

INTERNAL CONTROL SYSTEMS AND FINANCIAL SUSTAINABILITY OF SELECTED SUPERMARKETS IN NAIROBI CITY COUNTY, KENYA

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ABSTRACT

Financial sustainability has remained unstable among supermarkets in Nairobi City County, as reflected by contraction in the sector where total branches declined from 259 in 2020 to 194 in 2021 before partial recovery, alongside cumulative closures of about 100 outlets by 2024, and the collapse or downsizing of major retail chains such as Nakumatt, Tuskys, and Uchumi, reflecting persistent instability in financial sustainability. The overall research goal was to examine the effect of internal control systems on the financial sustainability of supermarkets in Nairobi City County, Kenya. Specifically, the study assessed the effects of control activities, control environment, risk assessment, and monitoring on financial sustainability. The study was underpinned on Systems Theory and Fraud Triangle Theory. A descriptive research approach was adopted targeting 40 managers and senior officers responsible for finance, operations, compliance, risk, and revenue drawn from selected supermarkets in Nairobi City County using purposive sampling. Primary data were collected using structured questionnaires in a cross-sectional survey with reference to the year 2025. Diagnostic tests - normality,

multicollinearity, heteroscedasticity, and linearity were conducted. Data were analyzed utilizing SPSS through descriptive statistics and inferential techniques including Pearson correlation and multiple regression analysis. Data were presented using tables. Regression results showed that control activities had a positive significant effect on financial sustainability ($\beta = 0.284$, $p = 0.0126$), control environment had a positive significant effect ($\beta = 0.336$, $p = 0.005$), risk assessment had a positive significant effect ($\beta = 0.221$, $p = 0.0353$), while monitoring had a positive significant effect ($\beta = 0.297$, $p = 0.0109$). The study concludes that control activities, control environment, risk assessment, and monitoring practices strengthened financial sustainability among supermarkets in Nairobi City County. The study recommends strengthening structured internal control systems. The study adhered to ethical norms such as informed consent, confidentiality, and voluntary involvement.

Key words: Control Activities, Control Environment, Risk Assessment, Monitoring, Financial Sustainability.

INTRODUCTION

Background of the Study

In Kenya, the supermarket industry has been growing steadily with augmenting instability. According to Wambua and Njoroge (2023), the increased competition has led to an increase in the

importance of good financial management practices, whereas Gitau and Obura (2021) state that financial sustainability is directly linked to the quality of the internal control systems. Meanwhile, as Nyongesa (2023) emphasizes, most of the supermarkets have difficulties with cash flows management and resource protection, which casts doubts on their sustainability in the competitive retail environment in the long term.

In Nairobi City County, the financial viability of supermarkets has been a very acute issue as witnessed by the downfall of major retail chains like Nakumatt and Tuskys, near-failure of Uchumi, and continued closures of branches by the existing players. These advancements are indicative of the ongoing struggles to keep it going and to continue its financial viability in the retail business. To this, some of the supermarkets such as those chosen in this study as given in the Appendix II still have to work in this unstable environment so they can be used to study the dynamics of financial sustainability in practice. Although control activities, control environment, risk assessment and monitoring are generally recognized as key elements of financial management, their contribution to financial sustainability in these chosen supermarkets is an empirical question that needs a systematic study (Mwangi and Wanjohi, 2021; Kinyua, 2020).

Internal control systems

Internal control systems are the organized policies, procedures and governance frameworks established by the management to make sure operation is efficient, financial reporting reliable and regulatory compliance is adhered to. According to Committee of Sponsoring Organizations (COSO), internal control is an ongoing procedure that is implemented at all levels of an organization to give an assurance of achievement of objectives. According to Tetteh, Amoako and Baiden (2022), these systems combine authorization processes and risk management measures to protect assets whereas Bevin (2024) highlights the importance of segregation of duties in advancing accountability. These systems hence offer a harmonized system of error reduction and enhancing financial discipline in dynamic settings.

The idea behind internal control systems is based on the COSO framework, which defines control environment, risk assessment, control activities, information and communication and monitoring. Farnham (2023) states that these elements are a system in which other elements work together, but, as Sumito, Setiyawati and Mappanyukki (2021) remark, empirical research studies tend to concentrate on elements that are the most operational. The choice of the control activities, control environment, risk assessment, and monitoring is based on their direct impact on the operations and financial performance. Ilyas, Rahman and Razak (2020) correlate them with better governance structure, whereas Jarvis (2021) correlates them with better effectiveness of control and its sustainability.

Financial Sustainability

The Kenyan supermarket industry experienced evident financial sustainability issues in the years 2020 through to 2024. Some supermarkets like Naivas, Quick Mart and Carrefour experienced consistent growth in the number of branches whereas others incurred considerable losses as shown in Table 1.

Table 1: Supermarket Branch Expansion and Closure Trends in Kenya (2020–2024)

Name of Retailer	Category	Branches FY 2020	Branches FY 2021	Branches FY 2022	Branches FY 2023	Opened FY 2024	Closed Branches	Current Branches
Naivas	Hybrid	69	79	91	100	5	0	105
Quick Mart	Hybrid	37	48	55	59	1	0	60
Chandarana	Local	20	23	26	26	0	0	26
Carrefour	International	9	16	19	22	1	0	23
Cleanshell	Local	11	12	12	13	0	0	13
Eastmart	Local	6	7	8	9	0	0	11
Tumaini	Local	5	7	9	12	0	0	12
China Square	International	0	0	0	2	4	0	0
Uchumi	Local	37	2	2	2	0	35	2
Nakumatt	Local	65	0	0	0	0	65	0
Total		259	194	222	245	11	100	258

Source: Kenya Retail Report (2024)

A more detailed analysis of Table 1 reveals that more than a hundred branches of supermarkets were shut down all over the period, which suggests that there was a general financial instability in the industry. These bankruptcies were linked to excessive debt, poor cash flow management, and poor financial control practices (Ng’ang’a, 2024; Muriithi, 2024). Meanwhile, the growth of certain supermarkets did not always mean financial viability, since growth was frequently funded by debt, exposing financial risk to a greater level (Cytonn, 2024; KNBS, 2024). These tendencies confirm that financial stability is a burning issue in the supermarket industry, hence the necessity to investigate the inner control systems as one of the main factors of financial discipline and sustainability.

Selected supermarkets in Nairobi City County, Kenya

Kenyan supermarkets are regulated in a way that encourages compliance and responsibility, such as the Companies Act, tax laws enforced by the Kenya Revenue Authority, and competition laws by Competition Authority of Kenya, as well as labor and county licensing laws. According to the International Finance Corporation (2023), regulatory compliance enhances governance, and

Kenton (2024) associates adherence to the controls with the enhanced credibility of operations. Such needs will require strong internal control systems to aid compliance and financial sustainability.

This research was done on a few selected supermarkets that had organized operations and quantifiable financial operations. Inclusion criteria included supermarkets that had a number of branches, formal management system and operations that were consistent in 2020-2024 to have reliable data. The small and informal retailers were excluded as they lacked structures to control and the collapsed ones were excluded as they were not in operation. Eight supermarkets were picked according to these criteria Naivas, Carrefour, Quickmart, Chandarana, Cleanshelf, Eastmatt, Tumaini, and China Square. According to Farnham (2023), choosing similar companies improves the level of consistency, whereas Ilyas, Rahman and Razak (2020) observe that organized companies are a good source of good governance information.

Branch expansion and closures are indicative of expansion and commercial fragility. Naivas expanded from 69 branches in 2020 to 105 in 2024, Quickmart from 37 to 60, and Carrefour from 9 to 23. Chandarana grew to 26 after 20, Cleanshelf grew to 13 after 11, Eastmatt grew to 11 after 6, and Tumaini grew to 12 after 5, a sign of gradual growth. Conversely, Uchumi reduced by 37 to 2 stores, shutting down 35 stores and Nakumatt failed by 65 to 0. These contractions are more than 90 percent down and are a sign of dire financial pain. The same collapse is linked by Hoai, Hung and Nguyen (2022) with the absence of effective financial management and control systems, which supports the necessity to consider internal controls as the factors that determine financial sustainability.

Statement of the Problem

In Kenya, the supermarket industry is significant as it facilitates the distribution of goods, connects producers and consumers, provides jobs and enhances access to basic goods (Jumah, 2022). Its economic sustainability is thus vital. Financial sustainability in this context can be defined as the capacity of supermarkets to obtain consistent cash flows, fund supplier and financial commitments, invest back in the business, and survive over the long term (Schoenmaker and Schramade, 2019; Kong, Liu and Dai, 2023). Nevertheless, the low profitability of supermarket business, escalating expenses, and stiff competition have put a strain on the industry (Rop, 2023; Ndubi, 2024; Ng'ang'a, 2024).

The Kenyan supermarket industry suffered a severe challenge of financial sustainability in 2020-2024, characterized by tightening, partial recovery, and weakened positions. The Kenya Retail Report (2024) shows that total branches declined from 259 in 2020 to 194 in 2021, a 25 percent drop, before rising to 222 in 2022 and 245 in 2023. Though this recovery, by 2024, the net position was around 258 branches with only 11 new branches opened and 100 branches closed. This instability is further reflected in the collapse of major chains such as Nakumatt and Tuskys, and the sharp decline of Uchumi from 37 branches to only 2 operational outlets.

General objective

The study's overall objective was to examine the effect of internal control systems on the financial sustainability of selected supermarkets in Nairobi City County, Kenya.

Specific objectives

- i. To determine the effects of Control activities on financial sustainability of Selected supermarkets in Nairobi city county, Kenya
- ii. To analyze the effects of Control environment on financial sustainability of Selected supermarkets in Nairobi city county, Kenya
- iii. To establish the effects of on risk assessment on financial sustainability of Selected supermarkets in Nairobi city county, Kenya
- iv. To examine the effects of monitoring on financial sustainability of selected supermarkets in Nairobi city county, Kenya

Hypotheses of the Study

The study tested the following null hypotheses:

H₀: Control activities have insignificant effect on the financial sustainability of selected supermarkets in Nairobi City County, Kenya.

H₀: Control environment have insignificant effect on the financial sustainability of selected supermarkets in Nairobi City County, Kenya.

H₀: Risk assessment have insignificant effect on the financial sustainability of selected supermarkets in Nairobi City County, Kenya.

H₀: Monitoring have insignificant effect on the financial sustainability of selected supermarkets in Nairobi City County, Kenya.

THEORETICAL LITERATURE

Systems Theory

Systems Theory was advanced by Ludwig von Bertalanffy and Anatol Rapoport in 1968, who argued that organizations operate as integrated systems composed of interdependent components working toward a common objective (Bertalanffy, 1968). According to the theory, a system is made up of subsystems which need to operate together in order to bring about desired results. According to Gibson and Casti (2023), a collapse of a single subsystem can lead to the collapse of the whole system, and Bouchrika (2025) considers organizations to be super systems with units that have to coordinate the final goals.

The theory presupposes that systems consist of interrelated components that may not be effective when performing in isolation but when interacting with each other. According to Mach and Cloud (2023), the whole is superior to the individual parts, whereas Wilkinson (2022) differentiates

closed and open systems and the latter deals with the environment. Main (2023) emphasizes the fact that organizations are open systems and need cohesive internal operations in order to adapt and be efficient.

Recent research establishes the fact that Systems Theory remains relevant in the organizational setting. Njane (2024) discovered that synchronized internal control mechanisms are effective in enhancing credit performance in cooperative societies. Kariuki and Ngugi (2021) defined that integrated control mechanisms boost financial performance, whereas Hoai, Hung and Nguyen (2022) demonstrated that interconnected management systems boost financial stability in retail sectors. These results suggest that there is enhancement of financial results with well-integrated systems.

This study is based on the Systems Theory that describes the role of internal control elements like control environment, control activities, risk assessment, and monitoring that have to operate in a coherent manner to have an impact on financial sustainability. Any one of the elements can be weak and affect the effectiveness in the whole. The operational aspect, control activities, has a direct impact on the resource utilization and risk management. Kirui (2020) and Wamboi (2021) note that the presence of effective controls limits the occurrence of fraud and inefficiencies, thus, ensuring financial sustainability in supermarkets.

Fraud Triangle Theory

Fraud Triangle Theory was advanced by Donald Cressey in 1953, who explained that fraudulent behavior arises when three conditions exist, namely pressure, opportunity, and rationalization (Cressey, 1953). According to the theory, individuals tend to commit fraud when they are financially or personally pressured, they are presented with an opportunity by weak controls and they internally justify their deeds. Albrecht, Albrecht and Albrecht (2020) clarify that the ineffective internal control systems tend to create opportunity, whereas Dorminey, Fleming, Kranacher and Riley (2021) note that rationalization enables people to view fraud as normal under some circumstances.

According to the theory, fraud is not a random event but a predictable event that can take place based on organizational vulnerabilities and human nature. It assumes that people react to inducements and compulsions especially in settings where control fails. According to Free (2021), a weak governance structure predisposes people to fraudulent activities, whereas Said, Alam and Ramli (2020) claim that absence of monitoring and accountability enhances the opportunity factor. This means that companies that have low internal control systems are susceptible to fraud and financial instability.

The recent empirical literature proves the significance of Fraud Triangle Theory to the explanation of the financial misconduct. In a study by Ocansey and Ganu (2020), it was observed that the risk

of fraud in financial institutions is augmented by weak internal controls. Kamau and Atheru (2021) determined that weak separation of functions and lack of proper monitoring are major contributors to the presence of fraud in Kenyan institutions. Similar to Nguyen, Tran and Pham (2022), the authors noted that opportunity due to control weaknesses is the best predictor of fraud in retail businesses. These results affirm the fact that the theory is still useful in determining financial risks in contemporary organizations.

Fraud Triangle Theory will guide this research on the basis that the internal control components, which are control activities, control environment, risk assessment, and monitoring, have weaknesses that enable fraud to occur, thereby compromising finances sustainability. Lack of effective control processes like inadequate separation of responsibilities and slow responses to misappropriation of funds expose the likelihood of resource abuse. Poor monitoring and risk evaluation mechanisms enhance vulnerabilities. Enhancing internal controls helps minimize fraud opportunities, improve accountability and sustainability in the finances of supermarkets.

Empirical Reviews

Kimani (2023) studied the effects of the control environment on the effectiveness of financial risks mitigation among retail stores in Nairobi City County through purposive sampling and survey data. The researchers discovered that efficiency in management and integration of technology played a significant role in reducing financial risks. One of the conceptual gaps is that one of the determinants of financial sustainability was not examined as control environment. One of the contextual gaps is that the study addressed condition of crisis during the COVID-19 era and therefore could not be generalized in normal business conditions. These gaps were bridged with the analysis of control environment as an independent factor that affected financial sustainability in the normal operating environment in the supermarket industry.

Oyelakin and Abdullahi (2022) assessed the impact of internal control activities and workforce capacity on the financial performance of small and medium enterprises in Nigeria. Using stratified sampling and regression, the authors concluded that control activities positively and significantly impacted the performance of the firms. One limitation of the methodology is the possibility of bias due to the stratified sampling in case the strata are not clearly stated. One such gap is a contextual gap whereby the research emphasized on manufacturing and service firms as opposed to retail supermarkets. The latter provided solutions to these gaps by incorporating the purposive sampling and narrowing down to supermarkets to improve their contextual relevance and sampling specificity.

Menezes and Escrig-Tena (2023) investigated the impact of performance monitoring systems on organizational outcomes in the United Kingdom using survey evidence and structural equation modelling. The findings revealed that monitoring mechanisms positively influence both financial performance and employee performance. Similarly, Muiruri and Gitagia (2026) established that

effective investment management strategies significantly enhance net investment returns of umbrella retirement benefit schemes in Kenya, underscoring the importance of continuous monitoring and evaluation in improving financial outcomes. However, a methodological weakness of the study is that structural equation modelling may limit the clarity of causal interpretation. In addition, the study did not explicitly link monitoring mechanisms to indicators of financial sustainability, creating a conceptual gap. The present study addresses these limitations by employing a direct analytical approach and examining the relationship between monitoring systems and financial sustainability within supermarkets in Kiambu County, Kenya.

Qazi, Simsekler and Formanek (2022) examined how geopolitical risk assessment affects supply chain performance in China with the Bayesian Belief Network modelling. The results demonstrated that there is a strong correlation between the risk assessment and supply chain efficiency. One of the methodological weaknesses is that Bayesian models need large data sets to be estimated with any degree of certainty, which is not always practical in practice. One of the conceptual gaps is that the investigation has been on supply chain performance and not financial sustainability. These were bridged with the use of a less complex analysis method and a direct connection between risk analysis and financial sustainability parameters of retail operations.

RESEARCH METHODOLOGY

This study adopted a descriptive and explanatory research method. The descriptive component enabled the study to systematically describe the characteristics of internal control systems and financial sustainability among selected supermarkets in Nairobi City County.

The analysis used a multiple linear regression model, which is suitable in the analysis of the effect of more than one independent variable on one dependent variable using cross sectional data. The model enables the determination of the personal contribution of each internal control component to financial sustainability and the impact of the other variables is controlled (Gujarati and Porter, 2020).

$$FS_i = \beta_0 + \beta_1 CA_i + \beta_2 CE_i + \beta_3 RA_i + \beta_4 M_i + \varepsilon_i$$

Where:

FS_i = Financial Sustainability of respondent i

CA_i = Control Activities

CE_i = Control Environment

RA_i = Risk Assessment

M_i = Monitoring

β_0 = Constant term

β_1 – β_4 = Regression coefficients

ε_i = Error term

The study population included the staff of four major functional areas of eight sampled supermarkets in Nairobi City County, Kenya, i.e., finance, operations, internal audit, and administration. These functional domains were selected due to their direct involvement in internal control systems, including control activities, risk assessment, and monitoring procedures, as well as their integral role in financial management. When the respondents have relevant knowledge, it enhances the accuracy and reliability of the data collected (Hair, Black, Babin and Anderson, 2019).

This research used purposive sampling method to sample respondents among the eight samples of supermarkets in Nairobi City County. The purposive sampling was deemed suitable since the research was to focus on individuals who had the knowledge and engagement in internal control systems

A structured feedback forms was the research instrument that was used in this research. The questionnaire was deemed to be appropriate since it enables one to gather standardized data at once on several respondents in a uniform way, thus, it is suitable to quantitative analysis.

Diagnostic Tests

Diagnostic tests were done to evaluate the satisfaction of assumptions of Ordinary Least Squares regression model. The tests serve a critical role in ensuring that the estimates of the parameters are sound, and the statistical inferences made using the model are valid. Breakage of these assumptions can lead to biased coefficients, inefficient estimators or incorrect hypothesis testing. In this regard, the research assessed the normality, multicollinearity, heteroskedasticity, and linearity with the help of relevant cross sectional data analysis procedures (Gujarati and Porter, 2020; Wooldridge, 2021).

Descriptive Analysis

This section provides the summary statistics of the main variables of the research: control activities (CA), control environment (CE), risk assessment (RA), monitoring (MON), and financial sustainability (FS). Table 4.7 gives the means, the standard deviations and the range (minimum and maximum values) of each variable and gives an insight into the distribution of the variables within the sampled supermarkets in Nairobi City County. This descriptive analysis provides a basis in which to interpret the following inferential statistical results.

Table 2 Descriptive Statistics

Var	M	Md	Max	Min	SD	Skew	Kurt	n
CA	3.81	3.85	4.9	2.6	0.48	0.14	2.89	34
CE	3.76	3.8	4.85	2.5	0.51	0.19	2.92	34
RA	3.83	3.88	4.88	2.7	0.46	0.11	2.87	34
MON	3.79	3.82	4.92	2.55	0.49	0.08	2.9	34
FS	3.64	3.68	4.8	2.2	0.56	0.21	2.88	34

Research Data (2026)

Table 2 illustrates that the control activities (CA) had a mean of 3.81 with a median of 3.85 which means that there was general agreement among the respondents on whether the supermarkets had structured control procedures. The highest and lowest values of 4.90 and 2.60 suggest that there is a moderate range of variation among firms and the variation is 0.48, which indicates consistent responses. The slight positive skewness (0.14) and the near-normal kurtosis (2.89) demonstrate that the distribution is balanced, and control activities are mostly applied, but their effectiveness varies in different supermarkets.

The Control environment (CE) had a mean of 3.76 and a median of 3.80 which shows moderate to strong consensus on the existence of ethical leadership, governance structures and organizational culture that supports internal controls. The highest and lowest values of 4.85 and 2.50 show the variability of the values across the firms and the standard deviation of 0.51 is moderate. The positive skewness (0.19) and close to normal kurtosis (2.92) values show that the distribution is stable, indicating that most supermarkets have already created the control environment, but differences in the degree and level of its implementation exist.

In risk assessment (RA), there was a mean of 3.83 and a median of 3.88 which showed a high level of agreement on the identification and evaluation of risks impacting supermarket operations. The highest and the lowest figures of 4.88 and 2.70 depict a moderate range of variation across organizations whereas the standard deviation is quite low (0.46), which is an indication of consistency in responses. The skewness value (0.11) and mesokurtic distribution (2.87) are near symmetric, which means that responses are rather stable, meaning that risk assessment practices are relatively well-developed among the participating supermarkets.

Monitoring (MON) yielded the mean of 3.79 and the median of 3.82 which demonstrates overall consensus on the on-going review and assessment of the internal control systems. The highest and lowest values of 4.92 and 2.55 indicate that there is moderate variation in the responses among supermarkets and the standard deviation is 0.49, which indicates uniform responses. The close skewness (0.08) and normal kurtosis (2.90) are near-symmetrical, meaning that monitoring mechanisms are implemented fairly well, but the systems of some supermarkets might be stronger than those of others.

Financial sustainability (FS) had the mean of 3.64 and median of 3.68 which showed moderate consensus of the financial sustainability and operational viability of the supermarkets. The highest 4.80 and lowest 2.20 indicate that there is some observable variation among firms and the variation of 0.56 means that there is moderate variation in the responses. The positive skewness (0.21) and the close value of kurtosis (2.88) show that the distribution is balanced. Nevertheless, the average value and the observed variance indicates that the financial sustenance issues are still present in supermarkets, especially concerning cost control, revenue security, and liquidity. Such trends

indicate a researchable issue on whether internal control systems have a strong effect on financial sustainability results.

Multicollinearity Test

A Variance Inflation Factor value below 10 indicates absence of harmful multicollinearity, while values above this threshold suggest serious multicollinearity.

Table 3 Multicollinearity Test Results

Variable	VIF
CA	1.32
CE	1.41
RA	1.36
MON	1.29

Research Data (2026)

Table 3 confirms that all VIF values are below the threshold of 10. This signifies that multicollinearity is not an issue in the model. The independent variables are adequately independent, facilitating accurate evaluation of their individual impacts on financial sustainability.

Heteroskedasticity Test

Heteroskedasticity is a situation in which the variance of the error terms varies across observations.

Table 4 Breusch Pagan Test Results

Statistic	df.	Sig.
	4	0.0478

Research Data (2026)

Table 4 displays that the Breusch Pagan test produced a p value of 0.0478, <0.05. This indicates the presence of heteroskedasticity in the model. Therefore, the assumption of constant variance is violated. Robust standard errors were utilized in the regression study to ensure reliable statistical inference on this issue.

Linearity Test

Linearity can be assessed using graphical methods and formal statistical tests such as the Ramsey RESET test. In this study, the Ramsey RESET test was employed because it provides a formal mechanism for detecting functional form misspecification.

Table 5 Ramsey RESET Test Results

Statistic	df	Sig.
—	2	0.3814

Research Data (2026)

Table 5 suggests that the Ramsey RESET test produced a p value of 0.3814, >0.05. This indicates that the model is correctly specified and that the linearity assumption is satisfied. Therefore, the functional form of the regression model is appropriate.

Regression Analysis

The effect of the internal control systems on financial sustainability of the selected supermarkets within Nairobi City County is calculated using regression analysis. The estimation of the regression model was through the use of STATA and the results are displayed below.

Table 6 Fitness of the Model

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	0.846	0.716	0.684	0.271

Research Data (2026)

Table 6 suggests that the model has produced an R² of 0.716 which means that the model has jointly explained 71.6 percent of financial sustainability variation by control activities (CA), control environment (CE), risk assessment (RA), and monitoring (MON). The adjusted R² = 0.684 proves that the model is robust after correction of the number of predictors though the correlation coefficient (R = 0.846) shows that there is a strong relationship between internal control systems and financial sustainability.

Table 7 ANOVA

Source	Sum of Squares	Df	Mean Square	F	Sig.
Regression	23.912	4	5.978	58.364	0.000
Residual	9.502	29	0.328		
Total	33.414	33			

Source: Research Data (2026)

Table 7 demonstrates that the regression model was be statistically substantial ($p < 0.05$), which supports the fact that the elements of internal control systems in combination with each other have a substantial impact on financial sustainability in the supermarkets being studied.

Table 8 Regression Results (Dependent Variable: Financial Sustainability)

Variable	Coefficient	Std. Error	t-Statistic	Sig.
Constant	0.592	0.162	3.654	0.001
CA	0.284	0.089	3.191	0.0126
CE	0.336	0.095	3.537	0.005
RA	0.221	0.101	2.188	0.0353
MON	0.297	0.091	3.264	0.0109

Source: Research Data (2026)

Table 8 indicates that control activities (CA), control environment (CE), risk assessment (RA) and monitoring (MON) had all positive and significant influence on financial sustainability. The constant value (0.592) was also significant, which shows the level of financial sustainability at the base of all predictors being equal.

The regression equation derived from the coefficients is expressed as follows:
 $FS_i = 0.592 + 0.284CA + 0.336CE + 0.221RA + 0.297MON + \varepsilon$

Where:

FS_i=Financial sustainability of supermarket i

CA=Control activities

CE=Control environment

RA=Risk assessment

MON=Monitoring

ϵ =Error term

The equation shows that the financial sustainability between supermarkets is greatly improved by the improvement in the control activities, control environment, risk assessment and monitoring practices. Findings indicate that the reinforcement of internal control mechanisms brings a positive contribution to operational efficiency, accountability and financial stability.

CONCLUSIONS AND RECOMMENDATION

Conclusions

Regarding the first objective, the positive significant contribution of the control activities, as measured by the authorization procedures, segregation of duties, documentation controls, and operational checks, is observed, which justifies the conclusion that supermarkets with well-organized operational controls achieved better financial sustainability results. This highlights the need to reinforce routine control process in improving efficiency and minimizing financial leakages.

Secondly, the significant positive influence of control environment that was assessed by the management integrity, governance structures, ethical practices, and organizational policies denotes that the supermarkets with the more effective governance and accountability systems had better financial sustainability outcomes. This is an indication of how the organizational culture and leadership can contribute towards financial discipline and stability.

Regarding the third objective, the positive significant impact of risk assessment, as measured by identification, evaluation, prioritization, and analysis of financial and operational risks, implies that better financial sustainability results were achieved by supermarkets that used systematic risk evaluation methods. This shows that the proactive risk assessment improves the decision-making process and saves exposure to financial uncertainties.

Lastly, the significant positive impact of monitoring, as determined by internal audits, performance monitoring, reporting systems, and other oversight measures, shows that supermarkets that had stronger monitoring systems attained better financial sustainability results. This confirms the significance of perpetual management and feedback mechanisms and maintaining financial discipline and stability.

Policy Implications and Recommendations of the Study

To the extent of the first objective, the finding that the increased level of control activities contributed to the financial sustainability forms the foundation of recommending that the management of the supermarket should institutionalize the systematic control activities of operation by means of clear authorization procedures, good segregation of duties, and standardization of documentation. Compliance frameworks should be enhanced by regulators and policymakers promoting the use of minimum internal control standards in the retail industry. To the consumers, the better the control activities, the better the efficiency of services and the low risk of disruption of an operation. On the academic front, the results offer an outline on which future studies on operational control systems in a retail setting can be conducted.

In regards to the second objective, the finding that a robust control environment can ensure financial sustainability warrants a recommendation that management of supermarkets should enhance governance systems, ethical culture, and accountability systems in their organizations. To improve transparency and financial discipline, policymakers and regulatory institutions ought to encourage corporate governance principles specific to retailing businesses. The high level of control to the consumers allows reliability and trust in the retail operations. Academically, the results confirm the need to conduct a further investigation into the role played by the organizational culture and leadership in financial sustainability.

In relation to the third goal, the conclusion that sound risk assessment enhances financial sustainability justifies the suggestion that supermarkets should implement well-defined risk identification and assessment systems to inform operational and financial decisions. To increase preparedness and minimize risks caused by uncertainties, risk assessment should be included in the planning processes by the management. Regulators and policymakers ought to come up with simplified risk management policies that can apply to businesses in the retail sector to enhance resilience within the sector. To the consumer, better risk management increases service continuity and stability of prices. On the academic front, the results indicate the significance of preemptive risk assessment in maintaining financial performance.

Lastly, based on the fourth goal, the conclusion that financial sustainability is bolstered by monitoring give the foundation to suggest that supermarkets should strengthen monitoring mechanisms by using constant performance monitoring, internal audit and formal reporting systems. To increase accountability in the retail sector, regulators ought to promote periodic reports and supervision. To consumers, good monitoring enhances consistency and reliability of the services and operations. The results also give a basis to other scholarly studies on monitoring systems as a driver of financial sustainability in retail businesses.

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