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**CAPITAL STRUCTURE AND FINANCIAL PERFORMANCE OF MANUFACTURING COMPANIES IN COAST
REGION, KENYA**

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CAPITAL STRUCTURE AND FINANCIAL PERFORMANCE OF MANUFACTURING COMPANIES IN COAST REGION, KENYA

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ABSTRACT

The study ascertained the influence of capital structure and financial performance of manufacturing companies in Coast region. The study employed both descriptive and quantitative research design. The sampling frame for the study comprised of 118 manufacturing companies located in Coast region. The sample size for the study comprised of 91 study participants and the period between 2018 and 2022 was covered. The participating firms were drawn from various manufacturing firms' categories which included, building, mining and constructions, chemical and allied, energy, electrical and electronics, food and beverages, leather and footwear, metal and allied, motor vehicle assemblers and accessories, paper and board, pharmaceutical and medical equipments, plastic and rubber, textile and apparel and lastly Timber, wood and furniture; excluding service and consultancy. Secondary data was mainly used and was gathered from financial statements, books, journals, articles and magazines, among others. The study used descriptive and inferential statistics in data analysis, gathered data was dissected using STATA version 14 and analyzed data was presented in form of tables. The study found that financial leverage, funds maturity, equity structure and liquidity management had a significant effect on financial performance. The study drew the inference that financial leverage facilitated firm growth by enabling firms to invest in revenue generating projects through debt capital. Debt also had tax saving benefits on interest payments which tended to favour long term fund maturity periods although the overall influence of funds maturity on firm financial performance was found to be weak but significant and positive. The study further concluded that changes in the equity structure lead to changes in the performance of the manufacturing firms as well as improvements on liquidity management lead to an improvement on firm performance. The study recommended that the management of the firms implement the most optimal leverage level in order to hedge against operational and bankruptcy risks. Proper mix of short term and long term funds maturity should be considered to minimise the cost of capital. An optimal equity structure is to be maintained which increases the growth potential of the firms. Liquidity ratios ought to be compared with industry standards and the variances analysed corrected. This study provided useful information on how manufacturing companies can complement Government's efforts in growing the economy and achieving the Kenya Vision 2030 development program.

Key Words: Liquidity Management, Equity Structure, Funds Maturity, Financial Leverage

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INTRODUCTION

A fitting capital structure is an essential decision for any company, because it can impact the return a business earns to its stockholders. A satisfactory capital structure of an organization assists with expanding the market cost of securities which, in this manner, prompts increase in the worth of the organization. Debt capital comes as advances or bonds, while equity capital alludes to preferred stock, normal stock and held profit. The debt to equity extent proportion is useful in laying out the peril of an organization's borrowing practices and thus it's going concern as well (Adeyemi & Oboh, 2020). A decent capital structure empowers a business venture to use the accessible funds completely; it guarantees the assurance of the monetary necessities of the business and raises the funds in such degrees from various sources for their most absolute utilization and at the very least expense of capital. The business enterprise is thus protected from over-capitalization and under-capitalization.

Globally, according to the United Nations Statistics Division (2022) China at 28.7 per cent global manufacturing output is the leading country in manufacturing, followed by the United States of America at 16.8 per cent global manufacturing output, the rest include Japan at 7.5 per cent global manufacturing output, Germany at 5.3 per cent global manufacturing output, India at 3.1 per cent global manufacturing output, South Korea at 3.0 per cent global manufacturing output, Italy at 2.1 per cent global manufacturing output, France at 1.9 per cent global manufacturing output, United Kingdom at 1.8 per cent global manufacturing output and Indonesia at 1.6 per cent global manufacturing output. Despite the contraction in manufacturing activity, it would be a mistake to conclude that manufacturing is dead or dying in the west, while China has a commanding lead in low tech areas such as textiles, apparel, and appliances, the United States has a larger share in high tech areas such as aircraft, special industrial machinery, and medical and scientific equipment. The challenge is to move

up the value chain, as the returns are much higher, which the Chinese manufacturers are attempting to do and it puts pressure on western firms to keep one step ahead. This requires a clear strategy; an understanding of customers' needs and a workforce which includes sufficiently skilled and flexible personnel and an optimal capital structure.

Kenya has an enormous manufacturing industry serving both the neighbourhood market and commodities toward the East African locale. The industry, which is overwhelmed by auxiliaries of worldwide enterprises, contributed around 14 per cent of the Gross Domestic Product (GDP) in 2021. Improved power supply, increased supply of agricultural products for agro processing, appropriate capital structure reforms, favorable tax reforms and tax incentives, more vigorous export promotion and liberal trade incentives to take advantage of the expanded market outlets through African Growth and Opportunity Act (AGOA), Common Market for Eastern and Southern Africa (COMESA) and East African Community (EAC) arrangements, have all resulted in a modest expansion in the sector of 1.7 per cent in 2021 in comparison to 1.4 per cent in 2020 (Nyabwanga *et al.*, 2022). The Customs Union provides Kenya more chances for development by making the most of the expanded market size, escalated intraregional trade and economies of scale.

The country's economic agenda seeks to expand the Gross Domestic Product (GDP) contribution of the manufacturing sector to 18 per cent by 2026. The Kenyan government is making progress toward being in step with the industrial revolution which is seen as the eventual fate of manufacturing. It is driven by the continuous mechanization of conventional manufacturing, modern practices, and utilizing present day savvy technology innovation. Kenya was stationed 110 out of 150 in the Competitive Industrial Performance Index Report (2022) by the Kenya National Bureau of Statistics, which benchmarks the capacity of Kenya to manufacture and export products competitively. The country was situated under Egypt (63) and

South Africa (50) yet drove East African partners with Tanzania (122) and Uganda (126).

Statement of the Problem

Kenya has a large manufacturing sector serving the local and international market. Improved power supply, appropriate capital structure reforms, favorable tax reforms and incentives, increased export promotion and free trade agreements have seen to the steady growth of the sector. For years the sector has been an underdog and has been dismissed with disregard to its earning potential. The manufacturing sector has made countries such as China and Japan grow into super powers and has the potential to turn Kenya from a developing country to a developed country and provide numerous employment opportunities to its citizens. Poor corporate governance on capital structure choices has influenced the privatisation of most state owned manufacturing companies due to inadequate performance such as Nzoia sugar and Chemilil sugar. Manufacturing companies are capital intensive and therefore capital structure choices on the ideal combination of equity and debt so as to increase firm net worth are essential.

The buy Kenya build Kenya initiative general goal is to build competitiveness and increase utilization of locally manufactured goods and services in order to increase the Gross Domestic Product (GDP). This has been necessitated by the increase in cheap imports from countries such as Egypt, India and China leading to the decrease of profit margins of Kenyan manufacturing firms. The manufacturing sector has been struggling to thrive and some firms have closed down due to issues such as miss management of funds, under capitalization, high leverage, increased input costs and poor capital management, these firms include Sameer East Africa, Proctor and Gamble, Pan Paper Mills and Eveready East Africa (K.N.B.S, 2022). Various studies have been undertaken on capital structure and financial performance giving varied results. These inconsistencies created a scholarly gap and gave a need to undertake an incisive examination on the subject matter.

Alshubiri (2021) inspected the sway of capital structure policies and leverage on Moroccan associations. The disclosures indicated a favourable relationship between the factors. Adelegan (2019) researched the effect of capital structure on firm funding choices and net worth in Ghana. The conclusion was that performance of the businesses was moderately positively impacted by capital structure. In studies carried out by Sivathaasan & Rathika (2020), Kaumbuthu (2020), Obim *et al.* (2020), Huizinga & Nicodeme (2021), capital structure has been demonstrated to be decidedly and altogether positively related to financial performance. Then again, scholarly literatures by Gonzales (2021), Ogundipe *et al.* (2020) and Velnampy (2020) show a significant adverse relation between capital structure and performance. Other scholarly studies carried out by Yazdanfar (2020), Abata & Migiro (2019) and Aburub (2020) discovered that capital structure has no influence on financial performance. These inconsistencies created a scholarly gap and gave a need to undertake an incisive examination on the subject matter.

Objectives of the Study

The general objective of the study was to establish the influence of capital structure on financial performance of manufacturing companies in Coast Region. The specific objectives of the study were:

- To ascertain the influence of financial leverage on financial performance of manufacturing companies in Coast Region.
- To find out the influence of funds maturity on financial performance of manufacturing companies in Coast Region.
- To establish the influence of equity structure on financial performance of manufacturing companies in Coast Region.
- To determine the influence of liquidity management on financial performance of manufacturing companies in Coast Region.

To achieve the objectives of this study the following five hypotheses were tested:

- H_01 : There is no significant relationship between financial leverage and financial performance of manufacturing companies in Coast Region.
- H_02 : There is no significant relationship between funds maturity and financial performance of manufacturing companies in Coast Region.
- H_03 : There is no significant relationship between equity structure and financial performance of manufacturing companies in Coast Region.
- H_04 : There is no significant relationship between liquidity management and financial performance of manufacturing companies in Coast Region.

LITERATURE REVIEW

Theoretical Framework

Trade off theory

The theory expressed that a firm chooses the best blend of equity and obligation to keep up with by measuring the costs like the expense of insolvency and agency cost and benefits such as the tax savings of debt (Alshubiri, 2021). The theory explained that firms are usually financed by both debt and equity capital and it states that there are advantages and expenditure to debt capital, such as tax advantages and the expense of financial distress. The marginal advantages of additional expansions in debt reduces as debt increases as the the marginal cost in debt soars, thus a company that wants to increase its value will consider the trade-off when deciding on the proportions of debt and equity capital (Brealey *et al.*,2020).

The optimal indebtedness and real may not be equal at any time, market frictions such as transaction costs and financial market imperfections can prevent instantaneous adjustment of the real debts at the desired level, for example, even small recapitalization costs could lead to large oscillations in the ratio of debt of a company over time while agency costs of debt influence the total cost of debt (Brooks, 2021). In

her model, Myers cited in Amalendu (2019) emphasized that the adjustment costs are not a prime interest in the context of the static trade-off theory and they were rarely mentioned, although adjustment costs exist and occur thus firms can not completely eliminate random events that deviate from the optimum indebtedness.

Miller and Modigliani theory

The concept of the Miller-Modigliani theory was that firm capital structure does not have any bearing on its worth; it champions the irrelevancy theory (Pandey, 2020). It suggested that firm worth is unessential to its capital structure, or at least, whether a business is exceptionally leveraged or humbly leveraged there is no impact on its fairly estimated worth, rather, the market worth of a business is exclusively dependent on the profits of the business (Okiro *et al.*, 2021). The first form of the theory was loaded with impediments as it was created under the assumption of entirely effective market, in which the organizations don't cover taxes, while there are no bankruptcy expenses or asymmetric information. Consequently, Miller and Modigliani fostered the second version of their hypothesis by including taxes, bankruptcy expenses, and asymmetric information (Rahman, 2020).

The first recommendation accepted that the market is completely efficient with the end goal that there are no transaction costs, no taxes, no share floatation expenses and information symmetry. The theory expressed that the worth of a leveraged firm which has extents of debt obligation and equity is equivalent to the worth of an unleveraged firm which is completely supported by equity, since there are no taxes a leveraged firm does not benefit from a tax shield (Adelegan, 2019). Companies can raise funds through bonds, loans, issuing of shares and by reinvesting their profits in their undertakings, the options that a firm chooses has no impact on its market value since firm value is derived as the present value of future cash flows (Song, 2020).

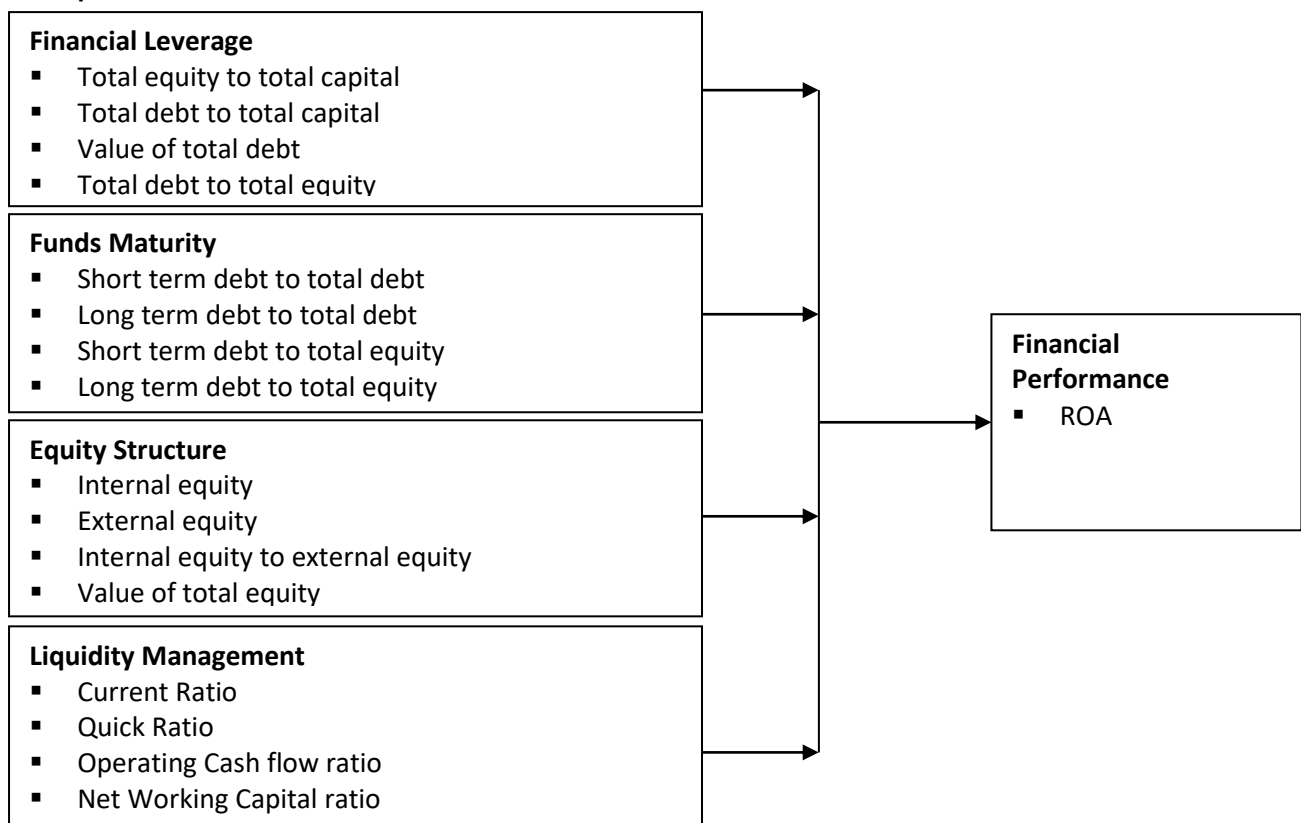
Pecking Order theory

It expressed that managers first use organization held profit to finance ventures, trailed by debt obligation and lastly equity financing (Hutchison *et al.*, 2019). It was based on the concept of asymmetric information whereby one party possess more data than the other and causes lopsidedness in exchange power. Managers frequently have more data about the association's financial position, risks and future prospects than debt holders and shareholders. In order to compensate for the information asymmetric debt holders and investors require a better yield to counter the gamble they have embraced (Kumar, 2020).

With regards to the theory, retained earnings financing reduced information asymmetry, unlike debt and equity financing in which firms must incur

cost to obtain, retained earnings were the cheapest and most convenient source of financing followed by debt and lastly equity. The issuance of obligation frequently flagged an underestimated stock and certainty that the administration accepts that the venture is beneficial (Akoto and Angmor, 2019). Then again, the raising of equity broods a negative message that the stock is exaggerated and the firm organization needs to get supporting by weakening shares in the firm. In the status of claims to resources, debtors require a lower return instead of investors since they are qualified for a higher claim to resources in case of bankruptcy, consequently the savviest wellsprings of funds is first from held profits, second from obligation, and third through equity (Murray, 2019).

Conceptual Framework



Independent Variables

Dependent Variable

Figure 1: Conceptual Framework

Review of Variables

Financial leverage

According to Diamond & Rajan (2021) financial leverage is the utilization of debt capital to secure an asset and investors may utilize financial leverage to enlarge their return on investment. Expecting that the worth of the asset increases and the financing cost on the debt obligation is underneath the development in the asset's worth, the proprietor of that asset will have a more prominent return. Nevertheless, if the value of the assets decreases, that means that the owner will have a greater financial loss. Organizations utilize a blend equity and debt to fund their undertakings, but they must generate a higher rate of return than the interest rates on their loans to maintain growth in profits (Yazdanfar, 2020). Companies that are less profitable and that have a less predictable income stream are subject to lose more when their assets decrease in value. They may have to pay higher interest rates on loans because their risk is greater. Financial leverage is a useful tool for companies that are profitable and can predict their income streams (Gitman, 2020). There are benefits of using financial leverage such as firms may make a relatively small upfront investment, firms may be able to purchase more assets through debt financing with the extra funds and firms can achieve super normal profits, while the draw backs include a chance that assets decline in value quickly and the financial losses may increase with financial leverage, greater operational risk for companies in industries like automobile manufacturing, construction and oil production and bankruptcy risk (Elliot, 2021).

The fundamental issue investigated in most cases in relation to capital structure is to ascertain to what extent firms should be financed with debt rather than equity. Modigliani and Miller hold that a firm's value is not influenced by how it is financed; whether by debt or equity (Huizinga & Nicodeme, 2021). However, Ebaid (2021) stated that leverage could be used as a metric for assessing managerial efficiency and can influence firm performance

positively, moreover it is beneficial to have an optimal mix of equity and debt as a lot of debt could lead to high interest costs, while a lot of equity brings about high monitoring costs; which consequently has a significant negative impact on the financial performance. A total debt to total equity ratio of greater than 2 indicates a highly leverage firm which causes investors to shy away from or require a greater return due to risk (Dimitrov & Jain, 2021).

Funds Maturity

Funds maturity is the date on which a liability becomes due for payment, depending on the period in which the debt remains outstanding, it can be categorised as long term which falls due in more than one year or short term which falls due in one year (Gill and Mathur, 2020). Different combinations of funds maturity impact organization financial performance in an unexpected way (Muchina and Kiano, 2021). Gonenc (2020) contended that organizations that utilized more limited maturity period obligation are probably going to have more growth choices in their venture opportunities. They thought that contention among investors and bondholders could prompt an underinvestment issue if long haul debt is given, as underinvestment disintegrates profits over the long haul, such conduct infers an antagonistic relationship between long term debt and performance. Gill and Mathur (2020) whose study showed an adverse connection between funds maturity and firm performance concurred with the results. This position was at fluctuation with the discoveries by Rahman (2020) who demonstrated a positive relationship between long term borrowing and firm profitability. He asserted that long term debt enabled the firms to avoid taxes and hence boost their profitability. A greater short term debt to total debt ratio indicates high working capital needs of the enterprise while a long term debt ratio to total debt indicates high investment needs of the firm. A long term debt to total equity ratio of greater than 0.5 indicates that the firm is financing

its investment more from debt capital rather than equity.

Equity structure

Equity capital is capital received for an interest in the ownership of a business. It is considered to be all components of the stockholders including retained earnings, par value of all stocks sold, additional paid in capital and repurchased shares (Robert, 2019). Equity structure is the combination of internally generated funds such as retained earnings and externally issued equity (Edim, 2021). Empirical studies on the manner in which the different sources of equity financing such as internal equity sources (for example retained earnings and reserves) and external equity sources (for example share holders capital) influences the firm's performance are based on the pecking order theory of capital structure. It asserts that administrators prefer internal funds over external funds (Goyal, 2021).

Carter (2020) conducted a study on Canadian firms with the objective of determining the way in which different sources of equity finance effect their growth levels over a six year period. Internal equity was represented by the ratio of retained earnings to assets while issued share capital to total capital was proxied by external equity and the growth level was determined by annual growth in returns. The findings conveyed that while internal equity expanded the growth rate, external equity was disadvantageous to the companies. The findings were in concurrence with those by Edim (2021) who stated that the utilization of internal equity is profitable to the business organizations. He depicted that firms with greater proportions of internal equity capital have a greater return per share than those with lower internal equity capital. The results however contradicted those by Song (2020) who stated that the sources of equity financing had no influence on firm value; while Obim *et al.* (2020) depicted that issued shares facilitated faster growth of the company than internally generated capital alone would allow.

Liquidity Management

Liquidity is fundamental for organization existence. It primarily affects monetary costs decrease or development, fluctuations in the sales dynamic, as well as it affects an organization risk level. The definitive meaning of liquidity implies that it is significant for organization improvement and simultaneously is one of the central endogenous variables which are answerable for organization market position. The meaning of liquidity to organization performance could prompt the end that it determines the profitability level of the organization and is essential for company growth. Liquidity is crucial for company development and one of the fundamental endogenous factors which are responsible for company market position. The significance of liquidity to company performance might lead to the conclusion that it determines the profitability level of company (Allen *et.al*, 2021). Rotich, (2020) noticed that liquidity management portrays the work of the financial managers to lessen liquidity risk exposure. It suggests transformation of resources into cash during the typical course of business and to have customary continuous progression of cash. The idea of liquidity in organizations has two aspects; quantitative and qualitative. The quantitative viewpoint incorporates the quantum, construction and usage of liquid resources. The qualitative viewpoint underscores upon the capacity of a firm to meet all present and expected requests on cash in a way that limit cost and boost the worth of the business.

A company in order to survive must remain liquid as failure to meet its compulsions in due time results in bad credit ratings, reduction in the value of reputation in the market and may ultimately lead to bankruptcy (Ghosh, 2020). Thus a good and firm liquidity management policy seeks to maintain adequate liquidity in order to meet its maturing obligations without diminishing profitability. Ikram *et al.* (2020) opines that liquidity management involves the efficient collection, disbursement and temporary investment in cash. Having liquid resources accessible comprises an opportunity cost for a firm, as the profit from those resources is

lower than the profit from productive investments, yet there might in any case be transaction costs arising from the sale or purchase of financial assets, and detriments concerning tax. An ideal cash balance implies a position where the firm can invest the surplus for a return profit and simultaneously have sufficient liquidity for future requirements. The object is to limit the aggregate fixed costs of transactions and the opportunity cost of holding cash (Ezeoha, 2022). Allen *et al.* (2021) used this insight to derive that firms' exposure to aggregate risk is observable; their model predicts that organizations with more prominent risk exposure ought to hold more money for their liquidity management, and that total money held ought to increment with the industrial risk levels. They likewise found that inefficient speculations happening as a result of overabundance cash are bound to happen when firms lack corporate governance.

Capital structure and Financial Performance

Financial performance is a measure of how efficiently an organization can utilize assets from its operations to produce revenue over a given period of time. It gauges the companies under takings in monetary terms (Feletiliki, 2022). Financial performance financial measurements include Return on Investment, Return on Equity, Return on Asset and Return on Capital Employed, while non financial measurements consist of firm competitive position and market share growth (Lumbasi, 2021). Return on Assets measures how well a firm utilizes its assets to produce profits, Return on Equity measures the net income divided by shareholders equity and indicates how well the firm is at generating returns on the funds received from its share holders, Return on Investment measures the efficiency and viability of an investment, it compares the initial capital invested and the returns to evaluate its efficiency and Return on Capital Employed measures the revenue generated from the company's capital (Diamond & Rajan, 2021). The study focused on Return on Assets as the primary financial measurement. Gladys (2019)

argues that regression analysis is the most common methodology of relating the measures of financial performance to variables determining financial performance. Other common tools used to establish relationship between performance and firm variables include descriptive statistics (includes tables of means, t-tests, tests of proportions, chi-square), correlation, analysis of variance, cluster and factor analysis. Investors measure overall company performance in order to be able to make right investment decisions, while the financial performance measures are assumed to be of primary interest to shareholders as they entrust their money to managers who are responsible for the application of capital but are more focused on profit maximization rather than share holders wealth maximization (Egbide *et al.*, 2019).

Capital structure decisions are essential to the financial position of the organization as they determine the best blend of obligation and equity that increases the net worth of the organization and reduces the expense of capital (Murray, 2019). The use of obligation in capital structure grows the profit per share as the interest on debt creates a tax shield, which results in growth of the share price, but a highly leveraged firm has a more prominent financial risk. Associations should keep an adequate capital structure which is in accordance with the investor's wealth maximization objective of the organization (Graham, 2020). Capital structure ensures that business enterprises adopt procedures that guarantee accountability on the part of management, aimed at improving organizational performance (Allen *et al.*, 2021).

Empirical Review

Empirical review is the quest for material on a topic under study. It involved an immediate inquiry of distributed works, including periodicals, and books that examines hypothesis and presents exact outcomes that are pertinent to the current study (Mark, 2020). This additionally implied analyzing all important data from the various sources, dissecting and remarking on the discoveries similarly as in the expressions of Gitman (2020), there is little point in

rehashing an already solved problem, the work that you do isn't done in a vacuum, yet thoughts of others who have studied and concentrated on the field before you. This requires you portray what has been published, and to marshal the data in a relevant and critical manner.

Ebimobowei (2020) carried out a study on Capital structure and performance of Nigerian firms, external equity to total equity ratio as one of the proxies of capital structure was used. He observed that there is a significant antagonistic relationship between external equity to total equity ratio and performance. The conclusion established was that internal equity is preferred and that an increase in internal equity to total equity ratio would increase performance of the Nigerian firms. Ogundipe *et al.* (2020) conducted a study on Capital structure, firm performance and market valuation in Nigeria. The study also focused only on the stock listed firms and it revealed that financial leverage a representative of capital structure had an adverse influence on performance. The corporations were seen to follow the pecking order theory.

Amalendu (2019) analyzed the significance of capital structure decisions and financial performance. 250 corporations in Ghana were analyzed and it was concluded that an ideal capital structure was essential in a firm. Lumbasi (2021) studied the capital structure management, evidence from power sectors in Kenya. His variables included financial leverage, funds maturity and liquidity management; he was able to discern that financial performance had a negative relationship to financial leverage and funds maturity, while it had a positive relationship to liquidity management. Ebaid (2021) investigated the influence of capital-structure choice on firm performance, based on 180 corporations. The study revealed a strong relationship between capital structure variables and firm performance variables which included Return on Capital Employed and Return on Investment. The study recommended that debt capital should be used with caution in order to avoid bankruptcy and ensure company going concern.

METHODOLOGY

The study employed a cross-sectional research design which is the most appropriate research design because data was collected among different manufacturing companies located in Coast Region at a single point in time. The target population of the study comprised of 118 manufacturing companies located in the Coast region which are stratified into twelve categories (K.A.M, 2022). The participating firms were drawn from various manufacturing firms' categories which included, building, mining and constructions, chemical and allied, energy, electrical and electronics, food and beverages, leather and footwear, metal and allied, motor vehicle assemblers and accessories, paper and board, pharmaceutical and medical equipments, plastic and rubber, textile and apparel and lastly Timber, wood and furniture; excluding service and consultancy. The contact persons were finance managers of the manufacturing companies. The 118 manufacturing companies operate in the twelve major categories. The sampling frame of the study constituted of 118 manufacturing firms stratified into twelve categories (K.A.M, 2022). The study employed multistage sampling technique to select the sample size, first stratified random sampling was used to sample the 118 manufacturing companies into twelve strata according to the Kenya Association of Manufacturers directory 2022, and then simple random sampling was used in selecting study participants from the stratified companies. Simple random sampling avoids biasness and gives every individual an equal opportunity to participate in the study. Proportional allocation was used to determine the size of each sample for different strata (Fraenkel & Wallen, 2021).

This study majorly employed secondary data collection methods. Secondary data was collected from financial statements, books, journals, articles and magazines among others. The study used a secondary data collection form. Once the secondary data was collected, data was crosschecked and verified for errors, completeness and consistency.

The study used both inferential and descriptive statistics and analysis of the panel data was carried out using STATA version 14. Analysis of variance and multiple linear regression analysis were computed to determine the statistical relationship between the variables and lastly data was presented using tables. The multiple regression model that was used in the study is as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Y- Is the dependent variable (Financial Performance)

β_0 =constant

β_i = regression coefficients (i=1, 2, 3, 4)

X₁- Financial leverage

X₂- Funds Maturity

X₃- Equity Structure

X₄- Liquidity Management

e- Error term

FINDINGS AND DISCUSSION

Descriptive Statistics

Table 1 shows the descriptive statistics for financial leverage (debt to equity ratio), funds maturity (short term debt to long term debt ratio), equity structure (internal equity to external equity ratio), liquidity management (current ratio) and financial performance (return on asset ratio).

Table 1: Descriptive Statistics

Statement	Obs	Mean	Std. Deviation	Min	Max
Return on Asset	455	0.1518	0.1097	-0.0114	0.3836
Financial leverage	455	0.5506	0.2660	0.2972	0.8925
Funds Maturity	455	0.2002	0.1876	0.0082	0.6068
Equity Structure	455	0.3183	0.1382	0.0043	0.6231
Liquidity Management	455	0.8062	0.6520	0.3289	1.2684

There were 455 observations from 91 manufacturing firms in Coast region covering a period of five years from 2018 to 2022. From the findings the Return on Asset among the 91 firms was 0.1518 and the standard deviation was 0.1097 with a minimum value of -0.0114 and a maximum value of 0.3836 implying that most firms maintained a sound ROA ratio. The financial leverage (debt to equity ratio) mean was 0.5506 and the standard deviation was 0.2660 with a minimum value of 0.2972 and a maximum value of 0.8925. Indicating that on average 0.55 of the firm's capital was from debt. Funds maturity (short term debt to long term debt ratio) mean was 0.2002 and the standard deviation was 0.1876 with a minimum value of 0.0082 and a maximum value of 0.6068. On average 0.20 of the firms funds liability matured within one year while 0.80 were long term that is greater than three years.

Equity structure (internal equity to external equity ratio) mean was 0.3183 and the standard deviation

was 0.1382 with a minimum value of 0.0043 and a maximum value of 0.6231. On average 0.32 of the firms utilized internal equity such as retained earnings to finance operations while 0.68 of the firms issued shares to increase capital for investment. Liquidity management (current ratio) mean was 0.8062 and the standard deviation was 0.6520 with a minimum value of 0.3289 and a maximum value of 1.2684. The ideal current ratio is between 1.2 to 2 which implied that the firm had 1.2 to 2 times more current assets to finance current liabilities, less than 1 indicates that the firm doesn't have enough liquid assets. While this is ideal, every industry is different and the firms must gauge themselves using the industry standards.

Correlation Analysis

The study established the strength of the relationship between the independent and the dependent variables. Pearson correlation coefficient was computed at 95 percent confidence interval. Table 2 illustrated the findings of the study.

The p-value for financial leverage was found to be 0.001 which was less than the significant level of 0.05, ($p < 0.05$), which meant it was significant. The result indicated that Pearson Correlation coefficient (r-value) of 0.995, which represented a strong, positive relationship between financial leverage and financial performance.

The p-value for funds maturity was found to be 0.006 which was less than the significant level of 0.05, ($p < 0.05$), which meant it was significant. The result indicated that Pearson Correlation coefficient (r-value) of 0.460, which represented a weak, positive relationship between funds maturity and financial performance.

The p-value for equity structure was found to be 0.008 which was less than the significant level of 0.05, ($p < 0.05$), which meant it was significant. The result indicated that Pearson Correlation coefficient (r-value) of 0.625, which represented a moderate, positive relationship between equity structure and financial performance.

The p-value for liquidity management was found to be 0.000 which was less than the significant level of 0.05, ($p < 0.05$), which meant it was significant. The result indicated that Pearson Correlation coefficient (r-value) of 0.980, which represented a strong, positive relationship between liquidity management and financial performance.

Table 2: Correlation

		Financial Performance	Financial Leverage	Funds Maturity	Equity Structure	Liquidity Management	
Financial Performance	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	24					
Financial Leverage	Pearson Correlation	.995*	1				
	Sig. (2-tailed)	.001					
	N	24	24				
Funds Maturity	Pearson Correlation	.460*	.349**	1			
	Sig. (2-tailed)	.006	.001				
	N	24	24	24			
Equity Structure	Pearson Correlation	.625*	.526**	.595**	1		
	Sig. (2-tailed)	.008	.000	.000			
	N	24	24	24	24		
Liquidity Management	Pearson Correlation	.980*	.450**	.638**	.448**	1	
	Sig. (2-tailed)	.000	.000	.000	.000		
	N	24	24	24	24	24	24

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

* . Correlation is significant at the 0.05 level (2-tailed).

Regression Analysis

Coefficient of Determination

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.802 ^a	.643	.628	.36211

0.643 was found to be the coefficient of determination. The correlation coefficient was 0.802 which showed a positive correlation between observed and predicted values of dependent and independent variables. Table 3 above showed the findings of the study.

Regression Coefficients

Regression analysis was used to measure the significance of the association between the independent and dependent variable.

Table 4: Regression Coefficients

ROA	Coef.	Std. Err.	z	P> z	(95% Conf. Interval)	
Constant	12.513	1.964	11.974	.000	14.207	3.879
Financial leverage	.686	.169	2.153	.025	.0345	.2364
Funds Maturity	.330	.209	2.273	.012	.1245	.0038
Equity Structure	.559	.135	2.560	.000	.2281	.1164
Liquidity Management	.861	.149	2.450	.000	.2367	.1233
R-squared	.6432					
Wald Chi2(4)	105.82					
Prob>chi2	0.0000					

0.6432 was the coefficient of determination which meant that the independent variables explained 64.32% of the variation of the dependent variable. Table 4 above showed the findings of the study. The *p-value* was found to be 0.000 which is less than 0.05; this indicated that the overall regression model was useful for prediction purposes at 5% significance level. According to the results while holding all factors constant, the change in financial performance was 12.513. Further, a one unit change in financial leverage lead to 0.686 unit change in financial performance, a one unit change in funds maturity lead to 0.330 unit change in financial performance, a one unit change in equity structure lead to 0.559 unit change in financial performance and a one unit change in liquidity management lead to 0.861 unit change in financial performance. Based on the findings of the study, the regression equation model for the study was:

$$Y=12.513+0.686X_1 +0.330X_2 +0.559X_3+0.861X_4$$

Where,

Y= Financial performance

X₁= Financial leverage

X₂= Funds maturity

X₃= Equity structure

X₄= Liquidity Management

From the findings, the *p-value* for financial leverage was found to be 0.025 which was less than the significant level of 0.05. A one unit change in financial leverage would lead to 0.686 unit change in performance which was crucial. These findings were in agreement with Ebaid (2021) discoveries that most of the Egyptian Manufacturing firms leverage levels were high leading to large interest payments which increased the cost of capital without significant returns for the assets; this meant that keeping the leverage levels ideal helped the firm to hedge against the risk of bankruptcy and

operational risk. The p-value for funds maturity was found to be 0.012 which was less than the significant level of 0.05. A one unit change in funds maturity would lead to 0.330 unit change in financial performance which was still material and note worthy, these findings were consistent with Chisti *et al.* (2021) that funds maturity had a significant and positive relationship with financial performance of the Indian Firms. The p-value for equity structure was found to be 0.000 which is less than the significant level of 0.05. A one unit change in equity structure would lead to 0.559 unit change in financial performance which was noteworthy; these findings were in line with Edim (2021) that by maintaining the equity structure at ideal levels firms

were able to reduce the cost of capital and in turn increase firm value. The p-value for liquidity management was found to be 0.000 which was less than the significant level of 0.05. A one unit change in liquidity management would lead to 0.861 unit change in financial performance which was crucial. The findings were in line with (Allen *et.al*, 2021) argument that liquidity is crucial for company development and one of the fundamental endogenous factors which are responsible for company market position. The significance of liquidity to company performance leads to the conclusion that it determines the profitability level of company.

Hypothesis Testing

Table 5: Summary of Hypothesis test results

Hypothesis	P-Values	Decision
There is no significant relationship between financial leverage and financial performance of manufacturing companies in Coast Region.	.025	Rejected
There is no significant relationship between funds maturity and financial performance of manufacturing companies in Coast Region.	.012	Rejected
There is no significant relationship between equity structure and financial performance of manufacturing companies in Coast Region.	.000	Rejected
There is no significant relationship between liquidity management and financial performance of manufacturing companies in Coast Region.	.000	Rejected

The study variables were found to be significant since their significant values 0.025, 0.012, 0.000 and 0.000 respectively were less than the p-value (0.05), thus the null hypotheses were rejected as detailed on table 5.

CONCLUSION AND RECOMMENDATIONS

Summary of Findings

The study found a positive and significant influence of financial leverage on firm performance. There were benefits of using financial leverage such as firms may be able to purchase more assets through debt financing with the extra funds and firms can achieve super normal profits, while the draw backs included a chance that assets decline in value quickly and the financial losses may increase with financial leverage due to higher interest payments

in respect to returns, there were greater operational risk for companies in industries like automobile assemble, construction and oil production as well as bankruptcy risk.

The study found a positive and significant influence of funds maturity on performance. Long term debt enabled the firms to avoid taxes and hence boost their profitability, while thought has to be given to potential investors as the contention among investors and bondholders could prompt an underinvestment issue if long haul debt is given, as underinvestment disintegrates profits over the long haul, such conduct infers an antagonistic relationship between long term debt and performance. Some investors favored a more prominent level of short term funds maturity to

long term as short term funds do not require much security and consequently no lawful case on guarantee.

The study found a positive and significant influence of equity structure on performance. The study depicted that issued shares facilitated faster growth of the company than internally generated capital alone would allow. Although most firms preferred a greater proportion of internal equity to external equity in their structure as retained earnings are the cheapest and most convenient source of financing followed by debt and lastly equity. It was tracked down that using the most cost effective source of funds decidedly affected performance.

The study found a positive and significant influence of liquidity management on performance. A company in order to survive must remain liquid as failure to meet its compulsions in due time results in bad credit ratings, reduction in the value of reputation in the market and may ultimately lead to bankruptcy. Thus a sound liquidity management policy seeks to maintain adequate liquidity in order to meet its maturing obligations while taking into consideration the opportunity cost.

Conclusion

Financial leverage had a significant effect on performance and it facilitated firm growth by enabling firms to invest in revenue generating projects through debt capital. A sound business credit enabled firms to acquire low cost, long term debt financing and enabled a firm to be considered for debt restructuring when times are tough. The level of debt should be kept at an optimum level to hedge against bankruptcy risk and enhance firm going concern. Debt also had tax saving benefits on interest payments which tended to favour long term fund maturity periods although the overall influence of funds maturity on firm performance was found to be weak but significant and positive.

The study concluded that equity structure had a positive and significant effect on financial performance. This implied that changes in the equity structure lead to changes in the performance

of the manufacturing firms. The study further concluded that liquidity management had a positive and significant influence on the financial performance of the manufacturing firms in Coast region, implying that improvements on liquidity management lead to an improvement on firm performance.

Recommendations

Based on the findings, the study recommended that the management of the firms implement the most optimal leverage level in order to hedge against operational and bankruptcy risks. Proper mix of short term and long term funds maturity should be considered to minimise the cost of capital. An optimal equity structure is to be maintained which increases the growth potential of the firms. Liquidity ratios ought to be compared with industry standards and the variances analysed corrected.

At the policy level, the study recommended that the manufacturing sector should set up capital structure policies that maximises the value of the firm while minimizing its cost of capital. The basic principles of corporate governance which included accountability, transparency, fairness, responsibility and risk management should be the bench mark of the organizations. Measures should be taken to mitigate other factors affecting firm performance such as high energy costs, lack of access to funds, lack of automation, high cost of technology, shortage of skilled workforce and lack of market for goods. Idle time should be reduced to boost capital productivity. Policies to be set up that facilitate credits from monetary establishments by having guarantees to be utilized to get advances. Internal controls to be set up in order to mitigate mismanagement of funds. Proper and complete records to be maintained and generally accepted accounting principles to be adhered

Areas for further Research

Future research should investigate generalization of the findings beyond the manufacturing sector. 0.6432 was found to be the coefficient of determination indicating a positive association between the variables. This meant that the

independent variables explained 64.32% of the variation of the dependent variable thus further research should be undertaken on other factors affecting financial performance in relation to capital structure such as inflation, tax shield and profitability.

Additionally, findings on capital structure practices could be used as the basis for specific and detailed research into every separate aspect of financial management practices in Kenya such as financial reporting and analysis, working capital management, fixed asset

management, capital budgeting and for financial planning. The model of financial performance developed in this study could be applied as the basis for the further research on building competitive strategies for the manufacturing firms. This research study was limited to data collected from only 91 manufacturing companies in Coast region. Therefore, there is need for other researchers to consider different sample sets so to take into consideration the different industries and operating environment. This will allow for comparison between the results of the different studies.

REFERENCE

- Abata, M. A., & Migiro, S. (2019). Capital structure and firm performance in listed Nigeria firms. *Journal of Economics*, 5(2), 50-70.
- Abor, J. (2019). The impact of capital structure on firm profitability: A study of listed companies in Nigeria. *The Journal of Finance*, 6(5), 436-440.
- Aburub, N. (2020). Capital Structure and Firm Performance: Analysis of Palestine stock exchange. *Journal of Banking*, 23, 100-120.
- Abor, J., & Quartey, P. (2021). Issues in Manufacturing Development in Ghana. *International Research Journal of Economics*, 40(1), 98-110.
- Adekunle, A., & Sunday, O. (2020). Capital Structure and Firm Performance: Evidence from Nigeria firms. *European Journal of Administrative Sciences*, 25, 71-80.
- Adelegan, J. (2019). Influence of Capital structure on firm financing decisions and firm value in Ghana. *Journal of Finance and Economics*, 12, 180-210.
- Adeyemi, B., & Oboh, C. (2020). Implied relationship between firm Capital structure and Firm Value in Nigeria. *Journal of Business*, 2(19), 121-133.
- Akoto, R., & Angmor, P. (2019). Capital Structure and Financial Performance: Evidence from manufacturing companies in Ghana. *Journal of Finance*, 5(9), 300-330.
- Alcock, M., & Steiner, J. (2020). Inflation, capital structure, and risk-adjusted firm performance. *Journal of Economics*, 53(2), 270-290.
- Allen, G., Carletti, B., Migiro, S. & Marquez, M. (2021). Market Competition, Capital Structure and Liquidity management. *Journal of Financial Studies*, 11(12), 10-18.
- Alshubiri, N. (2021). Review of the relationship between Capital structure policies, Financial leverage and Operating risks: Evidence from Moroccan industrial firms. *Business Journal*, 50, 1-15.
- Amalendu, I. (2019). Significance of Capital structure decisions and Financial performance. *Asian Journal of Business Management*, 3, 108-118.
- Bakur, M., & Kumar, J. (2020). Market Timing and Capital Structure. *Journal of Finance*, 57(1), 1–32.

- Brooks, R. (2021). *Financial Management*. (2nd ed.). London: Pearson Educational Limited.
- Brealey, A., Myers, C., Steiner, J. & Allen, F. (2020). *Corporate Finance*. Ringwood, Vic.: Penguin.
- Bryman, A. B. (2020). *Business research methods*. New York: Oxford University Press.
- Carter, K. E. (2020). Equity structure, funds maturity & financial leverage: Evidence from Canadian firms. *Accounting Horizons*, 3(9), 300-328.
- Chen, J. (2020). Determinants of Capital Structure of Listed Companies in Japan. *Journal of Business*, 57(12), 1345-1355.
- Chisti, A., Ali, K., Capon, M. & Sangmi, I. (2021). Effect of capital structure on profitability: Empirical study of Indian firms. *Journal of Economics and Public Administration*, 13(17), 185-190.
- Coasta, V. (2019). Determinants of corporate financial performance. *Journal of International Money & Finance*, 15(6), 120-135.
- Cooper, R.D. (2020). *Business Research Methods*. New Delhi: Tata Mcgraw-Hill. Damilila, D. A. (2019). *Corporate Finance: Financial leverage, funds maturity and Applications*. Lagos: Rise Publications.
- Diamond, D.W., & Rajan, R.G. (2021). Capital Structure Theories. *The Journal of Business Finance*, 55(6), 2430-2480.
- Dimitrov, W., & Jain, S. (2021). Financial Leverage. *The Journal of Economics*, 5(3), 405-419.
- Douma, T., George, N., Farley, K. & Kabi L. (2020). Domestic and foreign ownership and firm performance: Analysis of a large emerging market. *European Journal of Business*, 4(3), 5-21.
- Ebaid, E. (2021). The influence of capital-structure choice on firm performance: Empirical study of Egyptian firms. *The Journal of Risk and Finance*, 47(3), 56-76.
- Ebimobowei, A. (2020). Capital structure and performance of Nigerian stock exchange listed firms. *Research Journal of Accounting*, 4(5), 2222-2247.
- Edim, O. (2021). The relationship between equity structure and firm's performance: Empirical evidence from Ghana. *Journal of Sustainable Economic Development*, 7(9), 300-320.
- Egbide, C., Uwuigbe, P., Hoeni, T. & Uwalomwa, W. (2019). Asset Structure and Profitability of Manufacturing Companies in Nigeria. *Journal of Risk Finance*, 9 (1), 15-25.
- Elliots, W. (2021). The importance of financial leverage in financial profitability. *Journal of Management*, 11 (12), 2 -18.
- Ezeoha, E. (2022). Firm size, liquidity management and financial-leverage choice in a developing market economy: Empirical study of Nigerian firms. *The Journal of Business Administration*, 9(4), 350-365.
- Fama, E., & Fench, L. (2019). Trade-Off Theory and Pecking Order Theory analysis of Debt Capital. *Journal of Financial Studies*, 4(6), 100-115.
- Feletiliki, M. (2022). *The effect of capital structure on performance of manufacturing firms listed in New Zealand stock exchange*. : Penguin Press.
- Fraenkel, R., & Wallen, E. (2021). *How to evaluate research*.: McGraw Hill education.
- Ghosh, S. (2020). Liquidity management and firm performance: Empirical evidence from Indian business groups. *Applied Financial Economics*, 18, 125-145.

- Gill, A. B., & Mathur, N. (2020). The Relationship between funds Maturity and Profitability: Empirical evidence from the United Kingdom. *Journal of Business Studies*, 10, 1-9.
- Gitman, L. A. (2020). *Principles of Managerial Finance*. New York: Addison Wesley Publishers.
- Gladys, M.W. (2019). *Determinants of financial performance of manufacturing firms in Kenya*. Ph.D thesis.: Jomo Kenyatta University of Agriculture and Technology.
- Gonenc, B. (2020). Evaluation of debt financing between domestic and international companies. *International Journal of Finance*, 11, 49-68.
- González, V. M. (2021). Leverage and corporate performance: International evidence. *International Review of Economics*, 12(9), 216-236.
- Gonzalez, R., Lopez, J., Mathur, N. & Saurina, J. (2020). Determinants of access to external finance: Evidence from Spanish firms. *International Journal of Finance and Managerial Economics*, 42(4), 55-75.
- Goyal, V.R. (2021). Dissecting the pecking order theory of capital structure. *Journal of Economics*, 67 (2), 217-248.
- Graham, R. (2020). Tax shield benefits of debt capital. *The Journal of Business*, 55, 1901-1931.
- Huizinga, N., & Nicodeme, H. (2021). Capital structure and debt shifting. *Journal of Economics*, 15(21), 190-210.
- Hutchison, P. D., Farris, M. T., Jermias, J. & Anders, S. B. (2019). *Equity Structure Analysis and Financial Management*, 77 (8), 42 – 47.
- Ikram, H., Khalid, Z., Zuher, M. & Zaheer, A. (2020). The Relationship between Liquidity management and Firm Profitability: Empirical study of cement firms in Kajiado County. *Journal of Business Management*, 2 (2), 10-18.
- Iraya, B., & Jackson, N. (2021). Performance of Screened Portfolios at the United States of America Securities Exchange. *International Journal of Social Science*, 3 (6), 80-90.
- Javed, D., & Akhta, S. (2021). Correlation between capital structure, firm size and financial performance. *European Journal of Management*, 4(15), 140-158.
- Jermias, J. (2021). The Influence of Business Competitive Intensity and Strategy on Financial Leverage and Firm Performance. *British Journal of Accounting*, 3(40), 70-88.
- K.A.M. (2022). *Manufacturing in Kenya: Survey of Kenya's Manufacturing Sector- 2022*. Nairobi: Kenya Association of Manufacturers.
- Kaumbuthu, M. (2020). *Relationship between Capital Structure and Return on Equity for Industrial Sectors in the Nairobi Securities Exchange*. Unpublished MBA project. Jomo Kenyatta University of Agriculture and Technology.
- Kihara, A. (2021). *Impact of strategic contingencies on financial performance of Manufacturing Firms in Kenya*. Ph.D thesis.: Jomo Kenyatta University of Agriculture and Technology.
- K.N.B.S (2022). *Competitive Industrial Performance Index Report- 2022*. Nairobi: Kenya National Bureau of Statistics.
- Kothari, D.P., & Umeshkumar D. A. (2019). *Quantitative techniques in Business management*.: London press.

- Kumar, M. (2020). The determinants of capital structure choice. *Manufacturing in East Africa*, 13, 495-514.
- Lumbasi, J. A. (2021). *Capital Structure management: Empirical study of power sectors in Kenya*. Ph.D thesis.: University of Nairobi.
- Mark S. (2020). *Research methods for business studies*.: Person Press.
- Muchina, S., & Kiano, E. (2021). Influence of Capital Structure Management on Firm Profitability: A Case of Listed Manufacturing Companies in Kenya. *International Business Management*, 5 (5), 275-285.
- Murray, F. (2019). Trade-off Theory and Pecking order Theory of Capital Structure. *Journal of Corporate finance*, 5(9), 90-120.
- Nyabwanga, N., Ojera, P., Otieno, S., & Nyakundi, N. (2022). Analysis of Debt, Solvency and Financial performance of manufacturing companies in Kisii County, Kenya. *Journal of Social Studies*, 5 (9), 1 -25.
- Obim, N., Anake, F., Rash, H. & Awara, F. (2020). Relationship between Equity Structure and Company Performance. *Journal of Management*, 5(27), 78–87.
- Ogundipe, E., Idowu, A., Wasonga, F. & Ogundipe, O. (2020). Capital structure, firm performance and market valuation in Nigeria. *Handbook of Science and Technology*, 50(1), 1192-1200.
- Okiro, K., Aduda, J., Oduor, L. & Omoro, N. (2021). Influence of Corporate Governance and Capital Structure on performance of Firms Listed at the Nairobi Securities Exchange. *Applied Financial Economics*, 11(7), 505–535.
- Ovtchinnikov, A. (2020). Capital Structure Decisions. *Applied Financial Economics*, 25, 249-274.
- Pandey, I. M. (2020). *Financial Management*. (10th ed.). New Delhi: Vikas Publishing House Pvt. Limited.
- Rahman, M. M. (2020). Funds Maturity and Profitability: A Case Study on Textile Industry. *ASA University Review*, 5 (1), 115-135.
- Robert, M. (2019). *Impact of Capital Structure on financial distress of non- financial firms*. Empirical evidence from Kenya. Ph.D thesis.: Jomo Kenyatta University of Agriculture and Technology.
- Rotich, J. (2020). *Interrelationship between Firm Size, liquidity management and Financial Performance of companies Listed at the Nairobi Securities Exchange*. Ph.D thesis.: University of Nairobi.
- Ross, S. (2021). *Contemporary issues affecting Financial Management*. New York: Mcgraw-Hill.
- Saeedi, A., & Mahmoodi, I. (2021). Capital Structure and Firm Performance: Empirical study of Iranian firms. *Journal of Finance and Economics*, 70(7), 20-30.
- Sivathaasan, N., & Rathika, S. (2020). Capital structure and Return on Investment: An Empirical study of institutions listed on Colombo Stock Exchange in Sri Lanka. *European Journal of Business*, 5(14), 69-73.
- Song, H. (2020). Capital Structure Determinants : an Empirical Study of Swedish Companien. *Doctoral dissertation*. Stockholm: The Royal Institute of Technology.
- Steward Redqueen. (2022). *Manufacturing Africa*. Retrieved 02 February, 2022 from <http://www.stewardredqueen.com>
- United Nations Statistics Division. (2022). *Global Manufacturing output*. United States: United Nations Statistics Division.

- Velnampy, T. (2020). Leverage and firm performance: Evidence from Sri Lankan Manufacturing firms. *Journal of Sustainable Economic Development*, 3(3), 225-235.
- Voulgaris, K. (2019). Capital structure, asset utilization, profitability and growth in the United States manufacturing industry. *Journal of Applied Sciences*, 34, 1375-1390.
- Voulgaris, K., Asteriou, E., Velnampy, T. & Agiomirgianakis, L. (2021). Financial leverage, profitability and growth in the Greek manufacturing sector. *Journal of Applied Economics*, 34(11), 1380-1400.
- Yazdanfar, D. (2020). Debt financing and firm performance: an empirical study based on Swedish manufacturing firms data. *International business research*, 18(1), 17-25.