondents strongly agreed, and 41.6% agreed that responsibilities for identifying, analyzing, and responding to risks are clearly assigned. This finding aligns well with COSO's emphasis on defining and assigning responsibilities as fundamental to effective risk management (COSO, 2004). According to COSO, clear assignment of responsibilities ensures accountability and enhances the risk management process, providing a structured approach to managing both internal and external risks (COSO, 2004). This perspective is reinforced by Jenny & Pamela (2006), who argue that explicit risk management roles are crucial for effective risk mitigation. Despite the overall positive perception, 28.3% of respondents who disagreed or were uncertain suggest that there may be gaps in the communication or understanding of these responsibilities. This highlights the need for improved clarity and training to ensure that all stakeholders are fully aware of their risk management duties, in line with COSO's guidance on the effective assignment of risk management tasks (COSO, 2004; Jenny & Pamela, 2006).

6.Conclusion

This study highlights the significant role of the control environment, control activities, and risk assessment in shaping cash flow management practices within commercial banks in Rwanda. The findings indicate that while there is a strong recognition of management's commitment to ethical values and integrity, gaps remain in effectively communicating and implementing internal control policies. The mixed perceptions regarding management's promotion of internal controls suggest a need for greater clarity and reinforcement of internal control structures. egarding control activities, the study reveals a moderate level of agreement on the effectiveness of key control measures, particularly in separating authorization from record-keeping. However, the notable concerns and uncertainties among employees suggest that further refinements, including enhanced training and process reviews, are necessary to ensure stronger oversight and mitigate risks. In terms of risk assessment, the study demonstrates a generally positive perception of the assignment of responsibilities for risk identification, analysis, and response. Nonetheless, the presence of a significant portion of respondents who are uncertain or disagree highlights the need for improved communication and training to ensure a clearer understanding of risk management responsibilities across all levels of the organization. Overall, while commercial banks in Rwanda exhibit a commitment to maintaining strong internal controls, the study underscores the need for enhanced communication, structured training programs, and continuous improvement in control mechanisms. Strengthening these areas will contribute to more effective cash flow management practices, ultimately supporting financial stability and operational efficiency within the banking sector.

7. RECOMMENDATIONS

7.1. Relationship between control environment and cash flow management practices in commercial banks of Rwanda

To ensure a more consistent communication and implementation of ethical policies across the organization, it is recommended that the company conducts regular training sessions focused on ethical standards and values for all employees.

Additionally, the company should develop and maintain clear communication channels for disseminating ethical policies, such as through employee handbooks, newsletters, and dedicated sections on the company intranet. It is also essential to enforce these policies rigorously by implementing and communicating disciplinary measures for violations, ensuring that all employees understand the consequences of failing to adhere to ethical standards.

Management should also increase its active involvement in promoting and supporting internal control systems by participating in control reviews and endorsing control-related initiatives. Regular reviews of internal control practices should be conducted to assess management's adherence to these controls, with feedback provided to address any identified issues and take corrective actions where necessary.

7.2. The effect of the control activities on cash flow management practices in commercial banks of Rwanda

It is strongly recommended that the organization undertakes a comprehensive review and enhancement of its control activities to optimize cash flow management practices.

It is recommended that the organization develop and implement clear policies and procedures to ensure that these functions are distinctly separated and effectively managed

Regular audits should be conducted to verify the implementation and effectiveness of these separations, and feedback mechanisms should be established to continuously monitor and improve this aspect of control activities.

To address this, it is recommended that the organization ensure all documentation is up-to-date, clearly communicated, and readily available. Regular reviews and updates of these procedures should be carried out to maintain their relevance and effectiveness.

8.3. Relationship between risk assessment and cash flow management practices in commercial banks of Rwanda.

The organization should develop and deliver targeted training programs to ensure that all stakeholders are fully aware of their responsibilities for identifying, analyzing, and responding to risks.

It is recommended that the organization refine its risk estimation methods to reduce variability and enhance accuracy.

The organization should address the concerns of the 21.2% of respondents who expressed doubts about the effectiveness of these procedures by incorporating feedback from stakeholders and making necessary adjustments to improve their functionality. The organization should develop and implement more effective communication strategies to ensure that all stakeholders are fully informed about key business objectives and related risks.

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