EFFECT OF DEBT FINANCING ON THE FINANCIAL PERFORMANCE OF TEA COMPANIES IN KERICHO COUNTY, KENYA

Josphat Kipkurui Mibei[1*], Dr. Vincent Shiundu[2]

[1*]*School of Business, Economics and Tourism, Kenyatta University, PO Box 43844-00100 Nairobi*
[2]*School of Business, Economics and Tourism, Kenyatta University, PO Box 43844-00100 Nairobi*

ABSTRACT

The purpose of this study was to investigate the effect of debt on the financial performance of tea companies in Kenya. The study was grounded on Static Trade-Off Theory of Capital Structure. An explanatory research design was adopted, targeting three multinational tea companies located in Kericho County, with a census approach employed to include all tea factories in the study. Secondary data were primarily sourced from the financial statements of these companies, collected using documentary guides and data sheets. Descriptive statistics, such as frequencies, mean, and standard deviation, alongside regression analysis, were used to analyze the data. The results from correlation analysis indicated a negative correlation between debt financing and return on assets. The study concluded that debt financing had a significant influence on the financial performance of tea companies in Kericho County. Consequently, the study recommended that tea companies should aim to determine an optimal capital structure that minimizes capital costs and maximizes returns. This could involve a balanced strategy in leveraging debt and equity to finance operations and growth, thereby enhancing their financial performance.

KEYWORDS: *Capital Structure, Debt Financing, Financial Performance, Tea Processing Companies.*

INTRODUCTION

Business organizations make critical decisions regarding how to finance their operations and capital expenditures, typically choosing between debt, equity, or a combination of both. This is referred to as their capital structure. Capital structure explains how a business raises funds through debt or equity to finance its ongoing operations. Jadoua and Mostapha (2020) describe capital structure as a vital element for any organization, serving as the foundation for key decisions that allow management to maximize profits. According to Ngo, Tram, and Vu (2020), such decisions are crucial to the financial stability of the tea industry due to its unique features and economic dynamics.

Over the past decade, the global tea industry has experienced inconsistent financial performance, a trend exacerbated by the COVID-19 pandemic. Previous studies have explored the relationship between capital structure and financial performance, yet their findings vary regarding the extent of this effect. A report by Stir (2021) on capital and credit in the tea industry highlights a steady decline in Sri Lanka's tea sector, characterized by decreasing revenues and production. The report notes that in 2019, only three out of 14 public tea estates in Sri Lanka recorded profits, with the remainder incurring losses, adversely affecting returns for farmers

Between 2016 and 2020, several major tea companies in India collapsed due to liquidity issues. Arpeejay, India's third-largest tea producer, encountered significant liquidity problems in 2019, which ultimately led to its failure and inability to service its debts (Kakati & Roy, 2017). Similarly, McLeod, a multinational tea producer, faced severe debt challenges, resulting in the sale of 11 tea firms before the government took over due to bankruptcy. Panda and Nanda (2020) highlighted that many Indian tea companies prefer debt financing over equity financing, which has led to liquidity constraints. Factors such as cash flow, firm size, non-debt tax shields, economic growth, foreign investment, interest rates, and asset tangibility were found to significantly influence firms' debt levels, contributing to the financial instability in the industry.

The tea industry in Rwanda experienced substantial growth due to strong government support, as reflected in rising interest rates from 8% in 2018 to 15% in 2019 (Kabayiza et al., 2021). The government, through the agricultural board, encouraged farmers to secure loans from the Development Bank of Rwanda via cooperative societies to invest in processing factories aimed at boosting tea production. However, factors such as price erosion, increased export competition, adverse climate changes, and the COVID-19 pandemic hindered farmers' ability to repay their debts, leading to a decline in the financial performance of the sector (Kabayiza et al., 2021). In Ethiopia, Adong (2019) found that firm size, inflation, and sectoral economic growth positively impacted the identification of capital structures, aiding the progression of the tea industry.

The tea industry in Kenya plays a crucial role in the country's economy, contributing approximately 26% of foreign exchange earnings. It has been recognized as a key sector for achieving Kenya's long-term Vision 2030 goals. Small-scale tea companies, which produce 60% of the country's tea, are managed by the Kenya Tea Development Agency (KTDA) through contracts with farmers, while multinational companies manage the remaining 40% from large-scale farms (Kiptoo, 2017). Despite this significant contribution, the performance of tea processing firms has been underwhelming, with Yegon, Muturi, and Oluoch (2021) highlighting low earnings, which have disappointed both farmers and stock exchange investors.

Morin and Audebrand (2018) assert that evaluating an organization's financial performance allows for an assessment of management's financial successes over a specific period and provides a basis for comparison with similar businesses. Financial performance serves as an objective metric at the end of an accounting period, offering insights into the firm's operations and how well shareholders have benefited. This evaluation is often based on previous financial statements, which help to analyze the firm's market structure and condition, highlighting areas of strength and potential improvement.

Efficient measures of financial performance are influenced by the industry type, the nature of the business, and the purpose of the financial reports (Hussein, 2020). Ngo, Tram, and Vu (2020) identify several indicators for measuring financial performance, including profitability, liquidity, solvency, activity or efficiency ratios, cash flow ratios, market value, coverage, risk, and investment ratios. Different scholars have employed various metrics for assessing financial performance. Pouraghajan and Malekian (2015), along with Jadoua and Mostapha (2020), suggest that return on investment (ROI) and return on equity (ROE) are effective tools for evaluating the financial health of both SMEs and listed corporations. These indicators provide insights into shareholder returns and overall company efficiency, aiding in the analysis of financial leverage and investment effectiveness. Yegon et al. (2021) support these findings by using ROE and return on assets (ROA) to assess the financial performance of Kenyan tea factories.

Pandey (2017) suggests that financial performance can be evaluated using measures like solvency and liquidity ratios, which provide investors with a comprehensive view of an entity's financial health and performance. For manufacturing firms, including tea enterprises, focusing on cash flow ratios such as the operational cash flow ratio and cash flow to debt ratio is particularly useful for assessing working capital management. The current study on international tea enterprises in Kericho County used Return on Assets (ROA) as a measure of financial performance, in line with recommendations from Yegon et al. (2021), Kabayiza et al. (2021), and Adong (2019).

Problem Statement

The tea industry in Kericho County, Kenya, plays a crucial role in the local economy and contributes significantly to the country's export earnings. Despite its importance, many tea companies in the region face financial difficulties, with fluctuating financial performance and operational challenges. One of the critical factors influencing these financial outcomes is debt financing. Debt financing, which involves borrowing funds to support business operations and expansion, can have varying effects on a company's financial performance, including profitability, liquidity, and overall financial stability. However, the impact of debt financing on the financial performance of tea companies in Kericho County remains underexplored. There is a lack of empirical evidence regarding how different levels and types of debt financing affect the financial outcomes of these firms. This gap in knowledge makes it challenging for stakeholders to make informed decisions about financing strategies that could enhance the financial health of tea companies. Therefore, this study aims to investigate the effect of debt financing on the financial performance of tea companies in Kericho County, Kenya.

Research Hypotheses
H₀ Debt financing has no statistically significant influence on the financial performance of tea companies in Kericho County, Kenya

LITERATURE REVIEW
Theoretical Review
The Static Trade-Off capital structure theory was developed in the 1950s by Modigliani and Miller. The idea looks into if there is a perfect capital structure that includes both debt and equity. The theory recommends that organizations strive to balance the costs that can arise from financial distress associated with a tax shield benefit due to using debt. This theory is also called the tax-insolvency trade-off theory. This theory holds that organizations should make decisions appropriate to capital structure after considering trade-offs between solvency cost and the tax benefit of the debts (Abel, 2018).

Many companies view debt-equity decisions as a trade-off between the company's leverage costs, such as agency charges, insolvency, and non-debt tax shield loss, and the debt-tax shield, according to Voutsinas and Werner (2016). According to the argument, very lucrative businesses are better able to repay loans and have larger taxable income, which allows them to be protected. Consequently, the company will have a higher debt-to-equity ratio than businesses with lower profit margins. A firm that makes enormous profits maybe more inclined to using more debt financing because the probability of them becoming insolvent is low; thus, debt rating is projected to be high. However, as they have more retained revenues that may be utilized to fund new initiatives and operations, highly profitable firms rarely rely on debt financing, according to the notion of pecking order. Since managers can utilize this theory to decide on capital structure, it is pertinent to our study. In order to affect the organization's financial performance, management will make the best choices about debt or equity.

Empirical Review
Kebewar (2015) used a case study of the French service industry to investigate how debt financing affects corporate profitability. Agency theory, signaling theory, and tax theory supported this study. To assess the financial performance of the service industry, three metrics were used. PROF1 compared net income to total assets, PROF2 compared to profits earned before ROA, and the assets of the company on the applied interest rates. Between 1999 and 2006, a panel data of 2240 service industry non-listed companies was acquired. The Generalized Methods of Moments were applied during the process of data analysis. The findings indicate that debt, whether linear or non-linear, had no effect on profit. Nonetheless, the French service industry was the study's primary setting. The tea processing industry was the main focus of this study.

A study by Pouraghajan and Malekian (2015) aimed at assessing the implications of capital structures on listed companies in Iran's Tehran Stock Exchange financial performance. A sample size of 400 businesses, divided into 12 clusters, was employed in the study. Data was gathered between 2000 and 2006, a span of six years. The ROI and ROE measurements were utilized to measure financial performance. The results made it abundantly evident that there was a substantial inverse relationship between the businesses under investigation's debt ratio and financial performance. Furthermore, it was discovered that by lowering the debt ratio, management could increase such companies' earnings. It is important to note that the current study only focused on listed multinational tea processing companies.

Jadoua and Mostapha (2020) conducted a study that aimed at identifying how loans affect the success of small entrepreneurs and their businesses in Lebanon. Pecking order theory as well as trade-off were the main elements of consideration since companies that have implemented the two were selected. Data was collected from 102 small and medium-sized enterprises for the years 2014 through 2017. The data was collected from twelve auditing firms located in Beirut. Regression analysis was performed using the extended least squares method. According to the results, financial success and debt financial have a positive relationship in all the companies. This confirmed that majority of Lebanese businesses and lenders were using trade-off theory as a tactic. The study came to the conclusion that providing SMEs with financing facilities allowed them to expand their markets and product lines, which in turn improved their performance. Profitability and net interest margin were evaluated in this study to determine financial performance; the current study employed ROA to measure financial performance of the multinational tea companies.

Ngo, Tram, and Vu (2020) investigated the impact of debt on the profitability of Vietnamese businesses. 118 companies non-finance firms listed on the Vietnam Stock Exchange between 2009 and 2017 were considered for the study. The Generalized Method of Moments was utilized to assess the econometric components in order to enhance the precision of the regression coefficients. Corporate profitability was calculated using the ROA and EBIT on total assets of the firms. The firm size, growth rate, taxes, and tangible assets were employed as the control variables. The results demonstrated that debt had a significant negative impact on the companies' profitability. Notably, the reviewed study focused on the non-finance firms listed at the Vietnam Stockk exchange, however, the current focused on the listed multinational tea companies in Kericho County, Kenya.

In Egypt, Hussein (2020) explored the impact of a firm's capital structure on its financial performance. The study measured financial performance using metrics such as earnings per share, Tobin's Q, return on equity, and return on assets. Targeting 168 companies, panel data was gathered for the period from 2012 to 2016. Multiple regression analysis was employed to examine the relationship between leverage and financial success. The results indicated that short-term debt to assets had a negative but significant relationship with all financial performance measures, except Tobin's Q. In contrast, long-term debt was found to have a positive significant effect on return on equity alone. While Hussein's study utilized a descriptive research design, the current study employed a correlational research design.

Omesa *et al.* (2015) examined the relationship between NSE-registered enterprises' financial performance and their capital structure. Relevant data was collected from 30 companies that were listed on the NSE from the year 2007 up to 2011. The total assets of a company are related to its long-term debts, according to the research's findings. The study targeted 30 companies listed in the NSE drawn from various sectors. However, the current study was carried out in the tea industry.

Magara (2015) sought to identify all the possible factors that may affect the structure of an organization, especially the capital structure. The research process began in 2007 and ended in 2011. There was no good relationship between the variables hence suggesting that a firm's financial performance decreased as the company's debt increased. As a result, the study came to the conclusion that while using debt as a financing option, a business needs to have a defined strategy. In conclusion, there was a substantial positive correlation between the firm's growth rate, leverage degree, and size.

Makanga (2015) set out to assess the impact of debt financing on the financial performance of companies listed on the Nairobi Securities Exchange. Financial statements were used as the source of data during the study. Primary data was also used. A number of regression models were used in the study to assess how overall, debts affects financial success. The results demonstrated a significant unfavorable relationship between short-term debt and ROA. Finally, there was a slightly negative link between total debt and ROA. Consequently, the analysis concluded that there was no appreciable, linear or non-linear influence of debt on profitability. However, the study suggests that organizations should not overlook on the positive impacts of long-terms debts on the financial success and performance of the company.

Financial performance
Chauhan, Verma, and Kumar (2024) investigated how the financial state of a company can be affected by its capital or financial structure, especially social performance of SMEs. For the study, 46 non-banking microfinance organizations from the various periods—2014–2014 and 2018–2019—provided a set of panel data. Panel regression analysis was utilized for the examination of the acquired data. The results showed that capital structure significantly impacted the financial aspects that were looked at. The results showed that capital structure and financial performance were positively correlated, and that microfinance organizations in India were heavily indebted.

Rusnaeni, *et al.,* (2023) evaluated how financial success of companies is determined by capital structure with an emphasis on Malaysian real estate firms. Between 2011 and 2020, 130 observations were made for the study, which focused on 13 real estate and property enterprises. Panel regression analysis was utilized for the examination of the acquired data. The study recommended that real estate and property managers be creative in improving their financial performance through structuring their capital structure. However, the study targeted property and real estate companies, the current study was carried out in tea processing companies.

Akinrinola, Tomori, and Audu (2023) studied the two elements that re financial performance and capital structure among companies in Nigeria. The performance of the companies was also determined by analyzing their debt ratio. From 2011 to 2020, 14 manufacturing companies supplied secondary data through certified financial accounts. The panel regression's findings showed that the total assets of the companies are affected by debt ratio. However, it was also identified that debt and equity does not affect the performance of a company especially when it comes to financial performance. Nonetheless, the analysis concentrated on Nigerian industrial firms that were cited. Kenya is where the suggested study would be conducted.

Muema (2023) looked into the firm-specific features and financial performance of commercial and service enterprises registered on the Nairobi Stock Exchange. The main aim of the research study was to evaluate the effects of firm size, tangibility, liquidity, and leverage on financial. The study design employed was descriptive. Panel data was provided from the NSE's financial filings for the years 2012–2021. The data was analyzed using regression analysis. Although the characteristics and financial performance were positively correlated, the analysis revealed that leverage, liquidity, and firm size did not significantly correlate. Company size was used as a dependent variable in the study, but in this study company size was used as a moderating variable.

Materials and Methods
This study adopted an explanatory research design. This design was chosen for its effectiveness in providing detailed explanations of specific areas under investigation. It is especially useful when a problem has not been extensively studied before, when there is a need to generate operational definitions, and when prioritizing and refining the study model is essential. Explanatory research design facilitates a thorough evaluation of the problem by exploring underlying factors and relationships, rather than just offering definitive recommendations. This approach enables a deeper understanding of the issues at hand and helps in developing more effective strategies for addressing them. The study utilized panel data, incorporating both cross-sectional and time series dimensions. A regression model was employed to assess the direct effect of debt capital on financial performance. Debt capital, the independent variable, was measured by the debt ratio to total assets. Financial performance, the dependent variable, was evaluated using Return on Assets (ROA). This approach allowed for a comprehensive analysis of how variations in debt capital influence the financial performance of tea companies in Kericho County over time.

RESULTS AND DISCUSSION
Correlation Analysis
The study employed Pearson correlation analysis to evaluate the nature of the relationship between the variables under investigation.

Table 1: Correlation Results

	ROA	Debt Financing
ROA	1.0000	
Debt financing	-0.1107	1.0000

The study's findings, as presented in Table 1, reveal that debt financing exhibited negative correlations of -0.1107 with the Return on Assets (ROA) of the companies. These results align with the findings of Ngo, Tram, and Vu (2020), who investigated the effect of debt on the profitability of SMEs in Vietnam. Their study found that debt financing had a significant negative impact on the financial performance of these businesses. Similarly, And Hussein (2020) demonstrated that short term debt to assets had a negative significant relationship with financial performance measures such as ROA, ROE, and EPS.

Regression Results
The study conducted a panel regression analysis to examine the correlation between the capital structure and financial performance of tea companies in Kericho County. The study's hypotheses were:
H$_0$ Debt financing has no statistically significant influence on the financial performance of tea companies in Kericho County, Kenya

Table 2: Regression Analysis

Return on Assets	Coef.	Std. Err.	T	P>|t|	[95% Conf. Interval]	
Debt financing	1.472285	0.332938	4.42	0.000	0.7664881	2.178082
_cons	0.005667	0.005444	1.04	0.313	-0.0058732	0.0172084

R Square (Between) = 0.9943

R Square (Overall) = 0.8911
R Square (Within) = 0.8827
corr(u_i, Xb) = 0.3439
F(1,16)   =   60.19
Prob > F =   0.0000
rho = .17236716
sigma_e = .02254831
sigma_u =.01029017
ANOVA
F(2, 16) = 1.24   Prob > F = 0.3157

Source: Research Data, (2024)

The findings presented in Table 1 reveal that the R-squared value for the relationship between debt financing and financial performance is 0.8911. This indicates that debt financing, explains 89.11% of the variance in financial performance among tea companies in Kericho County. The analysis further shows that a one-unit increase in debt financing results in a 1.472285 increase in financial performance. The Y-intercept term of 0.005667 represents the portion of financial performance that is not influenced by the capital structure of these tea companies. The results of the ANOVA test show an F-statistic of 1.24 with a p-value of 0.3157. This suggests that the link between debt financing and the financial performance of the tea companies in Kericho was not statistically significant at the 0.05 confidence level. This means that the differences in debt financing does not account for significant variations in financial performance among these companies.

Testing of the Research Hypothesis
The hypothesis of the study was that debt financing does not significantly affect the financial performance of tea companies in Kericho County. The regression results, analyzed at a 95% confidence level, revealed a beta coefficient of $\beta = 1.472285$ and a p-value of 0.000, which is less than 0.05. This indicates that a one-unit increase in debt financing corresponds to a 14.7% variation in the financial performance of the tea companies. Consequently, the null hypothesis asserting that debt financing does not significantly influence financial performance was rejected.

These findings align with the work of Pouraghajan and Malekian (2015), who found a significant positive relationship between debt ratio and financial performance among listed companies on the Tehran Stock Exchange in Iran. Similarly, Jadoua and Mostapha (2020) identified a significant relationship between debt financing and the financial performance of small and medium enterprises in Lebanon. However, it is important to note that their study measured financial performance using net profit margin, whereas the current study evaluated financial performance through Return on Assets (ROA).

In contrast, Kebewar (2015) found that debt financing, whether linear or non-linear, had a non-significant statistical effect on the Return on Assets (ROA) in the French service industry. Similarly, Ngo, Tram, and Vu (2020) observed that debt financing negatively impacted the profitability of SMEs in Vietnam. Hussein (2020) reported that short-term debt to assets was negatively and significantly related to financial performance measures such as ROA, Return on Equity (ROE), and Earnings Per Share (EPS). Additionally, Makanga (2015) identified a negative relationship between debt financing and financial performance.

CONCLUSION AND RECOMMENDATION
The study investigated the effect of debt financing on financial performance of tea processing companies. The findings revealed that debt financing had a significant effect on financial performance of the companies. The study therefore concluded that debt financing significantly influences financial performance of the companies as it allows a business to leverage a small amount of money into a much larger sum, enabling more rapid growth than might otherwise be possible. The recommendations were that tea companies should regularly review their capital structure and financial

performance to make necessary adjustments in response to market conditions and internal performance metrics. This will ensure that they remain agile and responsive to changes in the business environment.

REFERENCES

1. Abel, A. B. (2018). Optimal debt and profitability in the trade-off theory. The Journal of Finance, 73(1), 95-143.
2. Adong Lilly, R. (2019). Computerized accounting systems and financial performance of manufacturing companies in Buikwe District: a case study of Uganda Tea Corporation LTD.
3. Akinrinola, O. O., Tomori, O. G., & Audu, S. I. (2023). Capital Structure and Financial Performance of Quoted Manufacturing Firms in Nigeria. International Journal of Business and Management Review, 11(3), 29-47.
4. Chauhan, S., Verma, A., & Kumar, C. V. (2024). Effect of capital structure on the financial and social performance of Indian microfinance institutions. FIIB Business Review, 13(2), 243-256.
5. Hussein, A. (2020). The influence of capital structure on company performance: Evidence from Egypt. Corporate Ownership & Control, 18(1), 8-21.
6. Jadoua, Z. A., & Mostapha, N. F. (2020). The Effect of Access to Debt on Lebanese Small and Medium Enterprises Performance. ACN Journal of Finance and Risk Perspectives, 9.
7. Kabayiza, A., Owuor, G., Langat, K. J., Mugenzi, P., & Niyitanga, F. (2021). Determinants and Effect Evaluation of Credits on the Farm Outcome-a Micro-Perspective of Tea Production from Rwanda.
8. Kakati, S., & Roy, A. (2017). A study on the financial performance of farmer producer companies with special reference to Northeast India. Amity Journal of Agribusiness, 2(1), 37-56.
9. Kebewar, M. (2013). The Effect of Debt on Corporate Profitability: Evidence from French Service Sector. Brussels Economic Review, 56(1), 43-59.
10. Kiptoo, I. K. (2017). Working capital management practices and financial performance of tea processing firms in Kenya (Doctoral dissertation, University of Embu).
11. Magara, R., (2015). Effect of environmental accounting on company financial performance in Kisii County. British Journal of Economics, Management & Trade, 10(1), 1-11.
12. Makanga, A. M. (2015). The effect of debt financing on the financial performance of companies listed at the Nairobi securities exchange (Doctoral dissertation, University of Nairobi).
13. Morin, E. M., & Audebrand, L. K. (2018). Organizational performance and meaning of work: correcting for restricted range. Organizational Performance and Meaning of Work, 1-19.
14. Muema, M. M. (2023). Firm Specific Factors and Financial Performance of Commercial and Services Firms Listed At The Nairobi Securities Exchange (Doctoral dissertation, KCA University).
15. Ngo, V. T., Tram, T. X. H., & Vu, B. T. (2020). The Impact of Debt on Corporate Profitability: Evidence from Vietnam. The Journal of Asian Finance, Economics, and Business, 7(11), 835-842.
16. Omesa, J. N. (2015). Effect of liquidity on the financial performance of financial institutions listed in the Nairobi securities exchange (Doctoral dissertation, University of Nairobi).
17. Panda, A. K., & Nanda, S. (2020). Determinants of capital structure; a sector-level analysis for Indian manufacturing firms. International Journal of Productivity and Performance Management, 69(5), 1033-1060.
18. Pandey, I. (2017). Financial Management (Vol. 9th edition). Vikas publishing House.
19. Pouraghajan, A., & Malekian, E., (2015). The Relationship between capital structure and firm Performance evaluation measures: Evidence from Tehran Stock Exchange. International Journal of Business and Commerce, 1(9) pp 166 – 181.
20. Rusnaeni, N., Gursida, H., Sasongko, H., & Hakim, D. R. (2023). Financial performance, capital structure, and firm's value: The moderating role of dividend policy. Journal of Business Social and Technology, 4(1).
21. Stir (2021) https://stir-tea-coffee.com/tea-coffee-news/financing_the_future_capital_and_credit_in_the_tea_industry/
22. Yegon, C., Muturi, W., & Oluoch, O. (2021). Effect of Working Capital Management Decisions on the Financial Performance of Tea Firms in Kenya. (Master's Thesis, Kabarak University)