

Influence of Financial Flexibility on Performance of State-Owned Sugar Manufacturing Corporation Projects in Western Kenya

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This study examined the influence of financial flexibility on performance of State sugar manufacturing corporations in Kenya. The study was guided by Modigliani and Miller's capital structure model mainly (trade-off, pecking order and agency cost) theories, and was based on pragmatic paradigm which provides for the use of both qualitative and quantitative research methodologies. It targeted a population of 1,145 people, drawn from employees of State sugar corporations, and used a sample size of 291, obtained from Krejcie and Morgan's (1970) Table. A structured questionnaire and interview guide were used to collect data. SPSS version 25 was used to analyse data and Hypothesis was tested at $\alpha=0.05$ significance level. Pearson's correlation and linear regression analysis showed a positive correlation between the variables ($p = 0.000 < 0.05$), implying that financial flexibility significantly influences the performance of State sugar firms. It was recommended that, to enhance financial flexibility in State sugar corporations, the Government should focus on strategies that help reduce costs, improve revenue generation, and strengthen financial management practices.

Keywords: capital structure decisions, financial flexibility, performance of state-owned sugar manufacturing corporation projects

INTRODUCTION

Financial flexibility as part of a firm's capital structure decision is relevant to its success. This means that the profitability of a firm heavily relies on its capital structure mix, as it enables it to obtain funds at the required time to meet its obligations, invest in new projects, and adapt to unpredictable market conditions (Alkaraan *et al.*, 2023a). Business corporations that possess a flexible capital structure allow for justifiable efficient planning and budgeting hence tend to enjoy favourable financial performance. Modigliani and Miller (1963) aver that firms may adopt a conservative leverage policy to maintain substantial reserves of untapped borrowing power, which allows them to raise external fund. It is easier for

firms with greater borrowing power to access external capital markets and raise funds (Arslan-Ayahdin, Florackis & Ozkan, 2014).

A section of scholars argues that a firm's flexibility is related to its ability to adapt to fluctuating financial rates and operational challenges in the business world, especially in the sugar sector. For instance, according to Alkaraan *et al.* (2023b), the new era of financing strategies in green investment decisions is perfected by influence of governance structure, which includes regulatory bodies' requirements. Akaraan *et al.* further state that adaptations of technological innovation, reinforcing green business strategies and green strategic investment decision-making practices, strengthen firm performance. This argument aligns with Germaise and Natividad (2021), who state that achieving financial flexibility is a matter of concern for corporations, as the pursuit of flexibility in debt markets may determine a firm's relationship with existing lenders, potentially increasing the risk of future financial distress.

Financially flexible business organizations usually keep some reserve funds on the side, which enable ease of borrowing in the event of an emergency. This kind of arrangement provides such business institutions with flexibility to take quick action towards unexpected situations and growth opportunities (Raza *et al.*, 2021). Raza *et al.* further state that an accurately and well-balanced capital mixture of debt and equity helps to enhance a financial flexibility. It also helps to improve a firm's stability for the purpose of managing its operations and investing in growth. From an empirical studies' perspective, firms with well-balanced financial flexibility are considered better placed and therefore more likely to perform well in the event of economic challenges than those without (Raza *et al.*, 2021). This is the case with state sugar manufacturing corporations in Kenya, which have no financial flexibility plans and are therefore in financial distress.

In Kenya, the performance of sugar firms has recently received increased interest from scholars and stake-holders. The financial performance of a firm is determined by profitability, growth in terms of dividends, turnover and return on assets/investment. However, debate still continues in various quarters regarding how the financial performance of state sugar firms should be measured and the factors that affect their financial performance (Wekesa, Mukras & Oima, 2018). According to Rahaman (2010), the performance of a firm normally derives from its financial position and structure of the firm. Chief financial officers use financial statements to draft a comprehensive financial plan that maximizes shareholders' wealth and identifies potential risks that may exist. Rahaman recommends that companies must look for other ways to improve financial performance, and one such approach involves ensuring flexibility as a way to reduce financial distress.

State-owned sugar manufacturing corporations are known for creating employment opportunities and generating revenue in form of taxes (Kenya Sugar Directorate, 2018). The Kenya Sugar Board (2010) reports that these sugar corporations contribute 15% of Kenya's Agricultural Gross Domestic Product (AgGDP). The corporations are well patronized since they enjoy well-branded products, qualified personnel and government support. However, it is unfortunate that in spite of all the advantages and support from the government, the corporations still continue to perform poorly. Instead of improving performance, they continue to remain in financial distress, owing a large amount of debts to banks and other lending institutions (Kenya Sugar Directorate, 2018; Government of Kenya, 2023).

Statement of the Problem

State sugar manufacturing corporations play a significant role in improving citizens' living standards by creating employment opportunities and generating revenues in form of taxes to the government. However, in spite of the benefits associated with the corporations, they are faced with challenges that lead to their minimal performance. State sugar corporations in Kenya are endowed with quality products, Government support and experienced personnel (Odeyo, Baraza & Mogwambo, 2024; Ong'ombe & Mungai, 2018; Ndi, 2019). Despite all these benefits, the sector still continues to perform below expectation leading to their near collapse. Several studies have been conducted by a number of scholars (Rehmat *et al.*, 2023; Raza *et al.*, 2021) on financial flexibility. However, none of the studies have addressed the issue of how financial flexibility, as a capital structure decision, influences the financial performance of state sugar manufacturing corporations in Kenya. A review of empirical literature focusing on top world

sugar-producing economies, such as Brazil, India, China, Pakistan, Indonesia, Mexico, and South Africa, has not adequately addressed issues related to how financial flexibility influences the financial performance of sugar firms. It is on this basis that this study investigated how financial flexibility, as a capital structure decision, influences the financial performance of state-owned sugar manufacturing corporations in the western region of Kenya.

Theoretical Framework

Modigliani and Miller's (1958) Capital Structure Irrelevance theory was used to guide the study. The theory was deemed relevant because it helps to explain financing structure of a firm. The proponents of the theory are of the view that the value of a firm is not relevant to capital structure of financial decisions. The three dimensions of the Capital Structure Irrelevance theory —namely, Trade-off, Pecking Order, and Agency —were found to be relevant to the study.

The Trade-off theory was denoted by Kraus and Litzenberger in 1973. The theory states that a firm is free to choose any amount of equity and debt it requires to finance its investment. The theory also states that debt has the advantage of a tax shield; however, should the borrower fail to pay the liability as agreed, the firm would be in financial distress and likely face bankruptcy. Since sugar manufacturing is a capital-intensive activity, it cannot be financed solely with either equity or debt, but rather a combination of both. This theory helped provide an explanation for why state-owned sugar corporations are financed with both debt and equity. The choice of the theory was based on its ability to determine how financial flexibility, as a capital structure decision, influenced the performance of State sugar manufacturing corporation projects. The theory also helped establish whether state sugar decision-makers consider financial flexibility issues as a means of reducing financial distress when making financing decisions.

The Pecking Order theory originated from the work of Myers and Majluf in 1984. It states that business-oriented firms prefer to use internal sources of funds first, before going for external funds to finance project activities. The theory emphasizes that firm managers should utilize internal sources first. If these are not adequate, they can turn to debt, and in the event that this is still insufficient, they are at liberty to resort to equity. The theory helped determine whether State sugar corporations utilize internal reserves first, before turning to external sources. It also enabled understanding and explanation of causes of firms' distress. The application of the theory has several advantages to this study however, it has some limitations.

The Agency Cost theory was developed by Berle and Means in 1932, who held the view that the separation of ownership gives managers opportunities to serve their own interests rather than those of the principals. However, a section of critiques argued that the theory only described the processes of behaviour of people. In this respect, the theory does not reflect the overall motivation behind the behaviour of different people. Nevertheless, the theory was suitable for the study because it helped establish whether owners and agents take financial flexibility issues into consideration when making capital structure decisions. It also helped to understand how those charged with borrowing decisions handle situations of financial distress and conflict between principles and agents.

REVIEW OF LITERATURE

In the United States, Wu *et al.* (2024) examined the moderating effects of investment efficiency on the relationship between financial flexibility and firm performance. A sample of 10,755 US-based firms was used to examine the relationship between financial flexibility and firm performance. The study covered a period of ten years (2010-2021) and reported that financial flexibility boosts a firm's performance. Although this study is not specifically on sugar firms, it is relevant to the current study because it focuses on financial flexibility, and its findings are similar to those of the current study. In Brazil, Lourenco and Reis (2023) carried out a study on Brazilian sugar companies. The study covered a period of fourteen years (2003-2016) and analyzed data using 625 companies listed on the Brazilian stock exchange. It was found that companies in Brazil are faced with volatility of capital structure. The study noted that, despite a number of companies reducing their debt portfolios, they still achieved minimal performance. The study is partially useful to this research because it addresses the impact of volatility in capital structure on sugar companies.

In Taiwan, Teng, Chang, and Wu (2021) explored the effect of financial flexibility on the performance of manufacturing industries during the COVID-19 pandemic. The researchers analyzed data from companies listed on the Taiwan Stock Exchange and found that financial flexibility has a positive effect on industries' performance. However, the study reported that financial flexibility had no significant impact on the performance of asset-light industries. It was noted that manufacturing industries in Taiwan experienced poor financial flexibility during the COVID-19 pandemic. This was the case in State sugar manufacturing corporations in Kenya where the COVID 19 Pandemic seriously affected operations leading to temporary closure. Contrary to the above finding, Fahlenbrach, Ragheth and Stulz (2021) found, in an investigation of how a firm's financial flexibility affects its stock price reaction to the COVID-19 shock, that firms with greater financial flexibility were better able to mitigate a revenue shortfall during the pandemic period. The above research is not specific to manufacturing firms; however, its findings are relevant to the current study because sugar firms in Kenya, which had no arrangements for financial flexibility, experienced financial distress during the COVID-19 pandemic.

In an analysis of firms' performance, Ross, Westerfield and Jordan (2019) found that when a firm is experiencing difficulties, it is in financial distress. The researchers argued that bankruptcy occurs when the value of a firm's assets equals the value of its debt, and as a company's debt increases, its financial distress and eventual bankruptcy rise. The analysts, however, cautioned that excessive use of debt capital leads to a debt crisis, and failing to take corrective measures, the firm may eventually go into bankruptcy. This confirms the situation of State sugar corporations in Kenya which are excessively indebted and are likely to face bankruptcy if urgent corrective measures are not taken to save the situation. In Indonesia, the situation was different as Zurchruf, Mangesti and Muhammad (2019) examined the effect of firm size and capital structure on financial performance and reported a positive effect.

In Kenya, Theuri (2021) examined the performance of manufacturing firms listed on the Nairobi Securities Exchange. The aim was to establish how size of a firm affects financial profitability. The study covered a period of five years (2015 to 2019), used descriptive research design and obtained secondary data from financial statements. Descriptive analysis and inferential statistics were adapted for analysis through Pearson correlation. It was found that size of a firm had insignificant correlation with financial returns. Theuri echoes Ross et al. (2019), who suggest that a firm experiencing financial difficulties is indeed in financial distress, and for this reason, it will yield minimal returns. This confirms that financial flexibility, as a capital structure decision, plays a major role in a firm's performance.

Odeyo *et al.* (2022) investigated effect of capital structure on financial performance of sugar firms in western Kenya. The researchers employed a descriptive research design and analyzed quantitative data using descriptive statistics, along with Pearson correlation and linear regression analysis. The analysts reported that the core maintenance loan was mainly for farmers and sugar companies for the purpose of agricultural production. However, this situation led to an increase in the financial distress of State sugar firms. The above argument aligns with research conducted by Jepkorir (2024) on the production flexibility of sugar companies in western Kenya. In this study, the duo found a significant relationship between production flexibility and performance of sugar firms. The study employed regression analysis and recommended that to improve production capacity, sugar companies should implement modern technology and a well-balanced capital structure with an appropriate mix of debt and equity. This approach is likely to enhance a firm's financial flexibility and improve its stability in managing obligations and adapting to changing market conditions. The above result concurs with those of the Kenya Sugar Board (2014), which reported that the use of debt among sugar firms has a negative influence on firms' financial health in terms of cash flow, liquidity, and leverage. In this regard, sugar firms should ensure financial flexibility based on sound capital structure decisions, so as to meet their obligations in times of need.

Wanyama, Oloko and Otinga (2019) in a study on the financial control of sugar manufacturing firms in western Kenya found a positive influence between the credit/accounting system and profitability. This finding aligns with that of Kipkemboi and Omwono (2021), who, in a similar area of study, found that Mumias Sugar Company's cash management is weak, negatively impacting its financial performance. A study conducted by Hwerien et al. (2021) on cash flow management and Industrial firms' performance in Nigeria, reported as follows: liquidity proxy by current ratio positively impacts on ROE of the firms; current

cash flow proxy by liquidity has a negative and non-significant influence on ROE; control variables of firm size efficiency and tangibility has a trivial effect on ROE while causal nexus revealed a bi-directional link between current ratio, cash flow and ROE. However, in a similar area of study on cash flow management and the performance of manufacturing firms listed on the Nairobi Securities Exchange, Oyieko (2018) found that cash flow management activities are statistically related to predicting the Return on Assets of listed firms. He further argued that use of cash flow management activities to a great extent led to an increase in financial performance of the listed firms. Oyieko concluded that decrease in financing cash flows does not significantly lead to increase in financial performance.

METHODOLOGY

Research Approach

The study employed a descriptive survey and correlational research design. Descriptive survey approach helped to analyse the situation as it was without manipulation. On the other hand, correlational design was used to assess the level of existing relationship between the variables.

Context and Sampling

Five state-owned sugar manufacturing corporations, namely Muhoroni, Chemelil, Mumias, Nzoia, and Sony (MUCHEMUNSO), were targeted, and the study covered a period of five years (2015-2019). A target population of 1145 was obtained from the management of state sugar corporations. The population comprised top-level management from each of the five state sugar corporations, supervisory staff, sugarcane outgrowers, and government officials (mainly from the Ministry of Agriculture and the Sugar Directorate). Krejcie and Morgan (1970) model table was used to determine the sample size of 291. A purposive sampling technique was used to select respondents from top-level management in each of the State sugar corporations. Conversely, for government agencies comprising Ministry of Agriculture and Sugar Directorate officials, a sample of 15 was selected with the help of a purposive sampling method. One individual was identified from each of the agencies (the Ministry of Agriculture and the Sugar Directorate) using a purposive sampling technique. The target populations of supervisory-level employees of state sugar corporations and sugarcane out-growers, with 54 and 1,056 members, respectively, were determined using stratified random sampling.

Data Collection

A self-structured questionnaire was used to gather quantitative data based on key performance indicators. Qualitative data were supported by interviews administered to opinion leaders, mainly the local administration (chiefs), Members of County Assemblies, and Members of Parliament from each of the state's sugar manufacturing zones.

Data Analysis

The collected data was appropriately recorded and processed. Quantitative data was analysed using descriptive and inferential statistics. Descriptive statistics included frequencies, means, and standard deviations. To test the relationship between the variables, Pearson correlation coefficients were applied at $P < 0.05$. Qualitative data was analysed thematically, according to the study objectives.

Ethical Considerations

The researcher ensured the honesty, confidentiality, and privacy of information obtained from participants, took responsibility for the research work, and obtained information voluntarily from the participants. The researcher also abided by the rules and regulations required by the Ministry of Health (MoH) regarding policies related to the COVID-19 pandemic.

RESULTS AND DISCUSSION

The respondents were asked to rate ten statements on a 1-5 Likert scale, where they expressed their levels of agreement and disagreement. The results obtained from levels of opinions were analysed and processed in a computerized system.

Financial Flexibility and Performance of State Sugar Corporation Projects

The participants were requested to provide their opinions on a 5-point Likert scale, where: Strongly Agree (SA) = 5, Agree (A) = 4, Neutral (N) = 3, Disagree (D) = 2, and Strongly Disagree (SD) = 1. The results were analyzed and presented in terms of frequencies, percentages, means, and standard deviations for each response across the ten items. The results were as presented in Table 1.

TABLE 1
FINANCIAL FLEXIBILITY AND FINANCIAL PERFORMANCE OF STATE SUGAR PROJECTS

Statements	SAF(%)	AF(%)	NF(%)	DF(%)	SDF(%)	Mean	Std. Dev
The corporation does not have the ability to raise capital in bad times.	102(39.1)	90(34.5)	34(13)	17(6.5)	18(6.9)	3.92	1.18
The corporation's sales and earnings are in the growth trend.	63(24.1)	107(41)	53(20.2)	22(8.6)	16(6.1)	3.69	1.11
The corporation does not have strong credit control measures.	74(28.4)	109(41.8)	45(17.2)	24(9.2)	9(3.4)	3.82	1.05
The corporation's cash flow is considered strong enough during good times.	85(32.6)	104(39.8)	44(16.8)	20(7.7)	8(3.1)	3.91	1.04
The corporation does not stretch its capabilities when raising capital in good times.	76(29.1)	96(36.8)	46(17.6)	23(8.8)	20(7.7)	3.71	1.20
The corporation often reduces its debt level during bad times.	81(31)	82(31.5)	47(18)	23(8.8)	28(10.7)	3.63	1.30
The corporation is not liquid because the amount of debt is more than the asset value.	116(44.4)	105(40.3)	25(9.6)	10(3.8)	5(1.9)	4.21	0.91

Statements	SAF(%)	AF(%)	NF(%)	DF(%)	SDF(%)	Mean	Std. Dev
Like any other sugar manufacturing firms in Kenya, the corporation is facing financial difficulties.	143(54.8)	78(29.9)	29(11.1)	2(0.8)	9(3.4)	4.32	0.95
The continuing increase in debt is likely to subject the corporation into bankruptcy.	152(58.3)	69(26.4)	23(8.8)	15(4.6)	2(0.8)	4.36	0.92
The use of too much debt is not the cause of the corporation's cash flow problems.	118(45.2)	71(27.2)	30(11.5)	23(8.8)	19(7.3)	3.94	1.26
Composite mean & Composite standard deviation.						4.03	0.97

Source: Field data (2022)

The above results indicate a composite mean and deviation for financial flexibility as 4.03 and 0.972, respectively. This implies that the majority of respondents agreed (mean = 4.03) that financial flexibility, as a capital structure decision, has an influence on the performance of state sugar corporations.

As shown in Table 1, the statement, “*State sugar corporations have no ability to raise capital in bad times*”, reported a mean of 3.92 and a standard deviation of 1.18. This means that the majority of respondents were of the opinion that corporations lack the ability to raise funds in situations of need. Since the line mean score (3.92) is lower than composite mean (4.03), it was concluded that there was a negative influence on financial performance. On the other hand, the higher standard deviation (1.18) is greater than the composite deviation (0.972), indicating a divergence of opinions among the study participants. These results support the view of the Kenya Sugar Board (2014) report that the use of debt among sugar manufacturing firms has a negative influence on a firm's financial health in terms of cash flow, liquidity crisis, and inability to meet day-to-day operational expenses. However, the results of the study also contradict those of Hoosyar *et al.* (2017), which reported that the financial leverage of listed firms in the Tehran Stock Exchange does not have a significant impact on flexibility, meaning these firms have the ability to raise capital in difficult situations.

The second statement, “*The Corporations' sales and earnings are in the growth trend*”, had a mean of 3.69 and a standard deviation of 1.11. This means that the majority of participants agreed that there was a growth trajectory in sales and earnings. The results registered a line statement mean score (3.69), lower than composite mean (4.03), which implied a negative influence on performance of state sugar corporations. However, the higher line item standard deviation of 1.11 was higher than the composite standard deviation of 0.972, indicating divergence of views. These results echoed those of Aslani and Zanjivdar (2014), who investigated the relationship between the financial flexibility and investment and reported positive relationship between the variables.

The statement, “*The corporations lack strong credit control measures*”, had a mean and standard deviation of 3.82 and 1.05, respectively. Based on the results, majority of participants agreed that corporations lacked strong control measures. These findings yielded a mean line score of 3.82, which is

lower than the composite mean of 4.03. This suggested a negative influence of credit controls on financial performance. On the other hand, the higher line item standard deviation of 1.11, which exceeded the composite deviation of 0.972, indicated a divergence in opinions among participants. These results contradicted those of Wanyama et al. (2019), who, in a study of the financial control on the profitability of sugar manufacturing firms in western Kenya, reported a positive influence between the credit/accounting system and the profitability of sugar manufacturing firms. However, Kipkemboi and Omwono (2021) concurred that the cash management of Mumias Sugar Company is weak, which negatively impacts the company's financial performance.

The assertion that “*The corporations’ cash flow is considered strong enough during good times*” recorded a mean of 3.91 and a standard deviation of 1.04. These results indicated that majority of the participants agreed with the statement. On the other hand, the line mean score (3.91) was lower than the composite mean of 4.03. This indicated a negative influence on financial performance of state sugar firms. However, the higher line item standard deviation (1.04) was more than composite deviation (0.972), meaning a divergence of views among participants. These findings contradicted those of Hwerien et al. (2021), a study on cash flow management and the performance of industrial firms in Nigeria, which revealed that the liquidity proxy, as measured by the current ratio, positively impacted the ROE of the firms.

The fifth statement, “*The Corporations do not experience financial distress when raising capital in good times,*” had a mean of 3.71 and a standard deviation of 1.20. These scores indicate that majority of participants agreed with the statement. The line mean score (3.71) was lower than the composite mean (4.03), suggesting a negative influence of financial flexibility on performance of state sugar firms. On the other hand, the higher line deviation (1.20) exceeded the composite deviation (0.972), indicating a divergence of views among the participants. The above results contradicted those of Vakilifard and Shahmoradi (2014), who, in a study of the profitability and free cash flow of listed companies on the Tehran Stock Exchange, reported a positive relationship between the variables.

Statement six, “*In situations of crisis, the corporations often reduce debt level*”, recorded a mean of 3.63 and a standard deviation of 1.30. This indicated that majority of the participants agreed with the statement. The higher line item standard deviation of 1.30 was higher than the composite deviation of 0.972. This suggested a divergence in views among the study participants. These findings align with those of Ross et al. (2019), which demonstrated that when a firm is in financial distress, its profitability value declines. Ross et al. caution that, contrary to the general view that debt is cheap, it is essential to consider that in periods of financial distress, the cost of debt may increase, which in turn reduces profits before tax.

From the seventh statement, “*The sugar corporations are not liquid because the amount of debts are more than the asset values*”, a mean and standard deviation of 4.21 and 0.91, respectively, were reported. This showed that the majority of the respondents agreed that corporations’ liabilities exceeded their assets. The mean score of 4.21 was higher than composite mean of 4.03, implying a negative influence on performance of state sugar corporations. Furthermore, the lower line item standard deviation of 0.91 was less than composite deviation of 0.97. Based on these results, there was convergence of opinions among the study participants. These results agreed with those of Audax (2018), which showed that liquidity plays a central role in firm profitability. Audax noted that indicators of liquidity and profitability are important to both shareholders and potential investors.

The proposition that “*Like any other sugar manufacturing firms in Kenya, the corporations are experiencing financial difficulties*” had a mean of 4.32 and a standard deviation of 0.95. These results suggested that majority of study participants were in support of the statement. The line statement mean score (4.21) was higher than the composite mean (4.03), implying a negative influence of financial flexibility on performance of state sugar corporations. Further, the lower line item standard deviation of 0.91 was less than the composite deviation of 0.97. This shows a convergence of opinions among participants. The results concurred with those of the Kenya Sugar Board (2014), which reported that the use of debt subjected sugar manufacturing firms to liquidity crises, hence their inability to meet day-to-day operational expenses.

The ninth item, “*The continuing increase in debt is likely to subject the corporations into bankruptcy*”, garnered a mean of 4.36 and a standard deviation of 0.92. These results show that the majority of

participants agreed that a continuing debt situation is likely to subject corporations to bankruptcy. The line statement mean score (4.36) was higher than the composite mean (3.93), implying a negative influence on performance of state sugar corporations. However, the line standard deviation of 0.92 was below the composite deviation of 9.7, suggesting a convergence of views among participants. The results echoed Munene’s (2014) view that relying too heavily on debt to finance day-to-day operations led firms to bankruptcy.

The last item, “*Use of too much debt is not the cause of the corporations’ cash flow problems*”, had a mean and standard deviation of 3.94 and 1.26, respectively. Based on the results, it was concluded that a majority of study participants agreed that excess debt was not the cause of corporations’ cash flow problems. The mean score of 3.94 was lower than the composite mean of 4.03, implying a negative influence on financial performance of state sugar corporations. On the other hand, the line standard deviation of 1.26 was higher than the composite deviation of 0.97, meaning a divergence views among the study participants. The results concurred with those of the Kenya Sugar Board (2014), which reported that the use of debt among sugar manufacturing firms has a negative influence on their financial health in terms of cash flow.

Corroborating the diverse results shown above, one of the key informants had this to say in regard to financial flexibility: “Corporation managers do not have proper guidance on aspects of financial flexibility to rely on in terms of debt capacity and cash holdings thus leading to financial distress” (Key Informant 001).

Correlation Analysis for Financial Flexibility and Financial Performance

The Pearson correlation coefficient was used to test the relationship between financial flexibility and the performance of state-owned sugar manufacturing corporation projects at a 95% level of confidence. The correlation results obtained were as shown in Table 2.

TABLE 2
CORRELATION ANALYSIS FOR FINANCIAL FLEXIBILITY AND FINANCIAL PERFORMANCE

Financial Flexibility Statements		Financial Performance
The corporation does not have the ability to raise capital in bad times.	Pearson correlation sig. (2-tailed) n	0.253* 0.000 261
The corporation’s sales and earnings are in the growth trend.	Pearson correlation sig. (2-tailed) n	0.515* 0.000 261
The corporation does not have strong credit control measures.	Pearson correlation sig. (2-tailed) n	0.420* 0.000 261
The corporation’s cash flow is considered strong enough during good times.	Pearson correlation sig. (2-tailed) n	0.381* 0.000 261
The corporation does not stretch its capabilities when raising capital in good times.	Pearson correlation sig. (2-tailed) n	0.487* 0.000 261
The corporation often reduces its debt level during bad times.	Pearson correlation sig. (2-tailed) n	0.563* 0.000 261

Financial Flexibility Statements		Financial Performance
The corporation is not liquid because the amount of debt is more than the asset value.	Pearson correlation sig. (2-tailed) n	0.310* 0.000 261
Like any other sugar manufacturing firms in Kenya, the corporation is facing financial difficulties.	Pearson correlation sig. (2-tailed) n	0.322* 0.000 261
The continuing increase in debt is likely to subject the corporation into bankruptcy.	Pearson correlation sig. (2-tailed) n	0.381* 0.000 261
The use of too much debt is not the cause of the corporation's cash flow problems.	Pearson correlation sig. (2-tailed) n	0.515* 0.000 261
Financial flexibility overall correlation.	Pearson correlation Sig. (2-tailed) N	0.725* 0.000 261

*Correlation is significant at 0.05 Level (2-tailed)

The study proposed and tested the following hypothesis: H_0 : There is no significant relationship between financial flexibility and financial performance of state-owned sugar manufacturing corporation projects. The corresponding mathematical model for the hypothesis was formulated as follows: financial performance of state-owned sugar manufacturing corporation projects = f (Company tax exposure). The correlation results presented in Table 2 indicate that all the P-values under significant 2-tailed were significant, $P\text{-values} < 0.05$.

Furthermore, simple linear regression was employed to investigate how financial flexibility affects the financial performance of state-owned sugar manufacturing corporation projects. Firstly, the model summary aimed to determine whether financial flexibility is a predictor that significantly or insignificantly affects the financial performance of state-owned sugar manufacturing corporation projects. The regression model summary results were as presented in Table 3.

TABLE 3
REGRESSION MODEL SUMMARY FOR FINANCIAL FLEXIBILITY AND FINANCIAL PERFORMANCE

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.725	0.526	0.524	0.4281
a. Predictors: (Constant), Financial flexibility				

Source: Field data (2022)

The model summary table suggests that there was a positive correlation ($R = 0.725$) between the financial flexibility and financial performance of state-owned sugar manufacturing corporation projects, as predicted by the regression model. In addition, 52.6% of the variation in the financial performance of state-owned sugar manufacturing corporation projects is explained by financial flexibility.

Secondly, the study sought to establish whether the regression model is the best fit for predicting the financial performance of state-owned sugar manufacturing corporation projects after the use of financial flexibility. The ANOVA results were as presented in Table 4.

TABLE 4
ANOVA OF THE REGRESSION OF FINANCIAL FLEXIBILITY AND FINANCIAL PERFORMANCE

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	52.634	1	52.634	287.242	0.000 ^b
	Residual	47.459	259	0.183		
	Total	100.092	260			
Dependent Variable: Financial performance of State-owned sugar manufacturing corporation projects						
b. Predictors: (Constant), Financial flexibility						

Source: Field data (2022)

The ANOVA results in Table 4 indicate that F-statistics (1,259) = 287.242 is significant, since the P-value $0.000 < 0.05$, implying that the predictor co-efficient is at least not equal to zero. Therefore, the regression model results provided a significantly better prediction of the financial performance of state-owned sugar manufacturing corporation projects.

Thirdly, regression coefficients were used to examine if financial flexibility influenced financial performance of state-owned sugar manufacturing corporation projects. The results were as presented in Table 5.

TABLE 5
COEFFICIENTS FOR REGRESSION OF FINANCIAL FLEXIBILITY AND FINANCIAL PERFORMANCE

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.195	0.167		7.146	0.000
	Company growth rate	0.708	0.042	0.725	16.948	0.000
a. Dependent Variable: Financial Performance						

Source: Field data (2022)

The simple linear regression coefficients in Table 5 indicate that there is a significant influence of financial flexibility and financial performance on state-owned sugar manufacturing corporation projects. The coefficient of the constant term ($\beta_0 = 1.195$; P-value=0.000 < 0.05) and financial flexibility ($\beta_4 = 0.708$; P-value=0.000 < 0.05) were statistically significant. The regression model for financial flexibility was $y = 1.195 + 0.708X_4$, implying that for each unit of financial flexibility, the financial performance of state-owned sugar manufacturing corporation projects marginally changed by 0.708 units, other predictors held constant. It was therefore concluded that financial flexibility and financial performance of state-owned sugar manufacturing corporation projects were positively and linearly related.

CONCLUSION

The study's results provide valuable insights for those involved in policy and decision-making within state sugar manufacturing corporations. The Kenyan Government, through its agency, the Sugar Directorate, can draw insights into procedures for capital structure mix that are relevant in reducing firms' financial distress. The study also contributes useful knowledge on best practices in project management

research and knowledge. The Kenyan government and other sugar-producing countries can utilize the findings to inform key policy actions that enhance the contribution of sugar manufacturing to national economic growth.

RECOMMENDATIONS

The Government of Kenya should institute financial flexibility mechanisms to support sugarcane farmers. The management of the corporations, in collaboration with the government, should put in place policies that promote financial accountability and transparency. Furthermore, the government should put in place rules and regulations to minimize political interference in the effective management of state sugar manufacturing corporations. Accounting ethics should be observed strictly, and violation of such codes of conduct should be treated as economic crimes and punished severely. Management of state sugar firms should ensure participatory involvement in decision-making at supervisory level. Corporate social responsibility practices should be given priority as a way of gaining support of the consumers. The state should support the management in their effort to introduce new technology so as to improve production, and ensure competitiveness in the sugar manufacturing market.

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