# Journal of Finance and Accounting



Internal Control System and Financial Performance of Cooperatives in Rwanda: A Case of Zigama Credit and Saving Society

Nzimurinda Elysee & Dr. Osiemo A. Kengere

ISSN: 2616-4965



# Internal Control System and Financial Performance of Cooperatives in Rwanda: A Case of Zigama Credit and Saving Society

<sup>1</sup>Nzimurinda Elysee & <sup>2</sup>Dr. Osiemo A. Kengere <sup>1</sup>School of Business and Economics, Mount Kenya University Kigali, Rwanda <sup>2</sup>School of Business and Economics, Mount Kenya University Kigali, Rwanda

How to cite this article: Nzimurinda E., & Kengere O., A. (2023). Internal Control System and Financial Performance of Cooperatives in Rwanda: A Case of Zigama Credit and Saving Society. *Journal of Finance and Accounting. Vol* 7(3) pp. 101-118. <a href="https://doi.org/10.53819/81018102t2155">https://doi.org/10.53819/81018102t2155</a>

# **Abstract**

This paper examined the contribution of internal control system on financial performance of cooperative banks in Rwanda with reference to Zigama Credit and Saving Society. Specifically, the study assessed effect of control environment on control activities and risk assessment on financial performance of Zigama Credit and Saving Society. The significance of research will be on practitioners, decision makers and researchers to get the knowledge about internal control system. The researcher used descriptive and correlation study design with a mixed approach on a sample of 167 participants drawn from 287 population using Yamane formula. Simple random technique was employed to obtain respondents and purposive sampling techniques are employed to choose participants and information were collected using questionnaire administered to respondents. Data entry, response code, edit and tabulation were used for data analysis. Data were analysed descriptively and regression analysis helped to general association between independent and dependent variables. Qualitative information analysis used content analysis. Data from the first objective felt that a unity of variation in control environment may stimulate a change in financial success by 0.482. The research established that financial cooperatives had conducive environment. To the second objective, the study show that a unit of adjustment in control activities stimulate variation on financial success by 0.214. Information established that financial cooperative has accounting system, which is strong enough to stimulate financial success through the reduction of risks and errors. Findings on the objective three demonstrated that a unit variation should lead to a change in identifying risks in financial success by 0.101. Results indicated that assessing risks as factor of internal control of the firm impact the financial success this show that managing risks had put in place assessment for reducing critical risks that can come from risk management where they had to assess risk that they are committed to assume responsibilities. In conclusion, the adequate control environment for suitable functions to the success through audit

Volume~7||Issue~3||Page~101-118~||June||2023|

Email: info@stratfordjournals.org ISSN: 2616-4965



done and the extent to which workers are committed is still at minimum level. The second objective showed that strategic measures established for detecting frauds and errors are applied in way that is inadequate, the review of daily transactions is sometimes done. The third objective showed that strategic measures established to identify, analysis and reduce risks are applied inconsistently. The study recommended that managing team would rely on the clarification of duties, follow up, cost revision, and should rely on risk measurements. Review of daily transactions should on daily basis workers should be trained on regular basis so as to enhance their ethical values and their commitment at work place. Rigorous policies and procedure manual must be applied accordingly. There is a need to ascertain the use of resources that provide financial means to equity ratio has been improved in the last three years. There is a need to improve the adequacy and suitability for increasing the success of Zigama Credit and Saving Society in Rwanda. The research proposed that further studies would be done within other banking sector than Zigama Credit and Saving Society in Rwanda.

**Keywords:** Internal Control system, Cooperative, Risk assessment, Control activities, and Financial Performance

### 1.0 Introduction

In Rwanda, there were banking institution which did not succeed well due to inadequate internal control practices as evidenced in the financial report (National Bank of Rwanda [BNR], 2022). Previously, argued that in 2009, 9 saving and credit cooperative are subjected under insolvency emanating from inadequate banking practices (Kumuyange, 2020). Specifically, Gisubizo Microfinance was closed due to dangerous banking conditions, insufficient money, delaying in reporting activities, losing money, poor accounting practices, depiction and mismanagements (Mutesi & Mulyung, 2021). Lack of adequate control practices stimulate a decrease in marker share between 7.6 and 4.8 in 2015 and the reduction of its bank operations by selling 46% of its shares (Zigama Credit and Saving Society, 2022).

Previous studies conducted outside of Rwanda such as Mwende and Njogu (2021) in Kenya, Toufaili (2021) in South Africa, Anh, et al., (2020) in Nigeria, and Avortri, et al., (2019) in Ghana, did not take into account the cooperatives, the internal control system aspects. Moreover, they did not succeed to indicate the immediate effect of internal control on the success of saving and credit cooperatives. Unfortunately, local studies like the work of Kumuyange (2020), and Uwingabiye (2019) focused only on monitoring, evidences and communication as factor of internal control system, but they did not take into account other component such as internal control environment, internal control activities and risks assessment for internal control. Based on the above considerations, this research assessed effect of internal control system on performance of cooperative in Rwanda using Zigama Credit and Saving Cooperative.

# 1.1 Research Objectives

- i. To establish effect of proper control environment on financial performance of Zigama Credit and Saving Society, Rwanda.
- ii. To assess effect of control activities on financial performance of Zigama Credit and Saving Society, Rwanda.
- iii. To analyse risk assessment on financial performance of Zigera Credit and Saving Cooperatives, Rwanda.

Volume 7||Issue 3||Page 101-118 ||June||2023|

Email: info@stratfordjournals.org ISSN: 2616-4965



### 2.0 Literature review

# 2.1 Review of Empirical Studies

Globally, internal control is deemed to increase control conducive conditions, accounting and follow up process. Rules and regulations governing banks had to esteem even in intricate the setting and internal control down results and adequate follow up illegal attitudes (Ahmed, & Ng'anga, 2019). In Africa, mineral of internal follow up the business improved workers need to undersets the research objectives and contracting banking laws and this aimed at assessing issues and enhanced banks and data quality and managing evidences and benefits (Anh, et al, 2020). In Ghana, a study undertaken by Grondys, et al.,(2021) on factors of internal control processes and their impact of financial success of cooperatives demonstrate that suitable control process is given in the context of environment and activities are felt as pertinent component of internal control mechanism in Ghana as remarked by respondent' that the mean was 4.72 and 4.66. Based on a research undertaken by Mutesi and Mulyung (2021) by exploring association between internal control and financial success referring to Nigerian case. Results demonstrated positive association between internal cornel use and available assets with a clear link at 0.93. Therefore, for r square of 0.87 evidenced that 87.3 percent of change for managing banks emanated from adequate use of financial resources.

In Kenya, internal control strategies is evidenced to be primary type of organization for their everyday activities. According to Amudo and Inanga (2019) felt that examination of internal control strategies encourages the investigation of impact of banks as risk identification, a decrease of risks. A research of Mmari and Thinyane (2019) argued that internal follow up adequacy and their correlation with the success of banks in Pakistan indicated internal organizational mechanism was suitable in banking institutions. Another study done in Kenya, Onsongo et al., (2020) undertook work on internal follow up strategies to the success of banks in Nigeria, therefore, the study demonstrated that internal control strategies and the success in Nigenia were discovered for improvement assessed within the context of ROA or NIM. According to Sulbha (2020) assessed internal control mechanisms and success among Kenyan banks. This study demonstrated that there was a positive association between internal control mechanism, increasing revenue, therefore, the research argued the degree of knowledge, level of understanding of them in the internal control strategies refers to association with profit, understanding in internal control strategies to revenue (r=0.988). In Rwanda, Akimana (2019) examined the internal follow up on performance of banks in rural area. An association was evidenced between internal control and the level of success for organisational success. The study argued that internal control is more likely to influence the success of commercial banks in Rwanda. Findings felt organizational follow up play a role to the success of banking institutions.

Globally, a research done on internal control activities was felt that the primary types of organization for managing institution. Duncan, (2020) demonstrate the role of internal control in encouraging impact of assessment of data or rules or policies on the risk identification and a decrease of risks. Findings from the research demonstrated that follow up and managing risks bear role of banking success. In Pakistan, a study by Francis, and Imiete (2018) on follow up activities or their association banking success demonstrated that follow up adequacy was durable in non-government strongest banking institutions in Islamic banks and was not positively

Stratford Peer Reviewed Journals and Book Publishing **Journal of Finance and Accounting** Volume 7||Issue 3||Page 101-118 ||June||2023|

Email: info@stratfordjournals.org ISSN: 2616-4965



statistically in challenge. In Africa, for instance in South Africa, Foster (2019) assessed whether internal control and punishments have impact of workers efforts to operate unfairly. The study adopted systematic approaches and relied on control actions and follow up. Gathering information were conducted and demonstrated that the access of follow up activities such as separating responsibilities contribute to high expenses of involving in unfair attitudes on the part of workers. In Nigeria, Fatihudin and Mochklas (2018) undertaken to follow up if internal control activities has effect on Nigeria university success. Researchers assessed the success using measurements like accountability, responsiveness and sources are adopted for gathering information that was utilized using questionnaire and interview. Secondary source on was gathered university libraries, books, and articles. Scholars assessed information using the Pearson correlation model and the study evidenced that all actions are begun by managers. Their research discovered that the existence contributions are and not united in financial sector and evidenced that external controllers the organization the financial statements. The research evidenced that financial data that was pertinent may be attained by a personal staff without the authorization provided by the other workers.

Regionally, in Kenya, a research done by Eton (2018) focused on one factor of internal control systems by a different one. The firm to which the internal control are adopted did not define the Barra working system. In Uganda, Eton (2019), examined the follow up and control strategies and its impact on financial success of financial cooperatives. They adopted ROE and NIM to demonstrate the success of banking institutions. Their findings proposed that usually assessment of cooperatives stimulate the mitigation of risks safely being done and that decrease the damage on loan supply and it stimulated the profit whose assessment was relied on ROE. In Rwanda, Kumuyange (2020), on internal control and its effectiveness in Zigama CSS used a research plan and questionnaire survey has been adopted to gather information and analysis of information was realized by research via the utilization of bivariate analysis and the study used tables and percentage and evidenced that the resource of organization are materially safe and separation of responsibilities was transparent and business are reasonable, business are determined and accountable staff official. Researches adopted some of factors of internal control system that was the control activities that made concluding remarks not pertinently justifiable.

Globally, Henk (2020) did a study on assessing risks and financial success in USA, where results demonstrated a factor of internal control and the banking success are established in term of assert, responsibility and report. According to a study done by Grondys, et al., (2021) demonstrated that internal control and financial success are positively associated and the findings evidenced the role of knowledge and level of understanding contributed to the improvement of revenue (r=0.988). The research argued that many financial cooperatives assessed the level of internal control and organizational success. In Africa, for instance in Ghana, Avortri, et al., (2019) on the factors of assessing risks and its influence on financial success demonstrate that control practices was felt where control environment and follow up were demonstrated a pertinent factor follow up among Ghanaian banking institutions and component was argued by participants with the response mean of 4.72 and 4.66. In Nigeria, Botti, et al., (2018) assessed contribution of internal control banking success utilizing product in Nigerian banks and the findings felt that a clear association for the financial success at 0.934 and for R Square was 0.873 show that 87.3% of general change in managing resources were distributed to adequate funds in

Stratford Peer Reviewed Journals and Book Publishing Journal of Finance and Accounting Volume 7||Issue 3||Page 101-118 ||June||2023|

volume /||Issue 5||Fage 101-116 ||June||2025|

Email: info@stratfordjournals.org ISSN: 2616-4965



the financial cooperative. In Kenya, Kisanyanya (2018) seek to find out whether managing risks have any impact on Kenya Commercial Banks and financial success. The research used descriptive research design for the research whereby secondary information was obtained by the research from the central bank as well as from the financial reports of banking sector. The multiple regression analysis was adopted to analyse data. Results argued that Kenya commercial banks financial success as associated with managing risks. The research adopted multiple regression model to assess similar to other information analysis and relied on internal control system and risks management. In Rwanda, Mutesi and Mulyung (2021) felt that credit risk process affect profit of financial institution and the study carried out to assess if credit risk has impact on Kenya commercial financial commercial banks using a descriptive study and gathered information using questionnaire and analysed using SPSS version 26.0 and the result show a clear association between follow up and success.

## 2.2 Theoretical Framework

This study was guided by the Agency Theory which provides the organizational being and it was pertinent to establish a follow up system that decrease chances (Lauren, 2020). This method was clearly associated with the study concerning the Zigama Credit and Saving Society to understanding that every worker execute the responsibility given to enhance productivity, adequate and suitable utilization of assets to attain excepted goals of the banks such as improving the level of accounting services for workers.

Stewardship model was used in the context that the agent protects or maximizes the benefits of all parties through the institutional performance due to steward or agent clear contribution was maximized (Sharma & Senan, 2019) provides evidences on clear importance played by managers, incorporating objective of banking institutions. This theory proposes that clients may be contented or interested to institutional achievement. The researchers argued that agency model takes into account peoples on economic that upturns (Sulbha, 2020) felt that the model acknowledges the role of agency that stimulate the steward and provided optimum independent established on it. It emphasizes on position of workers to operate more autonomously so that shareholder's return are optimized. Attribution model come from social psychology for assessing how people discusses grammar proceedings and problems and the way in which they denoted causes to Younas and Kassim (2019) had worked on this approach in examining in social conditions to explain measures and behaviours. However, auditor's responsiveness to frauds detection is proponed by (Vichet, 2020) by arguing that auditors are responsible of failing to reveal fraud actions after identifying the fraud appearance as risk. The above theory enabled the researcher to establish the conceptual framework as follows:



# Internal Control Activities Policies Success review Data processing Physical control Separation of Responsibilities Risk Assessment Identifying risks Analysing risks Managing risks Managing risks

Figure 1 Conceptual Framework

Source: Researcher (2023)

In undertaking this research, much attention emphasized on how internal control were used for increasing the success of banks. Therefore, control environment notes binging point to remaining other sections of internal control which will be assessed using integrity values, ethics, and willingness of workers and their competencies. Moreover, control activities which were plans, guidance's, processes, and strategies that remarks the banking institutions to astounded several constraints. The research of actions are examined using processes, success, data processing, physical controls and separation of responsibilities. The risk examination and identification felt systematic process that extends to discover pertinent risks that may affect the achievement of firm's objectives and their impact prior it happens, creating assesses the clarification of ways by which challenges necessitate to be answered and explained. This has been examined through the use of identifying risks, analyzing risks and managing risks. The financial success of banking institutions that are examined through ROA and ROE. The existence of national bank of Rwanda policy and regulations and Zigama Credit and of national bank of Rwanda policy, regulations and Zigama Credit and Saving Society manual of procedures.

# 3.0 Materials and Methods

This research was conducted descriptively using correlation research impact. The descriptive provided suitable recommendations and proposals to the management of Zigama Credit and Saving Society for appropriate financial performance. The study population explains a setting for persons, under which relevant data is provided may be calculated to Creswell (2018). The target population comprises of 287 Zigama Credit and Saving Society workers from its 14 outlets in Rwanda.



# 4.0 Results and discussion

Results are presented, interpreted and discussed in accordance with research objectives and the study variables.

# 4.1 Effect of Control Environment on Financial Performance of Zigama Credit and Saving Society

Before assessing effect of control environment, the researcher was wondering if and how control environment was applied at Zigama Credit and Saving Society. Respondents were asked to assess internal control system environment using five-point Likert scale.

Table 1: Types of Control Environment Applied at Zigama Credit and Saving Society

|   |    | ongly<br>sagree Disagree |          |            | No | Neutral Agree Strongly Agree |         |           |         |           |     | Total |           |  |
|---|----|--------------------------|----------|------------|----|------------------------------|---------|-----------|---------|-----------|-----|-------|-----------|--|
| Statement   | N  | agree<br>%               | DIS<br>N | agree<br>% | N  | utrai<br>%                   | Aş<br>N | gree<br>% | A;<br>% | gree<br>% | N   | Mean  | aı<br>std |  |
| Zigama Credit<br>And Saving<br>Society<br>ensures<br>integrity values     | 18 | 11.0                     | 5        | 3.0        | 5  | 3.0                          | 89      | 54.3      | 47      | 28.7      |     |       | 1.190     |  |
| Zigama Credit And Saving Society respects ethical values                  | 8  | 4.9                      | 6        | 3.7        | 4  | 2.4                          | 103     | 62.8      | 43      | 26.2      | 164 | 4.018 | 0.936     |  |
| Zigama credit<br>and saving<br>society's<br>personnel are<br>committed    | 5  | 3.0                      | 4        | 2.4        | 5  | 3.0                          | 93      | 56.7      | 57      | 34.8      | 164 | 4.176 | 0.850     |  |
| Zigama Credit<br>and Saving<br>Society Bank<br>Personnel are<br>competent | 5  | 3.0                      | 5        | 3.0        | 4  | 2.4                          | 112     | 68.3      | 38      | 23.2      | 164 | 4.054 | 0.803     |  |

Source; Primary Data (2023)

The research demonstrated that 54.3% of participants accepted with the statement, mean response on the use of ethical values were 4.86, and standard deviation was 1.190. Results indicated that Zigama Credit and Saving Society is very serious on the respect of ethical values 62.8% of participants, a mean response was 4.01 while std dev was 0.936 agreed with the statement. Moreover, workers, Zigama Credit and Saving Society's personnel are committed to respect bank policies, procedures, and behavioral standards, where 56.7% accepted with statement. A mean response was 4.17 and std dev was 0.850. By Zigama Credit and Saving Society develop the



competency of personnel. The research demonstrated that 68.3 of respondents agreed that at Zigama Credit and Saving Society personnel is competency with a mean response was 4.05 and standard deviation 0.803.

Table 2 Correlation between Control Environment and Financial Performance of Zigama Credit and Saving Society

|                            | -                      |      | Ethical values | Commitment of personnel | Competency of personnel | Increased<br>ROA | Increased<br>ROE |
|----------------------------|------------------------|------|----------------|-------------------------|-------------------------|------------------|------------------|
| Integrity values           | Pearson<br>Correlation |      |                |                         |                         |                  |                  |
|                            | Sig.(2-tailed)         |      |                |                         |                         |                  |                  |
|                            | N                      | 164  |                |                         |                         |                  |                  |
| Ethical values             | Pearson<br>Correlation | .129 |                |                         |                         |                  |                  |
|                            | Sig.(2-tailed)         | .100 |                |                         |                         |                  |                  |
|                            | N                      | 164  | 164            |                         |                         |                  |                  |
| Commitment of personnel    | Pearson<br>Correlation | .104 | .150           |                         |                         |                  |                  |
| personner                  | Sig.(tailed)           | .186 | .054           |                         |                         |                  |                  |
|                            | N                      | 164  | 164            | 164                     |                         |                  |                  |
| Competency of personnel    | Pearson<br>Correlation | .084 | .444           | .111                    |                         |                  |                  |
|                            | Sig.(2-tailed)         | .284 | .000           | .158                    |                         |                  |                  |
|                            | N                      | 164  | 164            | 164                     | 164                     |                  |                  |
| Increased Return on Equity | Pearson<br>Correlation | .027 | .197           | .007                    | .160                    |                  |                  |
|                            | Sig.(2-tailed)         | .35  | .012           | .095                    | .041                    |                  |                  |
|                            | N                      | 164  | 164            | 164                     | 164                     | 164              |                  |
| Increased return on asset  | Pearson<br>Correlation | .094 | .064           | .090                    | .035                    | .419             |                  |
|                            | Sig.(2-tailed)         | .030 | .044           | .025                    | .064                    | .000             |                  |
|                            | N                      | 164  | 164            | 164                     | 164                     | 164              | 164              |

Source: Primary Data (2023)

This study demonstrated the existence of a strong relationship between value integrity and ROE (r=0.027, level of significance 0.035), with return on asset (0.094, and p-value is 0.030). ethical values is positively associated with ROE as well as the p-value was 0.12) me meaning below 0.05 indicating change the change in ethical values produce a change in improving return on equity. Ethical value is positively affecting ROA since the Pearson results is 0.064 and the level of significance is 0.044). However, the commitment of workers at Zigama CSS is positively associated with the cooperative ROE (r=0.007, p-value is 0.095), with ROA (r=0.090 p-value was 0.025) and as it was below 0.05. Finally, competencies and abilities of employees is strongly associated with ROE (r=0.160, p-value=0.014) and ROA (r=0.035, p-value=0.064).



# 4.2 Effect of Control Activities on Financial Performance of Zigama Credit and Saving Society

This research began by assessing types of control activities applied by Zigama Credit and Saving Society in its internal control process. In this regard, a five point likert sxale was utilized.

Table 3: Types of Control Activities Done by Zigama Credit and Saving Society in Rwanda

|                                 | Str | ongly    | _   |          | -  |          |      |          | Strongly |          |      |       |        |
|---------------------------------|-----|----------|-----|----------|----|----------|------|----------|----------|----------|------|-------|--------|
|                                 | Dis | agree    | Dis | agree    | Ne | utral    | Agre | ee       | Agr      | ree      | Tota | ıl    |        |
| Statement                       | N   | <b>%</b> | N   | <b>%</b> | N  | <b>%</b> | N    | <b>%</b> | M        | <b>%</b> | N    | Mean  | Std.   |
| Rigor policies were adopted     | 11  | 6.7      | 8   | 4.9      | 4  | 2.4      | 106  | 64.6     | 35       | 21.3     | 164  | 3.890 | 0.015  |
| Systematic procedures were done | 4   | 2.4      | 5   | 3.0      | 6  | 3.7      | 74   | 45.1     | 75       | 45.1     | 164  | 4.286 | 0.870  |
| Performance was reviewed        | 15  | 9.1      | 7   | 4.3      | 7  | 4.3      | 106  | 64.6     | 29       | 17.7     | 164  | 4.115 | 1.158  |
| Physical control was done       | 5   | 3.0      | 5   | 3.0      | 4  | 2.4      | 110  | 67.1     | 40       | 24.4     | 164  | 3.774 | 1. 081 |

# **Source: Primary Data (2023)**

Results demonstrated different types of internal control activities applied at Zigama Credit and Saving Society. For this perspective, the study shows that 64.6% of respondents agreed that Zigama Credit and Saving Society adopted rigor policies to decrease mistakes and inadequate practices, this was indicated by the mean response of 3.890, and standard deviation was 1.015. Moreover, 45.1% of participants strongly agreed that Zigama Credit and Saving Society has adopted systematic procedures. In this regard, the mean was 4.286, standard deviation=0.870. Moreover, Zigama Credit And Saving Society reviews performance in order to approve before giving and taking appropriate actions strongly, this was demonstrated by 64.6% with the mean response of 4.15 and standard deviation of=1.158. Lastly, the 67.1% of respondents agreed that physical control was done at Zigama Credit and Saving Society.



Table 4: Correlation between Control Activities and Financial Performance of Zigama Credit And Saving Society

|                           |                          | Rigor policies | Systematic procedures | Performance review | Physical control | Increased<br>Return on<br>Equity | Increase<br>return on<br>asset |
|---------------------------|--------------------------|----------------|-----------------------|--------------------|------------------|----------------------------------|--------------------------------|
| Rigors policy             | Pearson<br>Correlation   |                |                       |                    |                  |                                  |                                |
|                           | Sig.(2-tailed)           |                |                       |                    |                  |                                  |                                |
|                           | N                        | 164            |                       |                    |                  |                                  |                                |
| Systematic process        | Pearson<br>Correlation   | .411**         |                       |                    |                  |                                  |                                |
|                           | Sig.(2-tailed)           | .000           |                       |                    |                  |                                  |                                |
|                           | N                        | 164            | 164                   |                    |                  |                                  |                                |
| Reviewing the performance | e Pearson<br>Correlation | .251**         | .125                  |                    |                  |                                  |                                |
|                           | Sig.(2-tailed)           | .001           | .111                  |                    |                  |                                  |                                |
|                           | N                        | 164            | 164                   | 164                |                  |                                  |                                |
| Physical control          | Pearson<br>Correlation   | .290**         | .134                  | .192*              |                  |                                  |                                |
|                           | Sig.(2-tailed)           | .000           | .087                  | .014               |                  |                                  |                                |
|                           | N                        | 164            | 164                   | 164                | 164              |                                  |                                |
| Increased ROE             | Pearson<br>Correlation   | .325**         | .057                  | 096                | .374**           |                                  |                                |
|                           | Sig.(2-tailed)           | .002           | .467                  | .022               | .037             |                                  |                                |
|                           | N                        | 164            | 164                   | 164                | 164              | 164                              |                                |
| Return on asset           | Pearson<br>Correlation   | .126           | .127                  | .109               | .274**           | .419**                           |                                |
|                           | Sig.(2-tailed)           | .009           | .106                  | .066               | .045             | .000                             |                                |
|                           | N                        | 164            | 164                   | 164                | 164              | 164                              | 164                            |

**Source: Primary Data (2023)** 

The association between control activities and financial success has been established where the rigors policies were associated with ROE (r=0.325, sig=0.002), ROA (r=0.126, sig=0.00. systematic process was insignificant in increasing return on asset (r=0.027 and p-value is 0.106), review success with return on equity (0. 096, sig.=0.002), the success and reviewing performance for return on assets (r=0.0.109, sig=0.066), while direct follow up was associated with return on equity (0.274, and p-value=0.0450 with return on asset (0.274 and sig=0.045).

# 4.3 Effect of Risk Assessment on Financial Performance at Zigama Credit and Saving Society in Rwanda

The researcher started by providing information on the type of risk assessment commonly done at Zigama Credit and Saving Society for ensuring effective internal control and financial success.

**Stratford Peer Reviewed Journals and Book Publishing Journal of Finance and Accounting** 

Volume 7||Issue 3||Page 101-118 ||June||2023|

Email: info@stratfordjournals.org ISSN: 2616-4965



Table 5 Risk Assessment Applied by Zigama Credit and Saving Society in Rwanda

|   | G4  | <del>''</del> | -   |       | _  |          | -     |          | 04  | 1     | -    |       |       |
|---|-----|---------------|-----|-------|----|----------|-------|----------|-----|-------|------|-------|-------|
|   |     | ongly         | D:a |       | Ma | 4        | A ~~~ |          |     | ongly | Та4а | .1    |       |
|   | DIS | agree         | DIS | agree | Ne | utrai    | Agr   | ee       | Agr | ree   | Tota | П     |       |
| Statement   | N   | <b>%</b>      | N   | %     | N  | <b>%</b> | N     | <b>%</b> | N   | %     | N    | Mean  | Stds. |
| Identification for                                | •   |               |     |       |    |          |       |          |     |       |      |       |       |
| risk affecting activities was done                | 5   | 3.0           | 9   | 5.5   | 3  | 1.8      | 81    | 49.4     | 66  | 40.2  | 164  | 4.184 | 0.941 |
| Risk analysis of<br>risks of material<br>was done | 11  | 6.7           | 10  | 6.1   | 14 | 8.5      | 91    | 55.5     | 38  | 23.2  | 164  | 3.823 | 1.067 |
| Risk<br>management<br>was done<br>adequately      | 10  | 6.1           | 6   | 3.7   | 8  | 4.9      | 87    | 53.0     | 53  | 32.3  | 164  | 4.018 | 1.035 |

# Primary Data (2023)

The study argued that answers gathered on internal control risks in Zigama Credit and Saving Society in Rwanda. In this regards, Zigama Credit and Saving Society had established pertinent practice for assessment of risks impacting their activities as accepted by 49.4% of respondents, a mean response of 4.184 and standard deviation of 0.941 explaining that have agreed. Results on risk analysis evidenced that participant agreed that the risk analysis and managing risks for material use by 55.5% at the mean of 3.823 and std of 1.067 and the research evidenced that risk management is done adequately. It was shown by 53.0%, mean response was 4.018 and standard deviation was 1.035.



Table 6 Correlation Analysis between Risk Assessment and Financial Performance of Zigama Credit and Saving Society

|                            |                        | Risk<br>identification | Risk<br>analysis | Risk<br>management | ROE  | ROA  |
|----------------------------|------------------------|------------------------|------------------|--------------------|------|------|
| Risk identification        | Pearson<br>Correlation | 1                      | .026             | .161               | .060 | .039 |
|                            | Sig.(2-tailed)         |                        | .738             | .040               | .044 | .016 |
|                            | N                      | 184                    | 164              | 164                | 164  | 164  |
| Risk Analysis              | Pearson<br>Correlation | .026                   | 1                | .003               | .067 | .041 |
|                            | Sig.(2-tailled)        | .738                   |                  | .970               | .092 | .098 |
|                            | N                      | 164                    | 164              | 164                | 164  | 164  |
| Risk management            | Pearson<br>Correlation | .161                   | .003             | 1                  | .027 | .011 |
|                            | Sig.(2-tailed)         | .040                   | .970             |                    | .034 | .090 |
|                            | N                      | 164                    | 164              | 164                | 164  | 164  |
| Increased Return or Equity | Pearson<br>Correlation | .060                   | .067             | .027               | 1    | .419 |
|                            | Sig(2-tailled)         | .044                   | .092             | .034               |      | .000 |
|                            | N                      | 164                    | 164              | 164                | 164  | 164  |
| Increased Return or assert | Pearson Correlation    | .039                   | .041             | .011               | .419 | 1    |
|                            | Sig.(2-tailed)         | .016                   | .0988            | .090               | .000 |      |
|                            | N                      | 164                    | 164              | 164                | 164  | 164  |

Source: Primary Data (2023)

Information from correlation analysis evidence that identifying risks positively associated with return on equity (0.060, p-value is 0.044), with return on equity (0.039, sig was 0.016) implying that identifying risks is stimulating an increase of ROE and ROA. Findings on analyzing risks indicated that it is associated with ROE (r=0.067, sig was 0.092) and ROA (r=0.041 and sig was 0.098) showing that a change in analyzing risks lead to improvement in ROE and ROA. This research established the statistically positive association between managing risks and ROE (r=0.027 and p-value is 0.35) and with return on asset (0.011 and p-value=0.090) if any adjustment in managing risks stimulate an increase in ROA and ROE. It indicated that the statistically positive association was between internal control and the success of Zigama Credit and Saving Society.

## **4.4 Discussion of the Results**

Data on the first objective agreed with the research done in Ghana, a research undertaken by Grondys, et al (2021) on factors of internal control processes and their contribution to the success of cooperatives demonstrate that suitable control process is given in the context of environment and activities are felt as pertinent component of internal control mechanism in Ghana as remarked by respondent' that the mean was 4.72 and 4.66. Based on a research undertaken by Mutesi and

Stratford Peer Reviewed Journals and Book Publishing Journal of Finance and Accounting Volume 7||Issue 3||Page 101-118 ||June||2023|

Email: info@stratfordjournals.org ISSN: 2616-4965



Mulyung (2021) by exploring association between internal control and financial success referring to Nigerian case. Results demonstrated positive association between internal cornel use and available assets with a clear link at 0.93. Therefore for r square of 0.87 evidenced that 87.3 percent of change for managing banks emanated from adequate use of financial resources. Another study done in Kenya, Onsongo et al., (2020) undertook study on follow up strategies but also on success of banks, therefore, the study demonstrated that internal control strategies and the success in Nigeria were discovered for improvement assessed within the context of ROA or NIM. It concur with the work of Sulbha (2020) assessed internal control mechanisms and the performance of banking sectors in Kenya. This study demonstrated the significant association between internal control mechanism, revenue, therefore, the research argued the degree of knowledge, level of understanding of them in the internal control strategies refers to association with profit, understanding in internal control strategies to revenue (r=0.988).

Results from the second objective are relevant since they concur with the work carried out in Iran on the internal control activities was felt that the primary types of organization for managing institution. Duncan, (2020) evidenced that assessing internal control encourage impact assessment, rules or policies on the risk identification and a decrease of risks. In Pakistan, a study by Francis, and Imiete (2018) on internal control activities and their association the banking success demonstrated their adequacy was durable in non-government strongest banking institutions in Islamic banks and was not positively statistically in challenge. Foster (2019) assessed whether internal control and punishments have impact of workers efforts to operate unfairly. The study adopted systematic approaches and relied on control actions and follow up. Gathering information were conducted and demonstrated that the access of follow up activities such as separating responsibilities contribute to high expenses of involving in unfair attitudes on the part of workers. In Nigeria, Fatihudin and Mochklas (2018) undertaken to follow up if internal control activities has effect on Nigeria university success. Researchers assessed the success using measurements like accountability, responsiveness are adopted for gathering information that was utilized through the use of questionnaire and interview guides. Secondary data was gathered university libraries, books and Journals. Scholars assessed information using the Pearson correlation model and the study evidenced that all actions are begun by managers. The research evidenced that financial data that was pertinent may be attained by a personal staff without the authorization provided by the other workers.

The objective three provides data on the role of assessing risks to the success of Zigama Credit and Saving Society in Rwanda. In this regards, Zigama Credit and Saving Society had adopted suitable rules and regulations. It agreed with Grondys, et al., (2021) demonstrated that internal control and financial success are positively associated and the findings evidenced the role of knowledge and level of understanding contributed to the improvement of revenue (r=0.988). The research argued that many financial cooperatives assessed the level of internal control and organizational success. Avortri, et al., (2019) on the factors of assessing risks and its influence on financial success demonstrate that control practices was felt where control environment and follow up were demonstrated a pertinent factor in controlling banking activities and was component was argued by participants with the response mean of 4.72 and 4.66. In Kenya, Kisanyanya (2018) seek to find out whether managing risks have any impact on Kenya Commercial Banks and financial success. The research used descriptive research design for the

Stratford Peer Reviewed Journals and Book Publishing Journal of Finance and Accounting Volume 7||Issue 3||Page 101-118 ||June||2023|

Email: info@stratfordjournals.org ISSN: 2616-4965



research whereby secondary information was obtained by the research from the central bank as well as from the financial reports of banking sector. The multiple regression analysis was adopted to analyse data. Results argued that Kenya commercial banks financial success as associated with managing risks. Risk assessment where data produced on these three elements of internal system as independent variables were be around, the results indicated that once there was improve of one unit in control environment there will be an improve in the financial success at 3.85% with standard error of 11.75%, when there is an increase of one unit in control activities, there would be an increase of 31% of the financial performance by a standard error of 8.55%. When there is an increase of one unit in risk assessment, there would be an increase of 5.6% of the financial performance by a standard error of 9.1%. This means that control activities is the most significant variable since it has the highest ratio (31%) in affecting positively the financial performance of Zigama Credit And Saving Society, the following is control environment with (13.85%) while the last one is risk assessment with (5.6%), these ratios or percentages show the level at which independent variables impact the financial success if saving and credit cooperatives at a standard deviation of 9.8%.

### 5.0 Conclusion

The study concludes that Access Bank Plc in Rwanda has applied different credit management Result on objective was to investigate how Zigama Credit and Saving Society had confirmed the adequate control environment for suitable functions to the success and using questionnaire through audit done and the extent to which workers are committed is still at minimum level. The second objective was to assess Zigama Credit and Saving Society provided the control activities to ameliorate the financial success. The findings showed that strategic measures established for detecting frauds and errors are applied in way that is inadequate, the review of daily transactions is sometimes done. The third objective was to analyze Zigama Credit and Saving Society collected evidences for assessing risks and its financial success. The findings showed that strategic measures established to identify, analysis and reduce risks are applied inconsistently.

# **6.0 Recommendations**

Managing team of Zigama CSS would rely on the clarification of separated responsibilities, follow up, approving transactions, cost revision, the way of disseminating evidences, and should rely on risk measurements. Review of daily transactions should on daily basis workers should be trained on regular basis to enhance their ethical values and their commitment at work place, especially on implementing company's policy, strategic measures established in order to reduce risk, management must ensure that all clients are treated equally in the benefits of the banks. Rigorous policies and procedure manual must be applied accordingly.

There is a need to ascertain the use of resources that provide financial means Zigama Credit and Saving Society to equity ratio has been improved in the last three years. Zigama Credit and Saving Society organization toward improved financial outcomes. There is a need to improve the adequacy and suitability for increasing the success of Zigama Credit and Saving Society in Rwanda.



The research establishes the internal control and financial success in Zigama Credit and Saving Society the future study was advised to take this document as reference by taking into account to indicate the contribution or influence of organizational control on the success at Zigama Credit and Saving Society in Rwanda. Future studies would be undertaken to the influence of internal control toward responsiveness thereby suggested that future researches integrate all elements that are left out of scope and assess how they impact the findings. The research proposed that further studies would be done among banking sector than Zigama Credit and Saving Society in Rwanda.

# Acknowledgments

I wish to acknowledge Dr. Osiemo A. Kengere for her contribution to this work. I wish to extend my acknowledgement to Mount Kenya University, and the Access Bank Plc.

# References

- Ahmed, S. O., & Ng'anga, P. (2019). Internal Control Practices and Financial Performance of County Governments in the Coastal Region of Kenya. *International Journal of Current Aspects*, 29-41
- Akimana, K. J. (2019). Effect of internal controls on financial performance of small and medium enterprises in Nairobi County (Doctoral dissertation), United States International University-Africa, Nairobi.
- Alarussi, A. S., & Alhaderi, S. M. (2018). Factors affecting profitability in Malaysia. *Journal of Economic Studies*, 45(3), 442-458.
- Alawattegama, K. (2018). The Impact of Enterprise Risk Management on Firm Performance: Evidence from Sri Lankan Banking and Finance Industry. *International Journal of Business and Management*, 13(1), 225-237
- Amudo, A. and Inanga, E. (2019). Evaluation of Internal Control System on regional member countries of East African Development Bank: A Case Study from Uganda
- Anh, T. Thi, L. Quang, H. and Thi, T. (2020). Factors influencing the effectiveness of internal control in cement manufacturing companies. *Management Science* 10 (1), 133-142.
- Auditor General Report, AGR (2020). Report of the Auditor General to Parliament for the Financial Year Ended 30th June 2020. The Office of the AG, Republic of Uganda, February, 2021
- Avortri, G, Nabukalu, B and Nabyonga-Orem, J. (2019). Supportive supervision to improve service delivery in low-income countries: is there a conceptual problem or a strategy problem? *BMJ Global Health Journal*, 4 (9), 4-5
- National Bank of Rwanda [BNR], (2019). *Annual financial stability report, 2018-2019*. Rwanda: government publications
- Botti, F. Corsi, M., & Zacchia, G. (2018). *A new European microfinance panel data set*: The European Microfinance Network survey 2006-2015 (No. 13d43173-6966-45ab-b920-fb4e43803764).
- Bryman, A. (2018). Social Research Methods. Oxford: Oxford University Press, 181-270



- Chen, H., Yang, D., Zhang, J. and Zhou, H. (2020). Internal controls, risk management, and cash holdings. *Journal of Corporate Finance*, 64, 101695
- Creswell, J. (2018). Research design: Qualitative, quantitative and mixed method approaches. London: Sage.
- Duncan, J. (2020). Impacting Nonprofit Financial performance and Mission
- Eton, M. (2019). Internal Control and Budget Implementation in Kabale District Uganda.
- Eton, M., Murezi, C., Mwosi, F. Bernard, P and Ogwel, P. (2018). Internal control systems and financial accountability in Uganda: A case of selected districts in western Uganda. *International Journal of Technology Management*. 4. 106-111.
- Fatihudin, D., & Mochklas, M. (2018). How Measuring Financial. *International Journal of Civil Engineering and Technology*. 9(6), 553–557.
- Foster, P. L. (2019). Coso Internal Control Integrated Framework: An Implementation Guide. (January). New York: PWC
- Francis, S., & Imiete, B. U. (2018). Internal control system as a mechanism for effective fund management of universities in Bayelsa State, Nigeria. *Global Journal of Social Sciences*, 17(1), 77-91
- Gosnik, D. (2019). Core Business Process Management and Company Performance. *Management Journal*, 14 (1), 59-86.
- Grondys, K.; Slusarczyk, O. Hussain, H.I. and Androniceanu, A. (2021). Risk Assessment of the SME Sector Operations during the COVID-19 Pandemic. *International Journal of Environmental Research in Public Health*, 18 (1), 4-9
- Henk, O. (2020). Internal control through the lens of institutional work: a systematic literature review. *Journal of Management Control*. 31 (1), 1-4.
- Kisanyanya, A. G. (2018). Internal controls and Financial Performance of Public Institutions of Higher Learning in Vihiga County, Kenya. *Journal of Business and Management*, pp. 31–41. https://doi.org/10.9790/487X-2004053141
- Kisanyanya, G. A. (2018). Internal control systems and financial performance of public institutions of higher learning in Vihiga County, Kenya (Doctoral dissertation). Kenyatta University, Nairobi.
- Kumuyange E. (2020). *Internal organizational factors and financial Performance of cooperatives in Rwanda: A case of Zigama CSS*. A Research project submitted in partial fulfillment for the award of a Degree in Master of Business Administration (Finance Option) Mount Kenya University, Rwanda. Kigali, Rwanda.
- Lauren, T. (2020). Stratified Sampling | A Step-by-Step Guide with Examples
- Mbilla, S. A., Nyeadi, J. D., Gbegble, M. K., & Ayimpoya, R. N. (2020). Assessing the Impact of Monitoring, Information and Communication on Banks Performance in Ghana. *Asian Journal of Economics, Business and Accounting*, 58-71.



- MINECOFIN (2018). Key Statistics on Rwanda <a href="http://www.minecofin.gov.rw/fileadmin/Key">http://www.minecofin.gov.rw/fileadmin/Key</a> statistics on Rwanda\_Feb\_25.pdf Accessed 1st Dec 2019.
- Mmari, G. A., & Thinyane, L. C. (2019). Analysis of Factors Influencing Financial Performance of Savings and Credit Co-operative Societies in Lesotho: Evidence From Maseru District. *International Journal of Financial Research*, 10(2)
- Muhunga, B. J. K., Kamukama, N., & Kijjambu, F. N. (2020). Control Environment and financial performance of savings and credit cooperatives (SACCOs) in mid-western Uganda. *International Journal of Business, Strategies* ISSN 2519-0857.
- Muhunyo, B. M., & Jagongo, A. O. (2018). Effect of internal control systems on financial performance of public institutions of higher learning in Nairobi city county, Kenya (Doctoral dissertation). Kenyatta University, Nairobi.
- Mutesi A, Mulyung, P.(2021). Effect of Cash Management on the Financial Performance of Cooperative Banks in Rwanda: A Case of Zigma CSS. *Invention Journal of Research Technology in Engineering & Management (IJRTEM)*. Volume 2 Issue 5 | May 2018 | PP 88-98
- Mwende, R., & Njogu, G. (2021). The Effect of Internal Control Systems on the Financial Performance of NSE Listed Banks. *International Journal of Business and Management Sciences*, Vol 2, Issue 4.
- National Bank of Rwanda [BNR]. (2020). Banking sector annual report 2019-2020.Kigali. Rwanda
- Nduba, M. P. (2018). Factors Affecting Financial Sustainability of Microfinance Institutions in Democratic Republic of Congo: The Case Study of MFIs in the City of Kindu Doctoral dissertation, United States International University-Africa.
- Onsongo, S. Muathe, M. and Mwangi, L. (2020). Financial Risk and Financial Performance: Evidence and Insights from Commercial and Services Listed Companies in Nairobi Securities Exchange, Kenya. *International journal of Financial studies*, 8(51), 1-15
- Pina, V. Bachiller, P. and Ripoll, L. (2020). Testing the reliability of financial performance. The case of Spanish local governments. *Sustainability*, 12(17), 6880.
- Rafindadi, A. and Olanrewaju, Z. (2019). Internal Control System, Sustainable Management and Service Delivery of NGO's in Nigeria: An Empirical Analysis. *International Review of Management and Marketing*, 9(2), 89.
- Sharma, R. and Senan, N. (2019). A study on effectiveness of internal control system in selected banks in Saudi Arabia. *Asian Journal of Managerial Science*, 8(1), 41-47.
- Sulbha Wagh, (2020), data management <a href="https://managementhelp.org/evaluation/prograevaluation-">https://managementhelp.org/evaluation/prograevaluation-</a> Guide.htm#anchor1585345
- Toufaili, B. (2021). The Impact of Risk Management on Financial Performance. "The EUrASEANs: journal on global socio-economic dynamics 3 (28); ISSN 2539 5645 (Print)

# Stratford Peer Reviewed Journals and Book Publishing Journal of Finance and Accounting

Volume 7||Issue 3||Page 101-118 ||June||2023|

Email: info@stratfordjournals.org ISSN: 2616-4965



- Uwingabiye, J. M. (2019). *Internal Control Components and Financial Performance in Public Institutions in Rwanda*, A postgraduate Thesis; Rwanda Social Security Board (RSSB)
- Uwingabiye, M. J. (2019). Internal control components and financial performance in public institutions in Rwanda: A case study of Rwanda social security board (RSSB). UR, Huye.
- Uwingabiye, M.J. (2019). *Internal control components and financial performance in Public Institutions in Rwanda*. A thesis submitted in partial fulfilment for the requirements of Master of Business Administration. University of Rwanda. Kigali, Rwanda.
- Vichet, S. (2020). High but Fragile Growth: Fostering SMEs development to improve Cambodia's economic resilience. Munich Personal RePEc Archive, MPRA Paper No. 104935
- Younas, A. and Kassim, A. (2019). Essentiality of internal control in Audit process. Center for Promoting Education and Research (CPER) USA. *International Journal of Business and Applied Social Science* (IJBASS), 5 (11), 1-6
- Zigama Credit and Saving Society [ZCSS]. (2019). Bank operations manual. Kigali, Rwanda.
- Zigama Credit and Saving Society. [ZCSS] (2019). *Human Capital Management Manual*. Kigali, Rwanda.
- Zigama Credit and Saving Society. [ZCSS] (2019). Risk Management and Legal Departments. Kigali, Rwanda.
- Zigama Credit and Saving Society. [ZCSS](2019). Treasury Management. Kigali, Rwanda.
- Zigama CSS Rwanda Ltd [Zigama CSS] (2022). Annual Reports. Kigali, Rwanda.