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Abstract

The study assessed the relationship between leverage and financial performance of agricultural firms listed in Nairobi Securities Exchange. The study applied correlational research design which was used to describe the various components of the study as well as the quantitative research design with the aim of identifying the relationship between the independent variables and the dependent variable. This is so because quantitative secondary data was collected from the NSE annual reports where the means, standard deviations, variances, correlation analysis and linear regression analysis were performed. The target population of the study consisted of all the seven firms listed at NSE, Kenya under agricultural sector. The analysis of the relationship between leverage and financial performance, measured by return on equity (ROE), revealed an inverse relationship with a coefficient of -1.939. This negative coefficient indicated that as leverage increased, financial performance tended to decrease, albeit insignificantly. The p-value for leverage was 0.824, which was well above the standard significance thresholds ($p < 0.05$ or $p < 0.1$). This lack of statistical significance implied that leverage did not have a meaningful impact on the financial performance of the agricultural firms listed on the Nairobi Securities Exchange (NSE). The study recommended that Firms should focus on maintaining an optimal debt-to-equity ratio that balances growth with financial stability. Financial managers should assess the potential risks and returns associated with debt and explore alternative financing options, such as equity financing, to support sustainable growth.

Keywords: *Leverage, financial performance, agricultural firms, Nairobi Securities Exchange.*

1.1 Background to the Study

According to KNBS Economic survey (2022), agricultural sector has remained the crucial sector to the economic development of the country, it accounted for about 22.4% of the overall GDP in 2021. Also, service activities and industry related activities accounted for about 60% cent and 17.0 % respectively in 2021, KNBS Economic survey (2022). Additionally, KNBS Economic survey (2022), states that industry employs more than 40% of the whole workforce and more than 70%

of the rural population. Given the vital role that this industry plays in the Kenyan economy, it is becoming more and more crucial to make sure that high frequency, high quality data is accessible to inform about the country's food supply status, the going rates, and the difficulties that can hinder sector output. In order to supplement information from other sources, the Central Bank of Kenya (CBK) developed a Survey of the Agriculture Sector.

According to KNBS Economic Survey, (2023) the industry had a 1.9% decline compared to a 0.3% decline in 2021, which had an impact on the output of tea, maize, milk, and horticulture. Additionally, according to KNBS Economic Survey, (2023) tea production fell from 537,800 tonnes in 2021 to 535,000 tonnes in 2022. According to the research, decreased rainfall in tea-growing regions was the cause of the decline in tea output. According to the research, the drought that caused a shortage of animal feed caused the volume of milk sold to consumers to drop from 801.9 million liters in 2021 to 754.3 million liters in 2022. This therefore call for study to be done on the above subject to investigate whether leverage affects performance of the agricultural forms listed at NSE, Kenya.

According to Rhone (2021) defines internal factors as Situations from within an organization that have a direct impact on the success of an organization, such as inconsistent leadership decisions, leverage, liquidity, efficiency, growth and unexpected management changes. Every company has a unique internal factor. Almost everything that has an impact on an organization's capacity to compete and adapt to changes in the external environment and, ultimately, the success or failure of the organizations is a component of its internal factors. How the organization develops as a standalone organizational unit and in reaction to its external environment depends on internal elements. Many studies have been done on the how the internal factors affect firm's performance globally, regionally and locally but the problem still remained unresolved.

Internal factors are essential to organizational management, as they include all elements within a company that can be controlled and adapted to influence outcomes (Martinez & Shaker, 2015). Positive or negative thinking can affect decision-making processes, where positive outlooks are likely to support clearer and more effective decisions, while negative attitudes may introduce hesitation or reduced confidence in strategic choices (Graciela & Shaker, 2015; Muturi, 2019). Financial leverage, for example, is a critical internal factor, as it involves the degree to which a firm utilizes debt and equity in its financial structure. Financial leverage reflects how a company's assets are financed, with an emphasis on using borrowed funds in hopes of yielding returns greater than the cost of debt (Muturi, 2019; Taqi et al., 2020; Hayes, 2022). This structure amplifies returns when successful but increases financial risk if returns fall short of debt costs, underscoring the need for careful debt-equity management.

Liquidity, another vital internal factor, denotes how easily a company can convert its assets into cash, directly impacting its ability to meet short-term financial obligations. According to Mootian

and Mukoma (2020), there is a significant negative relationship between liquidity and financial performance, suggesting that while sufficient liquidity is necessary for stable operations, excessive liquidity may reflect unproductive asset allocation. Hayes (2022) emphasizes that liquidity is often measured by the current ratio, which assesses the balance between current assets and liabilities, a ratio companies must optimize for effective cash flow management (Mootian & Mukoma, 2020; Hayes, 2022; Burches & Burches, 2020). A balanced liquidity strategy ensures that a firm can respond to immediate financial needs without sacrificing long-term investment opportunities that drive growth.

Efficiency within an organization is also essential to achieving high performance and competitiveness. Efficiency reflects the firm's ability to use resources economically to maximize outputs while minimizing costs, a concept that ties directly to effective decision-making and productivity (Suchitra & Ravi, 2022; Burches & Burches, 2020; Mansikkamäki, 2023). Operational efficiency highlights how well a company can convert inputs such as labor, materials, and capital into outputs, such as goods and services, while keeping costs low without compromising quality. In an academic context, efficiency is not just a goal but a measurement of how well an organization aligns its resources with its strategic objectives, ultimately driving financial performance and sustainability.

1.1.1 Performance

According to Saputra, Achsani, and Anggraeni (2015), performance refers to a company's ability to maximize shareholder wealth by effectively managing available resources. This performance encompasses both financial and non-financial aspects of an organization. Financial performance, in particular, measures a firm's overall financial health over a specific period and allows for comparison across similar firms within the same industry or sector (Logavathani & Lingesiya, 2018). Various indicators are used to assess an entity's financial performance, including profitability, return on assets (ROA), return on equity (ROE), return on investment (ROI), financial ratios, and earnings per share.

Profitability is often assessed using measures such as the net profit margin, which represents the ratio of net profit to the firm's total revenue, and the gross profit margin, which is the ratio of gross profit to total sales revenue. One of the most commonly used indicators of a firm's performance is profit after tax, where the profit level serves as a primary measure of the firm's success. Additionally, ROA is used as an indicator of performance, representing the percentage of profitability generated from all resources employed by the firm. This metric assesses the company's ability to generate income by utilizing its assets effectively, reflecting management efficiency in generating net income from the company's resources. A higher ROA indicates more efficient resource utilization.

The selection of financial indicators is crucial in assessing organizational performance and health, as these indicators evaluate various company aspects, such as leverage, liquidity, operational efficiency, and growth. Financial ratios, as argued by Rahman et al. (2017), have traditionally

served as indicators of overall corporate performance and can help quantify the potential impact of internal ratings on financial performance (Belas et al., 2012).

1.1.2 Nairobi Securities Exchange (NSE)

Nairobi Securities Exchange was established in the 1920's where dealings in shares commenced with trading taking place in a gentleman's agreement (NSE Annual Report, 2017). London stock exchange (LSE) officials accepted to recognize the setting up of the Nairobi Stock Exchange as an overseas stock exchange in 1953. Currently, the NSE has 65 listed companies which are clustered into eleven sectors: Agriculture, Automobile and Accessories, Banking, Commercial Services, Construction and Allied, Energy and Petroleum, Insurance, Investment, Manufacturing and Allied, Telecommunications and Technology, and Real Estate Investment Trust. Under the agricultural sectors, there are seven listed companies which shall be involved in the study namely: Eaagads Ltd,Kapchorua Tea Co. Ltd,Kakuzi ltd, Limuru Tea Co. Ltd, Rea Vipingo Plantations Ltd, Sasini Ltd and Williamson Tea Kenya Ltd.

The NSE stipulates requirements for firms to fulfill before they are listed which requires that a firm must have a clear future policy. The NSE also provides an avenue for members of the public to participate in buying and selling bonds, shares and other primary market Securities through the issuance of initial public offers (IPO). The study focused in all agricultural firms listed in the NSE, not the sectors because they exhibit intrinsic heterogeneous characteristics. According to the NSE report (2022), 65 listed firms are actively participating in trading. The NSE is Kenya's primary open market, and it is essential to the country's economic development by promoting savings and investment as well as assisting local and foreign businesses in gaining access to cost-effective capital. This is in line with Kenya Vision 2030, which aims to transform Kenya into a newly industrializing, middle-income nation by 2030 that offers a high standard of living to all of its citizens in a safe and secure environment.

1.2 Statement of the Problem

According various reports by KNBS Economic survey from 2012 to 2022, agricultural firms listed in NSE have reported mixed financial performance. The reports mostly attribute performance of all agricultural firms to climate change either availability or non-availability of rain. This negates financial aspect that plays a key role in defining the overall financial performance of the organization. Further, KNBS Economic survey from 2012 to 2022 reports, depicts that some firms perform well others perform poorly to an extent of stopping to trade.

According to KNBS Economic survey (2022), agriculture is a crucial sector to the economic development of the Kenya, this is so because it accounted for about 22.4% of the overall GDP in 2021. The sector played a crucial role in contributing to the growth of the country's GNI in 2020 which is a measure of disposable income. The GNI increased from KSh 11,058.4 billion in 2020 to KSh 12,588.2 billion in 2021, whereas nominal GDP increased from KSh 10,716.0 billion in

2020 to KSh 12,098.2 billion. The gross domestic product (GDP) per person also increased by 11.4% from KSh 220,132.2 in 2020 to KSH 245,145 in 2021. In addition to that, the sector employs more than 40% of the total workforce in the country and more than 70% of the rural population. Despite all such benefits from the sector, it has continuously been faced with several internal challenges which calls for an immediate solution which can be attained through research.

According to Kenya Bureau of National Statistics' (KNBS) Economic Survey, (2023) the industry had a 1.9% decline in performance compared to a 2.3% decline in 2021. This was as a result of a negative impact on the output of tea, maize, milk, and horticulture. The maize production fell from 537,800 tons in 2021 to 535,000 tons in 2022. According to the research, the decreased rainfall in tea-growing regions was the cause of the decline in tea output. On the other hand, research revealed that excessive drought caused a shortage in the animal feed production which led to a drop in the volume of milk sold from 801.9 million liters in 2021 to 754.3 million liters in 2022. Given the vital role that this industry plays in the Kenyan economy, it is necessary that high frequency and high-quality data is needed to inform about the country's food supply status. This therefore calls for study to be done on the above subject to investigate whether the internal factors like leverage, liquidity, efficiency and firm size, affected the performance of the agricultural firms listed at NSE, Kenya.

Most studies on this topic have focused on developed countries, leaving a gap in research for developing nations like Kenya. Studies by Dahmash et al. (2021) and Fahan and Aigbogun (2021), conducted in Jordan and Malaysia, respectively, illustrate this trend. In Kenya, research related to firm financial performance has predominantly centered on listed firms in sectors other than agriculture, such as manufacturing and insurance, as seen in works by David et al. (2021) and Kinyua and Fredrick (2021). This lack of focus on the agricultural sector highlights a need for research that examines firm characteristics influencing financial performance specifically within this industry. Local studies have often treated key financial characteristics as control variables rather than primary factors, despite evidence suggesting their impact on performance (Utama et al., 2020; Pham et al., 2018). To address this gap, this study will investigate how leverage affects financial performance in Kenya's agricultural sector.

1.3 Objective of the Study

To determine the relationship of leverage and financial performance of agricultural firms listed in Nairobi Securities Exchange.

2.0 Literature Review

The literature review provides an overview of relevant research on the relationship between financial leverage and firm performance, focusing on theoretical perspectives and empirical findings. Understanding the role of leverage is essential, as it influences firms' capital structure

decisions, impacts financial outcomes, and varies significantly across sectors. This review synthesizes previous studies to offer insights into leverage's implications on firm performance, particularly in the context of the agricultural sector, which faces unique challenges. By examining both theoretical frameworks and empirical evidence, this section seeks to highlight existing knowledge and identify gaps that motivate the current study.

2.1 Empirical Literature Review

The empirical literature review explores the findings from various studies on the relationship between financial leverage and firm performance. It emphasizes the methodologies, contexts, and conclusions of past research to draw a comprehensive picture of how leverage impacts firm outcomes. By analyzing empirical studies, this section aims to contextualize leverage's role within different industries and geographic regions, with a particular focus on sectors comparable to agriculture. This analysis not only highlights the range of outcomes associated with leverage but also underlines the complexity of applying general findings to specific contexts.

2.1.1 Relationship between Leverage and Performance

Forte and Tavares (2019) In their study did their study on the relationship between debt and a firm's performance: the impact of institutional factors o of 11,836 manufacturing firms from nine European countries covering the period from 2008–2013, the study used leverage as one of its independent variable, the study employed descriptive research methodology. it was revealed that the effect leverage on a firm's performance varies from country to country. Financial leverage has a positive effect on a firm's performance in Spain and Italy but is negatively related to a firm's performance in Germany, France, Belgium and Norway. In the case of Portugal, results obtained are not statistically significant and since the findings varies from one country to the other, the author of this study will use leverage as an independent variable to determined its relationship between leverage and firm performance of agricultural firms listed at NSE, Kenya so that he can come with a conclusion which is going to applies to all agricultural firms listed at NSE, Kenya.

Igbal and Usman (2018) Conducted their study on the Impact of Financial Leverage on Firm Performance of Textile Composite Companies of Pakistan. Pakistan Textile Composite Companies which are listed in PSX (100-index) are selected.5-year data is collected from 2011-2015 and top 16 companies are selected as a sample. To determine the outcomes, the study used descriptive statistics, correlation analysis, and regression modeling are used. The findings demonstrate that financial leverage has a considerable and adverse impact on firm ROE while having a favorable and significant impact on firm ROA. The study is aiming to use the same variable, i.e leverage to prove the findings of the study but the study will examine the agricultural firms listed at NSE, Kenya to come up with a conclusion which is going the firms listed in the above mention sector at NSE, Kenya to benefit from it.

Chen (2020) conducted a study on the impact of financial leverage on firm performance, specifically examining how leverage affects return on assets (ROA) in a sample of Chinese listed

companies from 2010 to 2019. Using Ordinary Least Squares (OLS) and Two-Stage Least Squares (2SLS) regression methods, Chen found a significantly negative relationship between financial leverage and firm performance. However, previous studies have reported conflicting results; for example, Igbal and Usman (2018) and Forte and Tavares (2019) found both positive and negative effects of leverage on firm performance. To address this inconsistency, the researcher intends to use leverage as an independent variable to assess its impact on the performance of agricultural firms listed on the Nairobi Securities Exchange (NSE) in Kenya. The findings from this study aim to provide insights applicable to the performance strategies of these firms.

Asifowose et al., (2020) in their study, examined Effect of Financial Leverage on Firms Performance: Case of Listed Pharmaceutical Firms in Nigeria. The study used panel data for a period of 16 years, ranges from 2003 to 2018. The study used the descriptive and regression model to analyze the effect of financial leverage on form performance. This data demonstrated that financial leverage has a considerable impact on the performance of organizations in terms of profitability and efficiency, particularly listed pharmaceutical companies in Nigeria. Now that we have seen there is a significantly positive effect between the financial leverage and the performance, this therefore call for the study to conducted to examine the relationship be relationship between leverage on the firm performance at Agricultural firms at NSE, Kenya, so that we can cope up with conclusion which is going to applied by all the firms listed at the above-mentioned sector at NSE, Kenya.

2.2 Theoretical Literature Review

The study was anchored on the Modigliani and Miller Capital Structure Theory. It is as discussed as below:

2.2.1 Modigliani and Miller's Capital Structure Theory

The theory of capital structure, developed by Modigliani and Miller (1958), was initially presented in a seminar paper where they proposed that, under certain ideal conditions, the capital structure of a firm is irrelevant to its value. This original proposition, known as Proposition I, was based on the assumption that the firm operates in a fully efficient market with no taxes, transaction costs, or bankruptcy costs. Additionally, it assumed that all market participants have perfect information. Under these conditions, they argued that the level of financial leverage does not impact a firm's value, suggesting that factors other than leverage would determine the firm's performance.

In their follow-up paper in 1963, Modigliani and Miller introduced Proposition II, modifying their model to include the effects of taxes. With the addition of taxes, they acknowledged the reality that interest payments on debt provide a tax shield, making debt financing advantageous. According to Proposition II, the capital structure becomes relevant to a firm's value due to the tax savings from interest on debt. As a result, a firm that utilizes debt can achieve a higher value than a fully equity-financed firm, highlighting that leverage, through the interest tax shield, can increase firm value.

Modigliani and Miller's theory, however, has faced significant critique, particularly for the unrealistic assumptions of Proposition I, such as the absence of taxes, transaction costs, and

bankruptcy costs, as well as the assumption of perfect information. Stiglitz (1969), for instance, argued that these assumptions do not hold in the real world, thus challenging the practical relevance of Proposition I. Despite these criticisms, the theory remains relevant to studies on financial leverage, particularly in light of Proposition II, which illustrates how debt financing can increase firm value by providing tax benefits. This study leverages the Modigliani-Miller framework to explore how financial leverage impacts firm performance, particularly through the interest tax shield benefits described in Proposition II.

3.0 Research Methodology

The study employed positivism research philosophy. The study applied correlational research design which was used to describe the various components of the study as well as the quantitative research design with the aim of identifying the relationship between the independent variables and the dependent variable. This is so because quantitative secondary data was collected from the NSE annual reports where the means, standard deviations, variances, correlation analysis and multiple regression analysis were performed. The target population of the study consisted of all the seven firms listed at NSE, Kenya under agricultural sector. The study applied census survey where all the seven listed firms at NSE, Kenya under agricultural sector were considered since the number is small and it was manageable by the researcher. Normality tests, multicollinearity tests, Hausman Test and Breusch and Pagan Lagrangian multiplier test for random effects were conducted on the results. The study then used Stata to generate measures of central tendency including mean and standard deviations. Correlation analysis and linear regression were performed to establish relations between variables.

4.0 Research Findings and Discussion

4.1 Overall Descriptive Statistics of Leverage

Table 1: Overall Descriptive Statistics of Leverage

Variable	Obs	Mean	Std. Dev.	Min	Max
leverage	72	.282	.125	.085	.693

The findings from Table 1 indicated that overall mean leverage was 0.282. This indicates that, on average, these firms maintained a debt level that was approximately 28.2% of their equity. The standard deviation was 0.125, the minimum recorded leverage value was 0.085, indicating that some companies had relatively low reliance on debt. On the other end, the maximum leverage observed was 0.693, showing that some firms utilized a significantly higher level of debt in their capital structure.

4.1.1 Descriptive Statistics of Leverage by Agricultural Firm Listed on NSE

Table 2 provides a summary of the leverage statistics for agricultural firms listed on the Nairobi Securities Exchange (NSE). The data includes key descriptive measures such as the mean, standard deviation (SD), minimum, and maximum leverage values for each firm over a set period. These

statistics offer insight into each firm's reliance on debt relative to equity, revealing variations in financial structure and risk tolerance across the agricultural sector. This overview highlights how each firm's leverage fluctuates within certain bounds, providing a foundation for understanding the role of debt in the financial performance of these NSE-listed agricultural companies.

Table 2 Summary statistics for Leverage by Agricultural Firm Listed on NSE

Company	N	mean	Sd	min	max
Eaagads Ltd	12	.151	0.056	.085	.242
Kakuzi	12	.279	0.032	.238	.329
Kapchorua Tea Co.Ltd	12	.454	0.106	.319	.693
Limuru Tea Ltd	12	.286	0.094	.144	.395
Sasini	12	.199	0.102	.117	.419
Williamson Tea Kenya Ltd	12	.326	0.076	.153	.465

Table 2 summarizes the leverage statistics for agricultural firms listed on the Nairobi Securities Exchange (NSE), illustrating varying levels of debt use across these companies. Eaagads Ltd had an average leverage of 0.151, indicating a low debt level relative to its equity. With a standard deviation of 0.056, leverage for Eaagads Ltd fluctuated within a narrow range, from a minimum of 0.085 to a maximum of 0.242. These values suggest that Eaagads Ltd maintained conservative debt levels, likely opting for a low-risk approach to financing.

In contrast, Kakuzi demonstrated a higher average leverage of 0.279, signaling a more substantial use of debt in its capital structure. The standard deviation of 0.032 and a range between 0.238 and 0.329 indicate that Kakuzi's leverage was consistently higher than that of Eaagads Ltd, though it remained relatively stable over time. This moderate yet consistent leverage could reflect a balanced strategy aimed at optimizing capital without excessive exposure to debt risk.

Kapchorua Tea Co. Ltd showed the highest average leverage among the firms, with a mean of 0.454, highlighting a greater reliance on debt financing. The broader standard deviation of 0.106 and a wider range from 0.319 to 0.693 indicate significant fluctuations in debt levels. This variability suggests that Kapchorua experienced periods of higher debt, possibly to fund growth or expansion initiatives, reflecting a more aggressive financial strategy compared to the others.

Similarly, Limuru Tea Ltd displayed an average leverage of 0.286, comparable to Kakuzi's levels and indicating moderate debt utilization. With a standard deviation of 0.094, leverage for Limuru Tea varied over time, within a range of 0.144 to 0.395. Although leverage fluctuated, it remained within moderate bounds, suggesting that the company employed debt cautiously without reaching extreme levels.

Sasini, on the other hand, reported an average leverage of 0.199, a relatively conservative figure that implies a restrained use of debt compared to Kapchorua and Kakuzi. The standard deviation of 0.102, alongside a range from 0.117 to 0.419, points to some variation in debt levels. However,

Sasini's leverage generally remained low, reflecting a cautious approach to financing with occasional increases, likely driven by specific financial needs.

Williamson Tea Kenya Ltd, with an average leverage of 0.326, reflected a balanced approach to debt use similar to Kapchorua but higher than Eaagads Ltd and Sasini. The standard deviation of 0.076 and a range of 0.153 to 0.465 indicate moderate variability, with periods of both lower and higher leverage. This balanced level of leverage suggests that Williamson Tea Kenya Ltd adjusted its debt in response to changing financial strategies or market conditions, optimizing capital without excessive risk exposure.

Together, these findings reveal diverse approaches to financial leverage among NSE-listed agricultural firms. Companies like Kapchorua took on higher leverage, potentially to fuel growth, while firms such as Eaagads Ltd and Sasini maintained conservative debt levels, suggesting varied financial strategies and risk tolerances within the sector.

4.2 Regression Results

The regression analysis focused on examining the influence of leverage on financial performance as measured by return on equity (ROE). The coefficient for the leverage variable was -1.939, indicating a negative relationship with financial performance. However, this result was not statistically significant, as evidenced by the high p-value of 0.824, which is far above the significance level (0.05). This suggests that changes in leverage did not have a meaningful impact on the financial performance of the agricultural firms within the sample.

The wide 95% confidence interval for leverage, ranging from -19.29 to 15.412, highlights the high level of uncertainty around the estimated coefficient. This range implies that leverage's true effect could vary greatly, potentially positive or negative, without conclusive evidence.

In comparison to other variables in the model, leverage appeared to be less influential in determining financial performance. The insignificance of leverage contrasts with the statistically significant findings for other predictors like efficiency and liquidity, which had clear and strong effects on performance.

The results suggest Levarage did not play a significant role in explaining variations in ROE for the agricultural firms listed on the Nairobi Securities Exchange (NSE). This could imply that these firms might manage their debt levels effectively or that leverage impacts financial performance indirectly, necessitating further investigation into other factors or potential moderating variables.

5.0 Discussion of Findings

The analysis of the relationship between leverage and financial performance, measured by return on equity (ROE), revealed an inverse relationship with a coefficient of -1.939. This negative coefficient indicated that as leverage increased, financial performance tended to decrease, albeit insignificantly. The p-value for leverage was 0.824, which was well above the standard significance thresholds ($p < 0.05$ or $p < 0.1$). This lack of statistical significance implied that leverage did not have a meaningful impact on the financial performance of the agricultural firms listed on the Nairobi Securities Exchange (NSE).

While leverage is often employed by firms to potentially enhance returns through financial leverage, this study suggested that its effectiveness in the context of agricultural firms was limited. The observed negative relationship may have been due to the inherent risks of high debt levels, especially in the agricultural sector, which is susceptible to factors like weather variations, commodity price volatility, and international market shifts. The mean VIF for the model was 1.394, confirming that multicollinearity was not an issue and that the results were robust in that regard.

The analysis of the relationship between leverage and financial performance in this study supports the findings of Chen (2020), who observed that leverage has a minimal or insignificant impact on financial performance. This indicated that high leverage in certain industries, especially those with stable cash flows, could increase returns on equity by using borrowed funds to amplify profits.

This study finding reveal a statistically insignificant negative relationship between financial leverage and firm performance in agricultural firms, contrasting with Asifowose, Aina, and Aduragbeni's (2020) results, which found a positive relationship between leverage and performance in other sectors. The positive effect identified by Asifowose et al. suggests that higher leverage can improve financial performance by maximizing returns on borrowed capital and leveraging fixed costs. However, the unique characteristics of the agricultural sector—such as income volatility, weather dependency, and fluctuating market prices—may reduce the effectiveness of leverage as a performance-enhancing tool. While leverage might bolster financial outcomes in more stable industries, its benefits appear limited for agricultural firms, where unpredictable cash flows and sector-specific risks make high leverage potentially detrimental. Thus, stakeholders in agriculture should recognize that while leverage can be strategically beneficial, its impact may be less pronounced than in other sectors.

6.0 Conclusions

The analysis revealed that leverage, as measured by the debt-to-equity ratio, does not have a significant positive impact on financial performance. In fact, a negative relationship was observed, suggesting that increasing leverage may not be beneficial for the financial performance of agricultural firms in this context. This finding emphasizes the importance of careful management of debt levels, as high leverage might increase financial risks and hinder performance.

7.0 Recommendations

Optimizing Leverage: Given the negative relationship between leverage and financial performance, agricultural firms should carefully consider their debt levels. While some level of debt can be beneficial for growth, excessive leverage may lead to financial instability and increased risk. Firms should focus on maintaining an optimal debt-to-equity ratio that balances growth with financial stability. Financial managers should assess the potential risks and returns associated with

debt and explore alternative financing options, such as equity financing, to support sustainable growth.

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