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Zacchaeus Kiteme Muema, Dr. Benjamin Otwoko, PhD & Dr. Dennis Juma, PhD

The Strategic JOURNAL of Business & Change MANAGEMENT
ISSN: 2312-9492 www.strategicjournals.com
Vol. 12, Iss.2, pp 1018 – 1039, May 165, 2025. www.strategicjournals.com, © Strategic Journals

CORPORATE GOVERNANCE AND FINANCIAL PERFORMANCE OF AGRO-BASED DEPOSIT-TAKING SACCOS IN KENYA

Zacchaeus Kiteme Muema, [1] Dr. Benjamin Otwoko, PhD [2] & Dr. Dennis Juma, PhD [2]

[1] *Master Student, Jomo Kenyatta University of Agriculture and Technology, Kenya*
[2] *Lecturer, Jomo Kenyatta University of Agriculture and Technology, Kenya*

Accepted: May 3, 2025

DOI: http://dx.doi.org/10.61426/sjbcm.v12i2.3248

ABSTRACT

The significant contribution of SACCO sub-sector cannot be ignored in the Kenyan economy with the sector contributing directly to 6.67 % of the country's GDP in 2021. Agro based SACCOS whose membership is comprised of farmers account to 46.79 % of total SACCO membership in Kenya and are spread across the whole country. Past studies have not concentrated on this particular segment of the economy and this prompts the current study aimed to establish the influence of corporate governance and financial performance of Agro based DT Saccos in Kenya. Specifically, the study sought to examine the influence of board size, board composition and audit committee on the financial performance of Agro based DT Saccos in Kenya. The study adopted firm size to act as the moderating variable. A census survey on all the 35 Agro based DT Saccos in Kenya was done. Further, descriptive survey design was adopted. The researcher use secondary panel data covering the period 2018 to 2021. Secondary data was collected with from the firm records. The data was sourced from the published audited annual reports of these Saccos. Analysis of the collected data gathered were be done using STATA after being subjected to the following diagnostic tests, multicollinearity, Hausman, normality, stationarity heteroscedasticity and autocorrelation tests. The analyzed data is presented using pie charts, frequency tables and histograms. The study results revealed that board size was negatively related to financial performance. Other variables including board composition, audit committee and firm size had positive significant relations with financial performance. The study therefore recommends that Saccos should minimize the size of their boards so at to reduce the unnecessary management costs. They should broaden the range of board managers and continue to ensure that audit committee roes are properly clarified to improve the efficiency of their services. Lastly, they Saccos should engage in robust recruitment and marketing of their products and services in order to boost their capital base since firm size has been shown to improve financial performance.

***Keywords**: Audit Committee, Corporate Governance, Board Composition, Board of Directors, Board Member, Board Size, Non-Executive.*

CITATION: Muema, Z. K., Otwoko, B., & Juma, D. (2025). Corporate governance and financial performance of agro-based deposit-taking SACCOs in Kenya. *The Strategic Journal of Business & Change Management,* 12 (2), 1018 – 1039. http://dx.doi.org/10.61426/sjbcm.v12i2.3248

INTRODUCTION

The significant contribution of corporate governance has attracted the attention of many academicians and scholars across the globe (Mwendia, 2018; Mishra *et al*, 2021; Balios & Zaroulea, 2020). Most studies done indicate that corporate governance measured through corporate governance index (CGI) affects both value and performance of any organizations (Mwendia, 2018; Mishra, Jain & Manogna, 2021). A study by Mishra *et al* (2021) established that corporate governance has a significant positive influence on the performance of non-financial firms listed on the National Stock Exchange for the period 2010–2018. This performance was measured by using return on assets and return on net worth.

There is no globally agreed meaning of the term corporate governance but evidence from business and corporate finance literature indicates that this term is often used to imply the aspect of size of the board, composition of the board, nationality of the board members, educational qualification of the board members, gender diversity as well as age differences among the board members of a corporation. Most studies point out that board size, board independence, and board diversity as major attributes of governance of institutions, which finally stand predominantly to determine the effectiveness and efficiency of the board members in achieving the overall strategic goal of the corporation (Meme, 2017).

Regionally, the studies done on corporate governance and financial performance of organisations are consistent with the global studies. Herbert and Agwor (2021) conducted a study on the effect of corporate governance disclosure (CGD) on the financial performance of commercial banks listed on the Nigeria Stock Exchange. The results of the hypothesized relationships showed a positive and significant association between CGD and the banks' financial performance, with a positive effect of CGD on the board of directors and whistleblowing policy. Fakoya and Nakeng (2019) on Board characteristics and sustainable energy performance of selected companies in South Africa. Results from the study indicated that board composition was a crucial factor in the governance of firms. It indicated that the number of female board members has a negative and insignificant influence on corporate energy usage; board independence positively and significantly influences energy usage, and market capitalization has a positive but insignificant influence on energy usage.

Local studies point out that corporate governance is a key aspect in the determination of the financial performance of not only banks but SACCOs and firms listed at the Nairobi Securities Exchange market as well. Omwenga (2017) established that the audit committee size and board diversity had an insignificant negative relationship with the financial performance of SACCOs in Kenya. The study focused on the effect of corporate governance on the financial performance of SACCOs in Kenya. Other studies include Ahmed and Rugami (2019), who conducted a study on corporate governance and performance of savings and credit cooperative societies in Kilifi County, Kenya. Specifically, the study looked at determining the influence of board composition, size of the board, board members' qualifications, and gender balance of the board members on the performance of SACCOs in Kilifi County. Results from this study revealed that the study's corporate governance was a significant factor in determining the performance of the SACCOs in Kilifi County.

Financial performance of a firm is an area that has been widely studied in the finance literature to denote an increase in performance and growth in the financial position of an entity. It is mostly measured using the ratio method from the accounting records. Most of the proxies used to measure financial performance include Return on Assets, Return on Capital employed, Return on Investments, among other measures (Ngwenze & Kariuki, 2017; Kamau, Machuki, and Aosa, 2018; Donald & Delno, 2009). A study done by Kamau, Machuki, and Aosa (2018) examined the financial performance of the 271 financial institutions in

Kenya as influenced by corporate governance. Other studies indicate that financial board characteristics and firm performance for non-financial firms listed at the Kuwaiti Stock Exchange singled out board characteristics into CEO duality, COE tenure, audit committee size, board size, and board composition. The study findings supported the positive effects of CEO duality and audit committee size on ROA (Return on Assets) for non-financial listed companies in the Kuwaiti Stock Exchange.

Financial performance has been linked with corporate governance in most studies, taking a version of board characteristics. Kapil and Mishra (2019) explored the link between the corporate governance system and the firm performance of Indian companies listed at the National Stock Exchange for 2013-2018. The financial performance of these firms was measured by using market-based performance measures (Tobin's Q) rather than the impact on accounting-based performance measures (ROA and ROE). Specifically, ownership was found to positively and significantly affect Tobin's Q and ROA, and not ROE. The board of directors is found to positively and significantly affect Tobin's Q, ROA, and ROE.

There is no generally agreed-upon definition of the term corporate governance. Most scholars opine that corporate governance implies the way the power of a corporate entity is exercised in taking care of the total resources of the organization. It is also defined as an internal system made up of policies, processes, and people, which serve the interests of shareholders and the wider stakeholder category, by directing and controlling management activities with good business savvy, objectivity, accountability, and integrity (Ngwenze & Kariuki, 2017). It simply denotes the way a corporation is structured to run, control, direct, and be accountable for its mandated activities to meet the desired interests of all the stakeholders within their scope of operation.

Board size is one of the paramount factors among the widely known factors affecting the effectiveness and efficiency of corporations, as it simply denotes the number of board members in a board of directors of the corporations (BOD). Some corporations have relatively large board sizes while others have relatively smaller board sizes. To strengthen the governance aspect of SACCOS, The President of the Republic of Kenya in July 2019 issued a policy directive for the immediate establishment of a SACCO Societies Fraud Investigations Unit (SSFIU) Besides the existing prudential regulatory framework, the establishment and operationalization of SSFIU for the SACCO subsector will go a long way in instilling integrity, accountability, transparency and good governance in the subsector. The sporadic incidences of fraud, outright theft and embezzlement of members' savings is therefore expected to be a thing of the past; while consumer confidence in SACCOs as trustworthy investment destination for member savings is also expected to improve (SASRA Supervision Report -2019).

Firm size has predominantly become a major area of concern in moderating the relationship between corporate governance. It implies the value of a firm at a particular period or simply the amount that one needs to pay or take over a given firm (Ncurai & Ng'ong'a, 2015). Firm size can refer the growth in the company's employees who have a large market capitalization. The higher the total assets, the higher the value of the company.

The Sacco industry in Kenya has immensely contributed to the growth of the Kenyan economy. In the recent past, the sector has witnessed rapid growth, contributing to financial access reaching 13% of the population. While the conventional banking sector has remained a significant contributor to the Kenyan economy, Deposit Taking Saccos remain the single largest financial credit service provider to many of the Kenyans, most of whom are middle to small scale farmers and business people. Owing to the fact that members can use their savings as collateral for security when applying for a credit facility, the same shares act as a n investment avenue to members who, in turn, earn dividend income at a specified period, usually one a year.

For ease of regulation and supervision, SASRA groups Saccos into various clusters primarily based on areas where they draw their common bond. These categorizations include government-based Saccos such as Kenya Police Sacco, Ushuru Sacco, Teacher-Based Saccos such as Mwalimu National Sacco, Private sector-based Saccos like Amica Sacco, Community-Based Saccos like PCEA Kayole DTM Sacco, and Agro-based Saccos. Agro-based Saccos are all the Saccos whose primary membership comprises of farmers or are engaged in agricultural activities. There were 49 Agro-based DTM saccos in Kenya in 2021, but only 35 of them from the period of 2018 to 2021, which is covered in this study. While most government-based Saccos are mostly domiciled in Nairobi, Agro-based Saccos are spread across the whole country.

Despite their significant contribution to the economy, Saccos have continually suffered from issues of poor governance structures and systems vested in the hands of the board of directors. This has led to public outcry to safeguard the interests of the members. SASRA has laid down guidelines and a policy framework on how Saccos should be governed to improve performance and restore as well as safeguard the interests of the member investor. The increasing importance in financial performance in Saccos through corporate governance for forms the basis of this study.

Statement of the problem

The worrying global trend in corporate failures has put the management of corporations in the spotlight. There is a consensus among scholars from the available literature that efficiently and effectively managed firms have higher values compared to their counterparts that lack such structures, hence lower values in the industry. Poorly run firms due to the weak and inappropriate blend of corporate governance have lower values in comparison to those firms with superior governance structures. (Wanyama *et al.,* 2013).

The Sacco industry in Kenya has grown exponentially in the recent past, with total assets standing at Ksh 807.11 billion by 31st Dec 2021. The SACCO industry contributed 6.67 % of the country's GDP growth, while it continues to employ thousands of Kenyans. Despite this growth, the sector still faces the risk of collapse due to poor corporate Governance. Several cases of mismanagement, fraud and outright incompetence have cost members billions of their hard-earned deposits; Between 2015 and 2020 Mwalimu National Sacco lost over Ksh 2.4 billion through mismanagement while Stima Investment Sacco in 2021 lost over Kshs 500 million through fraud perpetuated by their management. There have been cases of SACCOS collapsing with members' contributions, most notably Ekeza SACCO, which in 2021 collapsed with members' contributions totalling Ksh 750 million, while other SACCOS have had their license issued under certain conditions. This kind of loss badly affects the members who not only lose their savings but also lose a line of credit that supports their livelihoods and enterprises, while also bringing the entire financial sector that contributes significantly to Kenya's GDP under threat of loss of confidence and collapse.

While the membership of the Government, Private sector, and Teacher-based DT SACCOS have access to an educated and highly professional pool of membership that ultimately forms their boards, the farmer-based DT SACCOS based in the rural areas lack the same pool of qualified membership. Farmer-based DT Saccos thus accounted for two of the three DT SACCOS whose licenses were revoked by the regulator in 2020, while they formed 40% of the SACCOS whose licenses were renewed with conditions and are on the regulator's watch list. It is against this background that the current study sought to establish the effect of corporate governance on the financial performance of Agro-based Saccos in Kenya.

Objectives of the Study

The general objective of this study was to establish the influence of corporate governance on the financial performance of Agro-based DT Saccos in Kenya. The specific objectives were;

- To determine the effect of board size on the financial performance of Agro-based DT Saccos in Kenya.
- To examine the effect of board composition on the financial performance of Agro-based DT Saccos in Kenya.
- To establish the effect of the Audit Committee on the financial performance of Agro-based DT Saccos in Kenya.
- To examine the role of firm size on the financial performance of Agro-based DT Saccos in Kenya.

The study was guided by the following research hypotheses

- **H_{01}:** There is no statistically significant effect of board size on the financial performance of Agro-based DT Saccos in Kenya.
- **H_{02}**: There is no statistically significant effect of board composition on the financial performance of Agro-based DT Saccos in Kenya.
- **H_{03}**: There is no statistically significant effect of Audit Committee on the financial performance of Agro-based DT Saccos in Kenya.
- **H_{04}**: There is no statistically significant effect of firm size on the financial performance of Agro-based DT Saccos in Kenya.

LITERATURE REVIEW

Theoretical Review

Agency Theory

This theory is based on the premise that management and ownership of corporations is done by two different parties. The theory was proposed by Smith in 1937 and further expounded by Jensen and Meckling (1976) and stresses the separation of management and ownership in the management of corporations. It shows how unhealthy relationship between managers and shareholders can lead to cost inefficiencies hence weak firm value. Based on the law of contract, agency concept acknowledges two distinct parties as the principal and the agent viewed to have contractual obligation to each other failure to which conflicts arise (Morck, Shleifer & Vishny, 1998).

The value of the firm is likely to increase if this contractual obligation is respected by both parties. Agency conflicts occur where the agents become individualistic in following their own personal interests, ignoring those of the principal or achieving them at a minimum. In most cases, the two parties may also differ in their perception towards risk, the generous compensations that management may seem to award themselves, and the nature of investment opportunities, in which case the shareholders perceive it contrary, hence triggering the agency conflict. The two parties enter a contract, and all of them are bound to adhere to the terms of the engagement or else it is terminated by either party. To ensure that the agents pursue interests consistent with the principal's expectations, the principal normally incurs costs such as agency, audit, and monitoring as well as evaluation costs. The use of financial reporting as well as the engagement of external audit frameworks will help reduce principal-agent conflict by pursuing cost-efficient approaches in the operations and management of the entities (Adams, 1994).

The theory is relevant to this study in the light of managing agency contracts. The management and the board of Agro-based DT Saccos in Kenya occupy the agency part, while the shareholders of these SACCOs are the principals. They provide all the relevant support to the management, who in return are expected to engage in activities meant to boost their performance.

Stewardship Theory

The theory was introduced by Davis, Schoorman, and Donaldson in 1989 from the fields of sociology and psychology, but borrows heavily from the agency theory to a great extent. The theory postulates that managers, left on their own, will act as responsible stewards of the assets they control and describes the existence of a strong relationship between satisfaction and organizational success. It views the managers as stewards of all the resources a corporation owns (Davis, Schoorman & Donaldson, 1989).

According to the theory, a steward is viewed as a good agent if he or she manages these resources in a way that will enable the corporation to realize its desired goals by maximizing its value or as a bad steward if the corporation resources are not efficiently and effectively managed to meet the desired value maximisation objective. Those corporations that are poorly run indicate that the steward is not taking the affairs of the corporation to heart. This has been documented by most researchers as the immediate cause of conflicts between the shareholders and all the other stakeholders.

Those supporting this theory believe that further agency conflicts are likely to be removed if the management can put in place strong governance structures such as independent audit committees, well-composed boards with diversified educational backgrounds, gender mix, as well as upholding the CEO duality principle. Past studies show that organisations that have this system of governance in their structure are better positioned to gain a competitive edge in the market of operation by having reduced conflicts of interest (Donaldson and Davis, 1989). This theory stresses the need to meet the needs of all the wider stakeholder categories as opposed to the single individual groups interested in the corporation's performance. The management and the board of the Agro-based DTM Saccos are thus viewed as stewards who are entrusted with the financial success of the entities they lead

Resource Dependence Theory.

Resource Dependence Theory was postulated by Pfeffer and Salancik in the 1970s, with their publication of The External Control of Organizations: A Resource Dependence Perspective in 1978. The theory explains the critical resources that an organization must have in place for its survival. Pfeffer and Salancik (2003) observed that the key to organizational survival is the ability to acquire and maintain resources. Critical to this theory is the role of boards of directors. Resource Dependence Theory helps in understanding the role of boards in enhancing the performance of their organizations. The understanding is that boards enable firms to minimize dependence or gain resources. The board of directors' act as a link with the external environment in supporting the management in the achievement of organizational goals. Pfeffer (1972) posits that boards enable firms to minimize dependence or gain resources. Boards of directors provide expertise, skills, information, and potential linkage with environment for firms (Ayuso and Argandona, 2007, Abdullah and Valentine, 2009) for their sustained performance. Kor and Misangyi (2008) notes that resource provision by board is much highly valued and supplementary to the experience provided by top management teams. With the perception that directors are considered as resource providers, various dimensions of director diversity clearly become important during the constitution of boards. The theory's major limitation is its assumption that organizations are shaped primarily by materialistic forces; it fails to delineate the relationship shared between the environment and organization (Johnson, 1995). The theory fails to focus on other internal and external forces that can shape the direction of an organization.

Information Signalling Theory

This theory is believed to have been propagated by Michael Spence (1973), who in turn was influenced by the earlier institutional literature, including the book by Donaldson (1961). In his seminal article, Michael Spence proposed that two parties could get around the problem of asymmetric information by having one party send a signal that would reveal some piece of relevant information to the other party. Myers (1984) argues that issuing securities is subject to an adverse selection problem by the management of an organisation.

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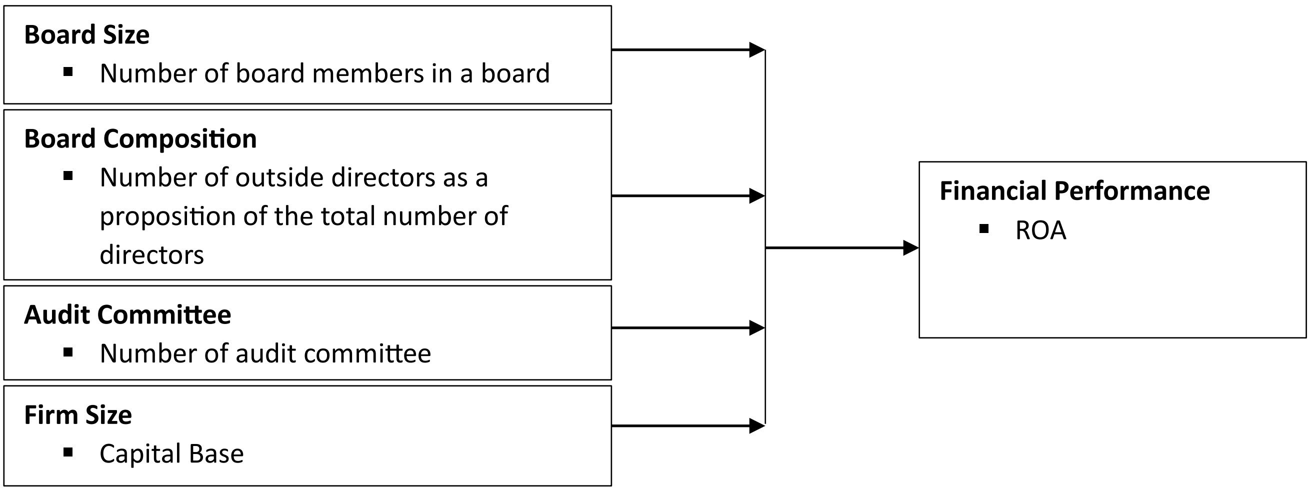
The theory contends that the choice of a firm's capital structure signals to outside investors the information of insiders. It further notes that the problem of asymmetric or incomplete information in firms makes it difficult for lenders to accurately assess the level of risk. Managers are motivated to communicate insider information about a firm's value to the public stock market, and their willingness or undertake costly capital structure reorganization change programs acts as a validated signal of this information. Ross (1977) argues that a firm signals an increase in the firm's asset value by increasing its leverage (debt), while Leland and Pyle (1977), however, posit that a firm signals an increase in the firm's value by reducing its leverage (debt). Arising from the two signalling hypotheses above, an increase in debt will lead to an increase in price based on the Ross (1977) model, while based on Leland and Pyle (1977) increase in debt will lead to a reduced price.

Conceptual Framework



Independent Variables **Dependent Variable**

Figure 1: Conceptual Framework

Board Size

Board size refers to the number of directors in the board of Management of an organization (Patel, 2022). Board size consists of all members constituting a board. Board size can influence the effectiveness and growth of a firm including decision implementation (Chaudhary & Gakhar, 2018). A firm can have either a large board size or a small board size (Oziegbe & Okenwa, 2021). A large board size, according to Ilaboya and Obareth (2015), incurs more remuneration to the board members, thereby affecting financial performance. In this study, Board size referred to the total number of directors involved in the management of a DT Sacco. Board size was measured by counting the Total number of Board Members in a DT Sacco.

Gambo *et al* (2024) studied effect of board size, board composition and board meetings on financial performance of Listed Consumer Goods in Nigeria. The study used expo factor research design and purposive sampling technique as research design and sampling technique. The population of the study was twenty (20) listed consumer goods companies in Nigeria and a sample size of ten (10) companies were studied. This study concluded that smaller board size is more effective than larger board size, good proportion of board composition is a good factor to enhance ROA of listed consumer goods companies in Nigeria and frequent board meeting will have negative effect on the ROA of listed consumer goods companies in Nigeria.

Muntolol and Githagia (2024) sought to determine the effects of board size on financial performances of twelve commercial banks listed at NSE in Kenya. The study adopted the agency, stakeholder, and resource dependency theories to support the variables. The study results indicated that board size of Kenyan listed commercial banks had an insignificantly positive financial performance effect; It was discovered that the relationship of interest rate with board size positively affected financial performance but in an insignificant manner.

Board Composition

Board composition refers to the constitution of the board in terms of outside directors and inside directors as members of the board Mishra, (Jain & Manogna, 2021). Outside directors are the board members who are not involved in the day-to-day management of a DT Sacco while inside directors are the board members who are also part of the management of the Saccos such as the CEO and CFO. It also refers the gender mix of a board in terms of the number of female and male directors in a board. Board composition will be measured by looking at the total number of inside directors as a percentage of outside directors and the total number of female directors as a percentage of female directors.

Over the years, it has been noticed that strong corporate governance can improve firms' performance by attracting more capital investment from investors, especially in developing nations with inadequate governance frameworks (Apochi *et al.*, 2022; Akan *et al.*, 2023; Bereprebofa *et al.,* 2023). On the one hand, it allows for improved management monitoring and alignment of controlling shareholder interests with other shareholders.

Audit Committee

This refers to the section of the non-executive members of the board who are charged with the sole responsibility of overseeing the accounting and financial reporting of an entity. (Omwenga, 2017). The Audit committee will be measured by counting the total number of directors in the audit committee of the DT Saccos under study.

Garad *et al* (2021) studied the impact of board directors, audit committee, and ownership on financial performance and a firm's value. According to the study, the board of directors works to protect investments from misappropriation by actively participating in the development of the company's strategy, giving appropriate incentives to management, and monitoring and evaluating its performance, thus maximizing the company's value. The audit committee can be used as a governance mechanism to improve financial information confidence and openness. Through their participation in the financial statement preparation process as well as improving the independence of both internal and external auditors, the audit committee can help prevent future financial disasters.

Firm size

Firm size is the value of a firm at a particular period or simply the amount that one needs to pay or take over a given firm (Ncurai & Ng'ong'a, 2015). The Firm size will be used as the moderating variable since SACCOS that have large total assets are considered to have good prospects in a relatively stable period and are able to generate profits compared to those with relatively smaller value in total assets (Azhar Susanto & Meiryani, 2019) Firm size in this study will be measured using the Total member deposits a DT Sacco holds.

Wayongah (2019) focused on firm size and firm financial performance: panel evidence from non-financial firms in Nairobi Securities Exchange in Kenya. The study was based on correlational research design. Secondary data from 2010 - 2016 was obtained from financial reports using data collection sheet. The findings revealed that firm size accounted for insignificant variance of 2.65% in BPCI and with positive coefficient of .057844.

Foyeke *et al* (2014) looked at firm size and financial performance: a determinant of corporate governance disclosure practices of Nigerian Companies. The study reveals that there is a significant positive relationship between the financial performance of companies and corporate governance disclosure. It also revealed that there is a significant positive relationship between firm size and corporate governance voluntary disclosure.

Financial Performance

Gowsalya and Hasan (2019) define finance as the provision of money at the time when it is required. Every enterprise, whether big, medium, or small, needs finance to carry on its operations and to achieve its targets. Without adequate finance, no enterprises can possibly accomplish its objectives. Finance refers to the management of flow of money through an organization. Financial statements analysis is an attempt to determine the significance and meaning of the financial data so that forecast may be made of the future ability to pay interest and debt maturities a (both current and long term) and profitability of a sound policy.

Financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. The term is also used as a general measure of a firm's overall financial health over a given period. (Mugenyi, 2010) For this study, financial performance of DT Saccos will be measured by using Return on Assets (ROA) this is done by taking the ratio of net operating profit before interest and taxes to Total Assets.

Gungor *et al* (2020) observe that the most significant aim of the businesses, which are an integral part of the economic system, is to create value maximization. The financial performance of businesses plays a key role in achieving this aim. Financial performance analysis is an effective criterion for businesses to achieve their goals, to adapt to changing conditions in the market, to improve the way of doing businesses and to be able to take measures against possible problems.

METHODOLOGY

The study utilized the descriptive cross-sectional research design. This study targeted all 35 Agro-based Deposit-taking Saccos in Kenya. The secondary data ran from 2018 to 2021. This study will carry out a census of the 35 Agro-based DT Saccos in Kenya. Given the nature of the data gathered, the scope of the study, time available, and the nature of the variables under investigation in the study, secondary data was the most appropriate data collection instrument. The study used a secondary data sheet. The researcher obtained permissions from the University to collect the data from the selected Saccos. Once the introduction letter from the University was received, the individual firm was contacted to allow the use of their secondary data. The researcher made follow ups and the required data were collected from the firms, aided by two research assistants. The study employed both descriptive and inferential statistics to analyse the collected data from the secondary sources cited. Descriptive statistics were applied to establish the measures of Mean and Standard deviation, while R-squared was used for inferential statistics through the Multiple Linear Regression Model. Multiple Linear Regression Model, which is as an estimation method of ROA, was used to establish the relationship between board characteristics and the financial performance of all the Agro-based DT SACCOs as registered by SASRA. In the quest to test the basic linear regression assumptions, the following diagnostic tests were performed: normality, multicollinearity, and homogeneity. The regression equation was adjusted for time, which was as follows:

$$\mathbf{Y_{it} = \beta_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \beta_4 Z_{4t} + \varepsilon}$$

$$\mathbf{Z_t = \beta_4 X_4 (X_1 + X_2 + X_3)}$$

Whereby the variables were identified as follows:

Dependent variable **Y** = Financial Performance measured through ROA

While the independent variables X_1, X_2, and X_3 are Board Size, Board Composition, and Audit Committee. This equation made it possible to analyse panel data that covers several years.

The number of directors on the board was used to measure board size, while board composition was measured by looking at the aspects of gender composition of the board members. The audit committee was measured by counting the number of board members in the audit committee. The coefficients of determination **β_1, β_2,** and **β_3,** while ε was the error term.

FINDINGS AND DISCUSSION

Assumption of Linear Regression

Table 1: Normality Test Using Shapiro-Wilk Test

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	**Df**	**Sig.**	**Statisti c**	**df**	**Sig.**
Board size	.148	34	.154	.885	34	.189
Board composition	.118	34	.103	.912	34	.120
Audit committee	.145	34	.053	.883	34	.079
Firm size	.124	34	.099	.899	34	.103
Financial performance	.170	34	.200	.887	34	.200

a. Lilliefors Significance Correction

Source: Research Data 2023

Based on the data shown in table 2, all variables have not rejected their null hypotheses, indicating that the data sets for the five variables are normally distributed. This conclusion was reached using both the Kolmogorov-Smirnov and Shapiro-Wilk tests, with a significance level of less than 0.05.

The study conducted several diagnostic tests to assess the appropriateness of the research model.

Normality Test

In accordance with the recommendations made by Hair, Black, Babin, Anderson, and Tatham (2016), the research used both graphical plots and any statistical tests in order to determine the true degree of deviation from the normal distribution.

Linearity

The study used the suggested scatter plots by Hair et al., (2016) to determine if there was a linear relationship between corporate governance and financial performance. The findings are as shown below in Figure 1 below.

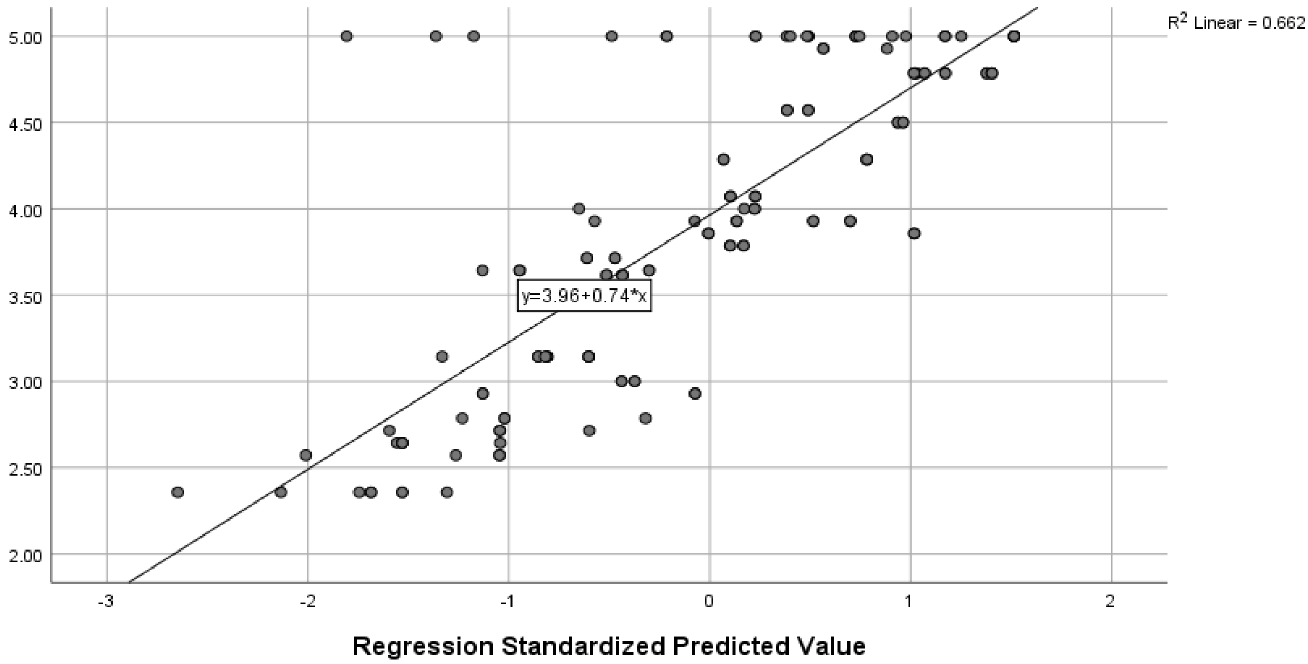


Figure 1: Linear Relationship between Corporate governance and financial performance

The data points in the scatter plot showed a positive correlation between independent variables and financial performance. This means that as the regression standardized predicted value increases, financial performance also tends to increase. The spread of the data points suggests that the relationship is not perfectly linear, but there is a general upward trend.

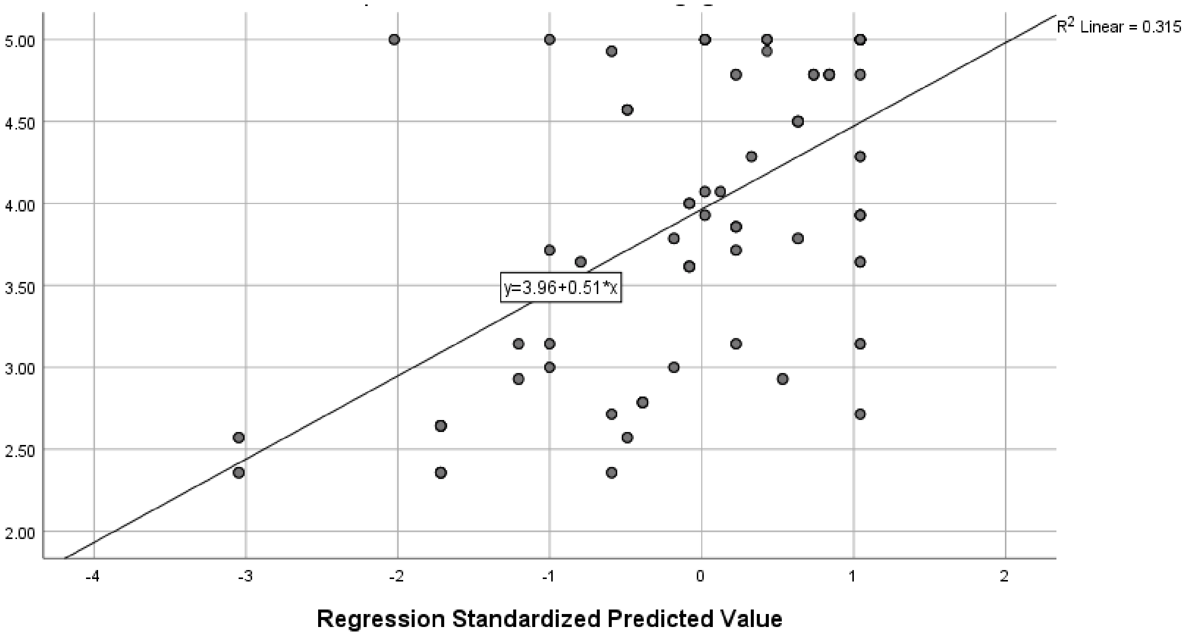


Figure 2: Linear Relationship Between board size and financial performance

The scatter plot exhibits a positive, moderate correlation since the majority of the plotted points ascend diagonally from left to right. Board size and financial performance appear connected, meaning that as the size of the board increases, financial performance also improves in the same direction.

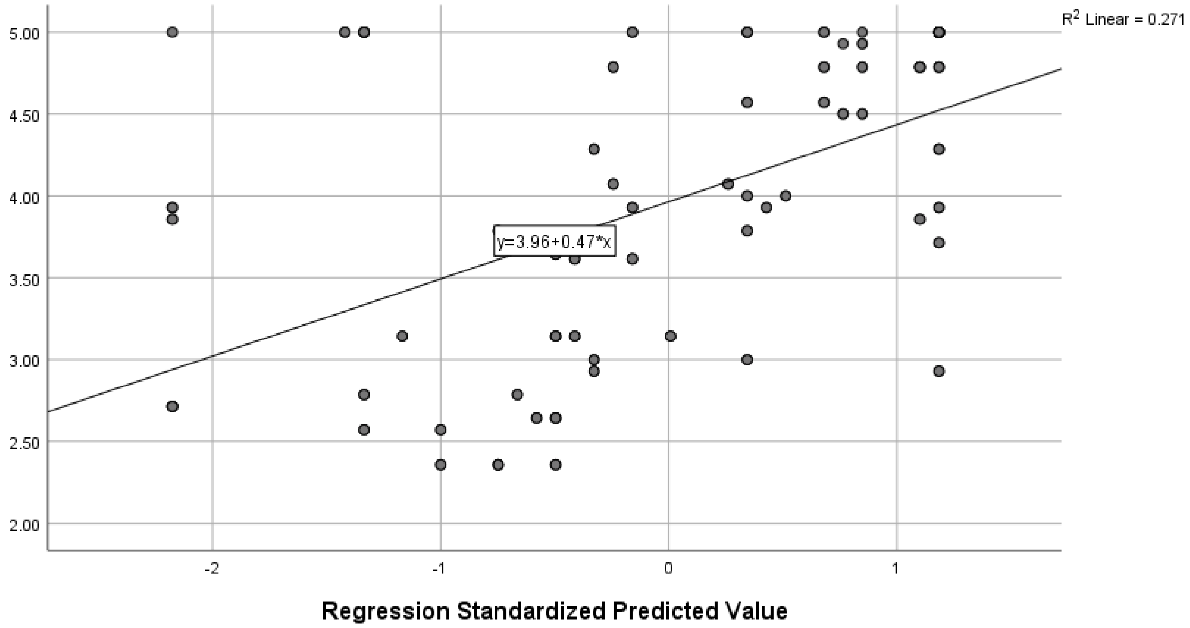


Figure 3: Linear Relationship between Board composition and financial performance

The scatter plot exhibits a positive, moderate correlation since the majority of the plotted points ascend diagonally from left to right. Board composition and financial performance appear connected, meaning that as it increases, financial performance also improves in the same direction.

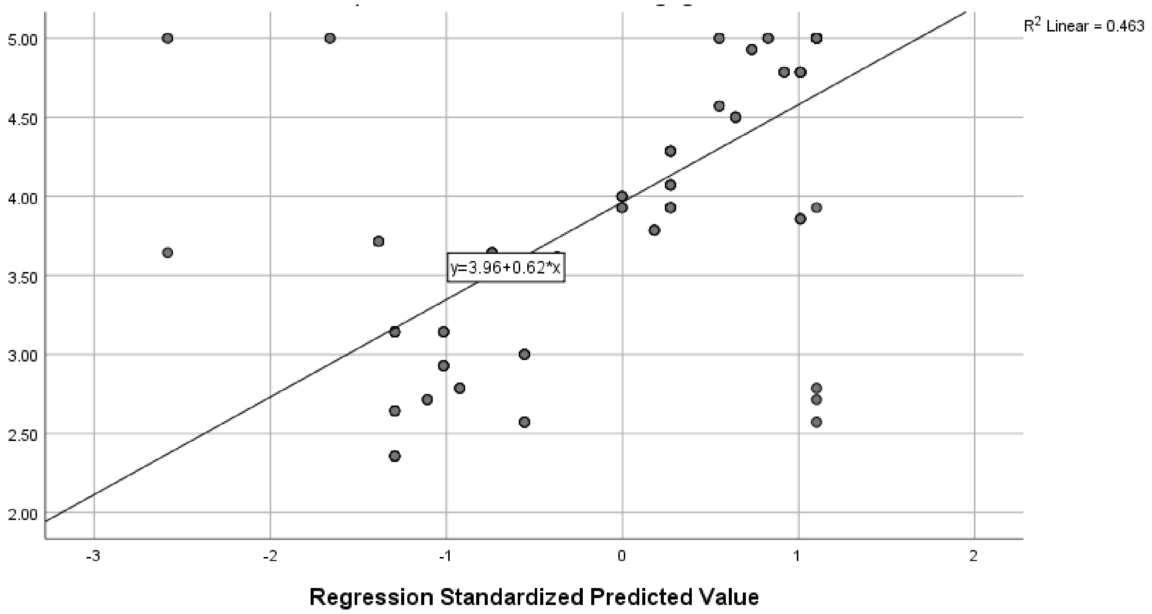


Figure 4: Linear Relationship between Audit Committee and Financial performance

The scatter plot exhibits a positive, moderate correlation since the majority of the plotted points ascend diagonally from left to right. Audit committee and financial performance appear connected, meaning that as it increases, financial performance also improves in the same direction.

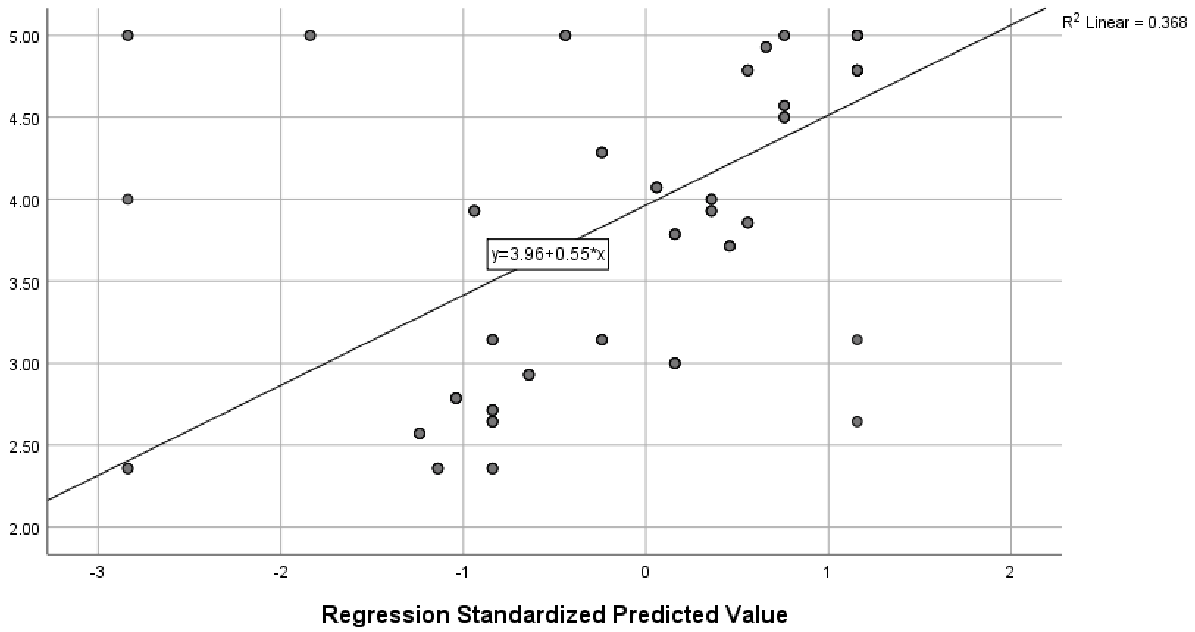


Figure 5: Linear Relationship between Firm Size and Financial performance

The scatter plot exhibits a positive, moderate correlation since the majority of the plotted points ascend diagonally from left to right. Firm size and financial performance appear connected, meaning that as it improves, financial performance also improves in the same direction.

Multi-collinearity Test

The researcher used variance inflation factor (VIF) to test collinearity. This factor measures how high the multi-collinearity is in a least squares regression analysis. It gives the index showing the magnitude of the increase of a variance if a regression coefficient is increased because of collinearity. A variable whose VIF and tolerance value is above 10 and 1 respectively would merit further investigation. From table 2, tolerance ranged from to 0.618 to 0.803which are all below 1 and therefore its reciprocal and the VIF was between 1.246 and 1.617, which are below the threshold value of 10 as required.

Table 2: Collinearity Statistics

Variable	Tolerance	VIF
Board size	.790	1.266
Board composition	.803	1.246
Audit committee	.618	1.617
Firm size	.623	1.606

This simply indicates that the variables were not highly correlated, and as a result, multi-collinearity does not exit. As a result, the variables were suitable for multiple regression analysis (Shresta, 2020). The findings of the VIF were presented in Table 4.17. The findings showed that the independent variables did not exhibit any signs of multi-collinearity. Furthermore, the VIF values were less than 10.

Homoscedasticity Test of Financial performance

To check for heteroscedasticity, the study applied the established Breusch-Pagan test. The squared residuals were used in a regression analysis to predict the effect of the independent variables. There is some wiggle room in the significance level you choose to test for heteroscedasticity, even though typically it's set at 0.05. If the regression coefficients are significant, we may infer the presence of heteroscedasticity, as suggested by Daryanto (2020). From the results in Table 3, there was no problem of for Heteroskedasticity since the P=0.090 which was greater than 0.05.

Table 3: Heteroskedasticity Tests

Breusch-Pagan Test for Heteroskedasticity[a,b,c]		
Chi-Square	Df	Sig.
2.869	1	.090

a. Dependent variable: Financial performance

b. Tests the null hypothesis that the variance of the errors does not depend on the values of the independent variables.

Multiple Regressions of Financial performance

The general objective of this study was to examine the influence of corporate governance on the financial performance of Agro based DT Scacco’s in Kenya. This was achieved by carrying out standard multiple regressions. The study was interested in knowing the effect of corporate governance on financial performance when all these constructs were entered as a block on the model. This aided in coming up with the coefficients of the study model as well as R square of the study hence, test the null research hypotheses. The results are as shown in Table 4.

Table 4: Model Summary Regression for Corporate Governance and Financial performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.813[a]	.662	.652	.53460

The model summary findings established that the linear relationship between financial performance and the four predictor variables; board size, board composition, audit committee and firm size is positive and linear. The coefficient of correlation was 0.813, (r=0.813). The coefficient of determination (R^2) was 0.662, and this shows that 66.2% of the variations in the financial performance can be explained by the four predictor variables in the study and the remaining 33.8% of the variations in financial performance of Agro Based DT Sacco's in Kenya is explained by other factors not captured in the model.

Table 5: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	76.550	4	19.137	66.961	.000[b]
	Residual	39.154	137	.286		
	Total	115.704	141			

a. Dependent Variable: Financial performance

b. Predictors: (Constant), Board size, Board composition, audit committee and firm size.

From the ANOVA results the F test gave a value of F (4, 137) =66.961, $p < .05$, which was large enough to support the goodness of fit of the model in explaining the variation in the dependent variable. It also means that corporate governance is a useful predictor of financial performance of agro based DT Sacco's in Kenya.

Table 6: Regression Coefficient

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	T	Sig.
1 (Constant)	.373	.232		1.609	.110
Firm size	-.253	.052	-.273	-4.888	.000
Board size	.194	.042	.254	4.583	.000
Board composition	.306	.053	.366	5.793	.000
Audit committee	.189	.057	.209	3.319	.001

a. Dependent Variable: Financial performance

The first regression model then becomes;

$Y = 0.373-0.253X_1+ 0.194 X_2+ 0.306 X_3+0.189X_4$

Where:

y = Financial Performance of Agro-Based DT Saccos in Kenya

x_1 = Board size

x_2 = Board composition

x_3 = Audit committee

x_4 = Firm size

From the coefficients table, board size, composition, audit committee, and firm size carried positive and significant predictive power (P<0.05). If corporate governance is held at zero or is absent, financial performance will be 0.373, p>0.05.

$H_{01:}$ Board size has no significant influence on the financial performance of Agro-based DT Sacco in Kenya.

Board size, with a beta of -0.253, p=0.000 is at statistically significant level and is a good predictor of financial performance implying that an increase in board size by a unit will result to significant (P<0.05) decrease in financial performance by 0.253 units. This aligns with studies such as Makori and Jagongo (2013), who found that board size reduced the capacity of commercial banks to repay loans and expand their operations. Additionally, the study by Ibbih and Gaiya (2013) on Nigerian microfinance institutions also supports this view, indicating that higher board sizes constrained the growth of small businesses.

However, other studies offer a differing perspective. For instance, Hermes and Lensink (2011) argued that board sizes do not necessarily hinder the financial performance of microfinances. Their study suggested that an increase in the size could signify a more robust lending environment, where borrowers who manage to secure loans despite higher cost rates are likely to use the funds efficiently.

H_{02}: Board composition has no significant influence on financial performance of Agro based DT Sacco's in Kenya.

When the other independent variables are controlled, board composition with a beta of 0.194, P=0.000 is at statistically significant level implying that an increase in board composition by a unit will result to significant (P<0.05 increase in financial performance by 0.194 units. This finding is consistent with the study by Diagne, Zeller, and Sharma (2000), which found that board requirements can reduce credit risk and enable better access to finance, thus supporting business growth. Similarly, Rahman and Luo (2011) observed that better managed commercial banks are associated with lower default rates and better financial outcomes.

Contrarily, some studies argue that bloated boards can exclude potential investors who lack assets, thereby stifling financial inclusion and economic growth. For instance, Brix and McKee (2010) highlighted that excessive board demands can limit access to credit for micro-enterprises, reducing their ability to scale up. These contradictory findings indicate that the effect of board composition on financial performance depends on the economic context and the nature of the bank.

H_{03}: Audit committees have no significant influence on financial performance of Agro based DT Sacco's in Kenya.

When the other three independent variables are controlled, audit committees with a beta of 0.306, P=0.000 is at statistically significant level implying that an increase in the audit committee by a unit will result to significant (P<0.05) increase in financial performance by 0.306 units. This finding resonates with the study by Beck, Demirgüç-Kunt, and Honohan (2009), which emphasized that simplified audit committees can influence transaction costs and improve access to finance, thereby supporting business performance.

On the other hand, Chua *et al.* (2017) found that overly stringent audit committee procedures could discourage potential investors, particularly those with lower financial literacy or inadequate documentation. This view suggests that while an efficient audit process is crucial, it must be balanced with accessibility to ensure that all eligible customers can benefit.

H_{04}: Firm size has no significant influence on financial performance of Agro based DT Sacco's in Kenya.

Lastly, when the remaining three independent variables are controlled, firm size with a beta of 0.189, P=0.001 is at statistically significant level implying that an increase in firm size by a unit will result to significant (P<0.05) increase in financial performance by 0.189 units is supported by several studies. For instance, Jappelli and Pagano (2002) highlighted that firm size reduces information asymmetry between lenders and borrowers, leading to better credit risk assessment and improved financial outcomes. Similarly, a study by Brown, Jappelli, and Pagano (2009) found that the size of firm assets contributes to higher repayment rates and lower default rates, thereby enhancing financial stability and performance.

Testing for null hypotheses

Table 7: Null Hypothesis Testing

Hypothesis	P<0.05	Verdict	Table
H_{01}: Board size has no significant influence on the financial performance of Agro-based DT Saccos in Kenya.	.000	Rejected	Table 8
H_{02}: Board composition has no significant influence on the financial performance of Agro-based DT Saccos in Kenya.	.000	Rejected	Table 8
H_{03}: The Audit Committee has no significant influence on the financial performance of Agro-Based DT Saccos in Kenya.	.000	Rejected	Table 8
H_{04}: Firm size has no significant influence on the financial performance of Agro-based DT Saccos in Kenya	.001	Rejected	Table 8

CONCLUSION AND RECOMMENDATION

This research was undertaken to determine the influence of corporate governance on the financial performance of Agro-Based DT Saccos in Kenya. Theoretical and empirical literature on the variables was reviewed. From the literature review, a conceptual framework was established to conceptualize the association between the independent and dependent variables. The hypothesized relation was then tested empirically and was guided by the following specific objectives. To identify the influence of board size, board composition, audit committee, and firm size on the financial performance of Agro-Based DT Sacco's. These relationships have been shown in the conceptual framework.

The research employed secondary data sources to achieve the study's aims and conceptual framework. The secondary data sheet that was employed was related to the study variables and was tested for reliability. The correlation between the independent variable and the dependent variable was established. The independent variables were tested for multicollinearity using variance inflation factors or tolerance, and normality was tested using the Shapiro-Wilk and Kolmogorov-Smirnov tests. Statistical Package for Social Sciences (SPSS) version 26.0 was used for analysis throughout. Quantitative data was analyzed using inferential statistics. The singular effects of the independent variables on the dependent variable were tested using simple linear regression, while the interaction of all the independent variables was investigated through the use of multiple linear regression. The summary of the findings per objective is as follows.

The study aimed to assess the impact of board size on the financial performance of Agro Based DT Sacco's in Kenya. Findings indicate that board size significantly influenced financial performance of DT saccos. The pearson correlations indicated that there is significant relationship between board size and financial performance of DT saccos as shown by R = -0.561, P=0.000. Multiple linear regression revealed that when other variables in the model are controlled, a unit increase in board size would result to significant decrease in financial performance of DT Saccos by 0.253 units (β_1=-0.253, P=0.000). This led to rejection of the first null hypothesis which was hypothesized as there is no significant influence of board size on financial performance of DT Saccos in Kenya.

The study focused on the impact of board composition on the financial performance of Agro-Based DT Saccos in Kenya. The findings revealed that the more diversified the board was, the lower the financial performance of such Saccos. Pearson correlation indicated that there is a significant relationship between board composition and financial performance, as shown by R = 0.520, P=0.000. Multiple linear regression revealed that when other variables in the model are controlled, a unit change in board composition would result in a significant increase in financial performance by 0.194 units (β1=0.194, P=0.001). This led to rejection of the second null hypothesis, which was hypothesized as there is no significant influence of board composition on the financial performance of Agro-Based DT Saccos in Kenya.

The study focused on the impact of the audit committee on the financial performance of Agro-Based DT Saccos in Kenya. These findings suggest that although the contribution of the audit committees was adequate, there was still room for improvement. Streamlining the board processes would better support the financial stability of DT Saccos. Pearson correlation indicated that there is a significant and strong relationship between the audit committee and financial performance, as shown by R = 0.681, P=0.000. Multiple linear regression revealed that when other variables in the model are controlled, a unit change in audit committee would result in a significant increase in the financial performance of DT Saccos by 0.306 units (β1=0.306, P=0.000). This led to rejection of the third null hypothesis, which was hypothesized as there is no significant influence of the audit committee on the financial performance of DT Saccos.

The study focused on the impact of firm size on the financial performance of Agro-Based DT Saccos in Kenya. The results indicate that the size of the firm significantly influenced the financial performance of DT Saccos. Pearson correlation indicated that there is a significant strong relationship between firm size and financial performance as shown by R = 0.607, P=0.000. Multiple linear regression revealed that when other variables in the model are controlled, a unit change in firm size would result in a significant increase in financial performance by 0.189 units (β1=0.189, P=0.001). This led to rejection of the fourth null hypothesis, which was hypothesized as there is no significant influence of firm size on the financial performance of DT Saccos in Kenya.

The study established that board size had a significant negative influence on the financial performance of DT Saccos. An increase in board costs would strain the financial capacity of these Saccos. The negative correlation between board size and financial performance indicates that as the size of the board grows, the financial performance of these saccos declines. This underscores the need for more stable and affordable boards to support the financial sustainability of the Saccos.

The study also revealed that board composition significantly influenced the financial performance of DT Saccos in Kenya. The positive correlation and regression analysis confirm that an increase in board composition positively impacts financial performance. Therefore, better board structures and management are necessary to improve the financial growth of DT Saccos.

The study highlights a significant positive influence of audit committees on the financial performance of DT Saccos in Kenya. The assessment of Sacco processes and documents plays a vital role in determining the continuity of their revenue and financial growth. The strong correlation and regression analysis confirm that improvements in audit activities are essential for enhancing the financial performance of these Saccos.

The study's findings also indicated a significant positive influence of firm size on the financial performance of DT Saccos in Kenya. The positive correlation and regression analysis confirm that firm size substantially contributed to the financial performance of these Saccos. As a result, the initial null hypothesis, which proposed no significant influence of firm size, was rejected.

Saccos should aim to minimize board sizes to allow more flexibility in the use of Sacco funds. Predictable and consistent boards would enable better financial planning for these Saccos. The Saccos should consider having lean boards in order to free funds for other activities. This would alleviate the financial burden of DT Saccos and improve access to more funds.

DT Saccos should broaden the range of board members in terms of their skills and expertise in order to gain from multidisciplinary skills. This would enhance the quality of products and services offered by Saccos that may provide continued provision of the same and may have substantial benefits.

Saccos should simplify and also maintain the roles of the audit committees by clarifying their roles and requirements. This would facilitate quicker approvals and enhance the overall efficiency of the Sacco processes. Strategies should be developed to minimize delays in facilitation of audit team processes.

Stakeholders, including those of Saccos should invest in robust recruitment and marketing systems to ensure improvements in Sacco deposits and investments that encourage the growth of their portfolio. This will facilitate the growth of their capital base and improve the efficiency of the Sacco processes thus positively impacting the size of the Saccos.

Areas for further Research

The main aim of this study was to assess the influence of corporate governance on financial performance of Agro-Based DT Saccos in Kenya. The achievement of this objective has led to a number of areas for further research emanating from the scope of the study, methodology, and the findings. First, whereas the findings were generalizable to Agro-Based Saccos in Kenya, the study recommends that further research should widen the scope and incorporate other Sacco types in Kenya.

Second, the study focused on corporate governance and financial performance of Saccos. Whereas these four variables explained more than 66.2% of the variations in financial performance, the study recommended that further studies should focus on additional variables that may not have formed part of this study. Furthermore, this could happen in different Sacco contexts beyond the Agro-Based Saccos used in this study.

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