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## **EFFECT OF DEBT FINANCING ON THE FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE**

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### **ABSTRACT**

*This study sought to establish the effect of debt financing on financial performance of manufacturing firms listed at the Nairobi Securities Exchange. The study used descriptive design. Ten listed manufacturing firms formed the population of the study and secondary data was collected for a period of five years (2017- 2021). Data was analysed using regression and correlation analysis. The study established that there is a weak negative and insignificant relationship between debt financing and financial performance as per the correlation analysis. The study also concluded that an increase in debt financing would contribute to a decrease in financial performance of the listed manufacturing firms in Kenya. This contradicts tradeoff theory which supported the use of debt financing to improve financial performance.*

**Key words:** Financial Performance; Debt Financing; Nairobi Securities Exchange; Manufacturing Firms.

### **1.0 INTRODUCTION**

Financial performance is the immediate goal that informs existence of the firm. Financial performance arises from the investments that require heavy outflow of funds (Subagyo, 2021). Thus, firms are forced to borrow so as to finance investment projects aimed at enhancing financial performance. Any form of firm's capital structure is critical for management to make corporate financial decisions. The rationale behind this is that it directly links profitability which determines firm's revenue maximization and cost minimization (Sheikh & Qureshi, 2017). Debt

financing is an important source of capital to the firm, since retained earnings may be unavailable or insufficient to support firm operations and improve its financial stability (Momanyi, 2018).

Debt Financing is the ratio of debt reported in a company's financial statement to total assets (Giannetti, 2019). Most short-term or long-term debt components include bank borrowings, corporate bonds, bank overdrafts, and finance leases. Based on the outcomes obtained, low rates result will lead to the conclusion that companies prefer more equity than debt. However, the most important factor of consideration is the balance between debt and equity that firm managers can attain as it is impossible to finance all business activities from equity (Andrieu *et al.*, 2018). The study measured debt financing using debt asset ratio and interest tax shield. Debt asset ratio, indicates the proportion of the firms' assets that is being financed by debt, rather than equity. Further utilization of debt in the capital structure will lead to increased gearing ratio due to the benefit of tax shield. These two measures were proposed in the Trade-off theory as an important explainer of debt financing measurement (Luigi & Sorin, 2019).

The financial performance of an organization is estimated utilizing accounting key execution markers. Return on resources (a pointer of how advantageous an association is near with its all-out resources), Return on sales (a proportion of how effectively an organization turns sales into benefits) and Earnings before Interest and Tax (an organization net income before paying tax expense and interest expenses are deducted). The benefit of these estimations is their overall accessibility, since each benefit oriented association creates these figures for their yearly monetary reporting (Fredrick, 2018). The study used return on assets measurement to assess the gain manufacturing companies have realized after investing borrowed funds.

From the pecking order theoretical point of view, more profitable firms have a strong incentive of using less debts and more retained earnings. Thus, negative relationship is predicted under this pecking order theory between debt financing and financial performance (Donaldson, 1961). This negative nexus implies that as a firm improves on its financial performance, more preference will be given to internal sources funds as opposed to external sources of funds like debts (Donaldson, 1961). External sources of funds like debts are highly prone to information asymmetry as compared to internal funds. From the tradeoff theoretical perspective, firms may have a strong incentive to use more debts because of the associated tax advantage that leads to wealth maximization (Myers, 1984). Thus, in light of the tradeoff theoretical stance, a positive relationship was predicted between debt financing and financial performance. This positive nexus implies that as the firm utilizes more debts, the tax advantage increases which helps to improve on financial performance (Myers, 1984).

## **1.1 RESEARCH PROBLEM**

The impact of debt financing on the profitability and financial performance is of considerable significance to not only manufacturing companies but also all business enterprises. Debt financing in most cases is usually less costly compared to equity financing and at the same time

the company is still able to retain its control compared to issue of equity shares which contributes to dilution of membership. Further debt financing is subject to interest tax shield benefits and it also allows firms to leverage on small amounts of capital to create business growth (Chen, *et al.*, 2022). Despite the significance of debt financing listed manufacturing firms in Kenya are facing financial distress due to debt management and are gradually facing imminent demise (Mukoma, 2020).

Empirical evidence by Koskei (2017) indicates existence of positive nexus between debt financing and financial performance. However, studies by Onchonga, Muturi and Atambo (2016), Gabrijelcic, Herman and Lenarcic (2016) and Kibunja (2020) provide evidence that debt financing and financial performance are inversely linked with each other. Rahman, Kakuli, Parvin and Sultana (2020) established an insignificant nexus between debt financing and performance at firm level. Based on this, it was asserted that debt financing has mixed relationship with financial performance which can either be positive or negative. This inconsistency in literature provide inconclusive evidence and calls for further studies.

Despite the existing problems, the preceding studies have producing contradicting results on the relationship between debt financing and financial performance. Wambua (2019) studied how financial performance of listed NSE firms were affected with debt financing. The study used descriptive research and secondary data from financial reports. The study found that there was a weak negative relationship between debt financing and financial performance. Muiruri (2020) also studied the relationship between financial performance debt financing among firms listed in the NSE. The study targeted all the listed firms in the NSE and panel data was used. The study found that there was a significant positive relationship between debt financing and financial performance. Finally, Karuma, *et al.*, (2020) studied the effect of debt financing (corporation tax rate, interest rates, long and short-term debt) on financial performance of listed manufacturing firms in the Nairobi Securities Exchange. The study used correlation and panel research design, where secondary data from 2013 to 2017 of nine companies in the Nairobi Securities Exchange was examined. The study found that there was a significant and positive relationship between accounts payables and ROA. Based on the reviewed studies it was evident that there exist a contextual and methodological research gap. Hence this study aimed to answer the research question “what is the effect of debt financing on financial performance of manufacturing firms listed at the Nairobi Securities Exchange?”

## **1.2 RESEARCH OBJECTIVE**

To determine the effect of debt financing on financial performance of manufacturing firms listed at the Nairobi Securities Exchange.

## **2.0 METHODS**

The study adopted a descriptive research design. The population of the study were ten manufacturing firms listed in the Nairobi Securities Exchange. The study also used Secondary

data which consisted of published financial statements from manufacturing firms which was collected for the past 5 years, that is; from 2017 to 2021. The research used the model shown below;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

**Where:**

$\beta_1, \beta_2,$  and  $\beta_3$  is the relapse coefficient of the independent variables

Y = Financial performance

$\beta_0$  = Constant

$X_1$  = Debt financing

$X_2$  = Interest tax shield

$X_3$  = Liquidity

**3.0 RESULTS**

Pearson correlation analysis was carried out to examine the nature and direction of the relationship between independent variables (debt financing, interest tax shield and liquidity) and dependent variable (financial performance). To assess the association between the study variables Pearson Correlation (r) was used.

**Table 1: Pearson Correlation**

		<b>Interests</b>			
		<b>Debt Financing</b>	<b>Tax Shield</b>	<b>Liquidity</b>	<b>Financial Performance</b>
<b>Debt Financing</b>	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	150			
<b>Interest Tax Shield</b>	Pearson Correlation	.747**	1		
	Sig. (2-tailed)	.000			
	N	150	150		
<b>Liquidity</b>	Pearson Correlation	-.030	-.1150	1	
	Sig. (2-tailed)	.863	.430		
	N	150	150	150	
<b>Financial Performance</b>	Pearson Correlation	-.149	-.112	.430**	1

Sig. (2-tailed)	.386	.515	.009	
N	150	150	150	150

\*\*. Correlation was significant at the 0.01 level (2-tailed).

Table 1 shows that there exists a weak negative correlation between debt financing and financial performance ( $r=-0.149$ ;  $p= 0.386$ ) and the relationship was statistically insignificant since  $p > 0.01$ . It was further determined that there was a weak negative correlation between interest tax shield banks and financial performance ( $r= -0.112$ ;  $p= 0.515$ ) and the relationship was statistically insignificant since  $p>0.01$ . On the correlation between liquidity and financial performance it was determined that the relationship was positively medium and significant ( $r= 0.430$ ;  $p= 0.009$ ).

Simple linear regression was applied to establish a causal relationship between independent variables (debt financing, interest tax shield and liquidity) and dependent variable (financial performance).

### Table 2 Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	6752.721	106.357		63.491	.000
Debt Financing	-.002	.003	-.149	-.879	.386
Interest Tax Shield	-.092	.000	-.112	-.659	.515
Liquidity	.014	.005	.430	2.777	.009

a. Dependent Variable: Financial Performance

$R^2 = 0.982$ ;  $F(3, 146) = 1.678$ ;  $p = 0.204$ ;  $D-W = 1.717$

It was determined that there was an insignificant relationship between a combination of the independent variables (debt financing, interests tax shield and liquidity) and dependent variable (financial performance) ( $F(1, 34) = 1.678$ ;  $p = 0.204$ ) and they could explain 98.2% variation of financial performance ( $Adj R^2 = 0.982$ ). It was further determined that a unit increase in debt financing contributed to 14.9% decrease in financial performance but the relationship was insignificant, since  $p\text{-value} > 0.05$  ( $\beta = -0.149$ ;  $t = -0.879$ ;  $p = 0.389$ ). It was further determined that a unit increase in interest tax shield contributed to 11.2% decrease in financial performance but the relationship was insignificant, since  $p\text{-value} > 0.05$  ( $\beta = -0.112$ ;  $t = -0.659$ ;  $p = 0.515$ ). It was further determined that a unit increase in liquidity contributed to 43% increase in financial performance and the relationship was statistically significant, since  $p\text{-value} < 0.05$  ( $\beta = 0.430$ ;  $t = 2.777$ ;  $p = 0.009$ ).

## 4.0 CONCLUSION AND RECOMMENDATIONS

Based on the study analysis and findings, it was established that there is a weak negative and insignificant relationship between debt financing and financial performance as per the correlation

analysis. The study also concluded that an increase in debt financing would contribute to a decrease in financial performance of the listed manufacturing firms in Kenya. This contradicts tradeoff theory which supported the use of debt financing to improve financial performance. The conclusion was in sync with the pecking order theory, which puts priority on the retained earnings. This also contradicts the findings by Wambua (2019); Muiruri (2020) and Karuma, *et al.*, (2020)

The study also concludes that there was a weak negative and insignificant relationship between interest tax shield and financial performance of the firms based on the correlation analysis. The study also revealed that an increase in interest tax shield would contribute to decrease in financial performance of the listed manufacturing firms. This has been attributed to the fact that an increase interest tax shield contributes to increased debt in the capital structure which has a negative impact on the financial performance. This contradicts the assertion by Rasyid (2015), who opined that tax shield act as a “charge safeguard”

Unlike the other two determinants of financial performance, it was established that there was a positive average relationship between liquidity and financial performance of the listed firms. The study finally concluded that an increase in liquidity would contribute to an increase in financial performance of the listed firms, this can be attributed to the fact that increased liquidity enables firms to meet their financial obligations thus improving financial performance in the long run. This is in tandem with the conclusion by Githire and Muturi, (2015) and Chen and Strange (2015).

#### **4.1 RECOMMENDATIONS**

Based on the study findings and conclusions, the study recommends that managers of manufacturing firms should focus on satisfactory debt levels. That managers should formulate policies that will improve capital management practices and sustain accounts payable as this will improve return on assets. This will make manufacturing firms more attractive to investors. Further regulators such as Nairobi Securities Exchange and Capital Markets Authority and by extension ministry of finance should enforce regulations and rules on debt financing of the listed firms to avoid bankruptcy situations of the listed firms.

Based on the conclusion that improved liquidity significantly contributes to an improved financial performance, this study recommends that managers of listed manufacturing firms should ensure the liquidity of the firms is at the optimal level through implementing effective working capital management practices, for them to meet their debt obligations as they fall due. External stakeholders such as individual investors and investment banks tend to prefer firms with optimal liquidity levels.

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