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EFFECT OF CAPITAL MIX ON THE FINANCIAL PERFORMANCE OF MANUFACTURING COMPANIES IN RWANDA

A CASE STUDY OF BRALIRWA PLC

PERIOD:2020-2023

A Dissertation submitted to the School of Economics and Business Studies in partial fulfillment of the requirement for the award of a Bachelor's Degree with honors in Accounting.

BY:

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Kigali, October,2024

DECLARATION

I, ALLELUYA JABO JACQUES hereby declare that the presented work on the “Effect of capital mix on the financial performance of manufacturing companies in Rwanda a case study of BRALIRWA PLC period:2020-2023 ”; is an original work, to the best of our knowledge, no work of the same kind has ever been presented before, in any University or institute of higher education.

ALLELUYA JABO JACQUES

Signature……

Date……/……/2024

APPROVAL

We hereby certify that this work entitled “Effect of capital mix on the financial performance of manufacturing companies in Rwanda a case study of BRALIRWA PLC period:2020-2023”; has been conducted by ALLELUYA JABO JACQUES under our supervisor and guidance.

Signature…….

Date ……/……/2024

Name of supervisor: **NSENGIYUMVA Jacques**

DEDICATION

ALLELUYA JABO JACQUES

To:

My Families,

Colleagues'

brothers and sisters,

ACKNOWLEDGEMENTS

First and foremost, we would like to acknowledge the Almighty God who unceasingly provides us strength to go and makes everything happen. Had it not been the special grace from the merciful God, we would not have been able to become whom we are today. So, praises and Glory to Him from the deepest bottom of our heart forever and ever.

We would like first of all to extend our gratitude to the mind behind the establishment of a great institution of high learning ULK, especially **Professor Dr. RWIGAMBA Balinda** the founder of ULK.

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Fellow students for moral, academic support and encouragement, to our respondents of this study, please thank you for the cooperation during our interactions with you, sincere appreciation to all relatives and friends.

May God bless you all!

ALLELUYA JABO JACQUES

LIST OF ABBREVIATION

AFR :African Financial Review

CAPM : Capital Asset Pricing Model

CFO :Chief Financial Officer

CPI : Consumer Price Index

EBIT : Earnings Before Interest and Taxes

EPS : Earnings Per Share

FCF : Free Cash Flow

GDP : Gross Domestic Product

IRR :Internal Rate of Return

KPI :Key Performance Indicator

LTV : Loan-to-Value Ratio

NPV : Net Present Value

P&L : Profit and Loss Statement

ROA : Return on Assets

ROE : Return on Equity

ROI : Return on Investment

S&P : Standard & Poor's (index)

SEC : Securities and Exchange Commission

SG&A :Selling, General and Administrative Expenses

SME : Small and Medium Enterprises

SOX :Sarbanes-Oxley Act

TQM : Total Quality Management

ABSTRACT

The financial performance of manufacturing companies is significantly influenced by their capital mix, which refers to the mix of debt and equity financing. This study investigates the effect of capital mix on the financial performance of BRALIRWA PLC, a leading beverage manufacturer in Rwanda, over the period from 2020 to 2023.The primary objective of this research is to analyze how different components of capital mix namely equity and debt—affect key financial performance indicators such as return on assets (ROA), return on equity (ROE), and profit margins within BRALIRWA PLC. A quantitative research approach was employed, utilizing financial data from BRALIRWA PLC's annual reports and industry benchmarks. Statistical tools were applied to assess relationships between capital mix ratios and financial performance metrics. In our findings, we observed the increase in capital mix of BRALIRWA PLC from -8.5% in 2020 to 23.1% in 2023, equity ratio was decreased also from 20.1% in 2020 to 12.4% in 2023; the interest coverage ratio was increased from 3.2% in 2020 to 3.5% in 2023;the debt ratio was increased from -22.8% in 2020 to 29% in 2023;retained earning was increased from decreased from from 29.2% in 2020 to 14.3% in 2023,the return on assets was increased from 7.0% in 2020 to 15.3% in 2023,the profit margin ratio increased from 8.4% in 2020 to 16% in 2023,return on equity was increased from 21.1% to 46.7% in 2023,the liabilities increased from 21.5% in 2021 to 83.6% in 2023,the debt to equity ratio increased from 1.98% in 2020 to 2.04% in 2023;debt to total assets increased from 0.66% in 2020 to 0.67% in 2023,total debts service include interest and payments decreased from 2.3% to 0.423% in 2023,the return on investments increased from 10.0% in 2020 to 24.1 % in 2023,and the earning per share was decreased from 78.13% in 2020 to 69.3 in 2023.

In brief ,all hypothesis are confirmed because it was observed that capital mix at BRALIRWA PLC during the period of 2020-2023 was significantly changed due to the influence of external economic factors and internal financial policies and there is a statistically significant relationship between the capital mix employed by BRALIRWA PLC and its key financial performance indicators (FPIs) from 2020 to 2023, suggesting that variations in capital mix directly affect profitability, liquidity, and solvency ratios.

Key terms: Capital mix, financial performance

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CHAPTER ONE: GENERAL INTRODUCTION

1.0.Introduction

This chapter presents the back ground of the study, the statement of the problem, the objectives of the study, research questions, hypothesis scope of the study, significance of the study, and it is ends up with the structure of the study.

1.1 Background of the study

Globally, the decisions link to the capital mix is critical for manufacturing companies due to its tie-up with financial performance; capital mix is the strategy employed by a firm to finance its assets, growth and operations; is the composite of total equity and the total debt. Firms can issue a number of securities to finance its assets however, appropriate combination of debt and equity (optimal Capital mix) is critical for them as it reduce their costs of capital and maximize their market worth and stock price. Firms can even attain competitive advantage, if it has perfect capital mix. Several macro environmental and firms-specific factors influence the decisions of the firm's capital mix. The country within which the particular firm operates also influences their capital mix as well as their financial performance (Krishnan & Moyer, 1997)

The role of manufacturing as a sub-sector in the economic growth of a country cannot be over-emphasized. It is the catalyst for economic transformation and national development. Consequently, the performance of the manufacturing sector would affect the performance of the economy at large. In the light of this, governments, regulatory agencies and researchers focused attention on how to improve the performance of the manufacturing sector through several initiatives, programs and policies (Nikoo,2015).

One of the ways to assess the performance is through mix of source of finance i.e. equity, debt, retained earnings, etc. In region like Sub-Saharan Africa, capital mixs of manufacturing companies are generally characterized by a dominant leverage on all equity finance, which is why sub-region fails to take advantages of the benefits of debt finance. This supports the view of Singh and Hamid (2006) that firms in developing countries rely more on equity finance than debt finance and that capital mix. Lot of theories have been propounded and studies conducted in order to determine the factors that influences the firm's performance. Some of the firms in the world performed poorly or have collapsed due to various challenges facing them in relation to their structure. Idigbe (2006)

noted that capital mix is regarded as the cornerstone of any organization ‘s financial strength. It supports the operations by providing a buffer to absorb unanticipated losses from its activities and in the event of problems, enable the firm to continue to operate in a sound and variable manner while the problems are addressed.

Firm’s basic resource is the stream of cash flows produced by its assets. When the firm is financed entirely by common stock, all of those cash flows belong to the various users at the time issues both debt and equity securities, it undertakes to spilt up its flows into two streams, a relatively safe stream that goes to the debt-holders and a riskier one that goes to them. Each of these i.e. debt and equity is associated with different levels of risk, benefits, and control. While debt holders exert lower control, they can earn a pre-determined rate of return and protected by contractual obligations with respect to their investment. Equity holders are the residual claimants, bearing most of the risks and correspondingly, have greater control over decisions. Where each decision uses different forms of financing results into different capital mix which may have different impact on the firm performance (Erasmus $James).

In the same vein, debt ratios in developing countries like Rwanda seem to be affected by the same types of variables that are significant in developed countries. These variables are related to one another include Return on investment (ROI), Residual Income(RI), Earning per Share(EPS), Dividend Yield, Return On Asset(ROA), and Growth in Sales and Return on Equity(ROE) (Barbosa & Louri, 2005). For the purpose of this study, the use of the Return on Assets (ROA) is due it represents what the firm earns on all assets held in firm. On other hand, return on Equity(ROE) reflects how effectively a firm management using shareholders’ investment. i.e. it tells them how much the company is earning on the book value of their investment (Goudreau, 1992). In fact, ROE is an best important measurement of a firm’s returns because it is influenced by how well the firm has performed on all other return categories, and indicates whether the firm compete for private sources in the economy, ROE is defined as net income divided by average equity (Noraini, 2012).It is ,however, important to note that, in evaluating the performance of a firm, the wealth of a firm may influence the level risk a company’s investors and managers may be willing to assume as well as determine the resources available to support the business. Thus, the concern of this research was to examine the impact of the particular distribution of these equity and debts that makes up the finances of company’s performance like Brwalirwa.

1.2.Problem statement

As noticed Capital mix determination is an important responsibility of financial management within an organization due to various decisions which are taken based on it to maximize mainly the earning of companies. The research problem addressed by present study is lack adequate guidance for attaining maximum financing decisions yet many of the challenge experienced by the companies are under statutory management were largely attributed to financing. This was confirmed by Abor (2005) who noticed that capital mix which is measured by short term debts, long term debt and total debts is negatively associated with an organization performance.

However, some risks have been observed and BRALIRWA PLC still experiencing financial loss problems concerned with expected costs for its both low profitability and poor economic efficiency; especially in 2016, Total volume decreased by 15% and revenue decreased to 3.8% mainly due to interest paid on loans; the company took five years of investment program in both brewery in Gisenyi and soft drinks plant in Kigali and this resulted to the financial impact which reflected to high depreciation cost, increased debts to finance these investments; much as capital mix investments where seen as a solution to increase production, they have not fully provided the quality leasing, purchasing and also quality of corporate governance at the time of declaring income tax due to sometimes lack of proper oversight and also accountability mechanisms

Furthermore; organizations rely on borrowing extremely cannot automatically achieve tax shields which many lead to increase in borrowing cost which can automatically lead not only to bankruptcy risk but also reduce the return w. Thus, this study will deal with contribution of capital mix on the financial performance of Brwalirwa PLC .

1.3. Research questions.

The study was guided by the following questions:

- How has the composition of the capital mix at BRALIRWA PLC from 2020 to 2023 has changed?
- How does the capital mix at BRALIRWA PLC influence its key financial performance indicators (FPIs) between 2020 and 2023?

1.4. Research hypothesis.

As defined by BAILEY (2014), a hypothesis is a response proposition that should be stated as anticipated answer to research question then tested through data analysis.

This study is guided by the following hypothesis:

H1: The composition of the capital mix at BRALIRWA PLC has changed significantly from 2020-.2023.

H2: There is a statistically significant relationship between the capital mix employed by BRALIRWA PLC and its key financial performance indicators (FPIs) from 2020 to 2023, suggesting that variations in capital mix directly affect profitability, liquidity, and solvency ratios.

1.5.Research objectives

This study was guided by both general and specific objectives that aim at the performance of BRALIRWA PLC in Rwanda

1.5.1. General objectives

The objective of the study was to assess the effect of capital mix on financial performance of manufacturing company, with a case study of BRALIRWA PLC for the period of 2020-2023.

1.5.2.Specific objectives

- To analyze the composition of capital mix at BRALIRWA PLC during the period of 2020-2023.
- To evaluate the impact of capital mix on key financial performance indicators (FPIs) of BRALIRWA PLC from 2020 to 2023.

1.6. Scope of the study

Due to financial constraints, as required to any research, it is necessary to delimit the study mainly in time, space and the content.

1.6.1. Time scope

The time scope for the study is set between 2020 and 2023. This period is significant as it encompasses the post-COVID-19 recovery phase, allowing for an analysis of how capital mix

strategies have adapted to changing economic conditions. It also provides insights into recent financial performance trends in manufacturing, particularly for BRALIRWA PLC, amidst evolving market dynamics and regulatory frameworks

1.6.2. Geographical scope.

The geographical scope focuses on Rwanda, specifically examining BRALIRWA PLC, a prominent manufacturing company in the country. Rwanda's unique economic landscape, characterized by its growth initiatives and investment climate, offers a relevant context for understanding how capital mix influences financial performance. The study aims to capture local factors affecting manufacturing firms within this specific national framework

1.6.3 Domain scope

The domain scope pertains to finance and management within the manufacturing sector. This includes analyzing capital mix components such as equity and debt financing and their impact on profitability and operational efficiency. By focusing on these domains, the study seeks to provide actionable insights that can inform strategic decision-making for manufacturers in Rwanda, particularly in optimizing their capital mix for enhanced financial outcomes.

1.7. Significance of the study

The motivation behind this study stems from a desire to gain an in-depth understanding of how capital mix influences the financial performance of manufacturing companies in Rwanda, specifically focusing on BRALIRWA PLC. This investigation is driven by various interests, including personal, academic, scientific, and social dimensions.

1.7.1 Personal

The researcher may have a vested interest in the financial dynamics of manufacturing firms, particularly in emerging markets like Rwanda. Understanding these dynamics can provide insights that are beneficial for personal investment decisions or career development within the finance sector.

1.7.2 Academic

From an academic perspective, this study contributes to the existing body of knowledge regarding capital mix and its implications for financial performance. It aims to fill gaps in literature related to Rwandan manufacturing firms and offers a case study that can be referenced by future researchers.

1.7.3. The Society

The was contributed to stakeholders by analyzing the financial performance of manufacturing companies through adjusting the capital mix key component involved; proper management of financial resources which brings about better planning and control.

1.8. Structure of the study

Under this part we provide a brief of the chapters and sections in this dissertation, where each chapter start with a brief introduction of the context described in summary form with the purpose of introducing the users the various aspects to be discussed. Our research is subdivided into four chapters. The first chapter deals with general introduction, the second chapter is the literature review, the third chapter is the research methodology and the fourth chapter deals with the presentation of findings, data analysis and interpretation. Finally, the research ends up with the conclusion and recommendations.

CHAPTER TWO: LITERATURE REVIEW

2.0. Introduction

This chapter defines the key concepts of this research and give details on the literature relevant on this study. It follows the conceptual framework, incorporate scholarly works and theories. The purpose of the study is to ascertain the role of capital mix played in determining the financial performance of manufacturing companies. The literature under review will be obtained publications, books, internet, journals, articles, magazines and text.

2.1. Conceptual review

This section describes the key concepts of this research study which are capital mix and financial performance of a manufacturing company.

2.1.1. Capital mix.

Capital mix refer to “the proportions of debt and equity used to finance a form’s operations.” (Van Horne, J. C. (2002). Financial Management and Policy (12th ed.). Prentice Hall.)

Capital mix is also described as a trade-0ff between risk and return, where companies must evaluate their financing choices in terms of cost and flexibility. (Damodaran, A. (2010). Applied corporate fiancé (3rd ed.). Wiley)

capital mix as the "financial plan of the company," which plays a critical role in funding operations and growth. (Higgins, R. C. (2007). Analysis for Financial Management (10th ed.). McGraw-Hill.

2.1.2.Financial performance.

Financial performance is described as the measurement of a company’s ability to generate revenue and manage its expenses effectively, contributing to overall profitability and shareholder value. (Kaplan, R. S., & Norton, D.P. (1992). The Balanced Scorecard: Measure that Drive Performance. Harvard Business Review.

Financial performance can also be stated as the set of indicators that provide insight into a company in generating profit relative to its revenue, assets, equity, and other financial metrics like Return on assets and Return on Equity (Van Horne, J. C., & Wachowicz, J. M. (2008). Fundamentals of Financial Management (13th ed.). Pearson Prentice Hall.

2.2. Theoretical Framework

Numerous financial theories provide an overview for understanding the effects of capital mix on performance; this section covers theories that help to examine these effects in the case study include: The Pecking Order Theory, Trade-off Theory, and Traditional Theory.

2.2.1 Traditional Theory

The theory state that a firm value increases to a certain level of debt capital, after which it tends to remain constant and eventually begins to decrease if there is too much borrowing, this decrease in value after the debt tipping because of overleveraging. According to this model, change in capital mix directly affects the firm's market Value. Optimal capital mix exists at the point where weighted average cost of capital and the market value of assets is maximized by utilizing a mix of both equity and debt capital where the marginal cost of debt and the marginal cost of equity are equated, and any other mix of debt and equity financing where the two are not equated allows an opportunity to increase firm value by increasing or decreasing the firm's leverage. Under this model the value of the company and its capital mix are related

Under traditional model of capital mix, there are two main assumptions described, the first assumption is that all earnings are distributed as dividends that mean no retention by the company and the second assumption is that firm's earnings are expected to remain constant throughout

2.2.2. Pecking Order Theory

The pecking order theory provides an influential model for thinking about how companies make these financing decisions. the theory suggests companies follow a defined hierarchy, prioritizing internal funds first, then debt, and finally equity as a last resort as the result of a symmetric information it postulates that the cost of financing increases with symmetric information from various sources; it does not discuss on the optimal capital as significant point, but states that firms have two main source of funding its financial needs which are external and internal like excess liquid assets or retained earnings.

It also suggests that the firm would follow a well-organized order of priorities with respect to financing source so as to also minimize its symmetry cost, if internal financial source is not enough through firstly choose retained earnings, then debt and finally raise its equity.it advocates that managers head of choosing between the difference sources of funding, prefer either use of debt leverage, secondly issuance of preferred stock and finally common stock.

2.2.3. Trade-off Theory

This was an idea that a company chooses how much debt finance and how much equity finance to use by balancing the costs and benefits. i.e. cost of debt is always lower than the cost of equity due to tax deducted from the interest on debt. the theory justifies moderate debt ratios its purpose was to explain the strategy firm uses to finances their investment which may also be by their equity and some of the time its debts. i.e. optimal range determined by the achievement of balance between tax benefits and costs of debt while considering other variables constant. This theory also predicts that weak firm will rely on banks for debt capital which will Couse a domination towards any mix of market and bank debt regardless of the priority structure.

Under this theory there is debts "pecking order" within bank debt in terms of being preferred to market debt, because of lower implied bankruptcy costs. When the bank holds all bargaining power, the level of desired tax debt shields are only one to be achieved; the firm would borrow up to the point where the marginal value of tax shields on additional debts is offset by the increase in present value of possible costs of financial risk stress.

In addition, direct costs of financial distress include costs of insolvency which may be in the form of demoralized employees, customers who eventually stop purchasing a company's products, investors who may decline to supply capital or obtain it at high cost etc Which means that corporate tax allows firms to reduce interest on debt when computing profits. And this also suggests that the advantages derived from debts would Couse firm to be entirely financed by them due to their interest payments associated with debts are tax deductible while payment associated with equity such as dividends are not tax allowable deductible; which means that the effect of more or less debt in a firm may either reduce or increase the firm value based on its nature.it was concluded that trade off theory couldn't account for the correlation between high profitability with low debts ratios.

2.3. Literature on capital mix

The capital mix or Capital mix decisions are one of the three financing decisions namely investment, financing, and dividend decisions that finance managers must make (Karadeniz, Kandir, Balcilar, & Onal, 2009). The capital mix of a firm is a mix of different securities. In general, a firm can choose among many alternative capital mixs. It can issue a large amount of debt or very little debt. It can arrange lease financing, use warrants, issue convertible bonds, sign forward contracts or trade bond swaps. It can issue dozens of distinct securities in countless combinations; however, it attempts to find the combination that maximizes its overall market value (Liang, Li, & Song, 2014). I.

2.3.1. Ownership structure

Share ownership structure is comparison between the number of shares, which are held by the internal parties or company management (insider ownership), and the number of shares, held by external parties or investors (outsider ownership). Relationship between manager and shareholder in the agency theory is described as relationship between agent and principal, in which the company (principal) provides a trust towards manager (agent) to manage the company in accordance with the interests of the principal itself associated with higher dividend expected.

The ownership structure of manufacturing companies plays a critical role in their operations, governance, and financial performance. It influences how decisions are made, how risks are managed, and how profits are distributed. Manufacturing firms can adopt various ownership models, each with distinct advantages and challenges that align with their strategic goals and market environments.

From sole proprietorships, where a single individual controls all aspects of the business, to complex corporations that involve numerous shareholders, the choice of ownership structure affects everything from liability and taxation to funding and growth potential. Additionally, structures like partnerships, cooperatives, and joint ventures enable companies to leverage shared resources and expertise.

Ownership structure in this study uses managerial share ownership and institutional ownership, in which the company having go public status, the management is separated into two becoming institutional ownership and managerial ownership functions.

2.3.1.1. Managerial Ownership

Is the proportion of share ownership by directors, management, commissioner or any parties who actively participate in the company decision-making. One of the mechanisms used to solve the agency conflict is increasing managerial ownership, so interests of the owner and the manager can be parallelized. The greater managerial ownership is, the more agency cost will decrease, so the value of company can also be increased. Managerial ownership in this study was measured by comparing the managerial share ownership with total of circulated shares.

$$\text{Formula} = \frac{\text{Managerial share ownership}}{\text{Total circulated shares}} \times 100$$

2.3.1.2. Institutional Ownership

Is the shareholder proportion belonged by the institutional owner such as insurance companies, banks, investment companies and other shareholdings except for subsidiaries and other institutions which have special relationships (affiliated companies and associated companies). A company

with large institutional ownership (more than 5%) indicates its ability to monitor management so that the greater the power of the institutional party to oversee the management is, the greater impetus to maximize the value of company will exist. Measurement of institutional ownership in this study was conducted by comparing institutional share ownership with total circulated shares.

$$\text{Formula} = \frac{\text{Institutional share ownership}}{\text{Total circulated shares}} \times 100$$

2.3.2. Capital mix and firm size.

Firm size has been empirically found to be strongly positively related to capital mix. This research investigated whether a dynamic capital mix model can explain the cross-sectional size–leverage relationship. The driving force that we consider is the availability of fixed costs of external financing that lead to infrequent restructuring which create a wedge between small and large firms. Small firms choose higher leverage of refinancing to compensate for less frequent rebalancing. Their longer waiting times between refinancings lead to lower levels of leverage at the end of restructuring periods. Within one refinancing cycle, the intertemporal relationship between leverage and firm size is negative. Finally, there is a mass of firms opting for no leverage. The analysis of dynamic economy demonstrates that in cross-section, the relationship between leverage and size is positive and thus fixed costs of financing contribute to the explanation of the stylized size–leverage relationship. However, the relationship changes sign when we control for the presence of unlevered firms.

2.3.2.1. Debt and equity composition

2.3.2.1.0. Introduction

The debt and equity composition of a company refers to the specific proportions of debt and equity that finance its operations and growth. This composition is a critical aspect of a company's capital mix and directly impacts its financial performance, risk profile, and strategic flexibility.

2.3.2.1.1. Component of debt composition

2.3.2.1.1.1. Long term debt

Refer to financial obligations that are due for repayment beyond one year. It is commonly used by companies to finance various investments like property, plant, equipment and other numerous large long-term projects through corporate and convertible bonds, term loans and Lease obligations.

Due to lack of enough long term financing has become an important complex issue in many developing economies, since global crisis caused by COVID 19 were having access to long term funds as their crucial source because it allowed governments and firms to finance large long-term investment to which had boosted their financial economic health performance as well as reducing all over risks and potential for both long and short run.

Consequently, several reports and studies have made to emphasize on the need for long term finance. The World Bank Global Financial Development Report 2015 examines evidence of the use and economic impact of long-term finance with the goal of identifying those policies that help to promote it and those that do not. otherwise, there is some of the set of principles issued to facilitate and promote long term investment by institutional investors. OECD (2013) also; the financial stability board (FSB) highlights the impacts that recent regulatory reforms who could have on the provision of long-term finances.

But long-term financing is not necessarily desirable in all situations. In fact, this type of financing can be better understood as arising from a tradeoff between creditors and debtors in the allocation of risks.

Long term finance shifts risk to the providers of funds because they must bear the fluctuations in the probability of default and the loss in the event of default, along with other changing conditions in financial markets, such as interest rate, etc. In contrast, short term finance shifts risks to the users of credit due it forces them to refinance their debts gradually. Furthermore, term debt might be optimal only in some situations.

In most case households, firms, nor the government prefer long term debts purposely to raise their economic welfare by allowing them to efficient consume their consumption over period at the same time facilitating lumpy investment like retirement, education needs, health shocks, and

premature death. In absence to them firms may depend on short term, and they lack the ability to roll over them and cause exit or poor profitable long-term investments with consequences for potential growth. Almeida et al (2011).

2.3.2.1.1.2. Short term debt

refers to financial obligations that are due to be settled within one year. This type of debt is commonly used by manufacturing companies to manage liquidity, finance operational costs, or bridge gaps in cash flow. Examples include lines of credit, short-term loans, and trade credit. Short-term debt typically has higher interest rates compared to long-term debt due to its shorter repayment period and can provide quick access to capital. It's an essential tool for maintaining financial flexibility, but excessive reliance on it can lead to cash flow issues.

According to the matching principle of finance which implies that companies must report expenses at the same time as the revenues they are related to. In terms of financial position, a firm should adjust its short-term debt financing until the amount of its current liabilities equals to the amount of its current assets. current assets must be financed with current liabilities and non-current assets must be financed by non-current liabities Guin (2011) current assets and liabilities are generally defined to be those items which will be paid off in a year. Company current assets (cash, account receivables', banks, etc.) are generally considered as the ones of the short-term period while non-current assets (equipment, plant and machines, buildings). etc. are considered as long-term property though those of current assets can also be long term if they are not completely used.

But on another side, current liabilities like accounts payables, short term debts, over drafts etc. are usually considered to be operating within the short period of time, while long term debts and equity capital are long term liabilities. even though current liabilities can also be considered a source for long term duration if they are not completely liquidated during the year.

Based on the above details, if it is assumed that a firm's current assets and current liabilities are short term financing respectively, the matching principle implies that current assets should be equal to its current liabilities, hence defining other current liabilities (OCL) all current liabilities except short term debt then the amount of a firm's short term debt should be equal to the amount of its current assets lees other current liabilities (STD=CA-CL).

This principle it also states that a firm's short term debt financing should vary over time as the amount of its current assets and other current liabilities change. It means that there is other two ways that a firm's short term debt financing can change.

Conversely, if the firm current assets decrease the amount of its short-term debt financing and other current liabilities should decrease also as it is called the size effect on short term debt and implies a direct relationship between short term debt financing and the firm's current assets balance.

A second source of change in a firm's short term debt financing may exist if short-term debt and other current liabilities are substitute forms of short-term financing. Holding current assets constant, the amount of a firm's change to finance its short-term assets. Conversely, if there is change in short-term financing decreases the firm will need to increase the amount of its short-term debt financing. since it is called the substitution effect where it implies an inverse relation between short-term debt financing and other current assets. In a regression with short-term debt as the dependent variable and current assets and other current liabilities as explanatory variables, so the coefficient of current assets should be positive while the substitution effect implies the coefficient of other current liabilities as it should be negative.

However at least two sources of risks associated with continually refinancing short term debt. One is default risk. If there is one reason or another, lenders do not wish to refinance the firm's debt when it matures, the firm will be in peril of default if sufficient capital is not available to retire the deb.

The other risk is the risk that interest rate charged on the refinanced debt will rise and cause the firm's interest expense to rise. Both the default risk and the interest rate risk are continuing risks that a firm faces every time it refinances its short-term debt. The sum of these two risks will be called refinancing risk. If the firm feels that the interest expense savings are large enough to compensate for the refinancing risk incurred the firm may be willing to use continually refinanced short-term debt as a permanent source of financing. If not, long-term debt could be used to finance a firm's permanent current assets. If a firm found the refinancing risk associated with over changes in its short-term debt this reduce the risk by replacing it with long-term debt financing for it to be continuously refinanced. Here is key point to be considered when it is determined:

2.3.2.1.2. Equity composition

Equity represents ownership in a company, it relates the residual interest in the assets of a business after deducting liabilities. Equity can take various forms, including common stock, preferred stock, and retained earnings. Investors purchase equity to in order obtain a share in a company's profits and have voting rights in corporate decisions. holders benefit from potential capital appreciation and dividends, but they also bear the risks associated with market fluctuations and business performance. Understanding equity is crucial for both investors and entrepreneurs, as it plays a vital role in capital mix and overall financial health.

2.3.2.1.2.1. Common equity

Common equity refers to the total value of ownership invested in a company; a synonym of ordinary shares, represent the basic voting shares of a corporation. Holders of ordinary shares are typically entitled to one vote per share, against the company's directors, and they can sell shares whenever they want though to do not have any predetermined dividend amounts. An ordinary share stands for equity in proportionally with all other ordinary shareholders, based on their percentage ownership in the company. All other shares of a company's stock are, by definition, preferred shares (Berle,2012).

As its defined by an article of association, all corporations must have ordinary shares as a part of their stock at least one ordinary share must be issued to a shareholder. Simply they entitled to receive dividends, right to corporation of profits on preferred shares paid.

The only obligation that an ordinary share holder has is to pay the price of the share to the company especially when it is issued; based on his/her right to retained profit, he is entitled to vote for the company's board members, receives and approves the company's annual financial statements. ordinary shares include those which are traded privately as well as shares are traded on various public stock markets. In many situations, these shares have a stated par value which is more technically, as it depends more to few pennies per share. The true value of this share is based on the price obtained through market forces, the value of the underlying business, and investor commitment towards the company. Chen et al (2013).

In addition to how its transaction easy is, investment in ordinary shares contains the potential unlimited gains, while its potential loss is limited to the original amount invested. Selling the shares

at high price than its original purchase prices it mainly results from the investor capital realization gains. However, the opposite can also happen; shareholders may eventually realize a capital loss if and only if they sell shares for less than they paid for them (Ibid).

When a company turns a profit, it often rewards its investors through paying small portion of profit to each one among themselves regarding to the number of shares owned. Though this dividend is not guaranteed as with preferred stock, due to many companies pride themselves consistently through payment of high dividends each year, thus encouraging long term investment. Shareholders may elect to reinvest dividends or receive them as income.

For manufacturing companies issuing common shares this is important ways to raise their capital for fund expansion without incurring too much debt. While this dilutes also the ownership of the company; unlike debt funding, the shareholder investment need not be repaid back later. Of course, shareholders do expect returns on their investment, as their stock growth or dividends payment. But always companies have an option to repurchase some or all of its outstanding shares if when it's no longer need the equity capital, there by combing ownership and also increase in value of share still available in terms of reducing the supply Islam, M (2015).

2.3.2.1.2.2. Preferred equity

Preferred equity or preferred stock as the name suggests, is "preferred" over common equity in repayment priority; is a class of ownership in a corporation which has a higher effect on its assets and earnings than common stock. It means that upon liquidation, its risk of first dollar loss typically occurs after the common equity has incurred a 100% loss. Preferred shares are generally having dividends which must be paid out before dividends to common shareholders, and also the shares usually do not carry rights to the vote.

Preferred stock also combines features which are not possessed by common stock of including properties of both debt instruments, due it pays fixed dividends, and equity which has a potential to appreciate in price as the details of each stock depend on the issue.

Adjustable rates of the shares specify certain factors that influence the dividend produced and a participating share can pay additional dividends which are in terms of common stock. If and only if the company is struggling and find its self-suspended the dividends, preferred shareholders may

have the right to receive payment before the dividend resumed for those who are common. It means that the shares with this arrangement are called cumulative shares.

But if the company has multiple simultaneous issues of preferred stock, it can be ranked in terms of priority; the highest ranking is called prior, where is followed by first preference, second, third, etc. Leon J. (2013).

Preferred shareholders have prior claim on a company's assets if it is liquidated, though they remain subordinate to bondholders. Preferred shares are equity, but in many ways they are hybrid assets which are in between stocks and bonds. Preferred shares may come with mandatory or optional features that allow the company to buy shares back at a predetermined price or to convert preferred shares to common shares. Parameters for these call or conversion options should be spelled out in a prospectus or other formal offering document; They offer more predictable income than common stocks where ate rated by the major credit rating agencies. Unlike with bondholders, failing to pay a dividend to preferred shareholders and this does not mean a company is in default. Due shareholders do not enjoy the same guarantees as creditors, the ratings on preferred shares are generally lower than the same issuer's bonds, with the yields being accordingly higher. Mansson M (2014).

When considering preferred stock, keep in mind that every issue of this security is an individually customized hybrid with its own unique risk and reward potential. A careful study of specific terms is needed to determine whether the security's investment profile will fit any particular portfolio objective.

Eventually preferred shares usually does not carry voting rights, though under some agreements these rights may revert to shareholders that have not received their dividend. Preferred shares have less potential to appreciate the price than common stock, and they usually trade within a few dollars of their issue price, whether they trade at a discount or premium to the issue price depends on the company's credit capital efficiency which mainly specify the issue.

Some preferred stock is convertible, i.e. it can be exchanged for a given number of common shares under certain circumstances. The board of directors might vote to convert the stock, the investor might have the option to convert. which is more advantageous to investors depend on the market price of the common stock. Baasi, N., (2013).

One consequence of the preference system is that preferred shares may provide equity investors with more stable cash flow potential relative to common stock, behaving in this dimension more like an investment in bonds than stock. But unlike bonds, preferred shares carry no general commitment to repay principal. And the market value of preferred shares tends to behave more like common stock, varying in response to the business performance and earnings potential of the issuer.

2.3.3. Cost of capital

It refers to the minimum rate of return a company earn before generating value. It is determined by companies accounting department to evaluate financial risk and whether the investment is justified before turning a profit, manufacturing companies must at least generate sufficient income to cover the cost of the capital it uses to fund its operations. This consists of both the cost of debt and the cost of equity used for financing a business. A company's cost of capital depends largely on the type of financing the company chooses to rely on – its capital mix. The company may rely either solely on equity or solely on debt or use a combination of the two. The choice of financing makes the cost of capital a crucial variable for every company, as it will determine its capital mix. Companies look for the optimal mix of financing that provides adequate funding and minimizes the cost of capital.

In addition, investors use the cost of capital as one of the financial metrics they consider in evaluating companies as potential investments. The cost of capital figure is also important because it is used as the discount rate for the company's free cash flow.

2.3.3.1.Debt to assets ratio

This ratio indicates the proportion of the company assets which are mainly financed by debt. It is calculated by dividing total debt by total assets. A high debt ratio the more the significant portions of assets are founded through debt, which may increase the financial risk due to interest payment.

$$\text{Debt to asset ratio} = \frac{\text{Total debt}}{\text{Total asset}} \times 100$$

2.3.3.2. Debt to equity ratio

Under this indicator we compare the company total debt to its total share holders' equity. It provides insight into how much debt a company is using to finance its operations compared to its equity. A higher ratio suggest financial leverage and risk as excessive debt can lead to financial instability during economic depression.

Debt to equity ratio= Total debt x100

Total equity

However, the solvency indicator is a compressive measure of solvency, as it measures cash flow rather than net income include depreciation to assets accompany ta up float. It also measures the cash flow capacity in relation to all liabilities, rather than only debts. Except from borrowing and debts, other liabilities like short term such as account payables and long-term ones such as capital lease and pension plan obligations; a company solvency ratio should be compared with its competitors in the same industry rather viewing it in isolation (Brealy, 2003)

2.3.3.3. Debt ratio

This ratio measures the proportion of a company's assets which are financed by debt.

Formula: Total debt

Total assets

2.3.3.4.Equity ratio

The ratio assesses the proportion of the company's assets that are financed by shareholders' equity.

Formula: Total equity

Total assets

2.3.3.5. Interest coverage ratio

The ratio shows a company ability to pay interest on its debt; a higher ratio indicates better capability to cover interest obligations.

Formula: Earning before interest and tax

Interest expense

Interest expense represents the cost incurred by a company for borrowed funds. It's an important component in financial statements and is used in various financial ratios to assess a company's ability to meet its debt obligations.

Generally, flexibility of the company is the ability to make every internal change that is necessary to respond effectively to the changing outward environment rapidly.

2.3.4.Dividend policy

Refers to a company's approach in distributing profits to its shareholders in the form of dividends. It provides decisions about whether to pay dividends, how much to pay, and how frequently to are distributed in either stable, residual, constant, and hybrid policy. Dividend decision is the third major financial decision (Pandey, 2008). The financial manager must decide whether the firm should distribute all profits, or retain them, or distribute a portion and retain the balance. The dividend pay-out should be determined in terms of its impact on the shareholders' value. The optimum dividend policy is one that maximizes the market value of the firm's shares. Thus, if shareholders are not indifferent to the firm's dividend pay-out, the financial manager must determine the optimum dividend pay-out policy. Most profitable companies pay cash dividends regularly. On the other hand, dividends may be considered desirable from shareholders' point of view as they tend to increase their current return. Dividends, however, constitute the use of the firm's funds. Cash dividend is the commonest of dividends paid (Pandey, 2008). It is a return to the shareholders. Companies intending to pay such dividends will be required to reserve sufficient cash in their bank accounts to facilitate this payment.

2.3.5. Growth opportunities

Growth opportunity is the development opportunity of a firm in the future (Mai, 2006). The other definition of growth opportunity is the change of the firm total assets (Kartini and Arianto, 2008). This element measures how far earnings per share of a firm is inclined by leverage. Firms with rapid growth sometimes increase its fixed assets. Therefore, firms with rapid growth need more fund in the future and more retained earnings; the more with rapid growth increase, those firms will deal more with debt to maintain the targeted equity ratio (Mai, 2006). Firm which is predicted to have rapid growth in the future tends to choose stock to finance their operations. In contrast, firms which is predicted to have low growth will effort to divide the risk of low growth with the

creditor through the issuance of debt which is in the form of long term payable (Mai, 2006). One of the basic reasons of this pattern is the floating price on the stock emission which is higher than bond. Thus, firm with rapid growth level tends to use more debt compared to the low growth firm in several ways like leverage decisions, equity financing, cost of capital, risk perception, market signals, retention earnings etc.

2.3.6.Tax considerations.

The magnitude and prevalence of firms' savings are surprising since debt holds a substantial fiscal advantage over equity, as firms can expense interest payments from their taxable corporate income while dividends and capital gains are taxed. Any favorable tax treatment of debt breaks the well-known Miller–Modigliani irrelevance results (1958, 1963), argued that optimal financing decisions maximize the after-tax value of the firms' total cash-flows by understanding the size and distribution of corporate savings across firms is important for several reasons. Foremost, internal funds allow firms to insulate themselves from the vagaries of financial markets. Thus, any attempt to quantify the importance of financial frictions or shocks must account for the observed financial positions of firms. More broadly, understanding the firm's financial decisions is indispensable to pin down the cost of capital and, for example, to evaluate the effects of the dividend, capital gains, and corporate tax rates on investment and the capital-to-output ratio. To minimize the fiscal burden, the entrepreneur will seek to finance investment exclusively through debt, only resorting to equity when reaching the debt limit. This introduces differences in the cost of capital across firms with different internal funds, or net worth. A firm with low net worth must resort to equity to finance its investment and incurs in a high cost of capital in doing so, while a firm with available internal funds can use these to reduce its cost of capital. Quite naturally, the firm's value becomes concave as a function of its net worth solely based on the differential tax treatment and the debt limit.

2.3.7.Risk and financial distress.

In the area of corporate finance, understanding risk and financial distress is crucial for effective decision-making and strategic planning. Risk encompasses the uncertainties a firm face, including operational, market, and financial challenges that can impact performance and sustainability financial distress, on the other hand, occurs when a company struggles to meet its financial

obligations, potentially leading to bankruptcy or insolvency, The interplay between risk and financial distress is particularly important when determining a company's capital mix. Firms often weigh the benefits of leveraging debt—such as tax shields—against the increased risk of financial instability. A company's ability to manage these risks effectively can influence its reputation, investor confidence, and overall market value.

There is an additional concern that financial distress costs are also endogenously related to debt ratios. Increasing leverage increases the probability of financial distress while an increase in the probability of financial distress should bring about decreases in the amount of debt a firm has in its capital mix. This issue of endogeneity has, to our knowledge, not been considered in the existing literature. Taken together prior studies that investigate the impact of financial distress on debt ratios have used either relatively poor proxies for financial distress, or mis specified models ignoring that financial distress is endogenous.

2.3.8.Industry and sector trends

In recent years, industries have experienced transformative trends driven by technological advancements, shifts in consumer behavior, and macroeconomic factors. For instance, sectors such as technology and biotechnology often lean toward equity financing to support rapid growth and innovation, while traditional industries like utilities may favor debt due to stable cash flows and lower risk profiles, Understanding these industry-specific trends is crucial for investors, managers, and stakeholders, as they reveal insights into how companies navigate their financing strategies in response to external pressures and opportunities. By examining capital mix trends across various sectors, one can gain a deeper understanding of how businesses adapt to changing environments and leverage their financial strategies for competitive advantage.

For instance, The COVID-19 crisis had a major impact on the corporate sector around the world. The unprecedented sudden shock caused a sharp contraction in economic activity and corporate revenues. It also changed the conditions for corporate access to finance and investment. However, not all firms and sectors are affected to the same degree or in the same way. While many companies have lost their investment grade rating or even defaulted on their debt, some have experienced higher sales and increased their market share. Some sectors, such as services, and economies that heavily rely on consumer spending have been hit harder than others.

However, variations in the impact of the crisis at the firm level can also be linked to underlying conditions that left some companies more vulnerable going into the crisis, such as high leverage levels and long-term weaknesses in company performance.

2.3.9.International considerations

In recent decades, with the globalization of the world economy, including the financial markets, many growth and financial opportunities have become available to firms in emerging markets. Specifically, firms can now take advantage of free trade agreements, increased investment and capital flows, increased access to both domestic and international financing. Access to the global financial markets is critical for firms to expand and be successful on the international stage. however, managers must learn to overcome the financial obstacles that are inherent in global expansion and make significant financing decisions for the firm.

2.4.Literature on performance of manufacturing companies

The transaction cost innovation theory pioneered by Niehans (2006) stated that the dominant factor of financial innovation is the reduction of transaction cost, and in fact the financial innovation is the response of advance in technology which caused the transaction cost to reduce in order to stimulate financial innovation and improvement of financial service.

In addition, based on Transaction cost theory, cost economics a adopts a contractual approach to the existence of the firm which focus mainly on the efficiency of making transactions internally compared to the cost compared to the cost of making such transaction through the market mechanism (Williamson,1975).

Transaction costs play a key role in determining the location of activity. For high transaction costs, economic activities are dispersed. The agglomeration gains that could emerge from concentration are more than offset by dispersion forces. As long as economic activities remain dispersed, lowering transaction costs increases the level of trade between locations. For a range of intermediate transaction costs firms have incentives to agglomerate despite competition and congestion. If transaction costs fall far enough, the process of concentration may be reversed due to congestion costs induced by spatial concentration. Whether this happens depends on the assumptions made on the nature of competition and the degree of product differentiation, increasing returns to scale, and factor mobility.

When someone own a manufacturing company or have harvested interest in one through the investments made, he/she need to know to evaluate its performance based on either facts and numbers. there are several parts in a business to watch. Here are some ways to measure its performance so as to make an appropriate change for the purpose to achieve the goal effectively. Mercy (2014), evaluate the assets and liabilities of the business from the balance sheet, review of cash flow in order to assess both operating, financial, and investing activities, the effect can be clearly understood through income and expense from income statement in terms of internal comparison of costs and sales to understand if the amount of stock accumulated is increasing while sales remains constant, indicating poor utilization of stock. So under this study we look at both micro and macro ones includes:

2.4.1. Revenue growth

In the domain of financial performance metrics, Revenue Growth stands as a pivotal indicator, offering a comprehensive glimpse into the fiscal health of an organization. it not only reflects the effectiveness of a company's sales strategies but also serves as a barometer for its overall competitiveness and sustainability in the market. Revenue Growth represents the percentage increase in a company's sales over a specific period. This metric serves as a fundamental gauge of the organization's ability to not only generate income but to do so in a manner that outpaces previous performance. It encapsulates the essence of progress, encapsulating the dynamic nature of business environments where adaptation and expansion are often prerequisites for continued success.

Positive figures signify growth, while negative ones raise red flags, indicating potential challenges that warrant attention and strategic interventions.

This financial KPI holds relevance for stakeholders, including investors, executives, and analysts, as it serves as a compass for decision-making. Investors keenly observe Revenue Growth as a measure of a company's potential for return on investment, while executives leverage it to fine-tune operational strategies and pivot when necessary. Additionally, analysts use this metric to contextualize a company's performance within broader industry trends, enabling a more nuanced evaluation.

$$\text{Revenue growth} = \frac{\text{current revenue} - \text{previous revenue}}{\text{Previous revenue}} \times 100$$

Current Revenue represents the total revenue generated by the company at the end of the specified period. Previous Revenue referring to the total revenue at the beginning of the period under consideration, it serves as the baseline for comparison. The numerator of the fraction calculates the difference between the current and previous revenues, while the denominator normalizes this difference against the baseline (previous revenue). Multiplying the result by 100 converts the ratio into a percentage, providing a clear and easily interpretable measure of Revenue Growth.

A positive percentage indicates growth, signifying that the company's revenue has increased compared to the previous period. Conversely, a negative percentage signals a decline in revenue, prompting further investigation into potential challenges or shifts in market dynamics.

This formula serves as a fundamental tool for financial analysis, enabling stakeholders to quantify and track changes in revenue systematically. Regular application of this formula, especially when analyzed over different time intervals, provides a dynamic perspective on a company's financial trajectory, aiding in strategic decision-making and long-term planning.

2.4.2. Gross profit Margin

Gross margin is the percentage of a company's revenue that's retained after direct expenses such as labor and materials have been subtracted. It's an important profitability measure that looks at a company's gross profit as compared to its revenue.

$$\text{Gross Profit Margin} = \frac{\text{Gross Profit}}{\text{Revenue}} \times 100$$

where gross profit is defined as revenue minus COGS, this metric serves as a crucial indicator of financial health.

A higher gross profit margin suggests that a company retains a greater portion of revenue after accounting for direct costs, which can be reinvested in growth initiatives, research and development, or shareholder returns. Conversely, a declining gross profit margin may signal rising costs, pricing pressures, or inefficiencies in production. Understanding gross profit margin is essential for stakeholders, including investors, analysts, and management, as it not only highlights a company’s ability to generate profit from core operations but also allows for comparisons within and across industries. This metric ultimately plays a significant role in strategic decision-making, helping organizations identify strengths and areas for improvement in their business models.

2.4.3.Net profit margin

Net profit margin is one among profitability ratios and it also an important tool for financial analysis. Due its final output the business is looking for so is of net profits after taxes to the net sales of a firm. All effort and decision marking in the firm is to achieve a higher ratio with an increase in the profits.It also clearly shows the margin left for equity and preference shareholders i.e. the owners. Unlike the growth profit which measures the operating efficiency of the company, net profit measures overall efficiency; an adequate margin is generated only when all the activities are done efficiently. And these can be production, administration, selling, financing, pricing, tax management or inventory management.

net profit is calculated as follow:

$$\text{Net profit margin} = \frac{\text{Net income}}{\text{Total operating income}} \times 100\%$$

This measurement is typically made for standard reporting period, such as monthly, quarterly, or yearly. The higher net profit margin indicates that the company is pricing its products correctly and is exercising good cost control. It is useful for comparing the results of companies in the same industry, since they are all subject to the same economic environment and customer base which may have the same cost structures.

Generally, a net profit margin exceed10% is more important, though it depends on the industry and the structure of the firm. When used in constant with the gross profit margin we can analyze the amount of total expenses associated on the income statement between gross and net profit line items.

One of the most important things is to know that net profit is not a measure of how much a company earned during a given period. Due the income statement it also includes non-cashed expenses. To learn about how much they can earn we need to describe the cash flow statement. So when the margin ratio decline over time, the problem to ask ourselves may range from sale to poor customer experiences nor inadequate expense management.

2.4.4. Operating profit

An operating profit is the total income earned from the operations of a company before calculating items like taxes, interest charges and other expenses. This number typically appears on the income statement as a subtotal. It's important to note that this calculation is not always equal to the cash flow of a business.

Operating Profit=Gross Profit−Operating Expenses

where operating expenses include selling, general, and administrative costs, as well as depreciation and amortization. This metric provides insight into how efficiently a company is managing its resources and controlling costs, making it a key indicator of operational performance. A healthy operating profit suggests that a company is effectively converting its revenue into profits through its core activities, while a declining operating profit may signal operational inefficiencies or rising costs. Analysts and investors often use this metric to assess a company's financial health, compare it with peers, and evaluate its ability to generate sustainable profits. Ultimately, operating profit is crucial for strategic decision-making, guiding organizations in optimizing operations and driving long-term growth.

2.4.5.Earnings before interest, taxes, depreciation and amortization (EBITDA)

This is key financial metric used to assess a company's operational performance and profitability. By focusing on earnings generated from core business activities, EBITDA provides a clear view of a company's ability to generate cash flow without the influence of financing decisions, tax strategies, or non-cash accounting items.

EBITDA is calculated by taking a company’s net income and adding back interest, taxes, depreciation, and amortization. This adjustment allows for a more straightforward comparison of profitability across companies and industries, regardless of their capital mixs or tax situations.

The respective EBITDA formulas are:

EBITDA=Net Income+ Taxes+ Interest Expense+ D&A o

EBITDA=Operating Income+D&A where**:** D&A=Depreciation and amortization

2.4.6. Return on investment ratio.

The return on assets ratio, is also a profitability ratio which measures the net income produced by total assets during a period by comparing net income to the total assets.

Simply it measures how efficiently a company can manage its assets to produce profits during the period. since the company assets' purpose is to generate revenues and produce profits, to help both management and investors to see how well the company can convert its investment in assets into income generation. In most cases, company invest money into capital assets and the return is measured in profits.

When by using the formula that, average total assets are usually used due it vary throughout the year. Here we add the beginning and ending assets together on the balance sheet and divide by two to calculate the average assets it might be obvious but it crucial to mention the average total assets as the historical cost on statement of financial position without considering the depreciation, and the net income is found on the income statement.

Its clear that a higher ratio is more favorable to investors because it shows that the company is more effectively managing its assets to produce greater amount of net income. A positive ROA indicates an upward profit trend as well thus its useful in comparing companies for the same industry as different industries use assets differently.

$$\text{ROA} = \frac{\text{Net income}}{\text{Total assets.}} \times 100\%$$

2.4.7.Return on equity

This is also a financial ratio that compare a company' total debt to total equity, it shows the percentage change of the company financing that comes from creditor and investors. The high ratio indicates that more creditors financing (bank loan) is used than investors financing (shareholders).

Each manufacturing company has its different equity ratio benchmarks; some industries tend to use more debt financing than others. A debt ratio of 5 show that there are half as many liabilities as there is equity, means it's financed by 2to 1 by investors to creditors. For example, investors own 65% of every company dollar of its assets while creditors only have 35% on one dollar.

A lower debt to equity shows that there is more financial stability. Companies with higher debts to equity ratio are more risk to creditor and investors than those with lower ratio. Likely equity financing, debt must be repaid to the lender. Since debt financing request debt servicing though is far more expensive form of financing than equity financing.

Companies leveraging large amounts of debts which might be not able to make payments. Creditors view with a higher ratio which is risky as it shows that the investors have not funded the operations as much as the creditors do. Which means that investors don't want to fund the business operations, and this end up for not performing well. Lack of performance and this is the reason why the company is seeking out extra debt financing forming well. Yet it's calculated as follow:

$$ROE = \frac{\text{Net income}}{\text{Total equity}} \times 100$$

2.4.8. Working capital

Working capital refers to the difference between a company's current assets and current liabilities. It's a key financial metric that indicates a company's short-term liquidity and operational efficiency.

Working capital is calculated from the assets and liabilities on a corporate balance sheet, focusing on immediate debts and the most liquid assets. Calculating working capital provides insight into a company's short-term liquidity and efficiency. A company with positive working capital generally has the potential to invest in growth and expansion. But if current assets don't exceed current liabilities, the company has negative working capital, and may face difficulties in growth, paying back creditors, or even avoiding bankruptcy.

Working Capital = Current Assets – Current Liabilities

A firm can either have positive or negative working capital:

Positive working capital: When this calculation is positive, it indicates that the company's current assets exceed its current liabilities, as in the above example. The company has more than enough resources to cover its short-term debt and some leftover cash if all current assets are liquidated to pay this debt.

Negative working capital: When the calculation is negative, the company's current assets are insufficient to cover its current liabilities. This is a warning sign that the company has more short-term debt than short-term resources. It typically indicates poor short-term health, low liquidity, and potential problems in paying its debt obligations.

2.4.9. Asset Turnover ratio

The asset turnover ratio is a measurement that shows how efficiently a company is using its owned resources to generate revenue or sales. The ratio compares the company's gross profit to the average total number of assets to reveal how many sales were generated from every dollar of company assets. The higher the asset ratio, the more efficient the use of the company's assets.The asset turnover ratio is typically used by third parties -- such as investors and creditors -- to evaluate the efficiency of a business's operations and learn how effectively each company uses their resources to produce revenue. By comparing companies in similar sectors or groups, investors and creditors can discover which companies are getting the most out of their assets and what weaknesses others might be experiencing.

$$\text{Formula: } \frac{\text{Net sales}}{\text{Total average sales}}$$

Where:

- Net Sales is the total revenue from sales minus returns, allowances, and discounts.
- Average Total Assets is calculated by taking the beginning and ending total assets for a period and averaging them.

- A higher ratio indicates more efficient use of assets, meaning the company is generating more sales per dollar of assets.
- A lower ratio may suggest that the company is not utilizing its assets effectively or has significant unused assets.

Asset turnover ratios can vary significantly across industries:

Capital-Intensive Industries (like manufacturing) often have lower asset turnover ratios due to the high investment in fixed assets.

Service Industries or Retail generally have higher ratios, as they typically require less investment in physical assets relative to their sales.

2.4.10. Capital expenditure

Capital expenditures (CapEx) are funds used by a company to acquire, upgrade, and maintain physical assets such as property, plants, buildings, technology, or equipment. CapEx is often used to undertake new projects and investments by a company. Making capital expenditures on fixed assets can include repairing a roof if the useful life of the roof is extended, purchasing a piece of equipment, or building a new factory.

This type of financial outlay is made by companies in an effort to increase the scope of their operations or to add some future economic benefit to the operation.

CapEx can tell you how much a company invests in existing and new fixed assets to maintain or grow its business. It's any type of expense that a company capitalizes or shows on its balance sheet as an investment rather than on its income statement as an expenditure. Capitalizing an asset requires that the company spread the cost of the expenditure over the useful life of the asset.

The amount of capital expenditures a company is likely to have depends on its industry. Some of the most capital-intensive industries have the highest levels of capital expenditures. They include oil exploration and production, telecommunications, manufacturing, and utility industries.

CapEx=ΔPP&E+Current Depreciation

where: CapEx=Capital expendituresΔPP&E=Change in property, plant, and equipment

Capital expenditures are also used in calculating free cash flow to the equity (FCFE). This is the amount of cash available to equity shareholders. The formula for FCFE is:

FCFE=EP−(CE−D) ×(1−DR) −ΔC×(1−DR)

where: FCFE=Free cash flow to equity

EP=Earnings per share

CE=Capex

D=Depreciation

DR=Debt ratio

ΔC=ΔNet capital, change in net working capital or

Alternatively, it can be calculated as:

FCFE=NI−NCE−ΔC+ND−DR

where: NI=Net income

NCE=Net Capex

ND=New debt

DR=Debt repayment

2.4.11. Economic value added.

is a measure of a company's financial performance based on the residual wealth calculated by deducting its cost of capital from its operating profit, adjusted for taxes on a cash basis. EVA can also be referred to as economic profit, as it attempts to capture the true economic profit of a company.

EVA is the incremental difference in the rate of return over a company's cost of capital. Essentially, it is used to measure the value a company generate in it in terms of funds. If a company's EVA is negative, it means the company is not generating value from the funds invested into the business. Conversely, appositive economic added value shows a company is producing value from the funds invested in it.

The formula for calculating EVA is:

EVA = NOPAT - (Invested Capital * WACC)

Where:

- NOPAT = Net operating profit after taxes
- Invested capital = Debt + capital leases + shareholders' equity
- WACC = Weighted average cost of capita

2.4.12 Price to Earnings ratios

The price-to-earnings (P/E) ratio measures a company's share price relative to its earnings per share (EPS). Often called the price or earnings multiple, the P/E ratio helps assess the relative value of a company's stock. It's handy for comparing a company's valuation against its historical performance, against other firms within its industry, or the overall market.

the P/E ratio is one of the most widely used by investors and analysts reviewing a stock's relative valuation. It helps to determine whether a stock is overvalued or undervalued. A company's P/E can also be benchmarked against other stocks in the same industry or against the broader market.

Formula: $\frac{\text{Market value per shares}}{\text{Earnings per share}}$

2.4.13 Earnings per Share

s a measure of a company's profitability that indicates how much profit each outstanding share of common stock has earned. It's calculated by dividing the company's net income by the total number of outstanding shares.

Earnings per share value is calculated as net income (also known as profits or earnings) divided by available shares. A more refined calculation adjusts the numerator and denominator for shares that could be created through options, convertible debt, or warrants. The numerator of the equation is also more relevant if it is adjusted for continuing operations.

Earning per share = $\frac{\text{net income – preferred dividend}}{\text{Common share outstanding}}$

2.5. Related studies

In attempts to provide answers, many studies have been done linking capital mix to firms' financial performance. The findings of some studies suggest that capital mix relates positively to firms' financial performance. For example, Hutchinson, (1995) in his scholarly work describe that financial leverage has a positive effect on the firm's return especially on equity provided that earnings 'power of its assets exceeds the average interest cost of debt to the firm. Taub (1975) found significantly positive relationship between debt ratio and measures of profitability. Nerlove (1973), Baker (1973) Petersen and Rajan (1994) also identified positive relationship between capital and financial performance on the industries. In their study of leveraged buyouts, Robben and lewellen (1995) established an important positive relationship between profitability and total debt as a percentage of the total buyout financing package.

However, some of various studies shown that debt has a negative effect on firm profitability. Adekunle (2009) did a research study on the impact of financial structure on firm profitability in Nigeria for the period one year from 2014-2013. He sampled 30non financial companies that quoted in Nigeria and collected secondary data from company's financial statement. The study used debt ratios as the independent variables and ROA and ROE as the dependent variable. The study employed ordinary least square estimation approach and established that debt ratio has a significant negative relationship with performance of the firm.

Onaolapo & Kajora (2010) did the research on the effects of capital mix on the profitability of firms quoted on Nigeria stock Exchange. The research used a sample of 30 non-financial firms for the period 2013-2014. The findings indicated that a negative effect exist between capital mix and the firm level of profitability. The study used (ROE and ROA) of these companies. Rajan&Zingales (1995).

The capital determinant of common corporations in seven big countries in the world such as Japan, America, Germany, Italy, Canada, etc. in the period of 1987-1991. The research used a sample of 4557 drawn from seven countries and the study indicated that leverage has negative correlation with the firm profitability. However, the study showed a positive correlation of leverage with the size of the firm and tangible assets value.

Abor (2005) did a study investigating the connection between profitability and the capital mix for firms quoted in Ghana stock exchange for the period starting from 1998-2002. He concluded that

short term debt has a positive relationship exist between total debt and profitability because total debts comprise largely of short term financing. However, long term financing was found to have a negative relationship with performance because they are more expensive in the capital market. But what matters is debt in general

But A study done by Raheel (2013) on capital mix and financial performance where total of 83 companies were selected from Pakistan for analysis. Findings of the study suggest that financial performance of firms is significantly affected by their capital mix and their relationship was negative in nature. Moreover capital mix of a firm is negatively related to its market value and also increase its risk level as the share of debts increases in the capital mix. The empirical evidences give little indication of identifying the casual relationship between capital mix of a firm and its performance, However it generally believed that transactions and bankruptcy costs play a vital role in the choice of debt financing . Debt/equity ratio is commonly used as a measure of capital mix, while other ratios like (Earning per share, Operating profit Margin ratio, Return on Asset, Return on Equity) are used as proxies for firm performance. These ratios were used to study the relationship between capital mix and company performance in the context of large public limited companies in Pakistan.

A study carried out by Nkurunziza et al. (2020**)** where the purpose was to examine how debt financing impacts the profitability and operational efficiency of manufacturing firms in Rwanda. He analyzed data from 50 manufacturing firms over a 5-year period using regression analysis. He found that Higher levels of debt were associated with higher return on assets (ROA) but also increased financial risk. The trade-off between leveraging benefits and the cost of financial distress was evident.

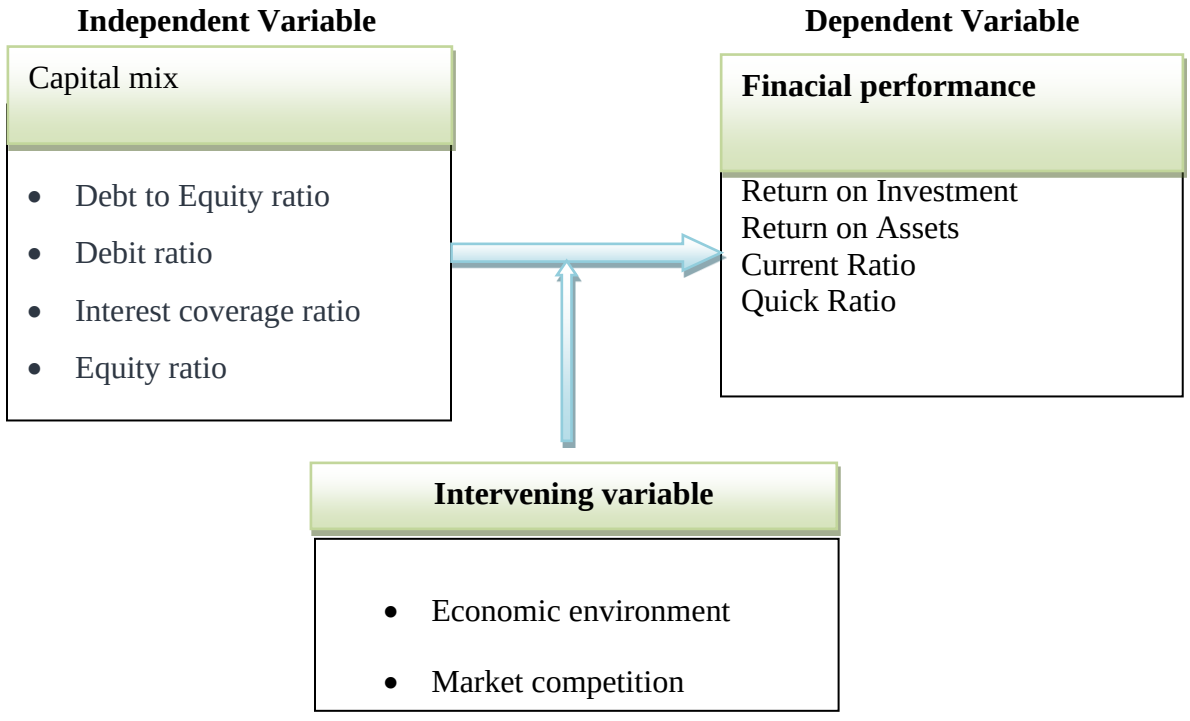
Another study carried out by Mugisha et (2021) where his Purpose was to assess the impact of capital mix on the return on equity (ROE) and overall financial stability of Rwandan manufacturing companies. He passed a panel data approach covering 40 companies and employed fixed effects and random effects models. In his research he found a positive relationship which was observed between equity financing and ROE, suggesting that equity-based capital mixs might be more favorable for long-term profitability. Debt was found to amplify both gains and losses, indicating higher volatility.

A study done by Uwizeye et al. (2022**)** he investigated the effects of capital mix on the liquidity and financial performance of Rwandan manufacturers. Through Conducting a cross-sectional study using financial ratios from 30 companies. He showed that the Excessive debt financing led to liquidity problems, affecting operational performance negatively. Companies with moderate debt levels maintained better liquidity and operational efficiency.

2.6. Conceptual frame work

The study aimed at analyzing the relationship between capital mix and the financial performance of manufacturing companies; the capital mix will be analyzed by its ratios and financial performance will be analyzed by its profitability ratios in order to understand the nature of the relationship between each ratio through considering the case of BRALIRWA PLC PLC . Schematically, the independent variable is capital mix and dependent variable is financial performance.

Figure 1. Conceptual framework.



Researchers, 2024

CHAPTER THREE: RESEARCH METHODOLOGY

3.0. Introduction

This chapter is also concerned with essential parts of the research activity due it showed research procedures plans and techniques used during the whole process of data collection and processing. This chapter cover different aspects like research design, the population of the study, data collection methods, measurement of variables, the validity and reliability test, data analysis and anticipated limitations of the study, sample size, population survey, etc.

3.1. Research Design

In this research, the case study approach which is appropriate was used during the research due it gave us an opportunity for various aspect of a problem to be addressed through some details within a limited time and the study which is BLARIRWA PLC for the period from 2020 to 2023. In this study we are going to describe the behavior of some indicators of capital mix, in relation to its financial performance indicators.

3.2. Data collection Techniques and Tools

Data collection refers to the process of gathering unprocessed information that can be processed into meaningful information, following the scientific process of data analysis (Gall and Borg, 2007). The study used secondary data.

3.2.1. Secondary data.

In the manufacturing sector, the effective analysis of secondary data is essential for understanding operational efficiency, market trends, and financial performance. Secondary data refers to information that has already been collected and published by other researchers, organizations, or institutions, providing a wealth of insights without the need for primary data collection. The below are the techniques.

3.2.1.1. Observation technique

Under this method, provided a unique lens through which researcher examined the complex interplay between capital mix and financial performance, of BRALIRWA PLC from various source like data bases and repositories, market research reports, data and stock exchanges etc. through assessing the managerial behaviors regarding funding choices as well as observing

operational performance metric over time basically the period of three past years from 2020 to 2023.

3.2.1.2. Internet technique

Under this technique the researcher used official websites of the company, news articles, media

3.2.1.3. Documentation technique.

Under this technique the research assessed the capital mix and financial performance through reading books, literature review of related research study and other work regarding to the impact of capital mix on the financial performance. In this case the researcher consulted BRALIRWA PLC annual reports which helped to find its financial statements.

3.2.1.4. Combine and compare technique.

According to D.E Sanga (2004) these techniques aimed at comparing various source and data from various sources like government publication, ULK library, press lease, etc. to help the researcher to generate theories thus comparing data from one year to another so as to observe thev performance level financially.

3.3. Reliability And Validity Measures

3.3.1. Reliability

Reliability refers to whether or not you get the same answer by using an instrument to measure something more than once. In simple terms, research reliability is the degree to which research method produces stable and consistent result whatever it is intended to measure. As per financial statement, the researcher found it appropriate since financial statements were prepared even during their quarterly period. further observations conducted to get reliable and first- published information as probing was prioritized for consistency.

3.3.2. Validity

Validity is the extent to which a measuring instrument measures what it claims to measure. It is whether an instrument measures the traits, characteristics, quality or whatever for which it is intended to measure (Singh, 2012). i.e. refers to how well among the study participants represent

true findings among similar individuals outside the study. For the validity to exists, the measure must achieve what the researcher wanted to measure in length.

Finally, the researcher consulted documentary evidence such as financial statements, websites, journals and other publications related to the study for a thorough analytical review of capital mix accounts management.

3.4. Data processing

This is the classification of answers into meaningful categories in order to bring about their main patterns in data processing the given answers are distinguished and grouped based on their comprehensiveness. Qualitative data presented in writing useful information from the respondents as presented in in relation to the study variables. After the process of data collection, the data is analyzed by arranging and organizing them properly so as to be easily interpreted.

3.5. Methods of data analysis

According to GRAWITZ (2015) a method is a concentrate operation implemented in order to reach one or many objectives, a body of principles leading all organized research, the research adopted the following methods.

3.5.1.Historical method

This is a method relates knowledge past events to the topic of the study, hence leading to compassion between issues (Schell C., 2013). This method helped in fact the analysis of data of precise period or on limited period of time in the past that is to say, 2020-2023; this method used while looking on the past event of BRALIRWA PLC.

3.5.2. Analytical method

Analytical method allows researcher to analyze all collected data and information. It insists on each case and considers everything in detail rather than a whole ((Audrey, 2016)

3.5.3.Statistical method

This statistic method helped to quantity and numbering the results of a research then it allows presenting the results through graphs and tables. This method helped the researchers to present results with tables and interpreting the results of the survey basing on mathematic data.

3.5.4. Correlation

A correlation reflects the strength and/or direction of the association between two or more variables. A positive correlation means that both variables change in the same direction. A negative correlation means that the variables change in opposite directions

3.6. Limitation of the study

Eventually, very study has its own limitations. In this study we considered capital mix of selected manufacturing company based on one company which is BRALIRWA PLC where its result will be generalized to all companies yet they don't have same characteristics with BRALIRWA PLC. This also implies to all production companies which deal with other production which are not beer.

Lastly; Due to confidentiality of some company's documents such as financial statements, auditor's reports and other financial reports this delayed the time schedule for the research.

3.7 Ethical considerations

During our research, we noticed ethical considerations especially by avoiding plagiarism. We also took care of indicating and specifying books, works which we don't own and their owners in references. As far as data collection concerned, we confirm that financial statements considered are the ones published by BRALIRWA PLC where any one can consult them on the company website.

Secondly; Due to confidentiality of some company's documents such as financial statements, auditor's reports and other financial reports, confidentiality of the information released was guaranteed through formal communication that the research was conducted and provided information was solely used for academic purposes.

CHAPTER FOUR: PRESENTATION OF FINDINGS, DATA ANALYSIS AND INTERPRETATION

4.1.Introduction

This chapter presents the analysis and interpretations of the research findings in respect to each objective of the study where it was in assessment of capital mix effect to the financial performance of manufacturing companies in Rwanda; occasionally, each objective is presented, analyzed and interpreted in a separate section, to answer both hypothesis yet it is based on the following specific objectives:

1. To analyze the composition of capital mix at BRALIRWA PLC during the period of 2020-2023.
2. To evaluate the impact of capital mix on key financial performance indicators (FPIs) of BRALIRWA PLC from 2020 to 2023.

4.2.Assessment of capital mix

The capital mix of a company, defined as the mix of debt and equity financing, plays a crucial role in determining its financial performance. In the context of manufacturing companies in Rwanda, particularly BRALIRWA PLC , understanding how different capital mixes influence profitability and operational efficiency is essential for strategic decision-making. This assessment will explore the relationship between capital mix components—such as long-term debt, short-term debt, and equity and key financial performance indicators like return on assets (ROA), return on equity (ROE), and net profit margins over the period from 2020 to 2023. By analyzing BRALIRWA PLC ’s financial data and market conditions during this timeframe, the study aims to provide insights into optimal capital mix strategies that can enhance financial outcomes for manufacturing firms in Rwanda.

4.3.Assets ratio

The assets ratio is a critical financial metric that evaluates the efficiency and effectiveness of a company’s asset utilization in generating revenue. In the context of manufacturing companies in Rwanda, particularly BRALIRWA PLC , understanding the impact of capital mix on financial performance from 2020 to 2023 is essential. This period has been marked by significant economic changes, including shifts in consumer demand and supply chain disruptions due to global events. Analyzing how different capital mix comprising equity and debt affect BRALIRWA PLC ’s asset

ratios will provide insights into operational efficiency and profitability. This study aims to elucidate the relationship between capital mix and financial performance, thereby contributing valuable knowledge to stakeholders interested in optimizing asset management strategies within the Rwandan manufacturing sector.

Table 4.1.Assets ratio for BRALIRWA PLC from 2020-2023

Year	Assets	Evolution	Perecentage(%)
2020	127271	-	
2021	116408	-10863	-8.5
2022	155989	39581	34.0
2023	191931	35942	23.1

Source: BRALIRWA PLC Financial Statement 2020-2023.

The assets ratio for BRALIRWA PLC shows significant fluctuations from 2020 to 2023, reflecting the company's capital mix and its impact on financial performance. In 2021, the assets ratio was a mere 8.5%, indicating a low level of asset utilization relative to liabilities, which could suggest underinvestment or inefficiency in asset management. However, this figure surged to 34.0% in 2022, demonstrating an improved capacity to leverage assets effectively, likely due to strategic investments or operational improvements that enhanced productivity and profitability. The subsequent decline to 23.1% in 2023 may indicate a retraction in asset efficiency or increased liabilities without a proportional increase in asset base, potentially signaling challenges in maintaining optimal capital mix. This analysis directly links to the topic by illustrating how variations in capital mix influence BRALIRWA PLC 's financial performance over these years**.**

4.2.2. Equity ratio

The equity ratio is a critical financial metric that assesses the proportion of a company's total assets financed by shareholders' equity. In the context of manufacturing companies in Rwanda, particularly BRALIRWA PLC, understanding the effect of capital mix on financial performance from 2020 to 2023 is essential. This analysis will explore how variations in equity and debt financing influence profitability, liquidity, and overall financial stability. By examining BRALIRWA PLC 's capital mix during this period, insights can be gained into effective financial management strategies within Rwanda's manufacturing sector.

T**able4.2.Equity ratio for BRALIRWA PLC from 2020-2023**

Year	Equity	Evolution	Perecentage(%)
2020	**42588**	**-**	
2021	**51113**	**8525**	**20.1**
2022	**56141**	**5028**	**9.8**
2023	**63123**	**6982**	**12.4**

Source: BRALIRWA PLC Financial Statement 2020-2023

The equity ratio of BRALIRWA PLC demonstrates significant fluctuations from 2020 to 2023, indicating a changing capital mix that impacts financial performance. In 2021, the equity ratio was notably high at 20.1%, suggesting a relatively strong reliance on equity financing, which can enhance financial stability and reduce bankruptcy risk. However, this ratio sharply declined to 9.8% in 2022, reflecting an increased dependence on debt or a decrease in equity, potentially leading to higher financial risk and lower profitability. The recovery to 12.4% in 2023 indicates some improvement but still suggests caution regarding leverage levels. This trend highlights the importance of capital mix in influencing BRALIRWA PLC ’s financial performance, as a balanced approach between debt and equity is crucial for sustainable growth in the manufacturing sector in Rwanda.

4.2.3.Interest coverage ratio

The interest coverage ratio (ICR) is a critical financial metric that assesses a company’s ability to meet its interest obligations from its earnings before interest and taxes (EBIT). In the context of manufacturing companies in Rwanda, particularly BRALIRWA PLC, analyzing the ICR provides insights into how capital mix influences financial performance. This study focuses on the period from 2020 to 2023, examining how variations in capital mix—debt versus equity—affect BRALIRWA PLC ’s operational efficiency and overall financial health. Understanding this relationship is essential for stakeholders aiming to optimize investment strategies.

Table 4.3.Interest coverage ratio for BRALIRWA PLC from 2020-2023

Year	Profit before tax	Interest expenses	Interest coverage ratio
2020	**12994**	**3989**	**3.2**
2021	**25624**	**8100**	**3.1**
2022	**35789**	**13245**	**2.7**
2023	**42658**	**13140**	**3.5**

Source: BRALIRWA PLC Financial Statement 2020-2023

The interest coverage ratio (ICR) for BRALIRWA PLC from 2020 to 2023 reflects the company's ability to meet its interest obligations from its earnings before interest and taxes (EBIT). In 2020, the ICR was 3.2, indicating a strong capacity to cover interest expenses. However, it slightly decreased to 3.1% in 2021 and further declined to 2.7% in 2022, suggesting a diminishing buffer against interest payments, which could raise concerns about financial stability amid potential increases in debt or operational challenges. The rebound to 3.5% in 2023 indicates an improvement in profitability or a reduction in debt levels, enhancing the company's financial resilience. This fluctuation highlights the impact of capital mix on financial performance; as BRALIRWA PLC adjusts its debt levels relative to equity, it influences both risk and return dynamics, ultimately affecting overall performance..

4.2.4.Debt ratio

The interest debt ratio is a critical financial metric that assesses a company's ability to meet its interest obligations relative to its total debt. In the context of manufacturing companies in Rwanda, particularly BRALIRWA PLC, understanding this ratio is essential for evaluating the impact of capital mix on financial performance from 2020 to 2023. This period has seen significant economic changes, making it imperative to analyze how varying levels of debt and equity financing influence profitability and operational efficiency. By examining BRALIRWA PLC 's interest debt ratio, insights can be gained into broader trends affecting the manufacturing sector in Rwanda.

Table 4.4.Debt ratio for BRALIRWA PLC from 2020-2023

Year	Debt	Evolution	Perecentage(%)
2020	**84683**		
2021	**65295**	**-19388**	**-22.8**
2022	**99848**	**34553**	**52.9**
2023	**128807**	**28959**	**29**

Source: BRALIRWA PLC Financial Statement 2020-2023

The debt ratio of BRALIRWA PLC shows significant fluctuations from 2020 to 2023, indicating varying levels of financial leverage. In 2021, the debt ratio was -22.8%, suggesting that the company had more assets than liabilities, which may indicate a strong equity position or potential misreporting. The sharp increase to 52.9% in 2022 indicates a substantial rise in debt relative to assets, reflecting a shift towards higher leverage that could enhance returns but also increase financial risk. By 2023, the debt ratio decreased to 29%, suggesting a reduction in reliance on debt financing while still maintaining a moderate level of leverage. This trend highlights the impact of capital mix on financial performance, as changes in debt levels can significantly influence profitability and risk management strategies.

4.3.Analysis of the performance of BRALIRWA PLC

The financial performance of BRALIRWA PLC , a leading manufacturing company in Rwanda, is significantly influenced by its capital mix. This study examines the effect of different capital mixs on the company's financial outcomes from 2020 to 2023. By analyzing the interplay between equity and debt financing, we aim to understand how these factors contribute to profitability, liquidity, and overall financial stability. The findings will provide insights into optimal capital strategies that can enhance BRALIRWA PLC 's competitive position within the Rwandan manufacturing sector.

Table 4.5. Analysis of financial performance figures of BRALIRWA PLC

Details	2020	2021	2022	2023
TOTALDEBTS	84,683,000	65,296,000	99,848,000	128,807,000
Equity	42,588,000	51,113,000	56,141,000	63,123,000
Long term debts	15806,000	13,556000	22,421,000	24,430,000
Total assets	127,271,000	116,409,000	155,989,000	191,931,000
Gross profit	42,787,000	51,142,000	71,699,000	84,024,000
Sales	107,111,000	123,596,000	157,656,000	183,682,000
Net income	9,005,000	17,525,000	22,545,000	29,518,000

Source: BRALIRWA PLC annual reports

The above table presents the BRALIRWA PLC financial key figures where different ratios will be computed. As it is seen on the above table the total debts, equity, long term debts and sales seems to be increasing from one year to another while the gross profit and net income have been decreased at their last two years after a gradual permanent increase from 2020 to 2023. Yet this ended for the above variables effects shown through regression analysis with ratio analysis.

4.3.1.Equity ratio

The equity ratio is a critical financial metric that assesses the proportion of a company's assets financed by shareholders' equity. At BRALIRWA PLC, a leading manufacturing company in Rwanda, understanding this ratio is essential for evaluating the impact of capital mix on financial performance from 2020 to 2023. This period has been marked by significant economic changes and challenges, influencing how BRALIRWA PLC manages its capital mix. By analyzing the equity ratio alongside other financial indicators, we can gain insights into how effectively BRALIRWA PLC utilizes its equity to enhance profitability and sustain growth in the competitive manufacturing sector of Rwanda.

Table.4.6. Analysis of equity at BRALIRWA PLC from 2020 to 2023

Equity	2020	2021	2022	2023
Share Capital	5,143	5,143	5,143	5,143
Share premium	85	85	85	85
General reserves	2,072	2,072	2072	2,072
Retained Earnings	35,287	43,813	48,841	55,823
Total Equity	42,587	51,113	56,141	63,123

Source: Balance sheet for the period (2020-2023)

The equity of BRALIRWA PLC as a source finance of the company, the total equity in 2020 was 42,587 billion (a change of 23.0% compared to the year before), in 2021 it was 51,141 rwf (a change of 20 % decrease), in 2022 it was 56,141 rwf (a change of 9.8 %), and in 2023 it was 63,123 rwf (a change of 12.4%).

From the above figures, the equity of this company keeps changing over year per year; for instance since 2020 during the outbreak of COVID 19 which continued to present an unprecedented end health crisis and various macro- economic risk like depreciation of Rwandan francs due to this pandemic which was likely have a significant impact on the company performance compared to 2019 like they stayed optimistic with the government 'effort to roll-out vaccines but in touch with priority of protecting the health of their employee, families, customers and partners in playing constructive role of supporting the government.

This had also indicated how the company used other source of finance during the period of this three years by 23.0% to 12.4%.

For business especially manufacturing companies like Blarirwa, issuing common shares is an important way to raise capital in order to expand the funds without incurring much debt even though it dilutes the ownership of the company, unlike debt funding, shareholder investment need not to be paid at a later date. For sure, shareholders do expects returns on their investment, either through stock growth or dividend payments. But the company will always have the option to repurchase some of its outstanding shares if and only if when it no longer needed of equity capital, there by combining ownership and increasing the value of shares still available by reducing the supply (Islam, M. 2015).

4..3.2. Trend in Retained earnings at BLARIRWA PLC

The Trend in Retained Earnings at BRALIRWA PLC is a critical aspect of understanding the financial performance of manufacturing companies in Rwanda, particularly within the context of capital mix. Retained earnings reflect a company's ability to reinvest profits into its operations, which can significantly influence its growth and sustainability. This study examines the period from 2020 to 2023, focusing on how BRALIRWA PLC 's retained earnings have evolved amidst varying capital mixs. By analyzing these trends, we aim to uncover the relationship between capital mix and financial performance, providing insights that could inform strategic decisions for similar manufacturing entities in Rwanda.

Table 4.7. The Trend in Retained earnings at BLARIRWA PLC

Items	2020(frw000,000)	2021(frw0000000)	2022(frw000000)	2023(frw000000)
Retained Earning	35,287	43,813	48,841	55,823
Change	29.2%	24.2%	11.5%	14.3%

Source: Balance sheet for the period (2020-2023)

Retained earnings are cumulative earning or profits of a company accounted after accounting for dividend payments that are available in either being reinvested in its core business opera tions or payment of debt. Various companies 'record retained earrings under shareholders equity on the balance sheet. When retained earnings increased in BRALIRWA PLC it can be used in investment of other activities and when it decrease the investment can also be decreased.2020 to 2021: Retained earnings increased from FRW 35,287 million to FRW 43,813 million. This represents a significant growth of 24.2%. This high growth rate suggests that the company retained a larger portion of its net income during this period, possibly due to reinvestment in business expansion or strengthening the balance sheet.2021 to 2022: The growth rate slowed down to 11.5%, with retained earnings rising from FRW 43,813 million to FRW 48,841 million. While still positive, this slower growth rate might indicate either a stabilizing of business growth or increased dividend payouts.2022 to 2023: There was an increase in the growth rate to 14.3%, with retained earnings growing from FRW 48,841 million to FRW 55,823 million. The rebound in growth rate suggests a potential recovery or improved financial performance after the previous year's slowdown**.**

4.3.3..Debt analysis ratio

The Debt Analysis Ratio serves as a critical tool in assessing the financial health of BRALIRWA PLC, particularly in the context of its capital mix and overall performance from 2020 to 2023. This analysis focuses on understanding how different levels of debt influence the company's profitability, liquidity, and risk exposure. As a leading player in Rwanda's manufacturing sector, BRALIRWA PLC 's capital mix decisions are pivotal for sustainable growth. By examining key ratios such as debt-to-equity and interest coverage, this study aims to elucidate the relationship between capital mix and financial performance, providing insights that can inform strategic decision-making within the company.

Table 4.8 The change of Debt analysis

Debt	2020(frw000,000)	2021(frw00000)	2022(frw000000)	2023(frw000000)
Current liability	-	-	-	-
Loan& borrowing	11,612	8,461	18,243	16,759
Deferred income	-	-	-	-
Deferred tax liability	4,194	5,095	4,178	7,671
Total noncurrent liability	15,806	13,556	22,421	24,430

Source: Balance sheet for the period (2020 -2023)

Non –current liabilities have some elements like differed income in the period from 2020 to 2023 BRALIRWA PLC did not have deferred income because there was no advance of payment made for service that have not yet been rendered nor certain goods which have not yet been delivered. Loan borrowing of BRALIRWA PLC in 2020 has 11,612,000,000 rwf and decreased by to 8,461,000,000 rwf in 2021; in 2022 increased up to 18,243,000,000 rwf and in 2023 decreased up to 16,759,000,000 rwf. From 2020-2023 BRALIRWA PLC used loan and borrowing as an appropriate way of increasing equity.

Tax liability is a balance sheet tool which show temporary difference that will came a due in the future and the one to be paid in in today. In 2020 and 2021 BRALIRWA PLC had a tax liability of 4,194,000000 rwf and 5,095,000,000 rwf, in 2022 was 4,178,000,000rwf and in 2023 was 7,671,000000rwf

4.3.4..Debt to equity ratio

The Debt to Equity Ratio is a critical financial metric that evaluates a company's financial leverage by comparing its total liabilities to shareholders' equity. At BRALIRWA PLC, a leading manufacturing company in Rwanda, this ratio serves as an essential indicator of the capital mix and its implications on financial performance. Analyzing the period from 2020 to 2023, this study aims to explore how BRALIRWA PLC 's capital mix influences profitability, liquidity, and overall operational efficiency. Understanding the interplay between debt and equity financing is vital for stakeholders, as it directly impacts investment decisions and strategic planning within the competitive landscape of Rwanda's manufacturing sector.

Table 4.9. The analysis of Debt to equity ratio of BRALIRWA PLC

Particular	2020	2021	2022	2023
Total debts (In thousand rwf)	84,683	65,296	99,848	128,807
Shareholders' equity(In thousand rwf)	42,588	51,113	56,141	63,123
Debt to equity ratio	1.98	1.27	1.77	2.04

Source: BRALIRWA PLC financial statement 2020-2023

A ratio of 1 can mean that investors and creditors have an equal stake in the business assets; the more the ratio is less than 1 shows that the portion of assets provided by stock holders is greater than the portion of assets provided by creditors and a greater than 1 ratio indicates that the proportion of assets provided by creditors is greater than the portion of assets provided by stockholders. In other words, a ratio of 1 means that 50%of assets are founded by creditors and 50% of assets are founded by stake holders . from the table above we can see that debts funded the assets of BRALIRWA PLC by 1.98 in 2020, 1.27 in 2021, 1.77 in 2022, 2.04 in 2023. This figures clearly show that BRALIRWA PLC has been more financed by debts than equity from 2020 to

2024. This scenario may not only have same advantages but also same disadvantages ,as it was a more demonstrated in the literature review. A lower debt to equity ratio show that the company is more stable financially, yet companies like BRALIRWA PLC with higher ratio are more risky to creditors and investors than those with lower ratio. Due it shows that investors haven't funded the operation as much as creditors have and this can also mean that investors don't want to invest in business operations because the company is not performing well and lack of performance may be a reason why companies are seeking out extra debt financing.

4.3.5.Return on Assets ratio

The Return on Assets (ROA) ratio is a critical financial metric that measures a company's efficiency in utilizing its assets to generate earnings. In the context of BRALIRWA PLC , a leading manufacturing company in Rwanda, analyzing ROA provides insights into how effectively the firm manages its capital mix to enhance financial performance. This study focuses on the period from 2020 to 2023, examining the interplay between capital mix and profitability. By evaluating ROA alongside other financial indicators, this research aims to elucidate the impact of capital mix decisions on BRALIRWA PLC 's operational success and overall financial health within the Rwandan manufacturing sector.

Table 4.10.Return on Asset ratio of BLARIRWA PLC

Particular	2020	2021	2022	2023
Net income (In million rwf)	9,005	17,525	22,545	29,518
Total Assets(In million rwf)	127,271	116,409	155,989	191,931
RO.A	7.0%	15.0%	14.4%	15.3%

Source: BRALIRWA PLC ltd financial statement statements (2020-2023)

Based on the above result BRALIRWA PLC has report a return on asset of 7.0% in 2020, 15.0% in 2021, 14.4% in 2022, and 15.3% in 2023. From the above figures a company managed to get

profit from the money invested in asset during this period of research. This had been achieved through the a diversity of combined strategies adopted by the company its self which was based on the investment in share market.

In other words the ROA shows how effectively the company converted the money used to purchase assets into net income. Since all assets are either financed by equity nor debt, some of the debtors had tried to disregard the costs of acquiring the assets in the the return calculation by adding back interest expense in the formula. The more the ratio is high the more is favorable for the company investors due to effective management of assets to- produce the great amount of income.

Positive ROA ratio usually indicate an up word profit trends as well. So as the income generated mainly by the revenues from sales realized as also it remain with the amount of net profit which is not bound to pay the interest expense because the company use its own equity through selling shares to finance its activities.

4.3.6.Profit Margin Ratio

it measure how much out every dollar of sales a company actually keeps in earnings. This is also a best indicator of an organization ‘s efficiency because net profit takes into consideration of all expenses of the company. Based on the following table

Table 4.11. The analysis of profit margin of Blarirwa PLC from 2020 to 2023

Particular	2020	2021	2022	2023(Frw000,000)
Net income (In thousand rwf)	9,005	17,525	22,545	29,518
Sales(In thousand rwf)	107,111	123,596	157,656	183,682
Profit margin in %	8.4%	14.1%	14.3%	16.0%

Source: BRALIRWA PLC financial statement 2020-2023

According to the above table, BRALIRWA PLC managed to remain with 8.4% of the revenues realized in 2020 as net profit margin, 14.1% of its income as a net profit margin of 2021, 14.3% of its income as a net profit margin of 2022, 16.0% of its income as a net profit margin of 2023. This clearly shows how the company managed to reduce \its operations through production

technology. From the figure above, BRALIRWA PLC managed to retain apportion of its income after covering all its expenses, a higher ratio of margin indicates a more profitable the company is as well as its better control over its costs compared to its competitors.

This margin ratio describe the margin left for the equity and preference shareholders.an adequate margin of net profits are generated when most of its activities are being done efficiently. For the case of our research Blalirwa PLC has taken necessary measures to increase the volume of the sales in order to increase its revenues as well as enables it to cover the operating expenses and also to remain with some percentages as profit to be distributed to the shareholders as rewards for their investment.

4.3.7. Return on equity ratio

Is the amount of net income returned as a percentage of shareholders equity. This means the ratio measures a corporation's profitability by reviewing the amount of profit the company generated with the money shareholders have invested, and this it is shown in the following table

Table 4.12. The change in equity of BRALIRWA PLC

Particular	2020	2021	2022	2023
Net income(In million rwf)	9,005	17,525	22,545	29,518
Owner's equity(In million rwf)	42,587	51,113	56,141	63,123
ROE	21.1%	34.2%	40.1%	46.7%

Source: BRALIRWA PLC financial statements (2020-2023)

According to the table above, in every 1 dollar invested in equity, BLARIRWA PLC managed to generate 21.1% of that money in 2020, 34.2%in 2021, 40.1% in 2022, 46.7% in 2023; from the above figures it is clear that the return on equity of this company increased over in 2023 due to the reduction in income tax expense of 0.8% by lower taxable income from write-off and old debts in that period, this also means that; For one dollar invested, BRALIRWA PLC earned Rwf 8.75 in 2020, it earned 17.03 in 2021, it earned 21.91 in 2022, it earned 28.69 per share

This ratio was calculated by using the net income of BLARIRWA PLC because of this company is generated mainly by revenue from sales and was the shares issued by it on Rwanda stock exchange, played a significant role in facilitating the company to reduce interest paid if it has used loans to finance its activities as well as it managed to retain a high net income.

Generally; there is a crucial relationship between variables due Capital mix ‘s definition which was the proportion of debt and equity in financing the company; the relationship has been a subject of interest among us as researchers and practioners for many years. Based on the above ratios with their demonstrated tables and explanation, a well-structured capital mix can enhance a firm like BLALIRWA PLC’ financial performance while poor structured one can affect its performance negatively.

4.3.8. change in deferred tax liabilities of BRALIRWA PLC

The analysis of deferred tax liabilities is crucial in understanding the financial performance of manufacturing companies, particularly in the context of BRALIRWA PLC. This study investigates how capital mix influences financial outcomes from 2020 to 2023, with a specific focus on BRALIRWA PLC ’s deferred tax liabilities. Deferred tax liabilities arise due to timing differences between accounting income and taxable income, impacting cash flow and investment decisions. By examining these liabilities, we can assess their effect on overall financial health and operational efficiency. This research aims to provide insights into how effective capital management strategies can mitigate tax burdens and enhance profitability in Rwanda’s manufacturing sector.

Table 4.13. change in deferred tax liabilities of BRALIRWA PLC

Items	2020	2021	2022	2023
Deferred tax liability (In million rwf)	4,194	5,095	4,178	7,671
Change	-	21.5%	(18.0%)	83.6%

Source: BRALIRWA PLC financial statement 2020-2023

Based on the above table BRALIRWA PLC deferred tax liability increased by 21.5%in 2021, in 2022 decreased by 18.05% in 2023 increased by 83.6%. this show that on what extent the company retain its tax and use it in the investment. Having an access on long term loan is a critical decision

because this allow the government and the firm as whole to finance long term investments as well as reducing roll over risks potentially for runs. i.e. short and long run. Even though information show that short- term loan have contributed to several well-known financial crisis

4.3.9. Debt to equity ratio

It indicates the proportion of equity and debt the company is using to finance its assets. A high ratio show that there was an aggressiveness in financing the company growth. This is based on the following table

Table 4.14. The analysis of Debt to equity ratio of BRALIRWA PLC

Particular	2020(Frw'000)	2021Frw'000)	2022(Frw'000)	2023(Frw'000)
Total debts(In million rwf)	84,683	65,296	99,848	128,807
Shareholders' equity (In million rwf)	42,588	51,113	56,141	63,123
Debt to equity ratio	1.98	1.27	1.77	2.04

Source: BRALIRWA PLC financial statement 2020-2023

A ratio of 1 can mean that investors and creditors have an equal stake in the business assets; the more the ratio is less than 1 shows that the portion of assets provided by stock holders is greater than the portion of assets provided by creditors and a greater than 1 ratio indicates that the proportion of assets provided by creditors is greater than the portion of assets provided by stockholders. In other words, a ratio of 1 means that 50%of assets are founded by creditors and 50% of assets are founded by stake holders. from the table above we can see that debts funded the assets of BRALIRWA PLC by 1.98 in 2020, 1.27 in 2021, 1.77 in 2022, 2.04 in 2023. This figures clearly show that BRALIRWA PLC has been more financed by debts than equity from 2020 to 2024. This scenario may not only have same advantages but also same disadvantages, as it was a more demonstrated in the literature review. A lower debt to equity ratio show that the company is more stable financially, yet companies like BRALIRWA PLC with higher ratio are more risky to creditors and investors than those with lower ratio. Due it shows that investors haven't funded the operation as much as creditors have and this can also mean that investors don't want to invest in business operations because the company is not performing well and lack of performance may be a reason why companies are seeking out extra debt financing.

4.3.10.Return on Assets ratio

The ratio measures the profit generated by 100Frw invested in assets. And it described in the following table

Table 4.15. Return on Asset ratio of BLARIRWA PLC

Particular	2020	2021	2022	2023
Net income (In million rwf)	9,005	17,525	22,545	29,518
Total Assets (In million rwf)	127,271	116,409	155,989	191,931
RO.A in %	7.0%	15.0%	14.4%	15.3%

Source: BRALIRWA PLC ltd financial statement statements (2020-2023)

Based on the above result BRALIRWA PLC has report a return on asset of 7.0% in 2020, 15.0% in 2021, 14.4% in 2022, and 15.3% in 2023. From the above figures a company managed to get profit from the money invested in asset during this period of research. This had been achieved through the a diversity of combined strategies adopted by the company its self which was based on the investment in share market.

In other words the ROA shows how effectively the company converted the money used to purchase assets into net income. Since all assets are either financed by equity nor debt, some of the debtors had tried to disregard the costs of acquiring the assets in the return calculation by adding back interest expense in the formula. The more the ratio is high the more is favorable for the company investors due to effective management of assets to- produce the great amount of income.

4.3.11.Profit Margin Ratio

it measure how much out every dollar of sales a company actually keeps in earnings. This is also a best indicator of an organization ‘s efficiency because net profit takes into consideration of all expenses of the company. Based on the following table.

Table 4.16. The analysis of profit margin of BRALIRWA PLC from 2020 to 2023

Particular	2020(Frw000,000)	2021(Frw000,000)	2022(Frw000,000)	2023(Frw000,000)
Net income	9,005	17,525	22,545	29,518
Sales	107,111	123,596	157,656	183,682
Profit margin	8.4%	14.1%	14.3%	16.0%

Source: BRALIRWA PLC financial statement 2020-2023

According to the above table $N^0$4, BRALIRWA PLC managed to remain with 8.4% of the revenues realized in 2020 as net profit margin, 14.1% of its income as a net profit margin of 2021, 14.3% of its income as a net profit margin of 2022, 16.0% of its income as a net profit margin of 2023. This clearly shows how the company managed to reduce \its operations through production technology. From the figure above, BRALIRWA PLC managed to retain apportion of its income after covering all its expenses, a higher ratio of margin indicates a more profitable the company is as well as its better control over its costs compared to its competitors.

This margin ratio describe the margin left for the equity and preference shareholders.an adequate margin of net profits are generated when most of its activities are being done efficiently. For the case of our research BRALIRWA PLC has taken necessary measures to increase the volume of the sales in order to increase its revenues as well as enables it to cover the operating expenses and also to remain with some percentages as profit to be distributed to the shareholders as rewards for their investment.

4.3.12.Debt to Asset Ratio

The **Debt to Asset Ratio** is a critical financial metric that assesses the proportion of a company's assets financed through debt. This ratio provides insights into the financial leverage and risk profile of a company, particularly in capital-intensive sectors like manufacturing. In the context of **BRALIRWA PLC**, Rwanda's leading brewery, understanding this ratio is essential for evaluating how its capital mix influences overall financial performance from 2020 to 2023. By analyzing the interplay between debt and assets, stakeholders can gauge BRALIRWA PLC's

ability to manage obligations while sustaining growth. This study aims to elucidate how variations in capital mix impact profitability and operational efficiency within the manufacturing landscape of Rwanda.

Table 4.17. Total Debt to total assets

Items	2020	2021	2022	2023
Total debt (In million rwf)	84,684	51,739	99,847	128,807
Total assets (In million rwf)	127,271	116,408	155,989	191,931
D/A in %	0.66	0.44	0.64	0.67

Source: Balance sheet & income statements (2020-2023)

On the table above the total debt to total asset this means that BRALIRWA PLC could use 0.66 of of debt to finance assets in 2020 0.66,frw 0.44 in 2021, frw 0.64, in 2022 and 0.67 rwf in 2023. This means that the company use large amount of assets than its debts. It also means that investors want to fund the business operations because the company is performing.

4.3.13.Debt coverage ratio

This is the financial metrics which measures and evaluate the ability of the company' cash flow available to pay current obligation. Its important for investors to assess the risks associated with lending money to a company providing investment.

DCR=Operating Income/ Total Debt Service.

Table 4.18. Total debt service includes interest and payments.

Items	2020	2021	2022	2023
Operating income (In million rwf)	198,826	31,214	42,171	54,498
Total debt service (In million rwf)	84,684	65,295	99,847	128,807
DCR in %	2.3	0.47	0.42	0.423

Source: BRALIRWA PLC financial statement 2020-2023

According to the standard rate of acceptance from industry to industry the minium coverage ratio is 1.25; according to the table above generally the was a gradual change in coverage ratio where in 2020 it was 2.3, in 2021 was 0.47 in 2022 was 0.42 and 2023 was 0.423 the higher rate of ratio indicate that on the rate of 2.3 the lender was financially stable and also due to potentially low interest rate through generating enough income which had increased compared to the year before due to factors like positive product mix but also it was driven by low fixed expense mainly from efficiency, reducing an over drawing, enforcement in cash collection and other cost saving initiatives.

The lower ratio (i.e. 2.3 - 0.42) indicate that BRALIRWA PLC had a negative cash flow where the company was not able to cover or pay current debt obligations without drawing on outside sources or borrowing; this means that company's income is potentially overstated because not all expenses are being considered when operating income, EBIT, are used.

4.3.14.Return on investment ratio

The Return on Investment (ROI) ratio is a critical financial metric that evaluates the efficiency of an investment relative to its cost. In the context of BRALIRWA PLC , Rwanda's leading brewery, analyzing ROI over the period from 2020 to 2023 provides insights into how capital mix influences financial performance. This analysis will explore how different financing strategies—equity versus debt—affect profitability and operational efficiency within the manufacturing sector in Rwanda. By examining BRALIRWA PLC 's ROI trends during this three-year period, we can

better understand the implications of capital mix decisions on overall business performance, particularly in a rapidly evolving economic landscape.

Table 4.19. Return on investment analysis

Items	2020	2021	2022	2023
Net profit (In million rwf)	9,005	17,525	22,545	29,518
Fixed assets (In million rwf)	89,260	87,118	104,209	122,079
ROI in %	10.0%	20.0%	21.6%	24.1%

Source: Financial statement of BRALIRWA PLC from 2020 -2023

Based on the table above the trend of return on Investment helped to analyze the income earned and capital employed with in this period of the research. In 2020 in order to generate 1rwf in vested in sales the company invested 10% in fixed assets, in 2021 to earn 1 rwf in sales it invested 20% in fixed assets while in 2022 there was 21.6% and in 2023 it was 24.1%

Furthermore; BRALIRWA PLC has also an ability to raise new funds quickly as well as the rate of ratio clearly show the positive impact which help the finance management of the company to change its structure with in the minimum cost and delay, if guaranteed by the environmental factors. It is also possible for the firm to provide funds at any time for profitable investment.

4.2.15. Analysis of the flexibility of BRALIRWA PLC for the period covering three years

This analysis examines the flexibility of BRALIRWA PLC , a leading beverage manufacturer in Rwanda, over a three-year period from 2020 to 2023. The focus is on understanding how the capital mix influences financial performance within the context of the manufacturing sector in Rwanda. By evaluating BRALIRWA PLC ’s capital mix, including equity and debt components, we aim to identify trends and their implications for operational efficiency and profitability. This study will provide insights into how strategic financial decisions impact overall business resilience and adaptability in a dynamic economic environment. Ultimately, this analysis seeks to contribute to a broader understanding of capital management practices among manufacturing companies in Rwanda.

Table 4.20. Analysis of the flexibility of BRALIRWA PLC for the period covering three years

Items	2020	2021	2022	2023
Total cost (In million rwf)	64,324	72,454	85,957	99662
Total equity (In million rwf)	42,587	51,113	56,141	63,123

Source: BRALIRWA PLC financial statement 2020-2023

4.3.15.Earnings per share ratio

Earnings per Share (EPS) is a financial metric used to indicate a company's profitability on a per-share basis. It's calculated by dividing the company's net income by the number of outstanding shares of its common stock.

Formula = $\frac{\text{Net income – preferred dividends}}{\text{Common stock out standing}}$

Table 4.21. Analyzing the earning per share of BRALIRWA PLC

Items	2020	2021	2022	2023
Net income	9,005	17,525	22,545	29,518
Preferred dividends (In million rwf)	1,192	9,005	17,525	22,545
common stock outstanding in %	100	100	100	100
EPS	78.13	85.2	50.2	69.73

Source: BRALIRWA PLC financial statement 2020-2023

Based On the table above of earning per share this means that BRALIRWA PLC could pay 78.13per share of various proportions include Net Income, Dividends on Preferred Stock, Average Outstanding in 2020 85.2,frw in 2021, frw 50.2, in 2022 and 69.73 rwf in 2023. The increase in value of earned amount per share in period like 2020, 2021, and 2023 clearly show that there was a **Strong Profitability** due the company is generating a substantial amount of profit for each share of stock. This can be an indicator of efficient operations and effective management.

Secondly this show **Attractiveness to Investors** with in these period; Investors often view high EPS as a positive sign, as it can suggest that the company is successful and potentially a good investment. Higher EPS can lead to higher stock prices, assuming other factors are favorable.

Basically it show the **Increased Shareholder Value**: With higher EPS, there's the potential for increased dividends per share, which can be attractive to dividend-seeking investors. Alternatively, a company with high EPS might reinvest profits to fuel further growth, potentially leading to higher stock value over time.

Furthermore; this also show **Comparison with Peers** because high EPS is more meaningful when compared to other companies in the same industry. It can be used to assess relative performance; however, EPS should not be the only metric used for comparison; Eventually; in the period of 2022 there was gradual decrease compared to the rest of the period where investors' perception of a stock worsens and they are looking to pay less for a dollar's worth of earnings, **P/E contraction** occurs. The stock's price falls (even though the earnings per share remains stable

4.4.Relationship between capital mix and financial performance of BRALIRWA PLC from 2020 to 2023.

4.4.1.Capital mix and Profitability

The capital mix, which refers to the proportion of debt and equity financing used by a company, has a significant impact on the financial performance of BRALIRWA PLC. From 2020 to 2023, BRALIRWA PLC 's capital mix has evolved, with a strategic focus on optimizing its debt-to-equity ratio. A balanced capital mix can enhance profitability by lowering the overall cost of capital. For instance, during this period, BRALIRWA PLC may have utilized debt financing to invest in new production technologies or expand its distribution network. This investment would

likely lead to increased sales volume and improved operational efficiency, thereby boosting profitability metrics such as Return on Equity (ROE) and Return on Assets (ROA).

Moreover, leveraging debt can provide tax advantages due to interest expense deductions, further enhancing net income. However, it is crucial for BRALIRWA PLC to maintain an optimal level of debt; excessive leverage could increase financial risk and potentially lead to higher costs of borrowing if market conditions change unfavorably.

4.4.2. Impact on Liquidity and Financial Stability

Another critical aspect of the relationship between capital mix and financial performance is liquidity management. The period from 2020 to 2023 has seen fluctuations in market demand and economic conditions that could affect BRALIRWA PLC ’s cash flow. A well-structured capital mix allows for better liquidity management; for example, maintaining sufficient equity can provide a buffer against downturns in sales or unexpected expenses.

BRALIRWA PLC ’s ability to meet short-term obligations without compromising long-term growth is essential for maintaining investor confidence and operational stability. If the company relies heavily on short-term debt financing, it may face liquidity challenges during periods of reduced revenue or increased costs. Conversely, a prudent mix that includes adequate equity financing can enhance financial stability by providing more flexibility in cash flow management.

In summary, the relationship between capital mix and financial performance for BRALIRWA PLC from 2020 to 2023 illustrates how strategic decisions regarding debt and equity influence profitability and liquidity. By carefully managing its capital mix, BRALIRWA PLC can optimize its financial performance while mitigating risks associated with over-leverage.

4.5.CONCLUSIONS AND SUGGESTIONS

4.5.1.Summary of findings

.The capital mix, also known as capital mix, refers to the proportionate relationship between debt and equity financing used by a company. In the context of manufacturing companies in Rwanda, particularly BRALIRWA PLC, understanding how this mix influences financial performance is crucial for strategic decision-making. Financial performance can be assessed through various metrics such as return on equity (ROE), return on assets (ROA), profit margins, and overall profitability.

2. Overview of BRALIRWA PLC

BRALIRWA PLC is one of Rwanda's leading beverage manufacturers, primarily known for its production of beer and soft drinks. The company has undergone significant changes in its capital mix over recent years, influenced by both local economic conditions and global market trends. This case study focuses on the period from 2020 to 2023, a time marked by recovery from the COVID-19 pandemic and shifts in consumer behavior.

3. Analysis of Capital Mix Components

The capital mix typically consists of:

- **Debt Financing:** Includes loans and bonds that must be repaid over time with interest.
- **Equity Financing:** Involves funds raised through selling shares or reinvesting profits.

In analyzing BRALIRWA PLC 's capital mix during this period, it was observed that the company maintained a balanced approach between debt and equity. The ratio of debt to equity was carefully managed to optimize financial leverage while minimizing risk.

4. Impact on Financial Performance Metrics

Several key findings emerged regarding how the capital mix affected BRALIRWA PLC 's financial performance:

- **Return on Equity (ROE):** A higher proportion of equity financing generally led to increased ROE during periods of stable sales growth. However, excessive reliance on debt resulted in higher interest expenses that negatively impacted net income.

- **Return on Assets (ROA):** The analysis indicated that a moderate level of debt could enhance ROA by allowing for greater investment in productive assets without overly burdening cash flow.
- **Profit Margins:** Fluctuations in profit margins were closely linked to changes in raw material costs and operational efficiency rather than solely dependent on capital mix. Nevertheless, an optimal capital mix contributed positively by reducing financing costs.

5. External Economic Factors

The broader economic environment also played a significant role in influencing BRALIRWA PLC ’s financial performance:

- **Market Demand:** Post-pandemic recovery saw an increase in demand for beverages, which positively impacted revenues.
- **Interest Rates:** Changes in interest rates affected borrowing costs; lower rates during certain periods allowed BRALIRWA PLC to take advantage of cheaper debt financing.

Overall, the findings suggest that while there is no one-size-fits-all approach to capital mix, maintaining a balanced capital mix has been beneficial for BRALIRWA PLC ’s financial performance from 2020 to 2023. Strategic decisions regarding debt and equity have enabled the company to navigate challenges effectively while positioning itself for future growth.

4.4.2. Conclusion

Under this section we deal with the major findings of the research with the conclusion of the researchers, recommendations and it ends with the recommendations for the further researches related to this topic.

For the study on the effect of capital mix on the financial performance of manufacturing companies; with a case of BRALIRWA PLC for the period of 2020-2023, the general reason of this study is to demonstrate the effect of one variable over another.

The specific objectives of this study are as follows:

- To analyze the composition of capital mix at BRALIRWA PLC during the period of 2020-2023.
- To evaluate the impact of capital mix on key financial performance indicators (FPIs) of BRALIRWA PLC from 2020 to 2023.

To reach on those objectives and based on problem statement of the study, the following questions were asked:

- How has the composition of the capital mix at BRALIRWA PLC from 2020 to 2023 has changed?
- How does the capital mix at BRALIRWA PLC influence its key financial performance indicators (FPIs) between 2020 and 2023?

The study expected the following Hypotheses:

H1: The composition of the capital mix at BRALIRWA PLC has changed significantly from 2020-.2023.

H2: There is a statistically significant relationship between the capital mix employed by BRALIRWA PLC and its key financial performance indicators (FPIs) from 2020 to 2023, suggesting that variations in capital mix directly affect profitability, liquidity, and solvency ratios.

In our findings, we observed the increase in capital mix of BRALIRWA PLC from -8.5% in 2020 to 23.1% in 2023, equity ratio was decreased also from 20.1% in 2020 to 12.4% in 2023; the interest coverage ratio was increased from 3.2% in 2020 to 3.5% in 2023;the debt ratio was increased from -22.8% in 2020 to 29% in 2023;retained earning was increased from decreased from from 29.2% in 2020 to 14.3% in 2023,the return on assets was increased from 7.0% in 2020 to 15.3% in 2023,the profit margin ratio increased from 8.4% in 2020 to 16% in 2023,return on equity was increased from 21.1% to 46.7% in 2023,the liabilities increased from 21.5% in 2021 to 83.6% in 2023,the debt to equity ratio increased from 1.98% in 2020 to 2.04% in 2023;debt to total assets increased from 0.66% in 2020 to 0.67% in 2023,total debts service include interest and payments decreased from 2.3% to 0.423% in 2023,the return on investments increased from

10.0% in 2020 to 24.1 % in 2023,and the earning per share was decreased from 78.13% in 2020 to 69.3 in 2023.

In brief ,all hypothesis are confirmed because it was observed that capital mix at BRALIRWA PLC during the period of 2020-2023 was significantly changed due to the influence of external economic factors and internal financial policies and there is a statistically significant relationship between the capital mix employed by BRALIRWA PLC and its key financial performance indicators (FPIs) from 2020 to 2023, suggesting that variations in capital mix directly affect profitability, liquidity, and solvency ratios.

4.5.3.Recommendation

1. Optimize Capital mix

The analysis of the capital mix indicates that an optimal capital mix is crucial for enhancing financial performance. It is recommended that BRALIRWA PLC should aim for a balanced mix of debt and equity financing. This balance can minimize the cost of capital while maximizing returns. The company should conduct regular assessments to determine the ideal ratio that aligns with its operational goals and market conditions.

2. Leverage Debt Financing Wisely

Given that debt can provide tax advantages and lower overall costs, BRALIRWA PLC should consider leveraging debt financing judiciously. However, it is essential to maintain a level of debt that does not compromise financial stability or lead to excessive risk. Implementing a robust risk management framework will help in monitoring and controlling the risks associated with increased leverage.

3. Enhance Equity Financing Strategies

BRALIRWA PLC should explore various avenues for equity financing, such as issuing new shares or attracting foreign direct investment (FDI). Engaging with potential investors through transparent communication about growth prospects and financial health can enhance investor confidence and support equity financing efforts.

4. Focus on Cost Management

To improve financial performance, BRALIRWA PLC must implement stringent cost management practices across all departments. This includes optimizing production processes, reducing waste, and negotiating better terms with suppliers. By controlling costs effectively, the company can improve its profit margins regardless of its capital mix.

5. Invest in Technology and Innovation

Investing in modern technology and innovative practices can significantly enhance operational efficiency and product quality at BRALIRWA PLC. Such investments may require upfront capital but are likely to yield substantial long-term benefits in terms of reduced operational costs and increased market competitiveness.

6. Conduct Regular Financial Performance Reviews

Regular reviews of financial performance metrics are essential for understanding how changes in capital mix affect overall profitability. BRALIRWA PLC should establish a framework for ongoing evaluation using key performance indicators (KPIs) related to return on equity (ROE), return on assets (ROA), and profit margins.

7. Engage Stakeholders in Decision-Making

Involving stakeholders—including employees, investors, suppliers, and customers—in decision-making processes regarding capital mix can provide valuable insights into market trends and operational challenges. This collaborative approach can lead to more informed decisions that positively impact financial performance.

8. Monitor Economic Conditions

BRALIRWA PLC should remain vigilant about macroeconomic factors affecting the manufacturing sector in Rwanda, such as inflation rates, interest rates, and government policies regarding trade and investment. Adapting the capital mix strategy based on these external factors will be crucial for maintaining competitive advantage.

9. Develop Human Capital

Investing in employee training and development is vital for enhancing productivity within BRALIRWA PLC ’s operations. A skilled workforce is better equipped to adapt to changes in technology and market demands, ultimately contributing to improved financial outcomes.

10. Foster Sustainable Practices

Lastly, integrating sustainability into business operations can enhance brand reputation while potentially reducing costs associated with energy consumption and waste management. Emphasizing sustainable practices may also attract socially responsible investors who prioritize environmental considerations alongside financial returns.

The combination of these recommendations aims to create a comprehensive strategy that addresses both immediate financial performance issues while laying a foundation for long-term growth within BRALIRWA PLC ’s operational context.

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APPENDICES