

Control Environment And Financial Performance Of Listed Agricultural Firms In Nairobi Securities Exchange, Kenya

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Abstract: *Internal controls are put in place to ensure safe custody of all assets; to avoid misuse or misappropriation of the firm's assets and to detect and safeguard against probable frauds. Some of the listed Agricultural firms in the Nairobi Securities exchange have registered declining performance in recent years. The current study therefore sought to determine the effect of control environment on the financial performance of agricultural firms listed in Nairobi stock exchange. The study adopted descriptive research design using both quantitative and qualitative approach. The study targeted 7 agricultural firms listed in Nairobi stock exchange. The target population was 286 employees working in accounting, administration, and operations department in the 7 companies. Stratified random sampling was used where the departments were used as stratas. Thus, in total, the study targeted a sample size of 164 respondents. Primary data was collected by use of a structured questionnaire while secondary data was obtained from published and audited financial statements of the listed agricultural firms. The data obtained was analysed using quantitative analysis. Data analysis made use of both descriptive and inferential statistics. The study found that the control environment had significant effect on financial performance of agricultural firms listed in NSE. The researcher provided some recommendations based on the research findings, Agricultural firms should diversify their control measures related to compliance level which could be done through assigning duties to individual employees based on their competence and training.*

Keywords: *Control Environment, Financial Performance, Listed Agricultural Firms*

I. INTRODUCTION

The trend analysis shows that the performance of agricultural sector, in terms of market capitalization, is quite low. Since market performance (market capitalization) has been linked to firms' profitability (ROA), the poor performance of listed agricultural firms can be linked to poor internal control systems that affect their profitability (Dioha, et al. 2018; Jave, 2013; Kazeem, 2015; Mirza & Mwebia, 2017). This close relationship between the performance of agriculture and that of the economy implies that agricultural firms must grow in embracing effective internal control systems at a high rate for it to spur economic growth (Nyoro, Wanjala & Awour, 2017).

Nairobi Stock Exchange (NSE) investors' handbook (2018) on financial review report showed that out of all the

seven listed agricultural firms in Kenya, three of them indicated poor performance within the period of the year 2014 to 2021. For instance, Eaagads' Ltd net profit for the year 2018 dropped by Kshs. 80,634,000; Limuru Tea Company reported a net loss of Kshs. 22,134,000 for the year of income 2019 indicating a drop by Kshs. 3,060,000; Sasini's Plc profit for the year of income 2019 dropped by Kshs. 237,578,000.

Karuturi Ltd was put into receivership back in the year 2014 due to inability of the managers to assess and manage risks, inability to take advantage of control environment, control activities, informational and communication. The inability of Karuturi Ltd to control its debt levels and operational costs was attributed to poor internal control measures. The company continued to sink further in debt after it was placed under receivership leading to its closure and delisting from NSE in 2018. The internal control systems have

been key to the best performing companies in Kenya especially in listed commercial banks and manufacturing companies (Nyoro, Wanjala & Awour, 2017).

In Kenya, the drop in ROA in the period 2017 to 2021 in Eaagad's Ltd, Limuru Tea Company, and Sasini Plc could be connected to poor internal control systems (NSE investors' handbook, 2018). The inability of these firms to take advantage of the control environment, risk assessment, information and communication, monitoring activities, and existing control activities could have resulted to drop in their net profit and hence decline in ROA (CMA, 2022). Further, Karuturi Ltd was put into receivership back in the year 2014 due to inability of the managers to assess and manage risks, inability to take advantage of control environment, control activities, informational and communication.

Internal controls are processes designed and implemented by those charged with governance, management, and other personnel to provide reasonable assurance about the achievement of an entity's objectives with regard to reliability of the financial reporting, effectiveness and efficiency of operations and compliance with applicable laws and regulations (Mwindi, 2018). Tunji (2013) and Dhillon (2001) argue that internal controls encompass a set of rules, policies, and procedures an organization implements to provide reasonable assurance that: its financial reports are reliable, its operations are effective and efficient, and its activities comply with applicable laws and regulations. The Committee of Sponsoring Organizations of the Treadway Commission (COSO, 2013) framework looks at internal control as a process, implemented by an entity's board of directors, management and other personnel, designed to provide "reasonable assurance" regarding the achievement of objectives in the following categories: Effectiveness and efficiency of operations, reliability of financial reporting, compliance with applicable laws and regulations.

The COSO framework (2013) identifies five main elements of internal control systems against which the review should take place. These include control environment, risk assessment, control activities, information and communication and monitoring. There is a general expectation that institution and enforcement of proper internal control systems will always lead to improved financial performance. The COSO (2013) framework also found out that properly instituted systems of internal control improve the reporting process and also give rise to reliable reports which enhances the accountability function of management of an entity. Internal controls are put in place to ensure safe custody of all companies' assets; to avoid misuse or misappropriation of assets and to detect and safeguard company's resources against probable frauds.

STATEMENT OF THE PROBLEM

Agricultural sector is majorly unstable due to risk of returns compared with other sectors for instance the services and commercial sectors and the industrial and allied sectors which have modest risk and investment and finance sector having the least comparative risk among all the four sectors. According to NSE investors' handbook (2018), financial review report showed that out of all the seven listed

agricultural firms, three of them; Eaagads, Limuru and Sasini indicated declining and poor ROA within the period of the year 2014 to 2019. From NSE the investor's data centre report (2018), Karuturi Ltd. was put into receivership back in the year 2014 due to inability to manage risk and poor internal control systems. The failure of the internal control systems were reflected by inability to pay a loan that was borrowed from CFC Stanbic.

The Agricultural sector in Kenya is dominated by firms who have had difficulties in managing their control environment and activities, poor risk management measures and poor monitoring system. There were concerns that an average drop of ROA from 2019 to 2021 of 19.4%, for Eaagads' Ltd, 32.1 % for Limuru Tea Company and 15.4% for Sasini Plc could be associated with ineffective internal control systems (NSE investors' handbook, 2021). More positively, Kenya's banking sector and manufacturing sector continues to record dynamic positive growth in ROA as a result of continuous investment in effective internal control systems (Matchmaker Associates, 2017). Given that most of the poorly performing companies listed in NSE are in the agricultural sector, it is important to test the statistical effect of control environment on their financial performance.

OBJECTIVE OF THE STUDY

- ✓ To establish the effect of control environment on financial performance of agricultural firms listed on the NSE.

INSTITUTIONAL THEORY

Institutional theory adds a layer of complexity to the explanation of how management techniques are adopted and organized inside companies. This hypothesis, which is more sociological in character, is based on Meyer and Rowan's (1977) and DiMaggio and Powell's (1977) work. Institutional theory is becoming an important theoretical stance in accountability analysis and corporate theory, according to Davidson, Goodwin-Stewart and Kent (2015). According to this notion companies are creating and implementing frameworks, processes and systems not primarily on the basis of rational economic cost-benefit analysis, but as new methods and processes are more or less necessary.

Company must implement the activities and processes that have been described in Meyer and Rowan according to the prevalent rationalized notions of the organizational function and institutionalized in society (1977). Regardless of the immediate use of the processes and procedures gained, organizations that do so increase their reputation and potential for success. Symbolic displays of compliance and social responsibility are organizational structures, which include diverse functions, duties, processes, and internal control systems. Organizations that have sufficient frameworks in place are less likely to be subjected to in-depth examinations of their activities. Gordon and Miller (1976) brought out the importance of institutionalized laws, based on their study. These are categories of society which are self-evident, endorsed by popular opinion, or even given legal authority. These Regulations include normative responsibilities, whether they are in- and outside-professional risk managers,

compliance officials, CEOs, auditors, directors or other types of professionals, to be taken into account and accepted by members of the corporate community.

The institutionalization process, according to Fadzil, Haron, and Jantan (2017), is the process through which many types of social structures in everyday society get legal significance. Institutional theory studies organizational phenomena by reference to the environmental aspects and the formally and informally established standards for organizational activities. Repeated patterns of behavior are structures, or institutionalized laws. This theory was important for the analysis because it highlights the organization's internal structures which will mitigate the external scrutiny if they are successful.

EMPIRICAL REVIEW

The internal monitoring mechanisms and financial performance of higher educational bodies in the Vihiga County of Kenya have been studied by Kisanyanya and Omagwa (2018). In Vihiga County, Kenya, internal financial control variables for institutes of higher education were studied. Four public universities and data collected from 96 employees have been selected. According to the research, internal control systems had a positive influence on financial performance. In other words, the flexible control environment had a positive and considerable impact on financial performance. Risk assessment, management measures and monitoring all showed significant positive financial performance impacts. Control measures are far more effective than other aspects in terms of financial success. Authority, organizational structure, and human resource policies and procedures were used as proxies for the control environment. Accountability, cost management, and excess were used to evaluate financial performance (income-expenses).

A study on the impact of internal control systems on financial performance of public higher learning institutions in Nairobi city county, Kenya was carried out by Muhunyo (2018). Financial performance operationalization was based on cost management, surplus (revenue minus expenses), transparency, reporting, and capital investment. Reporting, risk management, control operations, information and communication, and control environment were utilized as internal control system counterparts. This study used a cross-sectional descriptive survey technique and targeted 28 employees from the Nairobi County public institution of higher learning's administration, accounting/finance, and operations departments. A semi-structured questionnaire was utilized to assess the data using regression and correlation analysis in order to get primary data from respondents. A multivariate linear regression examined the connection between dependent and independent variables. The research reveals that financial performance is significantly affected by the control environment, risk management, monitoring activities and information and communications activities. The factors explained 99.1 percent of changes in financial performance. The study shows that organizations improve systems of internal control and preserve organizational capital transparency. Control environment indicators considered

included; organizational structure, authority and HR policies and procedures as recommended by COSO model.

II. RESEARCH METHODOLOGY

The research employed a descriptive design, following Creswell's (2013) definition, to provide a structured approach for solving the research questions. This design helped in organizing and analyzing the study conditions to assess their significance. Questionnaires were used for data collection, and the design's effectiveness was measured by its ability to define the current situation and establish benchmarks for evaluating the relationships between different events. This approach aligns with Orodho's (2012) view that a well-chosen design aids researchers in finding solutions to their problems.

The target population included listed agricultural firms on the Nairobi Securities Exchange (NSE), specifically seven companies: Eaagads Ltd, Kapchorua Tea Kenya Plc, Kakuzi Plc, Limuru Tea Co. Ltd, Rea Vipingo Plantations, Sasini Plc, and Williamson Tea Kenya Plc. These firms provided a total of 286 employees across accounting, administration, and operations departments, forming the basis for the study's analysis. The population distribution was documented in Table 3.1, highlighting the number of employees in each department within the firms.

A stratified random sampling method was used to select a sample size of 164 respondents from the target population, calculated using Krejcie & Morgan's (1970) formula. The sample included 42 respondents from accounting and finance, 52 from administration, and 70 from operations. Purposive sampling was then employed to select specific individuals within these categories. Data collection instruments included structured questionnaires for primary data and a secondary data checklist, with a pilot study conducted to test their validity and reliability. The pilot study, validity, and reliability measures ensured the accuracy and consistency of the data collection process, following standards set by Creswell (2017) and Kothari (2013).

III. RESEARCH FINDINGS AND DISCUSSIONS

The research concept's variables were descriptively evaluated. The variables' features and conclusions were identified by the researcher.

CONTROL ENVIRONMENT

On a five-point scale, respondents were asked to rate how much they agreed with certain statements (Agree). The findings are given in Table 1.

Control Environment		
	Mean	Std Deviation
Official rules and procedures govern all essential operations of the firm	3.96	.751
Responsibilities and follow-up measures are allocated for the results of all tasks feedback	3.95	.697

In the audit committee, direct connection between external and internal auditors is sufficiently maintained	3.95	.622
The corporate culture, code of behaviour, human resources policy and incentive systems are supporting their internal control goals and procedures.	3.89	.567
The firm has an excellent accounting and financial system	3.87	.657
There have been some powers and obligations to guarantee that policies and procedures are complied with.	3.86	.748
All stakeholders are honest and fair in the organization's interest	3.86	.711
There is an advanced company structure which represents the control chain suitably	3.84	.587

Source: Survey Data (2023)

Table 1: Descriptive Statistics on Control Environment

According to the data shown in Table 1, the participants indicated a consensus that the firm's crucial activities are regulated by official rules and procedures, with an average rating of 3.96. Furthermore, they reached a consensus that the outcomes of all tasks feedback include specific duties and follow-up actions. It was also acknowledged that the audit committee effectively maintains a strong relationship between external and internal auditors, with a mean rating of 3.95. The survey participants also agreed that the company culture, code of conduct, human resources policy, and incentive systems effectively align with their internal control objectives and processes (mean = 3.89). Additionally, they rated the accounting and financial system of the companies as outstanding (mean = 3.87). They also agreed that there exist certain authorities and responsibilities to ensure adherence to rules and processes, as well as the integrity and impartiality of all stakeholders in the organization's best interest (M=3.86). Respondents unanimously acknowledged the presence of a sophisticated corporate structure that effectively depicts the control chain, with an average rating of 3.80. The study further indicated that the standard deviations were less than 1 and therefore there were low variation in responses.

The study results were supported by Kisanyanya and Omagwa (2018) that the flexible control environment had a considerable impact on financial performance. Authority, organizational structure, and human resource policies and procedures were found to effectively determine the financial performance. Ndiffon (2014) found that the organizational structure, human resources policies and procedures impacts positively on financial performance. Muhunyo (2018) further argued that organizational structure, authority and HR policies and procedures greatly affected financial performance.

FINANCIAL PERFORMANCE

The study financial performance was indicated by the ROA in agricultural firms listed in Nairobi Securities. The result on ROA was indicated in Table 2

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	35	-.02090	.14322	.0582863	.04766541
Valid N (listwise)	35				

Table 2: Descriptive Statistics on ROA

The study findings in table 2 indicate that the minimum ROA was -2.09% and the maximum ROA was 14.322% for the 7 companies considered under a period of six years (2017 to 2022). The average ROA for the period 2017 to 2022 for the seven (7) companies was 5.83%. The results also indicate that the standard deviation was minimal at 0.0477 indicating a low variation from the mean. The result implied that for the period under consideration the financial performance of listed Agricultural firms in Kenya was low and some of the periods for instance 2019/2020 majority of the firms had the lowest Return on Assets which could also be attributed to Covid 19 pandemic.

Coefficients Of The Study Variables

The study used the coefficients to fit the following regression equation model;

$$Y = \beta_0 + \beta_1 CE_i + \epsilon$$

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-1.055	0.116		-9.095	0.000
	Control Environment	0.797	0.111	0.716	7.180	0.001

Source: Survey Data (2022)

Table 3: Regression Coefficients

From the standardized beta value in Table 3 the following standardized regression equation was fitted; $Y = -1.055 + 0.716 CE_i + e$

From the regression equation above, holding the five independent variables (control environment) constant the value of financial performance was -1.055 units. The findings also show that control environment has statistically significant influence on financial performance of agricultural firms listed in NSE as shown by ($\beta = 0.716, P = 0.001$). The influence of control environment on financial performance of agricultural firms listed in NSE was found to be significant. This implies that a unit change in control environment will result to a positive change in financial performance of agricultural firms listed in NSE by 0.716 units. The study findings agree with Kisanyanya and Omagwa (2018) that the flexible control environment had a considerable impact on financial performance. Authority, organizational structure, and human resource policies and procedures were found to effectively determine the financial performance. It also agree with Muhunyo (2018) that organizational structure, authority and HR policies and procedures greatly affected financial performance.

IV. CONCLUSIONS

The hypothesis tested H_{01} : The control environment has no significant effect on financial performance of agricultural

firms listed in NSE. The study found that the control environment has a statistically significant effect on financial performance of agricultural firms listed in NSE. The impact of the control environment on financial performance was also shown to be substantial. This meant that a unit improvement in the control environment would result in a boost in of agricultural firms listed in NSE financial performance.

RECOMMENDATIONS OF THE STUDY

Agricultural firms should diversify their control measures related to authorization of transactions (control activities) and compliance level (control environment). These could be done through assigning duties to individual employees based on their competence and training. The results could also be improved through successful customer service plans, which will identify both their "at risk" and most valuable clients.

REFERENCES

- [1] Creswell, J. W. (2013). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). SAGE Publications.
- [2] Capital Markets Authority (CMA). (2022). *Annual Report and Financial Statements*. Nairobi: Capital Markets Authority.
- [3] Dioha, C., Mohammed, N. A., & Okpanachi, J. (2018). "Effect of Firm Characteristics on Profitability of Listed Consumer Goods Companies in Nigeria." *Journal of Accounting, Finance and Auditing Studies*, 4(2), 14-31.
- [4] Jave, J. A. (2013). "Corporate Governance and Firm Performance: Evidence from Pakistan." *International Journal of Business and Social Science*, 4(9), 232-241.
- [5] Karuturi Ltd. (2018). *Company Receivership Report*. Nairobi: Nairobi Securities Exchange.
- [6] Kazeem, A. S. (2015). "Internal Control and Fraud Prevention in Nigerian Commercial Banks." *International Journal of Social Sciences and Humanities Reviews*, 5(3), 141-151.
- [7] Kisanyanya, M. & Omagwa, J. (2018). "Effect of Internal Control Systems on Financial Performance of Higher Educational Institutions in Vihiga County, Kenya." *International Journal of Scientific and Research Publications*, 8(6), 440-452.
- [8] Krejcie, R. V., & Morgan, D. W. (1970). "Determining Sample Size for Research Activities." *Educational and Psychological Measurement*, 30(3), 607-610.
- [9] Matchmaker Associates. (2017). *Agribusiness Market Intelligence: Financial Performance of Agricultural Firms in Kenya*. Nairobi: Matchmaker Associates.
- [10] Mirza, D. A. & Mwebia, M. (2017). "Impact of Internal Control Systems on Financial Performance of Credit Institutions in Kenya." *Journal of Business Studies Quarterly*, 8(4), 42-65.
- [11] Muhunyo, F. M. (2018). "Impact of Internal Control Systems on Financial Performance of Public Higher Learning Institutions in Nairobi City County, Kenya." *International Journal of Scientific and Research Publications*, 8(5), 377-391.
- [12] Mwindi, J. (2018). *The Role of Internal Control Systems in the Financial Performance of SMEs in Nairobi County*. Nairobi: University of Nairobi Press.
- [13] Nairobi Securities Exchange (NSE). (2018). *Investors' Handbook*. Nairobi: Nairobi Securities Exchange.
- [14] Nyoro, J. K., Wanjala, R. & Awour, O. (2017). "Effects of Internal Controls on Financial Performance of Commercial Banks in Kenya." *European Journal of Business and Social Sciences*, 6(5), 34-51.
- [15] Orodho, J. A. (2012). *Techniques of Writing Research Proposals and Reports in Education and Social Sciences*. Nairobi: Kanezja Publishers.
- [16] Tunji, S. T. (2013). "Effective Internal Controls System as a Tool for Improving Performance in Public Organizations in Nigeria." *International Journal of Scientific and Research Publications*, 3(6), 1-8