

CAPITAL STRUCTURE AND FINANCIAL PERFORMANCE OF AGRICULTURAL FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE

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# CAPITAL STRUCTURE AND FINANCIAL PERFORMANCE OF AGRICULTURAL FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE

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#### **ABSTRACT**

The capital structure and financial performance of agricultural companies listed on the Nairobi Securities Exchange were the main subjects of this study. The study's primary goal was to ascertain how listed agricultural companies' capital structure and financial performance relate to one another. The Capital Structure Theory served as the study's pillar. The study made use of secondary data that was gathered from the targeted institutions' annual reports during the study period. The study's primary independent variable was capital structure, as determined by the debt-to-equity ratio for the years 2019 through 2024, while the dependent variable was financial performance, as determined by the ROA ratio. The study's control variables were the tangibility of assets, liquidity, and organizational scale. The total asset sizes of all Kenyan agricultural enterprises that were listed on a public exchange between 2019 and 2024 were used to calculate organizational size using Log, Descriptive and regression analysis were used to examine the data gathered on these factors. The independent study variables could explain about 34.4% of the total variations in the financial performance of agricultural companies listed on the NSE, according to the study model's r-squared of 0.344.

Key Words: Capital structure, Liquidity, Tangibility of Assets, Firm Size

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#### **INTRODUCTION**

In order to optimize financial performance, the majority of contemporary businesses are putting more and more emphasis on obtaining the ideal capital structure. This is due to the fact that enhanced performance in areas like profitability and value demonstrates efficient use of resources while also drawing in a sizable clientele and skilled personnel. Organizations can now take advantage of and use more equity thanks to the opening of securities markets brought about by technological improvements and a loosening of national regulations. In addition to offering guidance on how to combine funding sources most effectively, a burgeoning financial sector has been offering a wide range of possibilities for obtaining debt at advantageous rates.

The debt-to-equity ratios that a business employs in its financial structure are referred to as its capital structure. Titman et al. (2017) define the capital structure as the proportion of an organization's total capital that is made up of debt, equity, and other instruments. In this instance, debt includes the organization's short- and long-term borrowings as well as obligations like principal repayment and fixed interest payments (Narsaiah, 2020). Even if affluent friends, family members, and other members of society lend money to enterprises, financial institutions are the most direct lenders. Conversely, equity describes the contributions made by shareholders in the form of retained income and share capital (Kinyua & Muriu, 2017).

Financial results refers to how well a company does financially in order to achieve its goals of profitability and revenue growth. Financial performance, according to Fatihudin and Mochklass (2018), goes beyond profitability and include the fulfillment of many participants. In this instance, comprehensive financial performance is defined as the ability to pay creditors' commitments, provide stability to employees, offer customers high-quality products, and use natural resources efficiently. Financial performance is commonly analyzed using the Return on Equity (ROE), Return on Investments

(ROI), Return on Assets (ROA) ratio, Earnings per Share (EPS), and profit margin (Matar & Eneizan, 2018). ROI separates profit before taxes by investments, ROE separates profit before taxes by total equity, and ROA separates profit before taxes by total assets. Different metrics are adopted by organizations according to their ideologies and predetermined plans that are utilized comparison throughout time. To assess company's standing in relation to the industry, its performance is also compared to industry norms. Because it is easy to collect data for the study period and to ensure uniformity amongst agricultural firms listed on the NSE, ROA will be used to quantify financial performance in this study.

Generally speaking, depending on the ratios of the various capital components, an organization's capital structure should have a certain impact on its financial performance (Xu et al, 2012; Ana et al, 2012; Narsaiah, 2020; Opoku-Asante, Winful, and Neubert, 2022; Masavi et al., 2017). This is due to the fact that when firms reach a tolerable debt level, the costs of debt payment, financial distress, and the risk of defining their company in accordance with debt commitments are minimized. The appropriate capital structure also makes the funds required for available investments, market expansion plans, and liquidity requirements—all of which contribute to better financial performance. However, using relatively significant amounts of debt in an organization's capital structure has a negative impact on its performance. Excessive debt financial significant fixed finance costs that "eat into" business revenues and may necessitate compliance with debt covenants, which may restrict the fullest possible pursuit of objectives.

The production, processing, and distribution of agricultural products, including crops and animal products, are the activities of licensed and registered agricultural businesses (Xu et al, 2021). According to Masavu, Kiweu, and Kinyili (2017), companies in Kenya either specialize in or engage in a variety of activities, including the production and

distribution of dairy goods, beef products, coffee, tea, pyrethrum products, and chicken products. Even though there are several agricultural companies in the 47 counties, only seven of them are listed on the Nairobi Securities Exchange (NSE). These include Limuru Tea, Eaagards Ltd., Kapchorua Tea, Rea Vipingo plantations, Williamson Tea, Sasini Ltd., and Kakuzi (NSE, 2022). NSE has been licensed by the Capital Market Authority, and it must list businesses on the Kenyan stock exchange for investors to trade in and to maintain the integrity of the securities exchange. The exchange facilitates trading and clearing settlement of fixed income, stocks, derivatives, and other related securities in addition to the enumerated. Large agricultural companies that satisfy listing standards would thus seek listing in order to profit from some of the listed advantages, like trading on instruments and increasing investor awareness (Kadi, 2016).

#### **The Problem Statement**

Over the centuries, the idea of capital structure and an organization's financial performance has sparked discussions. While some academics have shown that there is a strong relationship between the factors, others have shown that there is none at all. For example, Berger and Udell (1998) demonstrate that enterprises are likely to perform better as they access various sources of finance during their growth cycle, according to the financial growth life cycle theory. Their stance contradicts the 1958 theory of Modigliani and Miller, which held that the capital structure of an organization had no effect on its value. Miller and Modigliani (1958) proposed that, in a perfect market, the amount of cash flows produced by capital assets and the level of risk determine the worth of an organization.

Institutions that are listed on securities exchanges around the world have made it easier to raise equity while also giving businesses significant negotiating leverage when it comes to loans, which may indicate greater capital and improved performance under competent management. This hasn't always been the case, though, as seen by instances where Western Kenyan Furthermore,

Masavi et al. (2017) state that the effect of exchanges on organizations' capacity to raise money has been comparatively small in poor nations. This may be because investors' confidence in the exchanges is comparatively higher than their comprehension of how the exchange markets operate.

The best financial structure to use in the administration of agricultural companies around the world is still up for debate; some organizations favor a higher debt to equity ratio, while others maintain an equal weighting. Given that the average debt-to-equity ratio of 2.46 for the majority of agricultural companies listed on the NYSE indicates a greater level of debt in their capital structure, it is likely that debt financing offers comparative advantages over equity financing (NASDAQ,2022.

Listed agricultural companies in China may have a slightly different position because the majority of them favor a capital structure that includes more equity than debt (Xu et al, 2021). The all-equity capital structure of companies like Kakuzi Plc and Sasini Ltd suggests that Kenyan agricultural firms choose equity over debt (Masavu et al, 2017). Evaluating agricultural companies' capital structures from a local, regional, and global standpoint as well as the advantages of particular arrangements could assist resolve the corporate dispute over the best capital structure.

Both the overall debt ratio and the short-term debt ratio negatively impacted financial performance, while the long-term debt ratio had minimal impact on ROE and ROA, according to Xu et al.'s (2021) study of the capital structure and financial performance of Chinese listed agricultural enterprises. In addition to concentrating on the Chinese market, which may differ slightly from the Kenyan market in terms of macroeconomics, the study by Xu et al. (2021) only looked at debt ratio and short-term debt ratio as capital structure measures.

Using 100 manufacturing companies registered on the Bombay Stock Exchange in China, Narsaiah (2020) found a negative link between the short-term debt ratio, long-term debt ratio, and return on equity. Narsaiah's (2020) study was restricted to Chinese industrial enterprises, which may differ slightly from Kenya's environment of NSE-listed agricultural companies.

In a study conducted in Ghana and Nigeria, Opoku-Asante, Winful, and Neubert (2022) discovered a negative correlation between capital structure and financial performance. Although there are other thorough measures of capital structure, this study only used debt maturity as an indicator. Addae et al. (2013) found that overall debt has a significant and negative impact on the financial performance of listed companies. The study focused on the capital structure and profitability of listed enterprises in Ghana between 2005 and 2009. The research by Addae et al. (2013) reflects findings from a pretty long time ago, in addition to covering all listed enterprises in Ghana. According to the study, changes brought about throughout time, including the COVID-19 pandemic, could have changed performance since capital structure affects it.

With an emphasis on agricultural companies listed on the NSE, Masavi et al. (2017) discovered that capital structure had a major effect on financial performance, that the debt ratio had a positive relationship with financial performance, and that an increase in equity combinations significantly decreased the after-tax profits of listed agricultural companies. From 2011 to 2015, Kimencu (2018) found that the debt to equity and debt to asset ratios used to evaluate the capital structure had a negligible impact on performance as determined by ROE, earnings yield, and net profit margin. In addition to offering conflicting research results although spanning nearly identical time periods, the two Kenyan studies report results from before COVID-19, which may have had a substantial impact on the variables being examined.

According to the research, some studies found a substantial positive link between capital structure and financial success, while other studies found an adverse correlation and yet others revealed that capital structure had no influence at all. The bulk of the reviewed studies also cover a time before COVID-19, an extraordinary occurrence that might have had a big influence on performance and capital structure choices. Thus, the goal of the current study was to fill in the information gaps and provide a comprehensive, up-to-date assessment of the concepts surrounding capital structure and financial performance of agricultural businesses listed on the NSE.

## The study's objectives

The primary goal of this study was to determine whether there is a relationship between the capital structure and financial performance of agricultural companies listed on the Nairobi Securities Exchange. The following specific objectives guided the study;

- To examine the capital structure of Nairobi Stock Exchange-listed agriculture companies
- To evaluate the NSE's agricultural companies' financial performance
- To investigate the connection between agricultural enterprises' financial performance and capital structure
- To look into how external factors affect business performance and capital structure.

## LITERATURE REVIEW

# **Theoretical Framework**

## **Theory of Capital Structure**

Modigliani and Miller's 1958 study, which maintained that there is no connection between a firm's value and its financing mix in a perfect market, serves as the basis for the capital structure irrelevance argument. Their proposal was predicated on the following assumptions: zero growth rate, risk-free debt, homogeneous expectations, homogeneous risk class, and an efficient capital market. In a world without corporation taxes, the argument states that a

company's market value is determined by the amount and risk of cash flow generated solely by capital assets. The debt to equity ratio in this case humbly describes how future financial flows will be divided between debt holders and shareholders.

Assuming perfect market, homogeneous expectations, a homogeneous risk class, risk-free debt, and a zero growth rate, the mix of debt and equity in the company would not have an impact on the enterprise's value (Mudany et al, 2020). However, the firms' cash flow, risk management, and operational activities would account for this value. According to Miller (1977), increasing corporation taxes and loosening the assumptions would suggest that leverage had an impact on the firm's value and performance. corporation taxes. The debt to equity ratio in this case humbly describes how future financial flows will be divided between debt holders and shareholders.

### **Review of Empirical Literature**

In 2021, Xu et al. carried out a study on the capitalization and financial performance of China's agricultural sector. Proving the impact of capital structure on the financial performance of Chinese listed agricultural firms from 2013 to 2019 was the aim of the study. Total, short-term, and long-term debt ratios were employed to assess capital structure. Financial performance was then assessed using ROA and ROE. Panel regression estimate was employed in the study, and secondary data was sourced from the Chinese Stock Market and Accounting Research Database. The study found that while both the debt ratio and the short-term debt ratio negatively impacted performance overall, the long-term debt ratio had no discernible impact on ROE or ROA.

The methodology of this study depended on secondary data, which is something the management of the company can manipulate. The study also looked at Chinese agricultural companies, which may have a slightly different setting than Kenyan listed companies. As a result, the report cannot be entirely trusted to forecast the results of the ongoing inquiry into the capital

structure and financial performance of Kenya's listed agricultural enterprises.

Ana et al. (2012) examined the capital structures and financial outcomes of agricultural firms in Macedonia. 26 agricultural companies Macedonia that were formerly agrokombinates were analyzed using dynamic panel data between 2006 and 2010. ROA, the debt to equity ratio, and the debt ratio were used to evaluate the capital structure determinant and evaluate financial performance. The study's conclusions demonstrated that, in the short term, price flexibility limited the nation's agricultural firms' capacity to increase profitability. Additional findings demonstrated that highly leveraged agricultural firms did not have more opportunities to generate larger profits because of the asymmetries between national capital and credit markets, which raised exposure risk.

Consequently, Macedonian agricultural firms opted for more equity than debt when making long-term decisions that took financial risk into account. The study focused on the years 2006–2010 and used only empirical review as its approach. The study also looked at all agricultural businesses, not just those that were listed. This could be restrictive because listing on exchanges has certain advantages. Therefore, it is impossible to accurately forecast the study's findings about the capital structure and financial performance of agricultural businesses listed on the NSE.

Narsaiah (2020) did a study on the capital structures and financial performance of 100 industrial companies registered on the Bombay Stock Exchange in India between 2014 and 2019. Econometric models, as well as fixed effect, OLS estimation, Hausman test, random effect, and Ramsey RESET approach, were employed in the study to evaluate panel data. Financial success was measured using four metrics: ROA, ROE, EPS, and Tobins Q. The data was subjected to regression and descriptive analysis. The study's findings showed

that ROE, STDR, and LTDR had a weak correlation. The results also revealed a significant inverse relationship between the financial performance indicators EPS, ROA, and Tobin's Q and the capital structure measurements LTDR and TDR. This study's focus was limited to manufacturing firms listed on the Bombay Stock Exchange, which may be somewhat different from agricultural businesses listed on the NSE. Aspects that significantly define capital structure tactics and overall robust performance may include business structure, the nation's financial system, the industry environment, and even the political atmosphere.

In 2022, Opoku-Asante et al. conducted a study on capital structure and its relationship to the financial success of businesses in Ghanaian towns and Nigerian metropolis. In order to examine the impact of loan maturity on capital structure, the study used sectoral analysis. The study used 425 cross-sectional firm year samples from companies in Ghana and Nigeria from 2014 to 2019. Regression analysis was used as part of the data analysis process. The study's findings indicated a weak correlation between capital structure and financial prowess. Debt maturity as a capital structure parameter changed the relationship between capital structure and performance in particular market sectors.

The study focused on listed agricultural companies in Kenya, while the previous study examined companies in other industries in Ghana and Nigeria. Addae et al. (2013) conducted a study on the capital structure and profitability of Ghanaian publicly traded companies from 2005 to 2009. 34 of the 35 listed companies on the Ghana Stock Exchange were the focus of the study, which used a descriptive survey design.

The study made use of secondary data gathered from the Ghana Stock Exchange's published workbook. Regression analysis was used to analyze the data. The study's findings showed that the debt-to-income ratio had a significant and adverse effect on the financial performance of listed corporations. Additionally, studies showed that

listed Ghanaian businesses depended more on short-term debt than long-term debt. The results of a comparatively long time ago are reflected in this study. The perspective on capital structure and financial performance may have altered as a result of changes made over time in both companies and the external environment. Instead of concentrating on specific industries like the agriculture industry, which may be overshadowing, the project also covered all listed companies on the Ghana Stock Exchange.

In 2017, Masavi et al. carried out a study on the capital structure and financial performance of agricultural businesses listed on the Nairobi Securities Exchange. The study, which employed a longitudinal research design, focused on six agricultural companies that are listed on the NSE. The study used desk research to gather secondary data from the companies' public financial statements between 2010 and 2014. Using SPSS, the collected data was examined using both descriptive and inferential statistics. The study's findings showed that while an increase in stock combinations led to a notable decline in after-tax earnings, the debt ratio had a positive effect on financial performance.

The financial performance of the enterprises was shown to be considerably impacted by their capital structure. Only six agricultural companies that were listed on the NSE between 2010 and 2014 were included in the analysis; some of these companies may have delisted, while others may have joined in more recent years. Therefore, it is not possible to fully rely on the study to forecast the capital structure and financial performance of agricultural firms in the modern era.

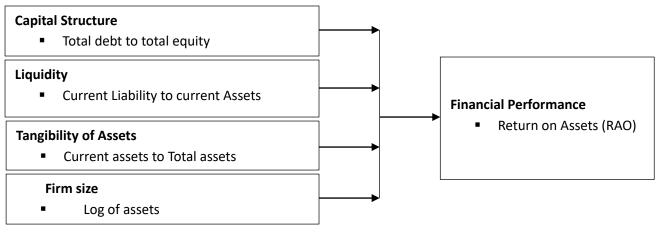
Kimencu (2018) conducted an analysis of the financial performance and capital structure of agricultural companies listed on the NSE between 2011 and 2015. Determining the relationship between the debt to equity ratio and ROA, the effect of the debt to equity ratio on earnings yield, and the effect of the debt to assets ratio on profit margin were among the specific goals. The study

used a descriptive research approach, and the target population consisted of Rea Vipingo Plantations Ltd. and the seven agricultural enterprises listed on the stock exchange: Kapchorua Tea Ltd., Eaagads Ltd., Kakuzi Ltd., Limuru Tea Ltd., Sasini Ltd., and Williamson Tea Kenya Ltd.Because of the small population, a census survey was conducted, and secondary data was used. The collected data was analyzed using regression and descriptive statistics. The findings showed that each of the independent variables, including the debt-toequity and debt-to-asset ratios, had a negligible impact on performance as determined by ROE, earnings yield, and net profit margin. According to the investigation, neither the debt to equity ratio nor the debt to assets ratio significantly improved performance. This study still uses data from 2020-2024, which was a long time ago—before even the

Covid-19 pandemic that wreaked havoc over the world.

Muturi conducted a study in 2019 in Kenya between 2011 and 2015 on the financial leverage and performance of agricultural firms on the NSE. The study relied on secondary data collected from the annual reports of agricultural firms, the NSE, and the CMA and employed a descriptive and analytical research approach. Under multiple regression analysis, the collected data was analyzed using the ordinary least squares approach. According to the study's findings, ROA was marginally but favorably impacted by debt to equity ratios. The study also showed that the positive and negligible effect of debt-to-equity on performance was unaffected by the moderating effect of organizational size.

# **Conceptual Framework**



#### **Independent Variables**

**Figure 1: Conceptual Framework** 

#### **METHODOLOGY**

Descriptive research design was used in the investigation. According to Kothari (2014), the goal of descriptive survey research design is to precisely and methodically describe the variables and circumstances being studied in detail. In order to describe the capital structure and financial performance of agricultural firms listed on the NSE, this study approach wasbe used. The study's focus was on agricultural companies that were listed on the NSE throughout the 2020–2024 timeframe. The study focused on seven companies: Williamson Tea,

**Dependent Variables** 

Eaagards Ltd., Kapchorua Tea, Limuru Tea, Kakuzi, Rea Vipingo Plantations, and Sasini Ltd. (NSE, 2022) to ensure data availability and uniformity in data collecting. Because the population was small, the study used a census survey rather than sampling. This was done using secondary data.

After the secondary data was cleaned and edited, the data in this study was examined using descriptive and inferential statistics with the help of Stata 15. By examining the mean, standard deviation, minimum, and maximum data values,

descriptive analysis aided in the evaluation of capital structure methods. With the use of inferential statistics, the goal of ascertaining the connection between capital structure and financial performance was achieved. The study used the F test, T test, Pearson Correlation (R), and Coefficient of Determination (R squared) under inferential statistics.

#### **RESULTS**

The data collected to determine the impact of capital structure on the financial performance of agricultural companies listed on the Nairobi Stock Exchange was examined in this chapter. As shown in the parts that follow, the results were displayed in tables and graphs utilizing regression analysis, correlation, and descriptive statistics.

# **Descriptive Statistics**

**Table 1: Characteristic Results** 

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	30	.028	.044	07	.119
Capital Structure	30	.002	.008	0	.041
Liquidity	30	4.819	2.935	1.116	10.676
Tangibility of Assets	30	.708	.156	.484	.939
Firm Size	30	15.409	.817	13.756	16.552

# Research data (2025)

The study's conclusions showed that, according to the ROA ratio, the listed agricultural companies in Kenya performed on average at 0.028 (28%) with a standard deviation of 0.044 (44%). Between 2019 and 2024, ROA reached its greatest recorded value of 0.119 (11.9%) and its lowest recorded value of -0.07 (-7%). The listed agricultural companies' average debt-to-equity ratio was 0.2%, suggesting that the firms' combined loan usage was less than 10%. Over the time, the highest debt-to-equity ratio was 0.041 (4.1%), while the lowest was 0%. The period's maximum liquidity was 10.676, while the lowest was 1.116. The average liquidity was 4.819. In Kenya, the maximum tangibility of assets recorded between 2019 and 2024 was 0.939

(93.9%), while the average was 0.708 (70.%). The results also revealed that, when measured by total assets, the average size of agricultural companies listed on the NSE was 15.4%, with the highest being 16% and the smallest being 13.8%.

#### **Analysis of Correlation**

A correlation study was performed to see whether two variables are related. If the correlation coefficient is negative, it implies a negative association; if it is positive, it suggests a positive connection. The relationship between independent and dependent variables was determined using the Pearson correlation test.

Table 2: Results of the Correlation
Coefficients of Spearman's rank correlation

Variables	ROA	CS	LQ	TA	FS			
(1) ROA	1.000							
(2) Capital Structure	-0.323	1.000						
(3) Liquidity	0.034	-0.104	1.000					
(4) TangibilityofA~s	-0.519	0.402	-0.019	1.000				
(5) FirmSize	0.011	-0.444	-0.292	0.006	1.000			

Spearman rho = 0.006

The study's conclusions demonstrated a negative correlation (R = -0.323) between capital structure

(measured by the D/E Ratio) and financial performance (ROA). Liquidity and financial

performance (ROA) were positively correlated (R = 0.034). During the study period, there was a negative correlation (R = -0.519) between the financial performance of listed agricultural enterprises and the tangibility of their assets. There

was a positive correlation (R = 0.011) between organizational size and financial success.

# **Analysis of Regression**

Firm size, liquidity, capital structure, and asset tangibility were all regressed against the expected variables.

**Table 3: Linear regression** 

ROA	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
CapitalStructure	-1.885	1.06	-1.78	.088	-4.068	.299	*
Liquidity	0	.003	-0.11	.916	006	.005	
TangibilityofAsets	114	.048	-2.39	.025	213	016	**
FirmSize	004	.01	-0.38	.707	025	.017	
Constant	.175	.171	1.02	.317	177	.527	
Mean dependent var		0.028	SD dependent var			0.044	
R-squared		0.344	Number of obs			30	
F-test		3.275	Prob > F			0.027	
Akaike crit. (AIC)		-106.428	Bayesian crit. (BIC)		-99.422		

<sup>\*\*\*</sup> p<.01, \*\* p<.05, \* p<.1

Y=0.175-1.885x1+x2-0.114x3-0.004x4+E

Where

X1=Capital structure

X2=Liquidity

X3=Tangibility of assets

X4=Firm Size

Regression analysis between the dependent and independent factors was performed, with return on asset serving as the dependent variable and debt ratio, liquidity, and asset tangibility as the independent variables. According to results, the study model's r-squared was 0.344, meaning that the independent study variables could account for roughly 34.4% of the overall variances in the financial performance of agricultural companies listed on the NSE.

The modified r-squared was used to represent the coefficient of determination, which explains the overall variations in the dependent variables brought on by shifts in their values. According to the results, the r-squared value was 0.344, meaning that changes in the values of the independent variables (debt ratio, liquidity, and asset tangibility)

captured by the study model and at a 95% confidence level account for nearly 34.4% of the overall variations in the financial performance among agricultural firms listed at the NSE.

At the significance level, which was less than 0.05, the research investigation found that every variable was significant. The financial performance of agricultural companies listed on the NSE was used to regress the predictor variables. The results show that, at a 0.1% confidence level, the study model's f-ratio of 0.027 was statistically significant. This result demonstrates the study model's importance and suitability for use in prediction-making at the 5% level of significance.

## **Analysis of Research Results**

Determining the capital structure and financial performance of agricultural companies listed on the Nairobi Stock Exchange was the aim of the study. The independent variables were business size, firm liquidity, tangibility of assets, and capital structure, which was assessed using the debt-to-equity ratio. The firm's performance was calculated using return on assets. Separate analyses were conducted to determine the strength of the correlation and the

direction of each predictor variable's impact on the predicted variable.

There was a negative but moderate correlation between return on assets and tangibility of assets, a positive correlation coefficient of -0.319 indicated a negative and moderate relationship between capital structure and return on assets, a positive correlation coefficient of 0.034 indicated a positive and strong relationship between firm liquidity and return on assets, and a negative correlation coefficient of 0.011 indicated a positive and strong relationship between firm size and return on assets.

Regression study results show that the model could account for 100% of changes in return on assets; fluctuations not covered by the model may account for the remaining 0%. Capital structure has a large impact on return on assets (p<0.05), as does liquidity; tangibility of assets has a big impact on return on assets (p<0.05); and business size has a significant impact on return on assets (p<0.05). According to the study's findings, shareholder value was significantly impacted by the firm's size, liquidity, capital structure, and tangible assets.

#### **CONCLUSIONS AND SUGGESTIONS**

The study indicated that the performance of listed agricultural enterprises depends on the careful management of capital structure, based on the findings that there is a positive correlation between capital structure and financial performance. Determining an organization's capital structure entails allocating debt and equity to its overall capital according to its availability and particular goals. Therefore, a company that effectively balances debt and equity in its capital performs better in terms of lower financing costs, fewer chances of financial difficulty, and more revenue.

The analysis came to the conclusion that among agricultural companies listed on the NSE, the impact of capital structure choices was remained negligible. According to the study's findings, which showed a positive correlation between organizational size and financial performance, growing an organization's size through resource

acquisition and market expansion improves financial performance in areas like higher revenues and profitability. Additionally, the study found that continually increasing liquidity, which is expected, aids organizations in making appropriate plans and reaping the rewards of better financial performance.

## **Study Limitations**

The analysis was restricted to the financial performance and capital structure of agricultural companies that were listed on the NSE. Although there are alternative measures of capital structure and financial performance, ROA was used to measure financial performance and the debt-toequity ratio to evaluate capital structure. The study also only employed three control variables: organizational size, tangibility, and liquidity. Only secondary data gathered from the 2019–2024 annual reports of agricultural companies listed on the NSE were used in the study. Organizations occasionally manipulate their reports by using creative reporting techniques. The results of the study could be deceptive if there was reporting manipulation in any of the organizations during any of the periods.

Only Kenyan agricultural companies listed on the NSE between 2019 and 2024 were included in the analysis. It's possible that the macroeconomic circumstances that affected the nation's capital structure and financial performance throughout that time were marginally different from those in other nations and eras. Therefore, the results of this study cannot be entirely trusted to forecast the results of comparable research in other nations, such as Ethiopia, Sudan, Tanzania, Uganda, Nigeria, and even India.

# The study's suggestion

The study suggests that the management of listed agricultural enterprises continue to make wise capital structure management decisions in light of the data showing a favorable association between capital structure and financial performance. Based on current circumstances and goals, management can adjust the capital structure's debt allocation,

resulting in improved financial performance and falling financing costs.

The report suggests that managers of businesses in various sectors, such as manufacturing, finance, insurance, and even hospitality, should pay close attention to capital structure management. This is due to the fact that capital structure affects organizations worldwide and is not just a reserve of agricultural enterprises. In order to improve the financial performance, the management of the various companies can accomplish this by keeping an eye on the debt and equity levels and adjusting them to the ideal levels.

This study recommended that primary data be used in future research on the capital structure and financial performance of agricultural companies listed on the NSE. This can be accomplished by interviewing and distributing questionnaires to management of the selected agricultural companies. Current discoveries that rely on

secondary data can be supplemented by conclusions from primary data.

#### **Ideas for More Research**

This study recommended that longer-term research be done on the subject of capital structure and financial performance of agricultural companies listed on the NSE. It may take ten or even fifteen years to observe the effects over extended periods of time. Additional financial performance indicators, such ROE, and capital structure metrics, including the long-term debt to equity and short-term debt to equity ratios, among others in the industry, may also be covered in the study.

This study recommended that more research be done in other nations, such as South Africa, Tanzania, Nigeria, India, and Uganda, on the subject of capital structure and financial performance of listed agricultural enterprises. The results of research conducted in various locations with various macroeconomic variables can support the findings of the current study.

# **REFERENCES**

- Addae, A, A., Nyarko-Baasi, M., and Hughes, D. (2013). The Effects of Capital Structure on Profitability of Listed Firms in Ghana. *European Journal of Business and Management*
- Ana, S., Dragan, G., and Monica, C. (2012). Capital structure and financial performance of agricultural companies: Evidences from the Macedonian agricultural sector in transition. Presentation at the 132nd Seminar of the European Association of Agricultural Economists Berger,
- N. and Udell, G. F. (1998). The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle, *Journal of Banking and Finance*, 22 (6/8), 613-673
- Burja C. (2011). Factors affecting company's profitability. Annales Universitatis Apulensis Series Oeconomica, 13(2): 215-224
- Chasmi, N. A., and Fadaee, M. (2016). Impact of financial performance and growth opportunities on success or failure of companies: Evidence from Tehran Stock Exchange. *Journal of Accounting and Marketing*
- Durmus, A. (2019). High inflation risk and growth rate. International journal of social science research Fatihudin, D., & Mochklas, M. (2018). How Measuring Financial Performance. *International Journal of Civil Engineering and Technology*. 9.
- Hall, R. E. (2017). Low Interest Rates: Causes and Consequences. International journal of Central BankingKadi, X. (2016). Advantages of Stock Exchange Listing. *European Scientific Journal*, 12(4)

- Kakuzi (2022). Annual audited Financial report for the year 2021. Kakuzi Publications Kedia, N. 2016.

  Determinants of profitability of Indian public sector banks. *Ira-International Journal of Management & Social Sciences*. 2: 1-16
- Kimencu, L, G. (2018). Effects of Capital Structure on Financial Performance of Agricultural Firms Listed In the Nairobi Securities Exchange. Unpublished Thesis, USIU-Kenya
- Kinyua, J, B., and Muriu, P, W. (2017). Determinants of Capital Structure of Agricultural Firms in Kenya. European Scientific Journal, 13 (7)
- Masavi, J, M., Kiweu, M., and Kinyili, J. (2017). Capital structure and financial performanceof
- agricultural companies listed in Nairobi securities exchange, Kenya. *International Journal of Economics, Commerce and Management*, V (11).
- Matar, A & Eneizan, B. (2018). Determinants of Financial Performance in the Industrial Firms: Evidence from Jordan. *Asian Journal of Agricultural Extension, Economics & Sociology*. 22. 1 10
- Miller, M. (1963). The Cost Of Capital, Corporation Finance And The Theory Of Finance. American Economic Review, 48(3), 291-297.
- Modigliani, F., & Miller, M. (1958). The Cost of Capital, Corporation Finance and the Theory of Investment. American Economic Review, 48(3), 261 297
- Mudany, J, O., Letting, N, K., and Gituro, W. (2020). Effects of Capital Structure on Performance: A Critical Review. *Stratford Peer reviewed journal*
- Muturi, W,J. (2019). Financial leverage and performance of agricultural firms listed at Nairobi Securities Exchange, Kenya. Unpublished Master's Project, Kenyatta University Kenya.
- Myers, S. C., & Majluf, J. (1984). The Capital Structure Puzzle. 3a(3), 575-595 Nairobi Securities Exchange (2022). Firms Listed at the NSE. NSE Portal
- Narsaiah, N. (2020). Does Capital Structure Impact on Financial Performance: Evidence from India. *Academy of Accounting and Financial Studies Journal*
- Opoku-Asante, E, C, K., Winful, M. S., and Neubert, M. (2022). The Relationship between CapitalStructure and Financial Performance of Firms in Ghana and Nigeria. *European Journal of Business and Management Research*
- Sasini (2022). Sasini annual financial report for the year 2021. Sasini publications
- Titman, S., Martin, J. D., Berk, J. B., & DeMarzo, P. M. (2017). Intermediate Corporate Finance. Pearson Education.
- Vasiliou, D and Eriotis N and Daskalakis N (2009), Testing the Pecking Order Theory: the Importance of Methodology, Qualitative Research in Financial Markets 1:85-96
- Xu, J., Sun, Z., & Shang, Y. (2021). Capital structure and financial performance in China's agricultural sector: a panel data analysis. Custos e Agronegocio. 17, 445-46