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**ABSTRACT :** Financial restructuring has become a global concern over the years as very profitable firms have collapsed in the manufacturing sector. The study sought to assess the effect of capital restructuring on financial performance of listed manufacturing firms in Kenya. The study was anchored on Trade-off theory, life cycle theory and pecking order theory. Longitudinal research design was adopted on a population of all the eight manufacturing firms listed on Nairobi Securities Exchange in financial years 2012 to 2021. Data was collected using secondary data collection sheet from audited financial statements and annual reports. Panel data was analyzed using STATA. Simple linear regression was used to establish the relationship between capital restructuring and financial performance. Pearson's product moment correlation established a negative and significant relationship between capital restructuring and financial performance. The regression coefficient estimate of capital restructuring was ( $\beta =-0.266$ , t=-2.44, p value = 0.017). It was concluded that capital restructuring had a negative and significant effect on financial performance of listed manufacturing firms in Kenya. It was hence recommended that manufacturing firms ought to minimize on debt usage and also look for the optimal mix of debt and equity in order to drive financial performance in the desired direction.

**KEYWORDS** – *Capital restructuring, debt capital, financial distress, financial performance, manufacturing firms.* 

# INTRODUCTION

I.

Capital restructuring involves alteration of the organization's capital structure, that is mix of debt and equity in order to attain an optimal structure that maximizes the value of the firm, causes a rise in the earnings per share and obtains a balance between short term and long-standing borrowing. Short in addition to long-term debts are replaced by longer-term debt (Kanakriyah, 2020).

Capital restructuring has become an issue of global concern over the years as very profitable firms have collapsed over the years in manufacturing sector, service firms, commercial banks, retail chain of supermarkets due to inability to survive fierce competition forcing them to restructure their operations. Unfortunately, the timing of the restructuring might be too late resulting into non-improvement of the firms' affairs and thus consequent liquidation. Restructuring is relevant especially during periods of insolvency when a company is facing financial distress such that despite having a feasible business it is incurring losses (Kaur & Srivastava, 2017).

Most manufacturing firms have been failing as a result of undercapitalization and having excessive investment in fixed assets which turn out to be unproductive. Some of the firms have sold the unproductive assets, traded debt for equity shares however; they still experience problems of inadequate financing (Edevaldo, 2018).

Manufacturing firms, being a capital-intensive sector, require sufficient liquidity to purchase state of the art infrastructure and therefore, resort to listing in order to obtain equity financing which does not pose a repayment burden unlike debt financing. Capital restructuring has been used extensively to attain performance and to survive and is usually done when the present structures become unfit (Koh, Durand, Dai, & Chang, 2015).

# **1.1 Statement of the Problem**

Financial restructuring aims at attaining an optimal capital structure that ensures adequate stream of cash flows is available to be invested in portfolios that maximize returns. This therefore derives value for shareholders and thus maximize financial performance of firms. Despite adoption of various ways of financial restructuring by firms in the manufacturing sector, financial performance is still on a downward trend. In 2017, Eveready East Africa undertook portfolio restructuring through sale of assets worth 452 million and used the proceeds to settle debts and ensure continuity of operations. In financial period 2018/2019, the firm adopted 100% retention rate but still recorded a 24% decline in revenues and recorded losses amounting to Ksh.303 million(Capital Markets Authority, 2019). Mumias Sugar Company recorded losses amounting to over 6 Billion

in 2017 and Sh. 4.8 Billion in 2016. It was eventually placed under receivership in 2019 following continued losses despite efforts of restructuring. East African Breweries registered a 39% profit decline in 2020 from Kshs. 11.5 Billion to Kshs. 7 Billion. BOC Kenya recorded a declined profit of Sh. 14,574,000 in 2020 from Ksh. 19 million in 2019. Unga Group Ltd recorded 88% profit decline from Ksh. 544,814,000 in 2019 to Ksh. 66,161,000 in 2020 (Nairobi Securities Exchange, 2021). Researches done have majorly been on corporate restructuring. Studies on financial restructuring majored on SACCOs and commercial banks in Kenya and with those on manufacturing firms only done globally and not locally. Other studies have found mixed results on the effect of components of financial restructuring on financial performance with some getting positive and some negative relationship raising the question of what should be the ideal relationship should be. Based on the gaps, the study sought after assessing the effect of capital restructuring on financial performance of listed manufacturing firms in Kenya.

# 1.2 Objective of the Study

The study's main aim was to examine the effect of capital restructuring on the financial performance of Kenya's listed manufacturing firms.

# **II. LITERATURE REVIEW**

### 2.1 Theoretical framework

The theories guiding the study were pecking order, life cycle and trade-off theory.

# 2.1.1 Pecking Order Theory

The theory was hypothesized by Myers & Majluf, 1984. It argues that firms will have preference for internal sources of finance rather than external sources, that is equity or debt finances. The theory propounds that a firm has got three sources of finance, that is, internal finances, debt or issue of new shares. It is on the basis of pecking order theory that corporations rank their preferred source of funding with internal sources being the most preferred and therefore in circumstances that internal sources is not adequate a firm will go for debt financing with issuing new shares being the last option which is least preferred(Myers & Majluf, 1984). The theory is relevant in relation to financial restructuring as it guides the manufacturing firms on the priority that be followed in relation to financing projects for improved financial performance which is explained by the findings of the study that an increase in use of debt capital reduces financial performance.

# 2.1.2 Trade-Off Theory

This theory was propounded by Robichek and Myers (1966) who holds the view that firms are capable of having an optimal capital structure, which is as a result of weighing costs against benefits of using debt and equity financing. Given that, interest payments on debt obligations are tax deductible, and that debt involves less risk, debt financing is considered less costly than equity financing. The optimal level of financial leverage is attained where a balance between tax-shield interest and bankruptcy cost/ financial distress is realized. Since bankruptcy costs of a firm rise with increased debt, firms should identify a trade-off point beyond which they should not exceed. Firms maximize value by establishing and maintaining an optimal capital structure usually affected by taxes, that is, both corporate and personal (Khanqah & Ahmadnia, 2013). The theory provides direction to manufacturing firms which are funded by both debt and equity in determining the mix that does not compromise financial performance so as to offset bankruptcy costs and take advantage of tax deduction on interest on debt

# 2.1.3 Life Cycle theory

Lifecycle theory was hypothesized by Miller and Friesen (1984) and explains that a firm is characterized by four stages it undergoes during its lifetime that is, birth, growth, maturity and decline stages whereby the stages differ from each other in terms of characteristics and structure thereby affecting decision-making process in times of financial distress or threat of bankruptcy. When the firm finally enters decline stage, a firm does not have capability to generate enough funds and thus is limited in terms of investment opportunities (Miller & Friesen, 1984). Lenders will be unwilling to extend debt in order to survive distress as they are risky. Moreover, firms experiencing distress in maturity stage will not go for issuing equity as investors are unwilling to risk their investments and they are exposed to few investment opportunities (Kipelian, 2020). With many manufacturing firms facing financial distress the theory guides on the type of capital restructuring to undertake depending on the stage it is at in the lifecycle for it to stay afloat.

# 2.2 Empirical Review

Ajayi and Araoye (2017) investigated the effect of capital structure on the financial performance of manufacturing firms in Nigeria. The study used secondary data from financial reports of the firms between from periods 2008-2014. The study applied purposive sampling technique and selected a sample of ten manufacturing corporations. In determining the association amid the dependent and independent variable, panel data was used and analyzed using multiple regression. The findings of the study indicated that debt-equity ratio had a negative but statistically significant effect on return on assets, age of the firm had statistically insignificant negative effect on ROA and asset turnover had a significant positive effect on ROA. On the other hand, debt-equity ratio had a

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positive insignificant effect on ROE, asset turnover a positive and significant effect on ROE and age had a negative and statistically significant effect on ROE.

Ajibola, Wisdom, and Qudus (2018) carried out a study on the impact of capital structure on financial performance of Nigerian quoted manufacturing companies. Longitudinal design was used in the study. Secondary data was collected from a sample of 10 out of the targeted population of 84 manufacturing firms listed on the Nigerian stock market. The study used panel data analysis in analyzing data obtained from 2005 - 2014. The outcome of the study showed a positive and statistically significant relationship existed between long term debt ratio, total debt ratio and return on equity and an insignificant relationship between short-term debt and ROE. A negative and insignificant relationship was recorded between long term debt, total debt and short term debt ratio and ROA.

Ingow and Oluoch (2020) conducted a study to evaluate the effect of corporate restructuring on financial performance of SACCOs in Kenya. The study used a census study population of 35 urban SACCOs that were licensed in Kiambu County Out of all SACCOs in Kiambu county, the study used a sample of 35 of them whereby secondary data was from the financial statements and other financial documents was gathered in addition to primary data utilizing structured questionnaires. The study applied descriptive research design and data was analyzed using Statistical Package for the Social Sciences and Microsoft Excel. Positive and significant effect of capital structure on financial performance of SACCOs was the finding..

Ithuku and Mwangi (2020) conducted a study to establish the connection between capital restructuring and the financial performance of Kenyan-listed companies. The annual financial accounts of the companies were utilized to collect secondary data for the study's descriptive research approach, which covered the 10-year period from 2010 to 2019. Panel data from 48 listed firms was used. The study's findings revealed that debt to capitalization significantly and favorably affected financial performance.

Kahuko (2018) investigated on corporate restructuring and financial performance of Kenyan listed commercial and service firms. The study employed descriptive research design and a census study on the 10 commercial and service firms listed on the NSE. The study used secondary data collected from financial statements and recorded on data collection sheet from year 2011 to 2017. Data was analyzed using panel data regression analysis. The results of the study displayed that there is a negative relationship between capital restructuring and financial performance.

Kakiya (2019) conducted a study on the effect of financial leverage on profitability of listed manufacturing firms in Kenya. The study adopted descriptive research design whereby a target population of 10 manufacturing firms listed on the NSE was used and secondary information collected using data collection sheet between 2012 to 2017. A census study was carried out. Data collected was analyzed using descriptive and inferential statistics using SPSS 20. Pearson's correlation was used in determining the degree of association between dependent and independent variable. Multiple regression analysis was used in analyzing relationship between dependent and independent variable. The study found out a negative effect of short-term debt and equity ratio on profitability. Long-term debt had a positive significant effect on profitability of listed manufacturing firms.

Narang (2018) conducted a study on impact of capital structure on financial performance of firms listed on National Stock Exchange. Secondary information was gathered from the 2012–2017 annual reports of 20 listed manufacturing corporations. Data analysis was done using regression analysis, correlation and descriptive statistics. The study findings indicated a significant positive relationship between capital structure and firm performance.

#### **2.3 Conceptual Framework**

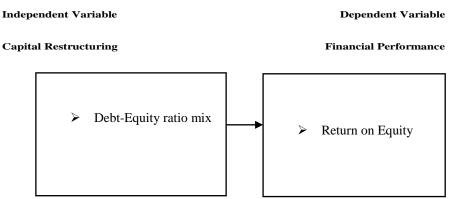


Figure 1: Conceptual Framework

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# III. RESEARCH METHODOLOGY

Longitudinal research design was adopted for the study The design was best suited as the study variables targeted at assessing the effect of financial restructuring on financial performance using repeated observations of listed Kenyan manufacturing companies without manipulation of the variables over a period of ten years, that is, 2012-2021. The study population composed of all the eight listed manufacturing firms in Kenya since whereby a census study was carried out.

### **3.1 Research Instrument**

Data collection sheet was used in collecting secondary data from audited financial statements. Information about short-term liabilities, equity, turnover, current assets, fixed assets, total dividends, net profit and long-term liabilities was extracted from financial statements between financial years 2012 to 2021 and debt-equity ratio, change in fixed assets to total assets ratio, dividend payout ratio and ROE generated.

### 3.2 Data Analysis and Presentation

Descriptive statistics consisted of mean, standard deviation, minimum value and maximum values. Inferential statistics comprised of Pearson's product moment correlational analysis and Hausman test for fixed and random effects in determining the association amid capital restructuring and financial performance. Diagnostic tests were conducted to ensure that the variables conformed to the assumptions of linear regression.

#### **RESULTS AND FINDINGS**

This section gives discussion of findings of both descriptive and inferential analysis. **4.1 Descriptive Statistics Results** 

#### Table 1: Descriptive Statistics

Variable	Obs	Mean	Standard Deviation	Min	Max
Capital Restructuring	80	0.5290001	0.2137152	0.0387492	0.9710592
Financial Performance	80	0.483148	0.2235959	-0.2176538	0.9519872

Capital restructuring was measured as a function of change in debt equity ratio. Eighty observations formed the target population. This was a function of eight listed manufacturing firms for a ten-year period, that is, from 2012 to 2021. Table 1 showed standard deviation of 0.2137152 was obtained which was less than the mean indicating that there was a wider variation in capital restructuring and that the data did not have outliers. A mean of 0.529 was recorded implying that manufacturing firms averagely had a debt-equity ratio of 0.529 meaning they used more of equity capital in financing operations. However, capital restructuring had a wide variation since some firms used fairly high debt in funding operations with maximum value of 0.971 whereas other incorporated comparatively lower debt, that is higher equity, with a minimum value of 0.03.

The manufacturing firms that incorporated relatively high debt in operations risked suffering insolvency due to the fixed regular repayments of interest on principal amounts borrowed which must be repaid regardless of whether the firm makes losses or not. Such firms will also be unattractive to investors as they will be highly indebted and thus depict alarmingly high gearing levels. On the other hand, manufacturing firms which ensured to use more equity financing will reap the benefit of having a permanent finance which attracts dividend payment only in years when profits are recorded and thereby rendering the manufacturing firms less risky. However, the use of more equity financing will lead to dilution of control due to existence of so many shareholders who hold stake in the ownership of the companies.

### 4.2 Correlation Analysis Results

Correlation coefficients were generated at 95% confidence level using Pearson's Product moment whereby coefficients close to one and -1 indicate strong positive and strong negative correlation. Correlation coefficient of above 0.7 among two ormore independent variables indicate presence of multicollinearity. A one tailed test was therefore done at 95% confidence level and any values above 0.05 are said to be insignificant. This therefore translates that an insignificant relationship exists for values above 0.05.

	ROE	CR
ROE	1.0000	
CR	-0.1943*	1.0000
	(0.0341)	

#### **Table 2: Pearson's Product Moment Correlation**

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Based on results in the above Table 2 the relationship between capital restructuring and financial performance was significant as a probability value of 0.0341 obtained which was less than 0.05 with coefficient of -0.1943 indicating that increase in debt capital changes financial performance in the opposite direction. The value in brackets is the p-value of the variable.

# 4.3 Fixed Effect Model

Fixed effect model is a statistical model whereby the values of independent variables are assumed to be fixed that is, constant and only the dependent variable changes in response to the independent variable levels. The fixed effect model assumes that individual-specific effects have an association with the independent variables. All time-invariant variations between the individuals are taken into account by the fixed-effects model, hence the estimated coefficients of the model cannot be prejudiced as a result of omitting time-invariant characteristics (Hill, Davis, Roos, & French, 2020). Table 3 indicates the results of fixed effect model. **Table 3: Fixed Effect Summary Results** 

Fixed-effects (within) regress					
Number of Groups =8R-sq:	Within=0.2296 Betw	veen=0.0625	Overall=0.2122	F(3,69) = 6.85	
$Corr (u_i, Xb) = -0.0603$	Prob>F =0.0004				
ROE	Coefficient	Std. Error	Т	p> t	
Capital restructuring	-0.2656499	.1089515	-2.44	0.017	
Cons	0.3770022	.0846091	4.46	0.000	

# 4.4 Random Effect Model

The random effects model is a statistical model that presupposes that there is no correlation between the predictor variables included in the model and the variation among entities are random (Oladugba , Amakor , Babatunde, & Nwogu-Ikojo, 2019). Random effect was conducted and the following regression coefficients generated as in Table 4.

### Table 4: Random Effect Model

ROE	Coefficient	Std. Error	Т	p>  <i>t</i>
Capital restructuring	-0.247321	0.1072883	-2.31	0.021
_Cons	0.3740434	.0803953	4.65	0.000

# 4.5 Hausman Test

Hausman test is a statistical test conducted to decide on the appropriate model between fixed and random effect for regression analysis. Fixed effects predict that each group and time will have a unique intercept in the regression equation (Baltagi & Liu, 2016). To test for model effect estimation, the hausman test was conducted to guide on selecting between fixed and random effect models in formulation of the regression equation.  $H_0$  is that random effect model is appropriate at significance level of 5%. Random effect is selected where probability value obtained is greater than 0.05 while fixed effect is settled for when p value is less than 0.05.

# Table 5: Hausman Test

	Coefficients					
	Fixed (b)	Random (B)	Difference(b-B)	Standard Error		
Capital restructuring	-0.2656499	-0.247321	-0.018328	0.0189643		
b = consistent under Ho and Ha $B = inconsistent$ under Ha, efficient under Ho						
chi2(3) = 27.14		Prob>chi2 =	0.0000			

Based on the results on Table 5 a chi-square value of 27.14 was obtained. The derived value of probability of the Chi square obtained was 0.0000 which is less than 0.05. The study therefore rejected the null hypothesis that the random effect model was appropriate. The alternative hypothesis adopted was that fixed effect was appropriate in analyzing the effect of capital restructuring on financial performance of listed manufacturing firms in Kenya.

Based on fixed effect, the following panel regression model was derived:

 $ROE_{it} = 0.377 - 0.266CR_{it}$ .....(3.1)

In absence of capital restructuring, financial performance would stand at 37.7%. A unit increase in debt capital decreases financial performance by 0.266 units. As indicated on table 3,  $R^2$  stood at 0.2122 signifying that capital restructuring explained 21.22% of the variations on Return on Equity.

### 4.6 Regression Analysis

Pearson's product moment correlation established a significant association between capital restructuring and financial performance with correlation coefficient of -0.1943 and p value of 0.0341. Regression results on Table 3 showed that capital restructuring had a significant effect on financial performance with regression coefficient of -0.267 and p value of 0.017. -0.267 point that when debt capital increases by one unit financial performance declines by 0.267 units. This means that as manufacturing firms borrows more debt capital to incorporate in operations, declined financial performance will be recorded. This is because debt capital increases the financing costs as predetermined amounts are accounted for as interest expense in the income statement thereby reducing profit levels and in turn decreasing the Return on Equity ratio. Moreover, over indebtedness increases the gearing levels of the firms thereby making the firm very risky and thereby discouraging any further investments into the firms. Probability value of 0.017 which is lower than 0.05 was obtained, indicating that financial restructuring had a significant effect on financial performance, as backed by t-statistic of -2.44 that is smaller in comparison to t-tabulated of -1.990. As a result, the study rejected the null hypothesis that capital restructuring had no significant effect on financial performance of listed manufacturing firms.

# V. CONCLUSIONS AND RECOMMENDATIONS

The results of this study show that capital restructuring negatively affects financial performance. The study therefore concluded that capital restructuring had a negative and significant effecton financial performance on listed manufacturing firms shown by regression  $\beta$  of -0.267 and p value of 0.017. Based on this outcome, it was suggested that the listed manufacturing firms ought to use internal sources of funding in financing their investments and reduce the use of debt capital as this negatively affects financial performance.

Descriptive statistics indicated that some manufacturing used a lot of debt capital in financing operations as shown by maximum value of 0.9710. It was therefore recommended that such manufacturing businesses ought to reshuffle their capital such that less debt is used so that the debt-equity ratio is low so as to reduce interest expense and thereby increase financial performance as finance costs would have reduced significantly and so would the riskiness of the firms. Moreover, this would lower the gearing ratio making the manufacturing firms attractive to investors.

Descriptive statistics indicated that some manufacturing used a lot of equity capital in financing operations shown by a minimum value of 0.0387. It was therefore recommended that such manufacturing firms should minimize the usage of equity as it has a disadvantage of dilution of control due to having many shareholders as well as the element of double taxation where the firm pays corporation tax on the net profits and shareholders taxed on dividend income earned.

It is also recommended that manufacturing firms should determine the optimal mix of debt and equity that maximizes financial performance so as to enjoy tax-shield caused by interest as it is deducted as an expense thereby reducing corporation tax and at the same time avoid bankruptcy cost/ financial distress caused by over indebtedness of the manufacturing firms. The study recommended that the firms should consider the stage they are in their lifecycle before undertaking capital restructuring since a firm at its birth stage cannot undertake debts in a bid to restructure its financial position, unlike a growth firm that may take up more debt to finance its investments.

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53 | Page

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