

# Effects of Operating Lease Finance on Financial Performance of Parastatal Sugar Manufacturing Firms in Kenya

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## Abstract

This study analyses the effect of operating lease finance on financial performance of Parastatal sugar firms in Kenya. The specific objectives were to: find out the effects of operating lease finance on financial performance, determine the relationship between operating lease finance and financial performance. The study used a retrospective research design in collection of data. A target population of all the 4 Parastatal sugar firms was considered in the study. Secondary data was the main source of data. The data was then analyzed using multiple linear regression models and Pearson product moment correlation. The study found that operating lease finance negatively affects ROA although not statistically significant ( $\beta$  -.451,  $p < 0.05$ ). Operating lease finance was strongly related to financial performance as measured by ROA. The conclusions of the study were that operating lease finance negatively affects firm performance although not statistically significant. The study recommended that Parastatal sugar firms should reduce the proportion of operating lease finance in their capital structure as it negatively affects financial performance.

**Key words:** Operating lease finance, ROA, ROE

## 1. Introduction

Operating leases finance contracts are cancellable and are mostly short term and can be cancelled at the option of the lessee with the proper notice (Mohammad and Shamsi, 2008). The use of Operating lease finance has increased more than the use of outright purchase in Parastatal sugar firms. Data from the financial statements revealed a progressive growth in the use of operating lease finance among the Parastatal sugar firms. The value for outstanding operating lease obligations in the firm's financial statements was millions of shillings which were long overdue. The firm's financial performance has decreased considerably prompting closure of some firms in Kenya. According to Muhammad, et al. (2012) Operating lease leads to tax allowable and thus high financial performance, but this is not the actual situation in the Parastatal sugar firms. Parastatal sugar firms were considerably using operating lease finance as an alternative means of financing but the inability to pay for the leased property leaves a new investor in dilemma as to whether to opt fully for outright purchase or leasing. There was lack of studies on operating lease finance in Kenya Parastatal sugar manufacturing firms. The researcher sought to address the knowledge gap on operating lease finance in the sugar industry by focusing on Parastatal sugar manufacturing firms in Kenya. This study sought to establish the effects of operating lease finance on financial performance of Parastatal sugar manufacturing firms in Kenya.

## Literature Review

### Concept of financial performance

Measures of financial performance fall into two broad categories: investor returns and accounting returns. The basic idea of investor returns is that, the return should be measured from the perspective of shareholders e.g. share price and dividend yield. Accounting returns focus on how firm earnings respond to different managerial policies e.g. ROE and ROA (Alan, 2008). This study adopted the use of Return on assets and Return on equity since they were the most commonly used financial ratios in the measurement of financial performance that is, profitability following the lead of (Kieso *et al.*, 2005).

According to Penman (2010) Return on assets is a measure that is commonly used to measure the financial performance of a firm's operations. ROA "measures the income available to debt and equity investors per dollar of the firm's total assets" (Brealey *et al.*, 2011). That is, it measures financial soundness of the firm in terms of its assets. As mentioned above, it also indicates the "overall financial health" of a firm (Bodie *et al.*, 2011). It was therefore used in the regression model as a measure of financial performance. Specifically, it is the ratio of revenues generated over a firm's total assets. Another ratio that gave an indication of a firm's "overall financial health" was Return on equity (Bodie *et al.*, 2011). It is a ratio that is used by analysts to evaluate the performance of a firm. ROE shows the income generated for the shareholder's by the equity, which is the financing provided by the shareholders (Alexander & Nobes, 2010). It gave an indication of whether a firm was able to find profitable investment opportunities (Berk & DeMarzo, 2011), something that was of great importance for firms that wanted to stay competitive. I therefore believed that it justified why I used it as a measure of financial performance in the regression model. Return on equity is calculated as "earnings before interest and tax divided by equity", following the lead of Abor (2005).

### **Information Asymmetry theory**

The study used Information Asymmetry theory by Myers and Majluf (1984) to inform the study. The authors argue that information asymmetry influences capital structure of firms. They demonstrate that if managers can issue safe debt, the adverse selection problem due to information asymmetry could be reduced. Consistent with Myers and Majluf (1984) one can argue that leasing, being similar to secured debt should also mitigate the adverse selection problem. Gilligan (2004) argues that leasing may reduce adverse selection in durable goods markets by increasing the average quality of used goods offered for sale. Sharpe and Nguyen (1995) found that leasing aids in alleviating financial contracting costs. They argue that financing with a lease may reduce the cost of external funds that arise due to asymmetric information or from agency problems that give rise to costly monitoring as per Ezzell and Vora (2001). By financing via true lease the firm puts the lease obligation on par with other administrative expenses that have higher priority than normal debt. This makes leasing a highly desirable financial contract in the presence asymmetric information as it puts leasing at the top of the pecking order of external financing options. Moral hazard problem arises because the salvage value of the leased asset accrues to the lessor. This leaves the lessee with little or no incentive to maintain the asset in order to preserve its salvage value. Lessors do recognize these issues and include various provisions in the lease contract such as penalty clauses, metered lease payments to reduce abuse of the leased asset. Chau, Firth and Srinidhi (2006) argue that leases with a purchase option can completely mitigate the moral hazard problem. From the above discussions it is clear that leases help mitigate the asset substitution problem due to agency and costly external financing due to information asymmetry and hence reduce any excess cost the firm could have incurred if they didn't have complete information. Reduction in excess cost will help improve the financial performance of Parastatal sugar manufacturing firms.

### **Operating Lease finance and financial performance**

Operating lease is a contract that allows for the use of an asset, but does not convey rights of ownership of the asset (Lorigan, 2014). Leasing is a contract between an owner of equipment, the lessor and another party, the lessee giving the lessee possession and use of a specific asset in return for payment of specific rentals over an agreed period (Kisaame, 2002). An operating lease is usually signed for a period much shorter than the actual life of the asset, and the present value of lease payments are generally much lower than the actual price of the asset. At the end of the life of the lease, the equipment reverts back to the lessor, who will either offer to sell it to the lessee or lease it to somebody else. The lessee usually has the option to cancel the lease and return equipment to the lessor, sometimes at a cost.

Operating lease is advantageous to a business because operating lease finance is used to hide financially leveraged balance sheets by presenting capital leases as operating leases. Although an operating lease is, many a times, more expensive as compared to an outright purchase or a capital lease for the same equipment due to the guarantee of service obscured in an operating lease in addition to the obsolescence risk assumed by the leasing company. However, this is justified by the lessee through the convenience of relying on fully operational equipment in addition to avoiding the obsolescence cost. An operating lease reduces the lessee's liabilities thus allowing it to borrow more than if it used a mortgaged loan or a capital lease. Leases offer a certain degree of flexibility, compared to having to purchase the asset. Operating lease finance includes short term operating lease obligations, long term operating lease obligations and a combination of both short term and long term operating lease finance obligations.

Muhammad, et al. (2012) did a study on the factors influencing the profitability of leasing firms in Pakistan. They analyzed a pool of data of 28 leasing companies for a period of 2006-2008. The variables used to determine profitability were size, leverage liquidity, age and Return on assets in operating lease finance. The study applied ordinary least square (OLS) model and Logistic models for estimation of results. They found that an increase in the proportion of operating lease led to an increase in firm performance of leasing companies as measured by ROA. Salam (2013) did a research to find the casual relationship between firm performance using ROA and ROE with different Small and medium enterprises on lease finance. The researcher found that an increase in the proportion of operating lease led to an increase in firm performance of leasing companies as measured by ROA and ROE.

Eric (2012) did a study on French Small and medium enterprises for 11436 firms for the year 1999. The variables used were long term debt, leasing, equity, short term assets, short term liabilities, EBITDA, financial fees, fiscal debt and firm age. Eric (2012) found that an increase in the proportion of operating lease led to an increase in firm performance as measured by ROA. According to Lasfer and Levis (2008) they examined the relationship between lease finance and ROA for Small and Medium enterprises and found that an increase in the proportion of operating lease led to an increase in firm performance as measured by ROA. Lasfer and Levis (2008) also found that an increase in the proportion of operating lease led to an increase in firm performance as measured by ROE. Kisaame (2002) who researched on Small and medium enterprises in Uganda revealed that businesses with leasing competence were on average more profitable as measured by ROA. According to Abor

(2007) he researched on Debt Policy and Performance of SMEs, Evidence from Ghanaian and South African Firms. He found that an increase in operating lease led to an increase in firm performance as measured by ROA and ROE.

*H01: Operating lease finance has no significant effect on ROA*

*H02: Operating lease finance has no significant effect on ROE*

*H03: There is no significant relationship between operating lease finance and ROA*

*H04: There is no significant relationship between operating lease finance and ROE*

## RESEARCH METHODOLOGY

The study employed a retrospective research design as it uses existing data that has been recorded. The design was adopted because it was meant to look back at events that already have taken place, For example, data already in financial statements during a given financial year. A time span of 10 years between 2004 – 2014 was considered in this study. The study targeted a sum of 4 Parastatal sugar manufacturing firms in Kenya that is Muhoroni, Nzoia sugar firm, Chemilil and Sony sugar. This study was purely a census study. The study used Secondary data available in their financial statements. Pearson product moment correlation was used to assess for significant association between dependent variables (ROA and ROE) and the independent variable (Operating lease finance). Linear Regression model was used to identify significant predictors of ROA controlling for confounders and a P value of less than 0.05 was considered significant. The regression models were as follows:

$$ROA_{M,t} = \beta_0 + \beta_1 X_{1M,t} + e_{M,t}$$

$$ROE_{M,t} = \beta_0 + \beta_1 X_{1M,t} + e_{M,t}$$

Where;  $X_{1M,t}$  = Operating lease finance to total assets of the firm M in year t  
 $e_{M,t}$  = error term;  $\beta_0$  = y intercept;  $\beta_1$  = coefficient of  $x_1$ .

### Empirical results

Pearson product moment correlation was used to assess for significant correlation between dependent variables (ROA and ROE) and the independent variable (Operating lease finance). The results showed that there was significant correlation between operating lease finance and financial performance as measured by ROA ( $r = -0.469$ ,  $p = 0.026$ ), as shown in Table 4.1. Similarly, there was no significant correlation between operating lease finance and financial performance as measured by ROE ( $r = -0.230$ ,  $p = 0.210$ ).

### Correlation between operating lease finance and financial performance (ROA and ROE).

Performance	Operating lease finance
ROA	$r = -0.469$ $p = 0.026$
ROE	$r = -0.230$ $p = 0.210$

Source: (Survey Data 2015)

### Regression

A Multiple linear regressions model was done on operating lease finance and ROA and the results showed that operating lease finance negatively affected ROA though not statistically significant ( $p > 0.05$ ), as shown in Table 4.2.

**Table 4.2: Multiple linear regression ROA and Operating lease finance**

Model	Un standardized Co- efficient		Standardized Co- efficient		P- value	95% Confidence interval
	B	Std. Error	B	T		
Constant	.407	.908	1.951	4.154	.053	-.015- .824
Operating Lease finance	-.475	.895	1.929	2.922	.098	-2.218- 1.677

Source: (Survey Data 2015)

The results of Table 4.2 indicate a non significant negative effect between operating lease finance and firm performance as measured by ROA ( $\beta_2 = -.475$   $p$ -value = .098) which is more than  $\alpha = 0.05$  as shown in Table 4.2 Hence we fail to reject the null hypothesis ( $H_0$ ) and conclude that operating lease finance does not significantly affect firm's performance as measured by ROA. Furthermore, we fail to reject the null hypothesis ( $H_{02}$ ) and conclude that operating lease finance does not significantly affect firm's performance as measured by ROE.

Their existed a significant relationship between operating lease finance and ROA and hence we reject the null hypothesis and conclude that there is a significant relationship between operating lease finance and ROA (H0<sub>3</sub>), We fail to reject the null hypothesis and conclude that operating lease finance is not significantly related to firm performance as measured by ROE (H0<sub>4</sub>). The findings of this study are different from the findings of Kisaame (2002), Eric (2012), Muhammad, et al. (2012), Salam (2013) because of differences in firm characteristics, sample size and market characteristics.

From table 4.3, the findings indicated that the model coefficient of determination (adjusted R<sup>2</sup>) was .451 which indicated that 45.1% total variation of financial performance is explained by Operating lease finance. This implies that there are other factors that affect Return on assets other than operating lease finance which were not captured in this study.

**Table 4.3: Multiple linear regression model summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.906 <sup>a</sup>	.820	.451	.044910

Predictors: (Constant), Operating lease finance

Source: ( Survey data, 2015)

### Conclusions

The study concludes the following:

- i. Operating lease finance negatively affects financial performance as measured by ROA though not statistically significant. Financial performance of Parastatal Sugar firms in Kenya is therefore negatively affected by the use of Operating Lease finance.
- ii. Operating lease finance does not significantly affect financial performance as measured by ROE. While the relationship could be negative for ROE it failed the significance tests at 0.05 level of significance. Financial performance of Parastatal Sugar firms in Kenya is therefore not affected by the use of operating lease finance when ROE is used as a measure of financial performance.

### Recommendations

- i. The study recommends that firms should opt for other alternative methods of financing other than operating lease finance as operating lease finance negatively affects financial performance.
- ii. The study further recommends that Parastatal sugar firms should reduce the proportion of operating lease finance in their capital structure as it negatively affects financial performance.
- iii. This study suggests that a further research to be conducted on the effects of operating lease finance on financial performance of private sugar firms in Kenya.

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