



**FIRM STABILITY AND FINANCIAL PERFORMANCE AMONG PUBLIC SUGAR MANUFACTURING COMPANIES
IN KENYA**

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ABSTRACT

The goal of this study was explore how firm stability affects sugar companies' financial performance. The study was supported by Modigliani-Miller, Trade-off, and Pecking Order Theorems. The population of interest consisted of three public sugar manufacturing companies as the unit of analysis. Linear regression models were utilized for data analysis: The results indicated; The study performance among public sugar manufacturing companies in Kenya, ($r=0.673$; $P<0.000$). The R^2 value was 0.453 and this implied that a unit increase in leverage leads to 45.3% enhancement in performance among public sugar manufacturing companies. A statistically significant relationship between liquidity control and financial performance among public sugar manufacturing companies in Kenya, ($r=0.746$; $P<0.000$). The R^2 value was 0.557 and this implied that a unit increase in liquidity control leads to 55.7% enhancement in performance among public sugar manufacturing companies. A statistically significant relationship between credit risk management and financial performance among public sugar manufacturing companies in Kenya, ($r=0.643$; $P<0.000$). The R^2 value was 0.413 and this implied that a unit increase in credit risk management leads to 41.1% enhancement in performance among public sugar manufacturing companies. And statistically significant relationship between economic resource utilization and financial performance among public sugar manufacturing companies in Kenya, ($r=0.484$; $P<0.000$). The R^2 value was 0.235 and this implied that a unit increase in economic resource utilization leads to 23.5% enhancement in performance among public sugar manufacturing companies. The study concluded that; Leverage significantly and positively affects financial performance among public sugar manufacturing companies in Kenya. Liquidity control significantly and positively affects financial performance among Public sugar manufacturing companies in Kenya. Credit risk management positively and significantly affects financial performance among Public sugar manufacturing companies in Kenya. Economic resource utilization positively and significantly affects financial performance among Public sugar manufacturing companies in Kenya. Public sugar manufacturing companies not listed at the Nairobi stock exchange should works towards being listed in the stock market to enhance their equity funding and general leverage, liquidity control, risk aversion and economic utilization of resources.

Key Words: Leverage, Liquidity Control, Credit Risk Management, Economic Resource Utilization

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INTRODUCTION

Financial performance has been the subject of extensive scholarly discourse regarding the evaluation of organizational performance from a financial perspective. Accordingly, some researchers believe that Tobin's Q is one of the metrics that can be deployed to evaluate the financial performance of an organization (Kyeré & Ausloos, 2021). This is consistent with research indicating that Tobin's is an important financial performance metric for U.S. technology companies (Okafor, Adeleye & Adusei, 2021). Ichsan et al. (2021) argue that return on assets (ROA), IVA, and Tobin's Q are among the alternatives for measuring a firm's financial performance. According to Nasrallah and El Khoury (2022), ROA and return on investment (ROI) can be employed to measure financial performance. Additionally, Kenyan studies demonstrate the importance of debt equity ratio and good corporate governance practices in the pursuit of enhanced financial performance within the context of the sugar industry (Onyango 2018, Odhiambo & Mwanzi, 2021).

Firm stability can also be operationalized in terms of an organization's utilization of economic resources. This is supported by prior research on the Indonesian Stock Exchange indicating that economic resource utilization can be an important predictor of a company's stability (Ruslim & Warsono, 2020). This is consistent with research from South Arabian petrochemical industries and South African banks indicating that economic resource utilization is a crucial element of firm stability (Ali & Faisal, 2020; Munangi & Bongani, 2020). On the other hand, credit risk management can manifest firm stability (Jayawardena, 2020; Kimbowa, 2020). This is reaffirmed in a study by Bencharles and Nwankwo (2021), who found that liquidity ratio, as one of the credit risk management concepts, can strengthen the stability of banks. Recently, Anuar (2022) used the context of commercial banks trading on the Malaysian Stock Exchange to emphasize the importance of credit risk management as one of the key indicators of

firm stability which can lead to enhanced financial performance. The present study examines firm stability as a predictor of financial performance by focusing on four key indicators: leverage, liquidity ratio, economic resource utilization, and credit risk management.

Prior empirical research pertaining to organizational performance has placed financial performance front and centre. This is supported by recent studies that identify financial performance as a key organizational performance metric (Hanaysha, & Alzoubi, 2022). In an attempt to measure the financial performance of organizations, a number of indicators have been proposed over time. Tobin's Q is one of the metrics that can be deployed to measure an organization's financial performance (Kyeré & Ausloos, 2021; Okafor, Adeleye and Adusei, 2021). In addition to Tobin's Q, Yoo and Managi (2022) note that IVA scores can be utilized to measure the financial performance of a company.

ROA is yet another method for determining an organization's financial performance (Ichsan et al., 2021). When Nasrallah and El Khoury (2022) did empirical research on SMEs in Lebanon, they found that ROA is one of the most common metrics used to assess the financial success of companies. The study also indicates that financial performance can be approximated by return on investment (ROI). Earnings before interest and taxes (EBIT) is another important metric that can be utilized (Kanini, Patrick, and Muhanji, 2020). Therefore, this study's objective is to evaluate financial performance in terms of ROA.

The government of Kenya has made significant investments in the sugar industry. Prior to independence, the Government of Kenya was not a major player in the sugar industry, having established only two companies, Miwani Sugar and Ramisi Sugar Companies, in 1922 and 1927, respectively. After independence, Kenyan government involvement in the sugar manufacturing industry increased with the establishment of Muhoroni (1966), Chemelil (1968),

Mumias (1973), Nzoia (1978), and South Nyanza (1980) sugar factories. West Kenya Sugar Company (1981), a private enterprise, is the most recent entrant into the sugar industry (Kalro, 2021).

In an effort to promote the growth and systematic management of the sugar production in Kenya, the Government started the Kenya Sugar Authority (KSA) on March 17, 1973, pursuant to Section 318 of the Agriculture Act and Legal Notice No. 32. Parliament enacted the Sugar Act 2001 in April 2002 to describe the roles of the sugar industry's key players, involving sugar cane farmers, millers, out-grower organizations, and the Kenya Sugar Research Foundation. In addition, the Sugar Act established the Kenya Sugar Board (KSB) as the apex body in charge of developing, regulating, and promoting the sugar industry in Kenya (Kalro, 2021).

Prior empirical research has demonstrated the connection between firm stability and financial performance. For instance, financial performance metrics such as return on assets can be influenced by leverage, which is regarded one of the key elements of firm stability. Additionally, leverage can affect the sales volume of a company (Sari & Sapari, 2020; Kalash & Bilen, 2021). Liquidity management, one of the key aspects of firm stability, has been linked to improved financial performance, particularly in the banking industry. In addition, research focusing on non-financial institutions demonstrates that correlation between liquidity and financial performance is positive (Alim, Ali & Metla, 2021; Mushafiq, Sindhu & Sohail, 2021). The economic resource utilization stability of a business can also be used to predict its financial performance.

Statement of the Problem

Financial performance has remained a topical issue in numerous research studies articulating and analyzing various organizational performance parameters. Local studies focusing on the insurance industry note that ROA and ROE can serve as proxies for financial performance (Morara & Sibindi, 2021). Mwangi, Gitau, and Kungu (2021) justify the need for VAT incentives as a means of enhancing

the financial performance of Kenyan manufacturing firms. Finance underperformance in the Kenyan corporate sector has become progressively more problematic. Odhiambo and Mwanzia (2021) criticize the challenges of financial underperformance in the context of the Kenyan sugar manufacturing industries as a result of unequal board member representation.

Prior research has emphasized the importance of achieving strong financial performance within organizations. Odhiambo and Mwanzia (2021), whose research focused on Kenyan public sugar manufacturing companies, found that the financial performance of such companies can be determined by the best procedures in Corporate Governance, particularly striking a balance between the diversity of the company's operations. Financial underperformance has been a problem for Kenya's publicly traded sugar manufacturers. As a result, research focusing on South Nyanza Sugar Company reveals that the company registered a poor financial performance in 2017, with the audited financial statements indicating a loss of close to 1.02 billion shillings (Okoth, 2018). Chemelil Sugar Factory recently lost close to 20 million Kenya Shillings due to a worker's strike, with poor financial management in the organization resulting in unpaid worker's arrears serving as the root cause (Tanui, 2022).

According to M. Mati and M. K. Thomas (2019), sugarcane production in Kenya has decreased due to high costs of input, smut disease, poor seed of long-maturing varieties, and delayed remittances to farmers. It is estimated that in western Kenya, field time for sugarcane is 18 to 24 months. This is contrary to Sudan that cultivates cane varieties which take 14 months or less to mature. In addition, sugar production costs have increased from approximately \$676 per tonne in 2014 to \$1,007 a tonne in 2018. This is not a favorable comparison to nations like Malawi and Zambia, where the cost of production is USD 350 per tonne and USD 400 per tonne, respectively. This highlights the importance of economic resource utilization with regards to

productivity and efficiency. By examining the effect of firm stability on ROA, which was used to gauge financial performance in the chosen state-owned sugar producing companies in Kenya, this study closed the gap.

Research Objectives

The general objective was to examine the effect of firm stability on financial performance among public sugar manufacturing firms in Kenya. The specific objectives were:

- To establish how leverage affects financial performance among public sugar manufacturing companies in Kenya
- To determine how liquidity control affects financial performance among public sugar manufacturing companies in Kenya
- To ascertain how credit risk management affects financial performance among public sugar manufacturing companies in Kenya
- To evaluate how economic resource utilization affects financial performance among public sugar manufacturing companies in Kenya

This study was conducted with the aim of testing the following hypotheses:

- H₀1: There is no significant relationship between leverage and financial performance among public sugar manufacturing companies in Kenya
- H₀2: There is no significant relationship between liquidity control and financial performance among public sugar manufacturing companies in Kenya
- H₀3: There is no significant relationship between credit risk management and financial performance among public sugar manufacturing companies in Kenya
- H₀4: There is no significant relationship between economic resource utilization and financial performance among public sugar manufacturing companies in Kenya

LITERATURE REVIEW

Modigliani-Miller Theorem

Modigliani-Miller (1958) first advanced Modigliani-Miller Theorem. His central argument was that a company's value is determined by the assets associated with risks and the capacity to generate revenue in relation to the assets. Moreover, neither investment financing decisions nor dividend distribution decisions affect a company's market value. This theory is also supported by the argument that companies may choose to invest via borrowed capital, the issuance of shares, or retained earnings (Kithandi & Katua, 2019). This theoretical framework's central tenet is that, in the case of a perfect market value, the equity-to-debt ratio in a company's capital structure has no influence. Therefore, the Modigliani-Miller Theorem is applicable to the present study because one of the variables is leverage, which relates to debt ratio (DR) and debt equity ratio (DER).

The Pecking Order Theorem

The Pecking Order Theory was first proposed by Donaldson (1961). Majluf and Myers (1984) later modified this theory for the purpose of articulating various financing options for firms (Wijaya, Asyik, & Fadrul, 2020). The theory posits that corporations have three financing options: debt, retained earnings, and equity. When faced with these three alternatives, businesses favour the most secure sources of funding, namely internal sources of finance over external sources. In this regard, external sources of financing will be chosen only if internal sources are insufficient to meet the company's operational requirements (Wijaya, Asyik, & Fadrul, 2020). This is consistent with Mangku, Jatmiko, and Laras's (2020) assertion that pecking order Theory is concerned with the selection of internal and external funding sources by businesses.

The pecking order hypothesis has been extensively utilized in studies concerning the financing structure of organizations. Hoang et al. (2021), whose study focused on Vietnamese estate companies, elucidated the relevance of the pecking order theory, in particular, the perspective of adjusting the capital structure in order to increase their competitiveness and business growth. The

Pecking Order Theory is predicated on the need for an organization to have a proper financial structure. First, the Theorem addresses the issue of liquidity management, given that the debt-equity ratio is useful for determining a firm's potential to settle both its short- and long-term liabilities. Credit risk management is an additional research variable related to this theoretical hypothesis. This follows from the notion that credit risk management entails mitigation and management of the credit risk inherent in a company's debt-equity mix.

Trade-off Theorem

The Trade-off theorem was first proposed by Myers (1984). It is predicated on the idea that a company's debt and equity capital structure is primarily achieved through balancing of the costs and benefits of financing. This suggests that the best capital structure can only be achieved when financing costs and advantages are traded off, therefore financing expenses must be evaluated against financing benefits (Yakubu, Kapusuzoglu & Ceylan, 2021).

The Trade-off theorem has been extensively cited in empirical studies examining the financial structure and performance of businesses. While researching the determinants of capital structure in the UK real estate market, Yousef (2019) highlighted the significance of Trade-off theorem in determining capital structure of a company. This compares positively with what was recently observed by Yakubu et al. (2021), who conducted a survey of Ghana's listed firms to determine the capital structure decisions; where trade-off theory was cited as a key theoretical framework in determining the capital structure of companies. In addition, Hoang et al. (2021) stressed the significance of trade-off theory when deciding between debt and equity to finance a company's operations. They did this in their study of the capital structure of real estate enterprises in Vietnam.

As a result, the Trade-off theory underpins the present study on account of the fact that corporations decide on debt level and equity level, both of which are important considerations when

attempting to moderate between financing costs and financing benefits. Evidently, this necessitates the prudent use of organizational resources in order to achieve an optimal mix of financing options, lending credence to the importance of economic resource utilization as one of the key determinants of firm stability within the context of the present study.

Empirical Review

In Turkey, Kalash and Bilen (2021) examined the effect of sales growth on operating leverage on financial performance. 200 firms registered on the Istanbul Stock Exchange between 2008 and 2017 made up the study sample. According to the findings' analysis, operating leverage and profitability were detrimental. Moreover, the negative impact of operating leverage was greater for companies with rapid sales growth, and vice versa. The fact that the study was conducted outside of Kenya and did not concentrate on the sugar industry justifies the need for the current study, which determined how leverage affects financial performance.

In addition, Kajola et al. (2019) scrutinised how the financial performance of consumer goods firms Nigeria are impacted by liquidity and leverage. Between 2012 and 2017, information was gathered from 17 consumer products companies listed on the Nigerian Stock Exchange. Data analysis employed the ordinary least squares regression model as the estimation technique. According to the results, the degree of accumulated leverage and the operating leverage proxy level had a substantial impact on the financial performance of the chosen firms. However, the present research filled the gap by examining leverage as a predictor of financial performance for Kenyan sugar manufacturing companies.

Irungu et al. (2018) assessed how leverage affected the financial performance of companies listed on the NSE. 64 NSE-listed firms made up the study sample. To compute relevant ratios, secondary data was drawn from financial statements. Dynamic panel data regression was utilized to analyse the

data, while ANOVA was utilized to test the correlation between the variables across sectors. The statistics showed that leverage has a significant adverse impact on the financial performance of both financial and non-financial firms. The study was conducted in the context of Kenyan listed companies, but it did not focus on the sugar manufacturing industries; therefore, this study addressed these research gaps.

This study provides evidence that liquidity management can affect an organization's financial performance. This concurs with the findings of Jihadi et al. (2021), who analysed the combined impact of liquidity leverage and profitability on Indonesian firm value. Between 2014 and 2019, 22 LQ45 index firms registered on the Indonesia Stock Exchange were obtained by means of sampling with intent. Utilizing multiple linear regression models, the data was analysed. The findings revealed that liquidity ratios possess a substantial effect on the selected companies. However, the study did not consider liquidity control in the context of sugar manufacturing industries, which was the focus of this study.

According to Wuave, Yua, and Yua (2020) who investigated how Nigerian banks' financial performance was impacted by their use of liquidity management. Five banks that are listed on the Nigerian Stock Exchange provided secondary data. The findings indicated that financial performance is significantly impacted positively and statistically by liquidity ratio as calculated by ROA, ROE, and net interest margin. The present study filled the research gap by examining the Kenyan sugar manufacturing industries to determine how liquidity affects and controls the financial performance of these firms.

Waswa, Mukras, and Oima (2018) evaluated how liquidity affects the financial performance of the Kenyan sugar industry. From 2005 to 2016, data were collected from five sugar producers. Using regression models with fixed effects, the study established a negative correlation between liquidity management and firm performance. Evidently, the

study focused on the sugar production in Kenya; however, the present study closed the research gap by focusing on state-owned sugar manufacturing companies in an effort to comprehend how various components of firm stability influence the financial performance of these firms.

Economic resource use within a company has the potential to affect a firm's financial performance. In their 2020 study, Ruslim and Warsono assessed the effects of corporate governance, intellectual capital, and asset utilization on the financial performance of mining and consumer products companies listed on the Indonesian stock exchange. 136 businesses engaged in the mining and consumer products industries between 2012 and 2015 made up the study's sample. Multiple linear regression models and t-tests were employed in the data analysis. Findings from the study demonstrated that both asset utilization and intellectual capital were remarkably related to financial performance. By analysing the effect of economic resource usage on the financial performance among public Kenyan sugar producing companies, this study filled the gap in the literature.

Additionally, Ali and Faisal (2020) looked at the relationship between Saudi Arabia's petrochemical sectors' capital structure and financial performance. Data was collected between 2004 and 2016 from petrochemical industries across the country. From the findings it was revealed that poor financial performance of the petrochemical companies was due to the underutilization of their resources, which was caused by the low prices and low demand for their products. The study's primary focus was on the petrochemical sector, but the current study closed the knowledge gap by analysing Kenya's sugar manufacturing sectors to ascertain how resource usage can impact their financial performance.

Finally, Munyi and Waruguru (2018) examined how environmental corporate social responsibility affected the financial success of Kenyan mobile telecommunications companies. Questionnaires were used in data collection. The study employed a

descriptive research design. Descriptive and inferential statistics were used in the data analysis. Among other findings, it was determined that efficient resource utilization improves the reputation of telecommunications companies, which in turn improves their financial performance by boosting demand for their products. This Kenyan study did not focus on the sugar industry; this research gap has been filled by examining how economic resource utilization affects the financial performance of these firms.

Noor and ACMA (2019) looked into how credit risk management affected the financial results of Bangladesh's public and private commercial banks. Between 2000 and 2016, information was gathered from ten commercial banks in Bangladesh. The annual reports of the bank were mined for secondary data, which was then analysed using t-tests, correlation, and multiple linear regression. According to the findings, both Non-Performing Loan (NPL) and Advance Deposit Ratio (ADR) have a negative and relatively notable impact on ROA, with NPL having a greater effect than ADR. Instead of focusing on commercial banks, the present study examined Kenyan sugar manufacturing firms under state ownership to establish the influence of credit risk management on their financial performance.

Oke and Wale-Awe (2018) studied the influence of credit risk management on the financial performance of Nigerian deposit money banks. Between 2012 and 2017, financial statements were mined for information. Data analysis involved both descriptive statistics and regression analysis. Analysis of the data, however, revealed a negligible impact of credit risk management on the profitability of certain banks. The study did not, however, focus on the sugar industry. Consequently, the present study aimed to fill this research gap by focusing on the Kenyan sugar manufacturing industries under state ownership in order to demonstrate how their financial performance is impacted by credit risk management.

Muigai and Maina (2018) looked at how credit risk management methods affect the financial performance of Kenyan commercial banks. In 2017, the study's target population comprised of licensed commercial banks operating in Kenya, and its design was descriptive. It was discovered, among other things, that credit risk management has a significant impact on the financial performance of commercial banks. This Kenyan study did not consider credit risk management from the perspective of the sugar manufacturing industries; the research group that was analysed in this study to establish how their financial performance is impacted by credit risk management.

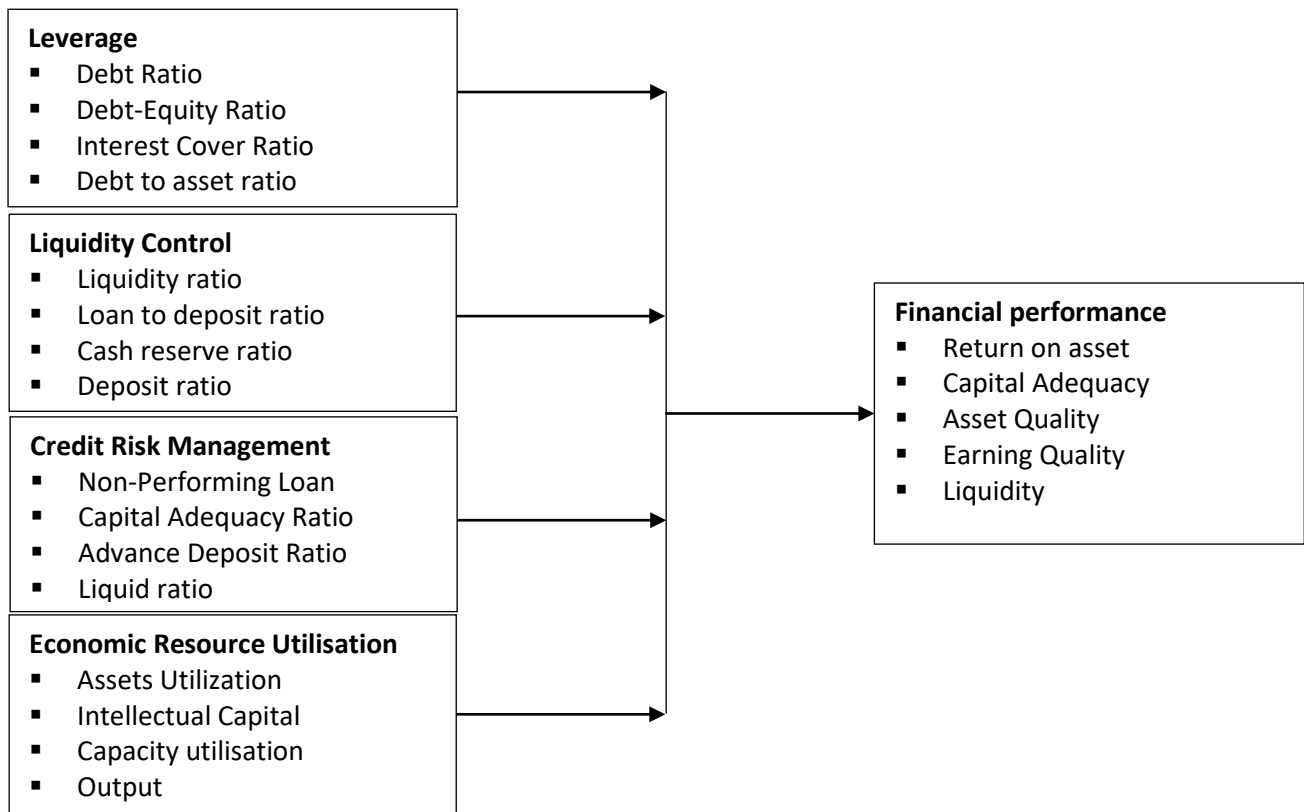
Financial performance has brought empirical studies assessing the performance of organizations from a financial perspective to the forefront. Previous research has proposed an increasing number of indicators and metrics for precisely defining financial performance. Corporate governance and a firm's financial performance were explored in the UK by Kyere and Ausloos (2021). The study utilized a cross-sectional research design to collect data from 252 firms registered on the London Stock Exchange in 2014. In their analysis of the findings, the authors identified Tobin's Q as one of the financial performance metrics within organizations. Despite the fact that the study was conducted outside of Kenya and in a different industry, the present study seeks to comprehend the financial performance of Kenyan sugar manufacturing firms that are owned by the state.

In Lebanon, Nasrallah and El Khoury (2022) determined if the Corporate Governance group can predict the financial performance of SMEs. ROA and ROI can be used to measure company financial performance, according to data collected via questionnaires from 150 non-listed companies. This study focused on the financial performance within the context of the Kenyan state-owned sugar manufacturing industries, a completely different sector, in order to comprehend various financial performance characteristics.

Kanini, Patrick, and Muhanji (2020) analyzed the relationship between revenue volatility from commodity sales and the financial performance of Kenyan manufacturers. The study operationalized financial performance as earnings before interest and taxes (EBIT) and ROA. Analysis of data was through utilization of long-run and dynamic panel data models. The results showed that revenue volatility has a detrimental effect on the financial

health of Kenyan industrial and commercial firms. This Kenyan study did not consider state-owned sugar manufacturing industries, which was the focus of the present study in order to understand how different aspects of firm stability affect their financial performance. The present study used ROA to measure the financial performance of selected sugar producing firms in Kenya, based on a review of previous research.

Conceptual Framework



Independent Variables

Dependent Variable

Figure 1: Conceptual Framework of Firm Stability and Financial Performance

METHODOLOGY

This study utilized longitudinal and cross-sectional designs. The target population consisted of six (6) public sugar manufacturing companies in Kenya which are South Nyanza Sugar Company, Nzoia Sugar Factory, Chemelil Sugar Factory, Mumias, Miwani and Muhoroni Sugar for a panel period scope of 13 years (2008-2021). Purposive sampling was applied to select the three operational sugar manufacturing companies as at 2021. Exclusion creation on the basis of being on receivership was

applied to determine those Public sugar manufacturing companies that are under receivership. Collection of secondary data was done by use of document review guide of existing financial records. Data analysis has been done utilizing quantitative analytical technique. Quantitative data was coded and analysed in SPSS Version 27 statistical software. The analysis utilized both inferential and descriptive statistics. Descriptive analysis involved issues of percentages,

measure of Central tendency and as well as measures of dispersion.

DATA ANALYSIS AND DISCUSSION

Descriptive Statistics on Financial Performance among Public Sugar Manufacturing Companies

Financial performance among public sugar manufacturing companies was the study's

dependent variable. The indicators defining the variable included; return on asset, capital adequacy, asset quality, earning quality and Liquidity. The indicators were measured in an ordinal Likert scale where their contribution to performance was rated by 5-very high extent, 4- High extent, 3-Neutral, 2- Low Extent and 1-very low extent. The descriptive statistics are as indicated in Table 1.

Table 1: Descriptive Statistics on Financial Performance among public sugar manufacturing companies

Statement	Very High Extent (5)	High Extent (4)	Neutral (3)	Low Extent (2)	Very Low Extent (1)	M	SD
Return on asset	3(5.36%)	6(10.71%)	4(7.14%)	15(26.79%)	28(50.00%)	1.95	1.227
Capital adequacy	3(5.36%)	9(16.07%)	2(3.57%)	12(21.43%)	30(53.57%)	1.98	1.314
Asset Quality	1(1.79%)	6(10.71%)	3(5.36%)	26(46.43%)	20(35.71%)	1.96	1.008
Earning Quality	2(3.57%)	0(0.00%)	1(1.79%)	27(48.21%)	26(46.43%)	1.66	0.837
Liquidity	1(1.79%)	2(3.57%)	3(5.36%)	27(48.21%)	23(41.07%)	1.77	0.853
Composite Mean and Composite SD						1.86	1.048

The statistical results presentation in table 1 suggested that there is generally a low level financial performance among public sugar manufacturing companies. This is because the return on asset is not so promising with the trend being reflected on the others indicators like capital adequacy, asset quality, earning quality and liquidity. The indicators all scored a mean of below 2 and an aggregate composite mean of 1.86 and 1.048 SD respectively. This can only depict a public company that is extremely struggling and can easily go into receivership if key management decisions are not taken to restructure it in order to turn around its fortunes.

Descriptive Statistics on Leverage and Financial Performance among Public Sugar Manufacturing Companies

Leverage was the study's first theme of independent variable. The indicators defining the variable included; debt ratio, debt equity, interest cover ratio, and debt to asset ratio. The indicators were measured in an ordinal Likert scale where their contribution to leverage of public sugar manufacturing companies and were rated by 5-very high extent, 4- High extent, 3-Neutral, 2-Low Extent and 1-very low extent. The descriptive statistics are as indicated in Table 2.

Table 2: Descriptive Statistics on Leverage and Financial Performance among public Sugar Manufacturing Companies

Statement	Very High Extent (5)	High Extent (4)	Neutral (3)	Low Extent (2)	Very Low Extent (1)	M	SD
Debt Ratio	1(1.79%)	10(17.86%)	2(3.57%)	19(33.93%)	24(42.86%)	2.02	1.168
Debt-Equity Ratio	1(1.79%)	3(5.36%)	3(5.36%)	31(55.36%)	18(32.14%)	1.89	0.867
Interest Cover Ratio	3(5.36%)	6(10.71%)	0(0.00%)	18(32.14%)	29(51.79%)	1.86	1.197
Debt to asset Ratio	1(1.79%)	4(7.14%)	10(17.86%)	19(33.93%)	22(39.29%)	1.98	1.018
Composite Mean and Composite SD						1.94	1.063

The statistical results presentation in Table 2 suggest that the leverage of the public sugar manufacturing companies as determined by debt ratio is low at 2.02 mean and 1.168 SD. Other measures of leverage such as debt-equity ratio, interest cover and debt asset ratio equally scored low indices with a composite mean 1.94 and 1.063 SD. This implies that there is no balance in the capital structure of the public sugar companies and

thus impacting negatively on their financial performance.

Analysis of Model Summary between Leverage and Financial Performance among Public Sugar Manufacturing Companies

The predictor and the criterion variables' degree of interdependence was measured through model regression summary as run on SPSS. Table 3 indicates the results;

Table 3: Analysis of Model Summary Between Leverage and Financial Performance among public sugar manufacturing companies

Model	R	R-Square	Adjusted R- Square	Standard Error of the Estimate
1	0.673 ^a	0.453	0.443	0.88718

Predictor: Leverage (Constant)

The constructed Table 3 results demonstrate that leverage and financial performance among public sugar manufacturing companies have linear association as a unit increase in financial performance can be predicted by R² value of 45.3%-point increase in leverage, while the other 54.7% is attributable to factors other than leverage. Leverage therefore is a significant firm stability factor affecting financial performance among public sugar manufacturing companies.

Hypothesis 1 Testing

H₀1: There is no significant relationship between leverage and financial performance among public sugar companies. The priori significant level was fixed at $\alpha=0.05$ for the reference alpha, where for values where $P>0.05$ we fail to reject the null hypothesis as there is no significant relationship that exists between the variables. And for values where $P<0.05$, we reject the null hypothesis as there is no sufficient evidence to fail to reject that a significant relationship exists between leverage and financial performance of sugar companies.

Hypothesis test was done using t-test scores guided by the formulated null hypothesis being tested where; $H_01: \beta_1 = 0$ and the opposite of the tested being the alternative hypothesis H_{a1} given as $H_01: \beta_1 \neq 0$. Therefore, with $P<0.000 <0.05$, the null hypothesis is forthrightly rejected and alternative hypothesis is subsequently retained.

Descriptive Statistics on Liquidity Control and Financial Performance among Public Sugar Manufacturing Companies

Liquidity control was the study's second theme of independent variable. The indicators defining the variable included; liquidity ratio, loan to deposit ratio, cash reserve ratio, and deposit ratio. The indicators were measured in an ordinal Likert scale where their contribution to liquidity control and financial performance among public sugar manufacturing companies and were rated by 5-very high extent, 4- High extent, 3-Neutral, 2-Low Extent and 1-very low extent. The descriptive statistics are as indicated in Table 4.

Table 4: Descriptive Statistics on Liquidity Control and Financial Performance among Public sugar manufacturing companies

Statement	Very Extent (5)	High Extent (4)	High Extent (3)	Neutral Extent (2)	Low Extent (1)	M	SD
Liquidity ratio	1(1.79%)	4(7.14%)	7(12.50%)	25(44.64%)	19(33.93%)	1.98	0.963
Loan to deposit ratio	1(1.79%)	5(8.93%)	1(1.79%)	26(46.43%)	23(41.07%)	1.84	0.968
Cash reserve ratio	2(3.57%)	5(8.93%)	1(1.79%)	20(35.71%)	28(50.00%)	1.80	1.086
Deposit ratio	2(3.57%)	5(8.93%)	2(3.57%)	35(62.50%)	12(21.43%)	2.11	0.966
Composite Mean and Composite SD						1.93	0.996

The statistical results presented in Table 4 suggest that the liquidity control of the public sugar manufacturing companies as determined by liquidity ratio is low at 1.98 mean and 0.963 SD against a possible maximum score of 5. Other indicators like loan deposit ratio, cash reserve ratio and deposit ration paints a picture of inability of the public sugar companies to adequately meet their immediate operational financial needs. The

Composite score for the variable was at 1.93 and 0.996 SD.

Analysis of Model Summary between Liquidity Control and Financial Performance among Public Sugar Manufacturing Companies

The predictor and the criterion variables' degree of interdependence was measured through model regression summary as run on SPSS. Table 5 indicates the results;

Table 5: Analysis of Model Summary Between Liquidity Control and Financial Performance among public sugar manufacturing companies

Model	R	R-Square	Adjusted R- Square	Standard Error of the Estimate
1	0.746 ^a	0.557	0.548	0.79874

Predictor: Liquidity Control (Constant)

The constructed Table 5 results demonstrate that liquidity control and financial performance among public sugar manufacturing companies have linear association as a unit increase in financial performance can be predicted by R² value of 55.7%-point increase in liquidity control, while the other 44.3% is attributable to factors other than liquidity control. Liquidity control therefore is a significant factor that affects financial performance of sugar manufacturing companies and thus companies should look at better workable formulas to balance their liquidity at optimum

Hypothesis 2 Testing

H₀2: There is no significant relationship between liquidity control and financial performance The

priori significant level was fixed at $\alpha=0.05$ for the reference alpha, for values where $P>0.05$ we fail to reject the null hypothesis as there is no significant relationship that exists between the variables. And for values where $P< 0.05$, we reject the null hypothesis as there is no sufficient evidence to fail to reject that a significant relationship exists between liquidity control and financial performance of sugar companies.

Hypothesis test was done using t-test scores guided by the formulated null hypothesis being tested where; $H_{02}: \beta_2 = 0$ and the opposite of the tested being the alternative hypothesis H_{a2} given as $H_{02}: \beta_2 \neq 0$. Therefore, with $P<0.000 <0.05$, the null

hypothesis is forthrightly rejected and alternative hypothesis is subsequently retained

Descriptive Statistics on Credit Risk Management and Financial Performance among Public Sugar Manufacturing Companies

Credit risk management was the study's third theme of independent variable. The indicators defining the variable included; non-performing loans, capital adequacy ratio, advance deposit ratio,

and liquidity ratio. The indicators were measured in an ordinal Likert scale where their contribution to credit risk management and financial performance among public sugar manufacturing companies and were weighted by 5-very high extent, 4- High extent, 3-Neutral, 2-Low Extent and 1-very low extent. The descriptive statistics are as indicated in Table 6.

Table 6: Descriptive Statistics on Credit Risk Management and Financial Performance of Public Sugar Manufacturing Companies

Statement	Very Extent (5)	High Extent (4)	Neutral (3)	Low Extent (2)	Very Low Extent (1)	M	SD
Non-Performing Loan	3(5.36%)	2(3.57%)	4(7.14%)	24(42.86%)	23(41.07%)	1.89	1.056
Capital Adequacy Ratio	1(1.79%)	6(10.71%)	4(7.14%)	22(39.29%)	23(41.07%)	1.93	1.042
Advance Deposit Ratio	4(7.14%)	7(12.50%)	4(7.14%)	22(39.29%)	19(33.93%)	2.20	1.242
Liquidity ratio	3(5.36%)	1(1.79%)	4(7.14%)	23(41.07%)	25(44.64%)	1.82	1.029
Composite Mean and Composite SD						1.96	1.092

The statistical results presented in Table 6 suggest that credit risk control of the public sugar manufacturing companies as determined by non-performing loans, capital adequacy, advance deposit ratio and liquidity ratio is demonstrating a negative trend and could be among the many serious challenges the public sugar companies are facing in the Kenyan business environment. The composite mean score for the variable is 1.96 while the SD was 1.092. This explains the negative

contribution of the credit risk management to the financial performance of public sugar manufacturing companies.

Analysis of Model Summary between Credit Risk Management and Financial Performance among Public Sugar Manufacturing Companies

The predictor and the criterion variables' degree of interdependence was measured through model regression summary as run on SPSS. Table 7 indicates the results;

Table 7: Analysis of Model Summary Between Credit Risk Management and Financial Performance among Public Sugar Manufacturing Companies

Model	R	R-Square	Adjusted R- Square	Standard Error of the Estimate
1	0.643 ^a	0.413	0.402	0.91909

Predictor: Credit risk management (Constant)

The constructed Table 7 results demonstrate that credit risk management and financial performance among public sugar manufacturing companies have linear association as a unit increase in financial performance can be predicted by R² of 41.3%-point increase in credit risk management, while the other

58.7% are attributable to other factors other than credit risk management. Credit risk management therefore is a significant factor that affects financial performance among public sugar manufacturing companies

Hypothesis 3 Testing

H₀₃: There is no significant relationship between credit risk management and financial performance. The priori significant level was fixed at $\alpha=0.05$ for the alpha, for values where $P>0.05$ we fail to reject the null hypothesis as there is no significant relationship that exists between the variables. And for values where $P< 0.05$, we reject the null hypothesis as there is no sufficient evidence to fail to reject that a significant relationship exists between credit risk management and financial performance of sugar companies.

Hypothesis test was done using t-test scores guided by the formulated null hypothesis being tested where; $H_0: \beta_3 = 0$ and the opposite of the tested being the alternative hypothesis $H_1: \beta_3 \neq 0$ given as $H_0: \beta_3 \neq 0$. Therefore, with $P<0.000 <0.05$, the null

hypothesis is forthrightly rejected and alternative hypothesis is subsequently retained

Descriptive Statistics on Economic Resource Utilization and Financial Performance among Public Sugar Manufacturing Companies

Economic resource utilization was the study's fourth theme of independent variable. The indicators defining the variable included; non-performing loans, capital adequacy ratio, advance deposit ratio, and liquidity ratio. The indicators were measured in an ordinal Likert scale where their contribution to economic resource utilization and financial performance among public sugar manufacturing companies and were weighted by 5-very high extent, 4- High extent, 3-Neutral, 2-Low Extent and 1-very low extent. The descriptive statistics are as indicated in Table 8.

Table 8: Descriptive Statistics on Economic Resource Utilization and Financial Performance among Public Sugar Manufacturing Companies

Statement	Very High Extent (5)	High Extent (4)	Neutral (3)	Low Extent (2)	Very Low Extent (1)	M	SD
Assets Utilization	2(3.57%)	6(10.71%)	4(7.14%)	33(58.93%)	11(19.64%)	2.20	0.999
Intellectual Capital	4(7.14%)	4(7.14%)	4(7.14%)	17(30.36%)	27(48.21%)	1.95	1.227
Capacity Utilization	8(14.29%)	6(10.71%)	5(8.93%)	23(41.07%)	14(25.00%)	2.48	1.362
Output	6(10.71%)	15(26.79%)	3(5.36%)	26(46.43%)	6(10.71%)	2.80	1.257
Composite Mean and Composite SD						2.36	1.211

The statistical results presented in Table 8 suggest that economic resource utilization of the public sugar manufacturing companies as determined by asset utilization, intellectual capital, capital utilization and out could be the strongest factor that is supporting the financial performance of the public sugar companies.

Analysis of Model Summary between Economic Resource Utilization and Financial Performance among Public Sugar Manufacturing Companies

The predictor and the criterion variables' degree of interdependence was measured through model regression summary as run on SPSS. Table 9 indicates the results;

Table 9: Analysis of Model Summary Between Economic Resource Utilization and Financial Performance among Public Sugar Manufacturing Companies

Model	R	R-Square	Adjusted R- Square	Standard Error of the Estimate
1	0.484 ^a	0.235	0.220	1.04953

Predictor: Economic resource utilization (Constant)

The constructed Table 9 results demonstrate that economic resource utilization and financial performance among public sugar manufacturing

companies have linear association as a unit increase in financial performance can be predicted by R² value 23.5%-point increase in economic resource utilization, while the other 76.5% is attributable to

other factors other than economic resource utilization. Economic resource utilization therefore is a significant factor that affects financial performance of sugar manufacturing companies and the companies at all times should optimize their use for better productivity

Hypothesis 4 Testing

H₀₄: There is no significant relationship between economic resource utilization and financial performance. The priori significant level was fixed at $\alpha=0.05$ for the alpha reference, for values where $P>0.05$ we fail to reject the null hypothesis as there is no significant relationship that exists between the variables. And for values where $P<0.05$, we reject the null hypothesis as there is no sufficient evidence to fail to reject that a significant relationship exists between economic resource utilization and financial performance of sugar companies.

Hypothesis test was done using t-test scores guided by the formulated null hypothesis being tested where; $H_{04}: \beta_4 = 0$ and the opposite of the tested being the alternative hypothesis H_{a4} given as $H_{04}: \beta_4 \neq 0$. Therefore, with $P<0.000 <0.05$, the null hypothesis is forthrightly rejected and alternative hypothesis is subsequently retained

CONCLUSIONS AND RECOMMENDATIONS

From the findings, the study enlisted conclusions made as follows;

- Leverage significantly and positively affects financial performance among public sugar manufacturing companies in Kenya
- Liquidity control significantly and positively affects financial performance among Public sugar manufacturing companies in Kenya
- Credit risk management positively and significantly affects financial performance

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among Public sugar manufacturing companies in Kenya

- Economic resource utilization positively and significantly affects financial performance among Public sugar manufacturing companies in Kenya
- Lastly, the study concluded that there is dangerously low level of financial performance among Public sugar manufacturing companies in Kenya

For policy and practice in implementation, the following are recommendations emanating from the study were made;

- Public sugar manufacturing companies not listed at the Nairobi stock exchange should work towards being listed in the stock market to enhance their equity funding and general leverage
- Public sugar manufacturing companies should venture into integration of product line ventures like production of molasses and ethanol to diversify their revenue sources and subsequently enhance their liquidity control
- Risk aversion strategies such as insuring their production sector against losses can help minimize losses during eventualities
- Resource optimization strategies should be employed to maximize production and profitability of the Public sugar manufacturing companies

Suggestions for Further Research

Suggestion for further study is here-by made that a similar study be conducted to determine firm stability and financial performance among privately owned sugar manufacturing companies in Kenya.

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