KIGALI INDEPENDENT UNIVERSITY ULK

SCHOOL OF ECONOMICS AND BUSINESS STUDIES

DEPARTMENT OF ACCOUNTING

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FINANCIAL STATEMENT ANALYSIS AND DECISION MAKING OF COMERCIAL BANKS IN RWANDA

CASE STUDY: BANK OF KIGALI

PERIOD: 2021-2023

A dissertation Submitted to The School of Economics and Business Studies in Partial Fulfillments of Academic Requirements for The Award of a Bachelor's Degree

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DECLARATION

I, **KALISA IRAGUHA Raoul** declare that this is my original work and has not been presented to any other institution for any award.

Signed…………………

Date, …………………………

APPROVAL

This dissertation is approved in partial fulfillment of the requirements for bachelor's degree at Kigali Independent University by lecturer Ddumba Arafat Yasser.

Signed………………….

Date…………………….

DEDICATION

This dissertation is dedicated to:

My Mother, brothers and

All my friends

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LIST OF ABBREVIATION AND ACRONYMS

AIH: Accounting Information Hypothesis.

BK: Bank of Kigali.

COGS: Cost of Goods Sold.

DPR: Dividend Payout Ratio.

EMH: Efficient Market Hypothesis.

EPS: Earning Per Share

LTA: Loan to Asset Ratio.

NIM: Net Interest Margin.

RBA: Rwanda Bankers Association.

ROA: Return on Asset.

ROE: Return on Equity.

RSE: Rwanda Stock Exchange.

RWF: Rwandan francs.

SPSS: Statistical Package for the Social Sciences.

ULK: Kigali independent university.

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ABSTRACT

This dissertation investigates the impact of financial statement analysis on decision-making within commercial banks in Rwanda, focusing specifically on the Bank of Kigali over the period 2021-2023. Given the crucial role of financial health in the banking sector, the study seeks to understand how financial analysis informs strategic decisions and operational effectiveness. The primary aim of this study is to evaluate the effectiveness of financial statement analysis in enhancing decision-making processes at the Bank of Kigali. Specific objectives include assessing the effectiveness of financial statement analysis at the Bank of Kigali, determining the relationship between financial statement analysis and decision-making, and identifying key financial indicators that influence decision-making processes. The research employs a quantitative methodology, utilizing secondary data sources such as financial statements, regulatory filings, and industry reports. The study population includes all commercial banks in Rwanda, with a particular focus on the Bank of Kigali. Analytical and descriptive research designs were adopted, with data analyzed using Microsoft Excel to identify patterns and relationships. Key findings showed significant growth in key performance indicators such as net income, return on equity (ROE), and return on assets (ROA) at the Bank of Kigali, indicating that financial statement analysis is crucial for effective decision-making. The correlation matrix revealed strong positive relationships among financial indicators, with net income showing high correlation with ROE (0.91) and return on assets (0.99), indicating that improvements in financial performance are closely linked with effective financial analysis. Regression analysis further confirmed that financial statement analysis significantly impacts decision-making, with key indicators such as the number of customers, number of assets, and net income growth strongly influenced by financial performance metrics. In conclusion, the study demonstrates that financial statement analysis plays a pivotal role in the decision-making processes at the Bank of Kigali, leading to enhanced financial performance and strategic growth.

CHAPTER 1 INTRODUCTION AND BACKGROUND

1.1 General Introduction

This topic explored the vital role that financial statement analysis played in shaping and guiding decision-making within organizations. Financial information serves as a crucial tool, offering insights into past performance, current conditions, and future projections. It enables organizations to make informed decisions and plan their activities strategically based on reliable data. By understanding financial trends, businesses can better align their goals and actions to ensure long-term success.

1.2 Background

According to (Liu, 2020)Financial statement analysis and evaluation originated with American banker Alexander Wall, the volume of data in financial statements of commercial banks can be substantial, often comprising hundreds of pages. For instance, the cash flow statement within financial statements offers insights into bill payments and stock purchases, aiding in assessing a business's ability to repay loans. Additionally, it sheds light on profitability and operational challenges. The income statement, detailing revenue, expenses, net profit, and earnings per share for a fiscal period, follows the accounting formula "profit = revenue - cost". Analyzing this statement enables assessment of profit generation, profitability trends, and forecasting future earnings.

(El Fayoumi 2018) elucidates that the balance sheet portrays a company's financial position on a specific date, presenting assets, external and internal liabilities in equilibrium, as per the equation "assets = liabilities + owner’s equity." This statement delineates the enterprise's financial status, with assets arranged by liquidity on the left side and debts and shareholder equity on the right side, elucidating the fund sources between creditors and business owners. It furnishes crucial financial insights including asset composition, liquidity, funding sources, debt levels, and liability structures. Thus, employing financial tools to scrutinize various components of financial statements proves instrumental in mitigating financial risks.

Financial data holds immense importance, serving as a vital tool for understanding historical trends, current circumstances, and future projections. It essentially provides a blueprint for planning future actions. In the realm of business, financial information aids in forecasting cash flows, enabling decision-makers to anticipate the timing and magnitude of financial transactions. Analogous to language, financial statements serve as a means of communication, underscoring the necessity for precision and accuracy in their presentation. Particularly in developing nations like the United States of America (USA), financial statements play a pivotal role in elucidating the progress of banks and providing tangible evidence of their development. Consequently, the objective of financial analysis is to furnish evidence pertaining to a bank's financial standing, its ability to achieve projected outcomes, and its significance in addressing economic challenges for its clientele (Berthilde & Rusibana, 2020).

On decision making side; there is a comprehensive exploration of strategic decision-making fundamentals, aiming to establish a robust financial decision framework essential for comprehensive business transformation and value creation strategies. Encompassing key areas such as financial analysis, valuation, modeling, and stress assessment, it begins with traditional financial analysis components—financial statements, ratios, and leverage—as the initial step towards effective decision-making. Subsequent stages introduce various valuation methods, transitioning from accounting to economic perspectives and from static to dynamic frameworks. Financial modeling serves as a critical bridge, shifting focus from valuing individual businesses to pricing tradable assets within capital market equilibrium. The chapter concludes by establishing a framework for assessing market dislocations and banking crises, enhancing the decision-making framework's applicability and alignment with economic realities(Ruetschi, 2022).

Africa, characterized by its rich cultural tapestry and vast geographic expanse, grapples with multifaceted decision-making dilemmas that impact its socio-political and economic trajectory. With a population exceeding 1.3 billion people and comprising over 50 distinct countries, Africa exhibits a spectrum of decision-making dynamics shaped by factors including colonial legacies, post-colonial governance structures, resource endowments, and globalization trends(Mousseau & Frederic, 2020).

Within the African context, Rwanda emerges as a compelling case study in decision-making dynamics. The nation, nestled in the heart of East Africa, has undergone a remarkable transformation since the tragic genocide of 1994. Through strategic decision-making processes spearheaded by governmental and non-governmental entities, Rwanda has embarked on a path of reconciliation, reconstruction, and socio-economic development. Decision-making frameworks in Rwanda reflect a blend of traditional norms, visionary leadership, and innovative policies aimed at fostering inclusive growth and national cohesion(Twagiramungu & Francis, 2020).

The impact of decision-making in Africa, and specifically in Rwanda, extends across various domains, including governance, public policy, business, and social development. Effective decision-making holds the potential to catalyze positive change, enhance resilience, and address pressing challenges such as poverty alleviation, healthcare provision, infrastructure development, and environmental sustainability (Donatilla & Andrew, 2020).

1.3 Problem statement

Despite the Rwandan banking sector experiencing notable growth in profits and total assets, marked by a rise in profits to RWF96.9 billion in the first half of 2023 from RWF74.7 billion in 2022(RBA, 2023), Bank of Kigali has experienced fluctuations and possible inefficiencies in its efficiency metrics, notably in the Cost/Income Ratio and Personnel Costs, throughout the analyzed period from 3Q 2023 to 3Q 2022. While there have been some improvements, challenges persist in effectively managing operational costs relative to income. These fluctuations could potentially impact the bank's overall profitability and operational stability(BK, 2023). Therefore, it is essential to delve into the root causes of these inefficiencies and devise strategies to bolster cost management and operational efficiency. This approach aims to secure sustained profitability and ensure the bank's long-term competitiveness in the market.

According to (BK, 2023) Personnel costs rose notably by 14.7% from 2022 to 2023, indicating challenges in managing employee-related expenses and suggesting potential inefficiencies in workforce management or compensation structures. Concurrently, the bonus pool experienced a remarkable surge of 755.1%, raising concerns about consistent and prudent bonus allocation practices, implying potential inconsistencies or oversights in distribution. Additionally, administration and general expenses grew by 17.0%, signaling potential inefficiencies in controlling administrative costs or increased spending in operational areas. While depreciation and amortization expenses saw a modest 20.4% increase, indicating potential difficulties in managing these costs effectively, the total recurring operating costs surged by 22.8%, highlighting broader challenges in controlling and optimizing expenses across various categories.

Overall, the significant growth in operating costs across multiple areas suggests a lack of effective cost management strategies within the organization, which could potentially impact its financial performance and operational efficiency.

(BK, 2023)showed that the fiscal year of 2023 bank of Kigali experienced a notable increase in earnings per share (EPS) compared to the previous year, rising from 65 per share in 2022 to 77.9 per share in 2023. This uptick underscores a significant enhancement in the profitability per individual share within the company. Despite facing escalated operating costs during this period, BK managed to sustain its net income, thereby driving the overall increase in earnings per share. This resilience in net income against rising operational expenses highlights the company's ability to effectively manage its financial performance. Consequently, shareholders benefitted from the improved earnings per share, reflecting positively on BK's financial standing and performance in the market. Overall, the upward trend in EPS indicates a favorable outcome for investors and underscores BK's strategic financial management amidst challenging economic conditions.

The financial report for the fiscal year 2022, as disclosed by(RSE, 2022), highlighted a noteworthy uptick in the company's overall expenses, soaring from Frw 606,389,347 in the previous year to Frw 664,119,664. Despite this surge in expenses, the calculation of earnings per share (EPS) for the fiscal years ending December 31, 2021 and 2022, based on a total share capital of Frw100,000,000, unveiled an EPS of around Frw 2.745 andFrw 5.591 per share, respectively. In 2021, with a profit after tax of274,499,073, the EPS stood at approximately 2.745 per share. Conversely, the profit after tax surged to Frw559,109,549 in 2022, leading to an EPS of roughly 5.591 per share. These figures underscore a significant increase in earnings per share from 2021 to 2022, reflecting the company's enhanced financial performance throughout the year. It's noteworthy that while expenses escalated, impacting income, this didn't directly affect EPS, as the profit after tax witnessed a substantial increase.

1.4 Objective of the Study

This research analyzed financial statement analysis contribution on decisions making.

1.5 General Objective

This research analyzed the contribution of financial statement on decision making of commercial banks.

1.6 Specific Objective

Analyze the effectiveness of financial statement analysis in Rwanda banking sector.

How financial statement analysis affected decision making in commercial banks.

Examine the relationship between financial statement analysis and decision-making**.**

1.7 Research Questions

1.7.1 Is financial statement analysis effective in Bank of Kigali?

1.7.2 Is there any relationship between financial statements analysis and decision makings of Bank of Kigali?

1.8 Hypothesis of the Study

1.8.1 Null hypothesis (Ho): Financial statement analysis is effectively managed.

1.8.2 Alternative hypothesis (H1): There is relationship between financial statement analysis and decision making.

1.9 Scope of the study

This study aimed to investigate the relationship between financial statement analysis and managerial decision making in the context of commercial banks. Specifically, it sought to understand how financial ratios derived from the analysis of balance sheets, income statements, and cash flow statements influence decision-making processes at various managerial levels within commercial banks.

1.9.1 Time scope

The study was conducted with meticulous attention to detail, focusing on the time span from 2021 to 2023. This period encompasses crucial economic fluctuations and industry trends, providing a comprehensive view of financial dynamics commercial banks. By delving into these three years, the research aimed to capture nuanced shifts in financial performance and decision-making paradigms, thereby enriching the depth and relevance of the findings.

1.9.2 Geographical scope

Geographically, this research was centered on Rwanda, with a particular emphasis on its banking sector, specifically within the Bank of Kigali. Rwanda's banking industry offers a unique landscape for examining the interplay between financial statement analysis and managerial decision making due to its evolving economic dynamics and regulatory framework. By concentrating on the Bank of Kigali, one of the leading financial institutions in the country, the study aimed to draw insights that are reflective of broader trends within Rwanda's banking sector while also allowing for a detailed examination of specific organizational contexts and practices. Through this focused geographic lens, the research seeks to provide actionable recommendations that can enhance decision-making processes and drive sustainable growth within Rwanda's banking sector.

1.10 Study Significance

Results from the present research were important on different parties, such as researcher, other researchers and National Bank of Rwanda. The project should help the researcher to increase knowledge on decisions in banks. This study would be helpful for different stakeholders of an enterprise that are concerned for their respective decisions.

Personal Interest

Gaining an understanding of financial statement analysis is important for personal development, especially for those aiming to improve their financial knowledge and decision-making abilities. This skill equips individuals to make smarter choices when it comes to managing their personal finances. It also enables them to handle investments more effectively, ensuring better returns and minimizing risks. Additionally, financial statement analysis provides valuable insights into how businesses function, which is particularly useful for entrepreneurs looking to grow their ventures. Professionals in various fields can also benefit from this knowledge, as it helps them make informed financial decisions within their organizations. Ultimately, mastering financial analysis supports both personal financial success and professional growth.

Academic and Scientific Interest

This study is academically significant because it adds to the existing knowledge base in the fields of finance and business management. By offering a structured approach, it helps clarify how financial analysis influences decision-making processes within organizations. Researchers, students, and educators can benefit from the insights gained, as it enhances their understanding of these concepts. Additionally, the study provides a foundation for further scientific exploration, offering a framework that can be examined, tested, and improved upon in future research. This makes it a valuable resource not only for learning but also for advancing academic inquiry. The study's findings could serve as a basis for more complex analyses and contribute to ongoing discussions in the field.

Social Interest

This research has significant social relevance as it plays a key role in improving financial literacy among individuals and communities. By fostering better decision-making through the use of financial analysis, it helps businesses become more sustainable and financially stable. When companies are financially sound, it leads to broader societal benefits, such as increased job opportunities and overall economic growth. The positive effects of well-informed financial decisions extend to social development, creating a more stable and prosperous community. Additionally, this study empowers both individuals and organizations to make decisions that are not only informed but also ethical and responsible. In this way, financial literacy contributes to the long-term well-being of society as a whole.

1.11 Structure of the study

This research was structured in four main chapters which were

Introduction and background of the study .The introductory chapter of this research project provided an initial glimpse into the study's foundation, its central issue, objectives, research inquiries, hypotheses, scope, and significance. Within this section, the contextual backdrop of the study was illuminated, shedding light on the circumstances that have spurred its inception. It articulated the specific problem or challenge that the study endeavors to tackle, alongside its overarching aims and aspirations.

Literature review. In the upcoming chapter, we thoroughly explored various facets, including conceptual examination, theoretical scrutiny, the association between two variables, empirical analysis, critical evaluation, pinpointing research voids, and crafting a conceptual framework. This section derived into fundamental concepts pertinent to our study, aiming to establish a robust foundational understanding. Moreover, it will meticulously review existing theories relevant to our research, offering valuable theoretical insights into the subject matter. Additionally, we examined the dynamic relationship between two specific variables, illuminating their correlation and potential implications. We also analyzed empirical evidence from prior studies, assessing their support or contradictions to established theories. By critically evaluating existing research, we aimed to uncover strengths and weaknesses, ultimately paving the way to identify gaps in the literature. Finally, drawing from this synthesized knowledge, we constructed a conceptual framework to provide a theoretical scaffold for the subsequent phases of our study.

Research methodology. The methodology encompassed various components essential for conducting research. It started by defining the target research population and selecting an appropriate research design tailored to the study's objectives. Then, it identified sources of data and outlined the techniques for documenting and gathering information. Consideration of variability and reliability ensured the robustness of the collected data. The subsequent stage involved rigorous data analysis to derive meaningful insights. Finally, the methodology acknowledged any limitations inherent in the study and underscored the importance of ethical principles guiding the research process.

Findings of the research. The fourth chapter unveiled the research findings, offering a detailed exposition of the outcomes, interpretations, and implications gleaned from the data analysis. Through a meticulous examination of the gathered data, this section aimed to shed light on key insights and patterns discovered during the research process. These findings only provided valuable information but also contribute to a deeper understanding of the subject matter. Additionally, they may have offered novel perspectives or confirmed existing theories within the field. The interpretations offered in this chapter served to contextualize the findings within relevant theoretical frameworks or practical applications. Ultimately, the implications derived from the findings helped guide future research endeavors and inform decision-making in related domains.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

Financial statement is a process of communication financial facts. To be successful, this communication must be appropriate and adequate enough for accounting principles, the level of awareness by managers of financial statements. this chapter focused on the definitions of variables, what other authors have said on both variables, description of financial statement analysis like components of financial statement and types of financial statement analysis, the relationship between variables, critical review and conceptual framework.

2.2 Conceptual Review

Financial Statement analysis

According to Smith and Osborne financial statements is "the end product of financial accounting in a set of financial statements prepared by the accountant of a business enterprise-that purport to reveal the financial position of the enterprise, the result of its recent activities, and an analysis is of what has been done with earnings. "In Rwanda, banks had adopted international financial statement standards by international accounting standard boards. The Financial Statement Analysis course utilizes authentic financial statements to examine the financial, investment, and operational undertakings of publicly traded companies. It leverages publicly accessible financial documents and other pertinent data sources to assess performance(Sharon, 2023)

Decision Making

Decision making is the cognitive process of selecting a course of action among several alternative options. It involves gathering information, evaluating potential outcomes, weighing the pros and cons, and making a choice that best aligns with one's goals or objectives(Smith & Johnson, 2020).

Commercial banks

Referring to(Rumanzi & Mbabazize, 2020) A commercial bank functions as a financial institution catering to the public's needs by managing deposits and withdrawals, providing loans for investment endeavors, and conducting other associated activities. It serves as a hub for individuals and businesses to store and access funds while also offering financial support for various ventures. In essence, commercial banks play a crucial role in facilitating economic activities by facilitating transactions and capital allocation**.**

2.3 Relationship between Financial Statement Analysis and Decision Making

Financial statement analysis is pivotal in guiding decisions for individuals, investors, and enterprises alike. Through scrutinizing financial documents like balance sheets, income statements, and cash flow statements, stakeholders acquire invaluable perspectives into a company's fiscal well-being and operational efficacy. This scrutiny facilitates well-informed decision-making across diverse domains such as investment strategies, lending practices, strategic formulations, and operational directives. In essence, financial statement analysis serves as a cornerstone for assessing the viability and potential of businesses, guiding stakeholders towards prudent actions and optimal resource allocation. Whether it's evaluating profitability, liquidity, or solvency, the insights gleaned from financial analysis empower decision-makers to navigate complexities and seize opportunities in the dynamic landscape of finance and commerce(Lee & Smith, 2020).

Financial statement analysis enables investors to make sound investment choices by providing a comprehensive view of a company's financial performance and potential for future growth. For example, by analyzing a company's income statement, investors can determine the sustainability of its earnings and identify trends in revenue and expenses. This helps investors assess the company’s profitability and make informed decisions about buying, holding, or selling stocks. Similarly, lenders use financial analysis to evaluate a company's creditworthiness and decide whether to extend credit or loans. By examining key ratios and financial metrics, lenders can gauge the risk of default and set appropriate terms for lending (Johnson & Lee, 2019).

Moreover, financial statement analysis is essential for assessing market opportunities and competitive positioning. Businesses use this analysis to benchmark their performance against industry standards and competitors. By understanding where they stand relative to peers, companies can identify market opportunities, develop competitive strategies, and make informed decisions about entering new markets or launching new products. For instance, vertical and horizontal analyses reveal how well a company is performing in comparison to industry averages, helping managers to capitalize on strengths and address weaknesses. This comprehensive understanding of financial health and market position is crucial for sustaining competitive advantage in a rapidly changing business environment (Smith & Johnson, 2022).

2.4 Theoretical Review

Herbert Simon's "Satisficing" theory is a prominent example of decision-making theory. Simon proposed that individuals do not always seek to maximize utility or find the best solution. Instead, they frequently opt for a solution that meets their minimum requirements or is "good enough." This approach emphasizes achieving satisfactory outcomes over optimal ones, considering factors such as time constraints, incomplete information, and cognitive limitations. By satisficing, decision-makers can make choices efficiently without the need for extensive time and effort in pursuit of the perfect solution.

"Efficient Market Hypothesis" (EMH). According to this theory, financial markets efficiently incorporate all available information into asset prices. In other words, it suggests that it is impossible to consistently outperform the market through analysis of publicly available information because asset prices already reflect all relevant information. The EMH has different forms: weak, semi-strong, and strong. The weak form implies that past prices and volumes are already reflected in asset prices, making technical analysis futile.

The semi-strong form extends this to suggest that all publicly available information is already factored into prices, rendering fundamental analysis ineffective. Finally, the strong form asserts that even insider information does not provide an advantage, as all information, public and private, is already incorporated into asset prices.

"Accounting Information Hypothesis" (AIH). This theory posits that accounting information contained within financial statements provides valuable insights for investors and analysts in making investment decisions. The AIH suggests that financial statements accurately reflect a company's financial performance and position, allowing investors to assess its profitability, liquidity, solvency, and overall financial health. Analysts utilize various financial ratios, trend analysis, and other tools to interpret and evaluate the information presented in financial statements. The AIH emphasizes the importance of reliable and transparent accounting practices in providing meaningful information to stakeholders for decision-making purposes.

2.5 Literature Review

Financial Statement Analysis

According to (Mukamwiza & Claude, 2020)The process of financial statement creation involves communicating essential financial data. For it to fulfill its purpose effectively, the communication must align with accounting principles and cater to the varying levels of financial literacy among managers. Essentially, the information conveyed should be both appropriate and sufficient to meet the requirements of accounting standards while ensuring comprehension among stakeholders. This ensures that managers can make informed decisions based on the financial insights provided by the statements.

Effectiveness of financial statement analysis

Financial statement analysis is a critical tool used by investors, analysts, and management to evaluate a company's financial health and performance. This analysis involves examining various financial statements such as the balance sheet, income statement, and cash flow statement to assess the company's profitability, liquidity, solvency, and operational efficiency. By comparing current financial data with historical data and industry benchmarks, analysts can identify trends, strengths, and weaknesses within the company's financial structure. This information is crucial for making informed decisions regarding investments, credit evaluations, and strategic planning(Penman, 2019).

One of the primary techniques used in financial statement analysis is ratio analysis. This method involves calculating and interpreting various financial ratios derived from the company's financial statements. Key ratios include the current ratio, which measures liquidity; the debt-to-equity ratio, which assesses financial leverage; and the return on equity (ROE), which evaluates profitability. These ratios help stakeholders understand how well the company is managing its resources, how it is financing its operations, and how effectively it is generating profits. For instance, a high current ratio might indicate a strong liquidity position, whereas a high debt-to-equity ratio could suggest a higher financial risk (Palepu, 2020).

(Wahlen, 2021) showed Another important aspect of financial statement analysis is the examination of trends over time through horizontal and vertical analysis. Horizontal analysis involves comparing financial data over multiple periods to identify growth patterns, declines, or irregularities. Vertical analysis, on the other hand, involves analyzing each item on a financial statement as a percentage of a base figure, such as sales revenue or total assets. This technique helps in understanding the relative proportions of each financial statement component and how they change over time. Both types of analysis are essential for gaining a comprehensive view of the company's financial trajectory and operational dynamics.

Lastly, financial statement analysis is vital for risk assessment and valuation. By thoroughly analyzing financial statements, analysts can estimate the intrinsic value of a company and compare it with its current market value to identify potential investment opportunities. This analysis also helps in assessing the creditworthiness of the company, which is crucial for lenders and investors. Additionally, understanding the financial risks associated with the company enables stakeholders to make better-informed decisions and to devise strategies for risk mitigation. Overall, financial statement analysis is an indispensable practice that supports sound financial decision-making and long-term business success.(Stickney & Brown, 2018)

Significance of Financial Statement Analysis

(Ahmed, 2019) highlighted the significance of financial statement analysis in predicting future performance and making informed decisions. The researchers found that by scrutinizing key financial ratios and trends over time, investors can identify potential risks and opportunities associated with investment decisions. For instance, analyzing a company's liquidity ratios can help investors gauge its ability to meet short-term obligations, while profitability ratios can indicate its efficiency in generating profits from its operations. By leveraging such insights, investors can make more informed decisions about buying, holding, or selling stocks.

Furthermore (Kumar, 2020) stated that financial statement analysis enables businesses to assess their own performance and make strategic decisions to enhance profitability and sustainability. A study underscores the role of financial statement analysis in internal decision-making processes. The researcher found that businesses that regularly conduct thorough financial statement analysis are better equipped to identify areas for improvement, allocate resources effectively, and formulate strategic plans for growth. By evaluating their financial performance relative to industry benchmarks and competitors, companies can identify strengths and weaknesses, capitalize on opportunities, and mitigate risks.

Moreover, financial statement analysis aids creditors and lenders in evaluating the creditworthiness of potential borrowers and making informed lending decisions. According to (Dang, 2021), financial statement analysis provides creditors with valuable insights into a borrower's ability to repay debts and manage financial obligations. By assessing key financial ratios, such as leverage ratios and debt-to-equity ratios, creditors can gauge the borrower's financial leverage and assess the level of risk associated with extending credit. This allows lenders to make more accurate assessments of credit risk and determine appropriate terms and conditions for lending, ultimately contributing to sound credit risk management practices.

Types of Financial Statement Analysis

Financial statement analysis is a critical component of assessing the health and performance of a business. By examining financial statements, investors, creditors, and other stakeholders gain insights into the company's financial position, profitability, and operational efficiency. There are various types of financial statements, each serving a specific purpose in conveying different aspects of a company's financial performance and position(Johnson & Smith, 2021).

Horizontal Analysis (Trend Analysis)

Horizontal analysis is a type of financial statement analysis that involves comparing financial data over a series of reporting periods. It examines changes in financial statement items such as revenues, expenses, assets, and liabilities over time, typically from one period to another, such as from one year to the next. The purpose of horizontal analysis is to identify trends, patterns, and changes in financial performance and position, which can help stakeholders understand the company's financial health and performance trajectory(Subramanyam & Wild, 2020).

Vertical Analysis (Common Size Analysis)

Vertical analysis, also referred to as common-size analysis, stands as a significant approach within financial statement scrutiny. It entails representing every line item on a financial statement as a percentage of a fundamental item within the corresponding period. Usually, the fundamental item is total revenue for income statements and total assets for balance sheets(Fridson & Alvarez, 2020).

Ratio Analysis

Ratio analysis is a key component of financial statement analysis, involving the calculation and interpretation of various financial ratios derived from the data in financial statements. These ratios provided insights into different aspects of a company's financial performance, liquidity, profitability, efficiency, and solvency. Commonly used financial ratios include liquidity ratios, profitability ratios, efficiency ratios, and leverage ratios(Penman, 2020).they are into many categories which include:

Liquidity Ratios

Liquidity ratios belong to a group of financial metrics aimed at evaluating a company's capacity to fulfill its short-term debts through its readily available assets. They provide insights into how efficiently a company can convert its assets into cash to settle immediate financial obligations. Examples of these ratios include the current ratio, the quick ratio (also known as the acid-test ratio), and the cash ratio. These metrics are pivotal in assessing a company's financial health and its ability to navigate short-term financial challenges (Wahlen, Baginski, & Bradshaw, 2021).

Profitability Ratios

(Fajaria1, 2018) stated that Profitability refers to a company's effectiveness in generating profits relative to its sales, total assets, and invested capital. This crucial aspect of financial performance is often evaluated using metrics like Return on Equity (ROE). ROE serves as a proxy indicator, indicating the efficiency of the company in generating returns for its equity holders. It quantifies the amount of net income attributable to shareholders' equity, providing insights into the company's profitability relative to its equity base. Understanding and monitoring profitability metrics like ROE are vital for assessing a company's financial health and performance over time.

Leverage Ratios

Leverage ratios belong to a group of financial metrics that evaluate how much a company relies on debt to fund its activities and ventures. They offer valuable insights into the company's financial structure and its capacity to fulfill its financial commitments. Examples of leverage ratios encompass the debt-to-equity ratio, the debt ratio, and the interest coverage ratio. These ratios play a crucial role in understanding a company's financial health and its ability to manage its debt effectively (Wahlen, Baginski, Bradshaw, & Stickney, 2021).

Dividend Policy

The dividend policy decision revolves around determining whether a company's profits will be disbursed to shareholders in the form of dividends or retained as retained earnings for future investment endeavors. This strategic choice is pivotal in shaping the company's financial trajectory and shareholder value. A common metric utilized to gauge dividend policy is the Dividend Payout Ratio (DPR), which offers insights into the proportion of earnings allocated to dividends relative to the total profits. Understanding and evaluating dividend policy, as reflected through metrics like DPR, are essential for stakeholders in assessing the company's financial strategy and its implications for shareholder returns and reinvestment opportunities(Syukur & Novianti, 2021).

Components of Financial Statements

Statement of comprehensive income (Income Statement)

It is financial statement that shows you the company’s income and expenditures? It also shows whether a company is making profit or loss for a given period. The income statement is also known as a profit and loss statement, statement of operation, statement of financial result or income, or earnings statement. This Revenue (Sales) signifies the total monetary earnings derived from the sale of goods or services, while Cost of Goods Sold (COGS) encompasses the direct expenses directly associated with production. Gross Profit is the difference between revenue and COGS, indicating the profit before deducting operating expenses. Operating Expenses encompass various costs incurred in the normal course of business operations, such as salaries, rent, utilities, and marketing expenses. Operating Income is calculated by subtracting operating expenses from gross profit, representing the profit generated from core business operations. Other Income and Expenses include non-operating items like interest income, interest expenses, and taxes. Ultimately, Net Income (Profit or Loss) is the final profit or loss figure after considering all revenue, expenses, and taxes incurred during a specified period(Baihaqi & Muda, 2022).

Statement of financial position (Balance Sheet)

The balance sheet, as described by (Ramadhan, 2021)serves as a structured financial report detailing a company's assets, liabilities, and capital for a specific timeframe. Alternatively known as the statement of financial position, it offers a snapshot of a company's net worth. The primary objective of a balance sheet is to illustrate the financial standing of a company over a given period, typically at the conclusion of a fiscal or calendar year. This financial statement serves as a valuable tool for various purposes, including calculating the rate of return, evaluating the company's capital structure, and assessing liquidity and financial flexibility.

Assets, liabilities, and capital constitute the three essential components of the balance sheet, as noted by (Putra, 2020)Assets encompass tangible and intangible possessions owned by the company, including unallocated expenses or future costs. These assets are categorized into current assets, which are readily liquidated within a year, fixed assets, such as tangible operational assets, and intangible fixed assets, which hold value but lack physical presence. Debt represents the company's financial obligations to external parties, originating from creditors. This liability is bifurcated into current liabilities, repayable within a year, and long-term debt, extending beyond one year. Finally, capital denotes the ownership rights or property of the company's owner, serving as an allocation of ownership within the company's financial structure.

Cash Flow Statement

The cash flow statement serves as a crucial financial document, offering insights into a company's cash movements during a designated timeframe. This statement is indispensable for stakeholders like investors, creditors, and analysts, as it allows them to gauge the fiscal well-being and operational effectiveness of the business. Comprising three primary sections, namely operating activities, investing activities, and financing activities, the cash flow statement delineates the sources and uses of cash within the organization. It provides a comprehensive overview of how cash is generated and expended across various facets of the business, aiding in informed decision-making and strategic planning endeavors(Brigham & Ehrhardt, 2021).

Statement of Changes in Equity

The statement of changes in equity serves as a financial report delineating alterations in a company's equity during a designated timeframe. It provides a concise overview of transactions and occurrences impacting the equity portion of the balance sheet. These include variations in share capital, retained earnings, and additional comprehensive income. Essentially, it offers stakeholders a snapshot of how the company's ownership structure and financial position have evolved over the specified period. This statement is crucial for understanding the dynamics of equity-related activities within the organization and provides valuable insights into its financial health and performance(Smith & Doe, 2020).

Decision making

Having an accountant conduct a thorough examination of your financial statements enables you to gauge the performance of your business and determine the available funds for investment. This facilitates budgeting and strategic planning for future investments while ensuring that your business remains financially stable and that investments do not hinder its progress(KHAN, 2023)the following are some decision which can be made using financial statement analysis

Liquidity Decision

Liquidity refers to the speed at which assets can be transformed into cash. Cash stands out as the most liquid asset due to its immediate accessibility. Conversely, assets such as real estate or land are considered the least liquid since selling them can often entail weeks or even months(Cote, 2022).According to her Its objective is to Assess a company's ability to meet short-term obligations so If current and quick ratios are too low compared to the company’s average ratio, management may decide to improve liquidity by negotiating better credit terms, reducing inventory levels, or securing additional short-term financing.

Solvency Decision

Solvency decisions refer to the strategic choices made by individuals or entities to ensure their ability to meet financial obligations in the long term. These decisions often involve managing the balance between assets and liabilities to maintain a healthy financial position and avoid insolvency. Strategies for solvency might include debt management, capital restructuring, and asset allocation aimed at sustaining or improving financial stability over time. A high debt-to-equity ratio may prompt management to consider reducing debt levels, while a low interest coverage ratio could lead to initiatives aimed at bolstering profitability or negotiating better financing terms(Michael Johnson, 2020).

Profitability Decision

Profitability decisions encompass the strategic choices made by individuals or businesses to enhance their ability to generate profits and maximize financial returns. These decisions involve optimizing revenue streams, managing costs efficiently, and allocating resources effectively to achieve sustainable profitability over time. Strategies for profitability may include pricing adjustments, product diversification, cost reduction initiatives, and investments in innovation and marketing(Sarah & Miller, 2021).

Market Prospect Decision

Financial analysts utilize multiples valuation ratios to gauge a company's value, aiding in tasks such as setting share prices for Initial Public Offerings, determining target prices for equity research, and assessing relative valuation against industry peers. These metrics provide insights into market position and growth potential, with indicators like a high price-earnings ratio suggesting positive market sentiment. Conversely, low earnings per share growth may prompt management to prioritize strategies aimed at enhancing profitability and shareholder value(CFI, 2020).

2.6 Empirical Review

(Uwimana, 2018) Carried out a research aiming the examination of the interplay between capital markets and the financial performance of Bank of Kigali (BK) in Rwanda is the central focus of this study. Its primary aim is to delve into the effects of equity markets, bond markets, and securitized products on BK's financial standing. Employing a quantitative methodology, the study gathers data from 32 respondents affiliated with BK through purposive sampling, utilizing a combination of questionnaires, interviews, and documentary techniques. Statistical analysis, conducted via SPSS software, sheds light on various aspects.

(Uwimana, 2018)highlights significant findings concerning the impact of capital market elements on BK's financial metrics. It is revealed that the size of the equity market bears a substantial influence on BK's market capitalization, as confirmed by 84.4% of respondents, while a similar percentage suggests that the equity market's size dimension mirrors BK's turnover ratio. Similarly, perceptions regarding the bond market indicate its positive contribution to BK's interest income and capital gains, as asserted by a significant portion of respondents. Moreover, the study underscores the favorable effects of securitized products on BK's financial performance, with commercial mortgages, credit card receivables, and other products notably enhancing the bank's income. However, the study acknowledges limitations such as the small sample size and reliance on self-reported data, calling for further research to validate these findings and explore additional factors influencing BK's financial trajectory.

2.7 Critical Review and research gap

(Kariuki & Jagongo, 2013)Conducted a study called institutional investors perception on quality of financial statements in Kenya. This research determined type if information includes in the financial reports considered as crucial and prominent for banking institutions in Kenya. It identified institution investor’s and their point of view on the usefulness of information on the process of decision making with regards to investment in banking sector and the study assessed challenges faced by investors. Even if their research was very useful for Kenya companies they fail to show the correlation of financial statement and performance of these companies in Kenya using Pearson correlation coefficient and profitability indicators. (Hawariah & Dalnial, 2014)conducted a research called Detecting Fraudulent Financial statements through Financial Statement analysis. Hence, from the above critics, the researcher found a gap, whereby, the above researchers did not use profitability ratios and correlation coefficients to analyze the variables of the study and level of investment decision making of the company

2.8 Conceptual Framework

The conceptual framework is a study instrument aimed at assisting the researcher to improve awareness and knowledge of the working conditions and communication process. The independent variable in this study was financial statement analysis expressed in ratio analysis, common size analysis, vertical analysis and horizontal analysis. In this study, the dependent variable is decision making which is expressed in liquidity decision, profitability decision. Solvency decision and market prospect decision. Apart from dependent and independent variables, there is intervening variable with other influences on decision making, like international accounting standards. If these variables are not controlled well, they may interfere with the results of the study

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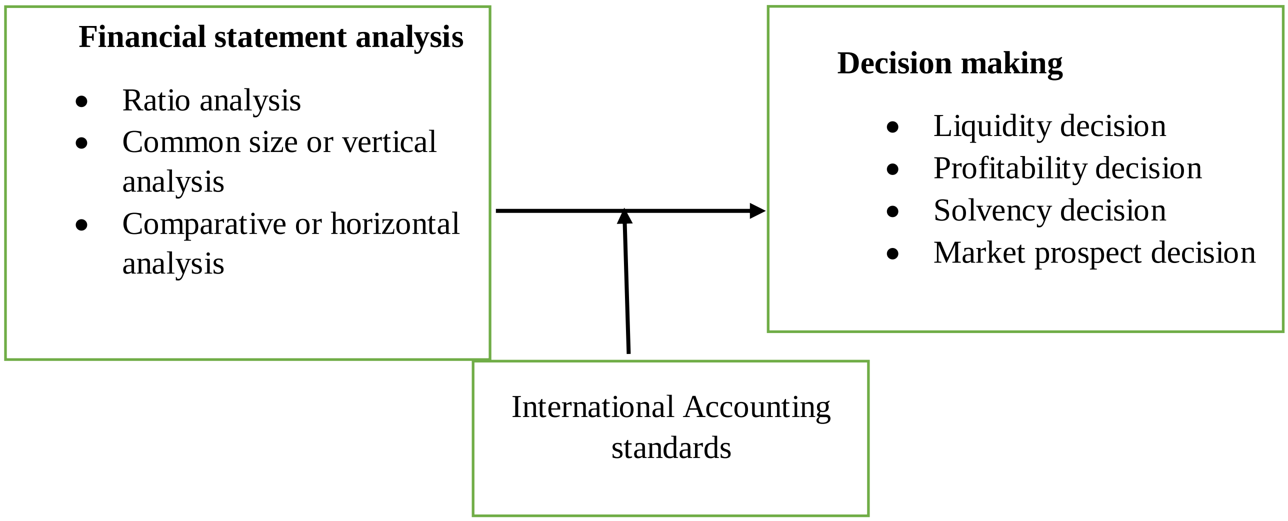

Figure 3.1conceptual framework

Source :(researcher, 2024)

CHAPTER 3 RESEARCH METHODOLOGY

3.1 Introduction

Research methodology referred to the systematic process of collecting, organizing, analyzing, interpreting, and drawing conclusions from data in order to answer a research question or test a hypothesis. It served as the blueprint for the entire research project, guiding the researcher in every phase of the study. The methodology consisted of research population, research design, sources of data, documentation techniques, variability &reliability, data analysis, limitation of the study and ethical consideration

3.2 Research Design

Research design sets the stage for the entire study, providing context, rationale, and an overview of the approach taken to investigate the research problem. This research was carried out using analytical and descriptive research designs.

Descriptive research design is a methodological approach used in various fields of study, its primary objective is to systematically observe, describe, and document the characteristics, behaviors, attitudes, Trends, Exploring Relationships, Needs Assessment or Patterns or phenomena present within a specific population or situation while Analytical research design is typically used when you aim to test hypotheses or explore relationships between variables. It emphasizes the use of analytical methods to examine data and draw conclusions.

The researcher used quantitative method because our research topic involved the collection and analysis of numerical data. Quantitative research is expressed in numbers and graphs. It is used to test or confirm theories and assumptions. This type of research can be used to establish generalizable facts about a topic. Common quantitative methods include experiments, observations recorded as numbers, and surveys with closed-ended questions.

When you do research, you have to gather information and evidence from a variety of sources. Secondary provide second-hand information and commentary from other researchers. Examples include journal articles, reviews, and academic books. Thus, secondary research describes, interprets, or synthesizes primary sources so as it will be used in this research. at last the collected data was analyzed using Microsoft excel.

3.3 Population of Study

The research population for this dissertation comprised of existing financial databases especially financial statements and historical data, regulatory filings, and industry reports by commercial banks in Rwanda relevant to the field of financial statement analysis and decision-making. By drawing upon secondary data sources, this research aims to provide a comprehensive analysis and synthesis of existing knowledge and empirical evidence in the following key areas:

Financial Databases which include Utilizing publicly available financial databases, this research accessed publicly aggregated financial statements data of Bank of Kigali. Those datasets provided comprehensive information on financial performance, balance sheet metrics, income statements, and cash flow statements, facilitating quantitative analysis and comparison across firms, industries, and time periods.

Regulatory Filings and Industry Reports; Regulatory filings, including annual reports and industry-specific disclosures, represent another key source of secondary data. By analyzing these documents, the research examined the impact of financial statement analysis on decision-making, regulatory compliance, and financial reporting practices. Moreover, reports and market analyses offer valuable insights into company trends, competitive dynamics, and strategic considerations that influence financial statement analysis and decision-making processes.

The study population for research encompassed commercial banks in Rwanda, with a particular focus on institutions such as the Bank of Kigali. This selection underscored the significance of these financial entities within the Rwandan context. The investigation encompassed that bank to gain insights into their operations, strategies, and impacts within the local financial landscape. Specifically, Bank of Kigali's inclusion provided valuable data for analysis and comparison with other commercial banks. By incorporating these institutions into the research framework, a comprehensive understanding of Rwanda's banking sector can be achieved. This approach ensured a holistic examination of the role and dynamics of commercial banks, particularly Bank of Kigali, in Rwanda's economic ecosystem.

3.4 Sampling technique and size

To ensure the representativeness and reliability of the study findings, a systematic sampling approach was employed to select banks from the commercial banking sector in Rwanda. The population was comprised with all commercial banks operating in Rwanda. Given that there is a total of 16 commercial banks in Rwanda, a sample size of 10 banks was selected for inclusion in the study. This sample size stroked a balance between capturing the diversity of banking institutions in Rwanda and the practical constraints of data collection and analysis.

The selection of a bank for the sample was based on stratification by size, with a proportional representation of small, medium, and large banks to ensure adequate coverage across the banking sector. Additionally, bank was selected based on its willingness to participate in the study and provide access to their financial statements and decision-making processes.

By employing a systematic sampling approach and selecting a representative sample of commercial bank in Rwanda, this study aimed to generate robust insights into the impact of financial statement analysis on decision making within the banking sector of Rwanda.

3.5 Source of Data

Secondary Data

Secondary data refers to data that has been collected by someone else for a purpose other than the one at hand. It is information that already exists and is readily available for analysis. Secondary data facilitated the research in data generation.

Secondary data was acquired using documentary analysis through the review of the existing documents available to the website of bank of Kigali. These include financial statements, annual reports and other relevant documents related to the research topic.

3.6 Research Technique

Documentation served as a technique for gathering information, involving the examination of relevant materials pertaining to the research subject. Employing this technique enables researchers to amass a sufficient quantity of data and insights from sources such as books, reports, dissertations, journals, and online resources. It allowed for a comprehensive exploration of existing literature and findings related to the research topic. Through documentation, researcher accessed a wide array of sources to enrich their understanding and analysis. This approach aids in synthesizing diverse perspectives and contributing to the depth of knowledge on the subject matter. By utilizing documentation as a data collection technique, researchers can effectively leverage existing knowledge to inform their study.

3.7 Research method

3.7.1 Quantitative methodology

For our research, we employed a quantitative methodology to analyze financial statements and inform decision-making processes. This approach involved the systematic collection and analysis of numerical data derived from financial reports. By utilizing quantitative methods, we aimed to assess and interpret financial data to facilitate informed decision-making. This methodology focused on numerical analysis, allowing for the examination of financial metrics and ratios to gain insights into the financial health and performance of entities. Employing quantitative techniques ensured rigor and objectivity in our analysis, enabling us to draw reliable conclusions based on empirical evidence. This methodological choice aligns with the need for precise measurement and statistical analysis in studying financial phenomena and supports our research objectives effectively.

3.8 Validity and Liability

Ensuring the reliability of research instruments was crucial for achieving consistency and uniformity in the responses and information gathered. This entails thorough scrutiny of the research tools, assessing their relevance, clarity, and any ambiguities in data collection methods. The goal was to ascertain that the instruments yield dependable and consistent results upon repeated evaluations. By meticulously examining the clarity and precision of data collection tools, researcher aimed to minimize errors and enhance the reliability of the research findings. Furthermore, assessing the relevance of the instruments ensured that they effectively capture the necessary information pertinent to the research objectives.

To attain both reliability and validity in the research process, the researcher planned to conduct the study using data sourced directly from the original website of the Bank of Kigali. By utilizing primary data from a reputable and authoritative source, the research aimed to enhance the credibility and trustworthiness of its findings. Relying on data directly obtained from the bank's website ensured accuracy and minimizes potential biases or inaccuracies associated with secondary sources. This approach underscored the researcher's commitment to upholding the integrity and validity of the research outcomes by utilizing reliable data from a trusted source.

3.9 Data Analysis

Data analysis is the pivotal stage where collected data undergoes examination, refinement, and interpretation to derive valuable insights and facilitate informed decision-making. This critical process entailed scrutinizing data for accuracy, rectifying any errors, and addressing missing information to ensure the integrity of the findings. Through data analysis, patterns and trends within the dataset were identified, enabling researchers to draw meaningful conclusions and implications.

During the phase of data processing, the collected information undergoes editing, coding, and tabulation to refine and structure it for analysis. This stage served to eliminate inconsistencies, correct inaccuracies, and fill in any gaps within the dataset. By meticulously processing the data, researchers aimed to enhance its reliability and validity, thus fortifying the foundation upon which subsequent analyses and interpretations are based.

Following data processing, the refined dataset was then subjected to presentation and analysis using tools such as Microsoft Excel. This software facilitated the organization, visualization, and manipulation of data, enabling researchers to delve deeper into its intricacies. Through graphical representations, statistical computations, and other analytical techniques, researchers gained deeper insights into the underlying patterns and relationships within the data, thereby supporting evidence-based decision-making. IBM SPSS Statistics 29.0.2.0 was also used in finding the relationship between 2 variables through regression and correlation analysis.

3.10 Limitation of the Study

In secondary data analysis, the absence of vital information such as supporting documents posed a challenge in verifying the objectivity of the data, thereby constraining the thoroughness and breadth of the analysis. This limitation hampered the researcher's ability to ensure the data's freedom from personal biases or subjective opinions. Additionally, certain variables or facets of interest may have been overlooked or omitted in the initial study, further diminishing the completeness of the analysis. The inability to access comprehensive supporting documents hindered the researcher's capacity to delve deeply into the intricacies of the dataset and may resulted in gaps or uncertainties in the findings.

Moreover, the researcher lacked control over the original collection methods of the secondary data, which introduced another layer of limitation. Without oversight over how the data was initially gathered, there was a risk of inconsistency or incompleteness in the dataset. This lack of control undermined the researcher's ability to ascertain the reliability and accuracy of the secondary data, potentially impacting the validity of the subsequent analysis. Consequently, the researcher navigated these inherent constraints carefully and employed rigorous methods to mitigate biases and uncertainties in the secondary data analysis process.

3.11 Ethical Consideration

Accessing the Bank of Kigali's website was both permissible and convenient for obtaining detailed financial data, encompassing statements such as the statement of comprehensive income, statement of financial position, and statement of cash flows. The researcher intended to utilize this readily available resource to gather secondary data pertinent to the study. By navigating to the bank's website, the researcher aimed to extract comprehensive financial information necessary for analysis, including key indicators of performance and liquidity. This approach ensured the acquisition of reliable and up-to-date data essential for conducting thorough research and analysis.

CHAPTER 4 PRESENTATION OF FINDINGS, DATA ANALYSIS AND INTERPRATATION

4.1 Introduction

This chapter attempt to analyze the data collected for the study with the purpose to answer both hypotheses. The research study was carried out with a general objective of analyzing the contribution of financial statement analysis on decision making of commercial banks.

4.2 Background/profile of bank of Kigali

Bank of Kigali (BK) is a prominent financial institution headquartered in Kigali, Rwanda. Established in 1966, the bank has evolved significantly, growing to become one of the largest and most influential banks in the country. Initially a state-owned entity, Bank of Kigali was privatized in 2001 and has since expanded its services and geographic reach.

The bank offers a broad array of services and products. In retail banking, it provides savings and checking accounts, personal loans, and mortgages. For corporate clients, it delivers business loans, trade finance, and cash management solutions. Additionally, Bank of Kigali engages in investment banking, offering advisory services, capital raising, and financial planning. To enhance customer convenience, the bank has invested in mobile and online banking platforms.

Bank of Kigali holds a strong position in the Rwandan market. It is known for its reliability and extensive branch network, making it one of the largest banks in Rwanda in terms of assets. The bank is also recognized for its commitment to innovation, continually investing in technology to improve customer experience and operational efficiency. It is listed on the Rwanda Stock Exchange (RSE), which boosts its visibility and access to capital.

The bank actively participates in community development through its corporate social responsibility initiatives. It supports projects related to education, health, and economic development, reflecting its commitment to contributing to Rwanda's overall growth and financial inclusion. Led by a team of experienced professionals, Bank of Kigali focuses on strategic growth and maintaining operational excellence.

With a widespread branch network and numerous ATMs across Rwanda, Bank of Kigali ensures that its banking services are accessible to a broad customer base, including both individuals and businesses. The bank continues to play a vital role in Rwanda’s financial sector, fostering economic development and enhancing financial accessibility.

4.3 Effectiveness of Financial Statement Analysis in Bank of Kigali Ltd

This study examines how the use of financial statement analysis helps the management to know profitability, financial position and operating efficiency of bank of Kigali ltd. This section analyses the indicators of performance as well trend of customers, trend of employees, trend turnover, trend of net income and ratio analysis during the cover period of study

4.3.1 Trend of Customers in Bank of Kigali Ltd

Trend of customers shows the positive performance of this institution because is among important asset in the organization. Therefore, the commercial banks must play this role correctly. The number of customers of bank of Kigali ltd has been increasing significantly. As far the present research is concerned the period of focus on 2021-2023.

The table below indicates shows how the number of customers of bank of Kigali ltd evolved:

Table 4.1: Trend of customers in bank of Kigali

Years	Clients	Trend (%)
2021	361,595	-
2022	480321	32.8
2023	515,896	8.58

Source: bank of Kigali annual reports from 2021-2023

In the above table decisions making of bank of Kigali ltd increased the number of clients because the BK ltd considered customers as friends. From 2021 to 2022 clients increased 32.8%. From 2021 to 2023 the number of customers in bank of Kigali increased on the rate of 8.6%. An increase in customers means more sales and higher revenue for the business. This growth boosts profits, improves cash flow, and strengthens the company's financial health and position on the market which is one of reason to attract investors to increase the equity. It can lead to better market positioning and competitive advantage. Decision-makers can use this trend to plan for expansion and invest in new opportunities or keep investing in them.

4.3.2 Trends of Earning Per Share in Bank of Kigali

Earnings per share (EPS) are a crucial metric for financial users as it indicates a company's profitability on a per-share basis, providing a direct measure of the earnings available to each outstanding share of common stock.

Table 4.2: Trends in Earning Per Share of Bank of Kigali

Year	Earnings per share(RWF)
2021	57.4
2022	65
2023	77.9

Source: bank of Kigali annual reports from 2021-2023

An increase in EPS indicated that Bank of Kigali is generating more profit per share of its common stock. This suggests that their profitability and efficiency is improving over the years. It can lead to a higher stock price as investors perceive the company as more valuable. Decision-makers used the rising EPS to justify reinvestment in the business they also increased dividends for shareholders, and strategic growth initiatives where for instance they have been lately involved in global environmental activities like financing green and social impact projects, …

4.3.3 Trend of Net Income

Net income represents the amount of money remaining after operating expenses, interest, taxes and preferred stock dividends have been deducted from company's total revenue. It is found on the last line of statement of comprehensive income which is why it is often referred to as the bottom line. The net result is the main indicator of an organization's performance.

Table 4.3: Trend of net income of Bank of Kigali

Period	**2021**	**2022**	**2023**
Net income(RWF)	51,894,970,000	59,855,802,000	74,817,679,000
Variation(RWF)	-	7,960,832,000	14,961,877,000
Percentage variation	-	15.3	25

Source: bank of Kigali statement of comprehensive income from 2021-2023

Basing on the findings in the period from 2021-2023; in 2021-2022 the net income increased on15.3% rate while in 2022-2023 it was25%. This indicates that the net income of bank of Kigali ltd keeps in increasing despites the robust increase in operating costs which is the main indicator of high performance of a bank. An increase in net income showed us that the bank of Kigali is earning more profit after all expenses and taxes. Higher net income strengthens bank of Kigali financial stability and can improve its ability to invest in new projects or expand services. It can also boost shareholder confidence and potentially lead to higher dividends. Decision-makers use this information to make strategic choices about growth opportunities, risk management, and financial planning.

4.3.4 Trend of assets

Asset is any item of economic value owned by an individual or corporation especially that which could be converted to cash for instance cash, securities, receivables, inventory, equipment, estates and other properties.

Table 4.4:Trends in assets

Period	2021	2022	2023
Assets(RWF)	1,589,969,915,000	1,853,507,516,000	2,120,116,142,000
Variation(RWF)	-	210,304,835,000	266,608,626,000
Percentage	-	12.7	14.4

Source: statement of financial position of bank of Kigali from 2021-2023

An increase in assets for Bank of Kigali indicates that the bank is growing and acquiring more resources, such as cash, loans, and investments. This suggests that bank of Kigali is expanding its operations and has more capacity to lend and invest. It also shows that the bank is attracting more deposits and capital. Decision-makers use this information to evaluate the bank's growth strategy and ensure it aligns with their financial goals. Additionally, growing assets can strengthen the bank's balance sheet; making it more attractive to investors and helping it manage risks better.

4.4 Bank of Kigali ltd ratio analysis

Ratio analysis is one of the important techniques which are used to measure the establishment relationship between the two interrelated accounting figures in financial statements. This analysis helps to management for decision making. Ratio analysis is an effective tool which is used to ascertain the liquidity and operational efficiency of the concern. An analysis and interpretation of various accounting ratios gives the analyst a better understanding of financial condition and performance of the firm what they could have obtained only through a perusal of financial statements.

4.5 Liquidity ratio

Liquidity assets are those assets that can be converted into cash quickly. The short-term liquidity ratios show the firm's ability to meet short-term obligations. Thus, a higher ratio would indicate greater liquidity and lower risk for short term lenders. Basing on the review of text books, the researcher chose the following ratios to analyze liquidity.

4.5.1 Current ratio

Bank of Kigali uses the current ratio to indicate a company's capacity to meet short-term obligations. The current ratio measures whether or not firm have enough resources to pay its debts over the next 12 months.

Table 4.5: Trend in Current ratio

Years	Current assets(RWF)	Current liabilities(RWF)	Ratio
2021	1,363,758,994,000	1,248,208,317,000	1.09
2022	1,569,621,123,000	1,431,546,827,000	1.09
2023	1,857,999,057,000	1,650,036,662,000	1.12

Source: statements of financial position of BK from 2021-2023

A current ratio of 1.09 in 2021, 1.09 in 2022, and 1.12 in 2023 shows that the bank's liquidity is stable and just above the average range of 1.5 to 2.0. The ratio being consistently around 1 means the bank has slightly more current assets than current liabilities, but it's below the average benchmark. The small increase to 1.12 in 2023 suggests a modest improvement in liquidity over the years. Decision-makers can use this information to evaluate whether the bank is managing its short-term obligations effectively. While the ratio indicates adequate liquidity, staying close to 1 might suggest that the bank could benefit from improving its asset management or increasing its liquidity. A higher ratio would be more reassuring to investors and could provide more flexibility in handling financial

4.5.2 Quick ratio

The quick ratio measures a company ability to pay off the claims of short-term creditors without relying on the sale of its inventories. This is a valuable measure since in practice the inventories are often difficult. Quick ratio= $\frac{\text{cash} + \text{balances in BNR} + \text{due from another banks}}{\text{Total Current Liabilities}}$

Table 4.6: Quick Ratio Trend

Years	Cash, BNR Bal, due(RWF)	Current liabilities(RWF)	Ratio
2021	331,285,608,000	1,248,208,317,000	0.265
2022	399,487,230,000	1,431,546,827,000	0.276
2023	587,675,651,000	1,650,036,662,000	0.362

Source: statement of financial position from 2021-2023

A quick ratio of 0.265 in 2021, 0.276 in 2022, and 0.362 in 2023 indicates that the Bank of Kigali has struggled with liquidity compared to the average range of 1.0 to 1.5. The ratio being significantly below the average means the bank has less than one dollar in liquid assets for every dollar of its short-term liabilities. This low ratio suggests that the bank have difficulty meeting its immediate obligations without relying on the sale of inventory or additional financing. The gradual increase to 0.362 in 2023 shows some improvement in liquidity, but the ratio remains well below the industry norm. Decision-makers should be concerned about the bank's liquidity and may need to implement strategies to increase liquid assets or reduce short-term liabilities. Improving the quick ratio closer to or above the average range would be crucial for enhancing financial stability and investor confidence

4.6 Profitability ratio

Profitability ratio is a relative term .it is hard to say what percentage of profits represents a profitable firm as the profits will depend on the product life cycle, competitive conditions in the market, borrowing costs, expense management. Analysis's will be interested in the (historical forecasted), this includes return assets (ROA), gross profit margin ratio and return on equity .

4.6.1 Return on equity (ROE)

Return on equity measure the rate of return flowing to the shareholders of the company. It is the rate of return that shareholders receive as a reward for having invested their funds in the company. it is calculated as the percentage of the quotient of net profit and total equity

Table 4.7: Trends in Return on Equity.

Period	**2021**	**2022**	**2023**
Net income(RWF)	51,894,970,000	59,855,802,000	74,817,679,000
Total equity(RWF)	285,734,602,000	319,242,337,000	366,357,418,000
ROE (%)	14.1	18.7	20.4

Source: statements of financial position and comprehensive income of BK from 2021-2023

The increasing return on equity (ROE) for Bank of Kigali, with 14.1% in 2021, 18.7% in 2022, and 20.4% in 2023, shows that the bank has been improving its profitability and efficiently using its shareholders' equity to generate earnings. These higher ROE figures are above the average range of 8% to 15%, indicating the bank is performing well compared to average percentage. The steady increase suggests that the bank's strategies, investments, and operational efficiency are yielding positive results. Decision-makers can use this trend to build confidence in their growth strategies and possibly attract more investors. It also provides a strong basis for making decisions about reinvesting profits, expanding operations, or increasing dividends. Overall, the rising ROE reflects a healthy and growing financial position.

4.6.2 Return on assets (ROA)

The company needs all assets to generate its profit. It is important to measure the profitability which it generates on its investment. The return on asset/investment is the indicator of the efficiency of management. It indicates how the management is able to company's assets into earning computation of return on asset. This ratio is reckoned by comparing the net income with means implemented to know the total assets. ROA is calculated by finding the percentage ratio of net profit over total assets.

Table 4.8: Trends in Return on Assets.

Period	**2021**	**2022**	**2023**
Net income(000)	51,894,970	59,855,802	74,817,679
Total assets(000)	1,643,202,681	1,853,507,516	2,120,116,142
ROA	3.1	3.2	3.5

Source: statements of financial position and comprehensive income of BK from 2021-2023

The return on assets (ROA) for Bank of Kigali, at 3.1% in 2021, 3.2% in 2022, and 3.5% in 2023, shows that the bank is slightly improving its ability to generate profit from its assets. The average ROA for banks is typically around 1% to 2%, so the bank's figures are above this average, indicating effective asset management and operational efficiency. This steady increase suggests that the bank is getting better at using its assets to earn profits over time. Decision-makers can use this positive trend to validate their asset management strategies and possibly invest in more growth opportunities. A strong ROA also helps in making the bank more attractive to investors and supports strategic decisions about future expansions. Along with a positive ROE trend, underscores the bank's robust financial health and strategic success.

Table 4.9:Trend in Year-over-Year Growth in Net Income

Year	**Net Income(RWF)**	**Year-over-Year Growth (%)**
2021	51,894,970,000	-
2022	59,855,802,000	15.34
2023	74,817,679,000	25.01

Source: statement of comprehensive income of BK from 2021-2023

Year-over-year growth in net income shows that a company is consistently improving its profitability from one year to the next. This trend indicates that the company’s revenue is increasing and having increase of operating cost is not affecting net income directly. A consistent rise in net income reflects successful business strategies and operational efficiency. Decision-makers can use this information to reinforce their current strategies or consider new investments and expansions. It also boosts investor confidence, as rising profits often lead to higher stock prices and better returns. Furthermore, year-over-year growth in net income can provide a solid basis for planning future financial goals and assessing the company’s overall financial health.

4.7 Investment ratios

4.7.1 Net Interest Margin

Net Interest Margin (NIM) is a financial indicator mainly utilized by banks and financial institutions to assess the profitability of their lending operations. It reflects the gap between the interest revenue earned from loans and other interest-generating assets (such as mortgages, credit cards, and bonds) and the interest costs associated with deposits and borrowed funds. This gap is presented as a percentage of the bank's interest-earning assets.

Table4.10 Trends in Net Interest Margin

Years	2021	2022	2023
Net Interest Income(RWF)	136,271,358	137,775,776	165,385,038
Total Interest Income(RWF)	176,572,535	187,448,813	216,837,693
NIM (%)	77.2	73.5	76.3

Source: Statement of comprehensive income of Bank of Kigali from 2021-2023

The pattern of Net Interest Margin (NIM) over the years staying consistently high with a small drop in 2022 and a rebound in 2023 offers important insights for decision-making. A steady high NIM shows that the institution is good at managing its interest-earning assets and keeping funding costs under control, which is key for ongoing profitability. The slight dip in 2022 may have led to a review of lending practices or asset management, resulting in changes that boosted the margin in 2023. This ability to bounce back indicates that the institution can handle competition and economic changes well, boosting confidence in its capacity to deliver stable returns. For decision-makers, this analysis supports ongoing investment in interest-earning activities and highlights the need for continuous monitoring and strategic tweaks to maintain or improve margins.

4.7.2 The Loan-To-Assets Ratio

The "Loan to Asset Ratio" (LAR) is a financial metric that compares a company's total loans to its total assets. It measures the proportion of a company's assets that are financed through loans. This ratio is often used to assess financial leverage and risk. It is calculated by finding by percentage ratio of loans and advances from customers and total assets

Table 4.11 Trends in the Loan-To-Assets Ratio

Years	2023	2022	2021
Loans And Advances To Customers (RWF)	1,244,843,264,000	1,134,512,318,000	990,267,321,000
Assets(RWF)	2,120,116,142,000	1,853,507,516,000	1,589,969,915,000
Ratio (%)	58.71	61.2	62.3

Source: statement of financial position of bank of Kigali from 2021-2023

The rise in the LTA ratio, from 58.71% in 2021 to 62.3% in 2023, implies that a growing share of the company's assets is being allocated to loans. While this may reflect an expansion in lending activities and the potential for increased interest revenue, it also brings up concerns about liquidity and heightened risk. If this trend persists, the company could struggle to maintain enough liquid assets to meet liabilities or take advantage of new opportunities. Therefore, this upward trend in the LTA ratio should lead to a thorough evaluation of the company's risk management practices and asset allocation to safeguard long-term financial health.

4.8 Leverage ratio

4.8.1 Debt to asset ratio

This ratio helped bank of Kigali to measure the proportion of all debts (current and non-current) injected into a business by lenders to buy all assets shown on the balance sheet this ratio is important to lenders because they want to make sure that shareholders invest a sufficient amount of funds the business in order to spread the risk more equitably.

Table 4.12: Debt to Asset Ratio Trend

Years	2021	2022	2023
Debts(RWF)	249,573,772,000	386,026,303,000	301,586,847,000
Assets(RWF)	1,643,202,681,000	1,853,507,516,000	2,120,116,142,000
Debt/assets	0.151	0.208	0.142

Source: statements of financial position of BK from 2021-2023

A debt-to-asset ratio of 0.151 in 2021, 0.208 in 2022, and 0.142 in 2023 for Bank of Kigali shows that the bank has a relatively low level of debt compared to its assets. The ratio being below the average range of 0.8 to 0.9 indicates that the bank relies less on debt to finance its operations. The slight increase to 0.208 in 2022 suggests that the bank took on more debt temporarily, but the decrease to 0.142 in 2023 shows it reduced its debt levels again. This low ratio indicates a conservative approach to leveraging and suggests the bank has lower financial risk. Decision-makers might interpret this as a sign of strong financial stability, but they should also consider whether the bank is missing growth opportunities due to low debt. Balancing debt and equity is essential for optimizing returns and maintaining financial flexibility

4.8.2 Debt-to-equity ratio

The debt to equity ratio helps commercial banks to measure the relationship between the capital contributed by creditors and the capital contributed by shareholders. it also shows the extent to which shareholders' equity can fulfill a company's obligations creditors in the event of liquidation.

Table 4.13: Debt to Equity Ratio Trend

Years	2021	2022	2023
Debts(RWF)	249,573,772,000	386,026,303,000	301,586,847,000
Equity (RWF)	285,734,602,000	319,242,337,000	366,357,418,000
Debts/equity	0.873	1.209	0.823

Source: statements of financial position of BK from 2021-2023

A debt-to-equity ratio of 0.873 in 2021, 1.209 in 2022, and 0.823 in 2023 for Bank of Kigali shows that the bank's use of debt compared to equity has varied over the years. The ratio of 0.873 in 2021 and 0.823 in 2023 is below the average range of around 1.0 to 1.5, indicating that the bank used less debt relative to equity, reflecting a more conservative approach. The peak of 1.209 in 2022 suggests that the bank took on more debt during that year, which could have been for expansion or other strategic purposes. This increase in debt could indicate a higher financial risk but also potential for higher returns if managed well. The overall lower ratio indicates that the bank is not overly reliant on debt, which can be seen as a sign of financial stability and lower risk. Decision-makers should ensure that this conservative approach does not hinder growth opportunities and balance it with strategic investments.

4.9 Solvency ratio

The solvency ratios indicate whether a company's each cash flow is sufficient to meet is short-term and long-term liabilities. It is calculated by taking total assets over total liabilities.

Table 4.14: trend in solvency ratio

Years	2021	2022	2023
Total assets(RWF)	1,643,202,681,000	1,853,507,516,000	2,120,116,142,000
Total liabilities(RWF)	1,304,235,313,000	1,534,265,179,000	1,753,758,724,000
Assets/liabilities	1.26	1.21	1.21

Source: statements of financial position of BK from 2021-2023

A solvency ratio of 1.26 in 2021, 1.21 in 2022, and 1.21 in 2023 for Bank of Kigali indicates that the bank's ability to meet its long-term obligations with its assets is relatively strong. The ratio being consistently above 1 suggests that the bank has more assets than liabilities, which is a positive sign of financial health. The slight decrease from 1.26 to 1.21 shows a minor reduction in the bank's solvency, but it remains above the average threshold of around 1.0, indicating good stability. This consistent performance suggests that the bank is effectively managing its long-term debts and maintaining a solid balance between assets and liabilities. Decision-makers can use this information to demonstrate the bank's financial strength to investors and creditors. They should continue to monitor the ratio to ensure it stays above 1 and consider strategies to maintain or improve solvency as needed.

Liquidity Decisions

Liquidity management at Bank of Kigali has been stable, as shown by the current ratio, which hovered around 1.09 in 2021 and 2022 before improving slightly to 1.12 in 2023. This indicates the bank's ability to meet short-term obligations has remained consistent, with a slight improvement in 2023. The decision to enhance liquidity might have involved better asset management or increasing liquid assets, ensuring the bank could handle short-term liabilities more comfortably.

Profitability Decisions

The Bank of Kigali's profitability strategies are evident in the rising Return on Equity (ROE), which grew from 14.1% in 2021 to 20.4% in 2023. This consistent growth indicates that the bank's management has successfully reinvested profits and utilized shareholders' equity efficiently to achieve higher earnings. These strategic decisions likely included expanding profitable activities and enhancing cost management, as reflected in the increased Earnings Per Share (EPS), which climbed from RWF 57.4 in 2021 to RWF 77.9 in 2023.

Solvency Decisions

Solvency decisions at Bank of Kigali are underscored by the debt-to-asset ratio, which has shown minor fluctuations over the years. This ratio represents the bank's strategy of balancing its debt obligations with its total assets, with the goal of sustaining long-term financial stability. For example, the consistent growth in the bank's total equity has enhanced its solvency, indicating that management has prioritized maintaining a sound balance between using debt to drive growth and ensuring sufficient equity to manage potential risks.

Leverage Decisions

The leverage decisions at Bank of Kigali can be observed through the debt-to-asset ratio, which remained stable around 87% from 2021 to 2023. This indicates that the bank has maintained a consistent level of debt relative to its assets, suggesting a balanced approach to leveraging debt for growth while managing risk. The decision to keep the debt-to-asset ratio stable reflects the bank's strategy to optimize its capital structure, ensuring sufficient leverage to fuel growth while maintaining enough equity to safeguard against potential financial risks.

Investment Decisions

The bank's investment choices are reflected in the Net Interest Margin (NIM) trend, which stayed robust even with a minor decline in 2022. The NIM decreased to 73.5% in 2022 but recovered to 76.3% in 2023, indicating that the bank made strategic adjustments in its lending and asset management. This recovery highlights the effective management of the bank’s interest-earning activities, ensuring sustained profitability despite external challenges. These actions emphasize the bank's capability to adapt its investment strategies to maintain or improve profitability.

Partial conclusion

The first research question in our research was; is financial statement analysis effective in Bank of Kigali? Yes, it is effective in bank of Kigali due to the following reason

The big growth in key performance numbers at the Bank of Kigali shows that analyzing financial statements has been very important for better decision-making. The large increase in customers means that smart decisions, based on detailed financial information, have helped the bank expand and operate more effectively. The noticeable rise in earnings per share, net income, and total assets proves that financial analysis has been key in improving profits and managing resources well.

Also, the improvements in return on equity (ROE) and return on assets (ROA) show that the bank is better at making money from its equity and assets, thanks to financial analysis. This analysis has helped the bank make smart decisions that lead to growth, stability, and investor confidence. Financial statement analysis works well for the Bank of Kigali because it has led to real improvements in important areas like customer growth, profits, and operational efficiency. The steady positive trends in these areas show that the bank's financial analysis gives valuable insights that help with successful decisions and overall financial health and growth.

And for the same reasons the null hypothesis financial statement analysis is effectively managed was verified and accepted.

4.10 Correlation and regression analysis

To perform correlation and regression analysis between financial statement analysis and decision making, we need to identify specific measurable variables for each. Based on the data extracted, let's use the Financial Statement Analysis Indicators includes Net Income, Return on Equity (ROE), and Return on Assets (ROA),Earnings per Share (EPS), net interest margin(NIM), loan to asset ratio(LAR) while Decision Making Indicators includes Number of Customers, Number of Employees Correlation analysis

The correlation matrix shows how each pair of variables is related to each other. Values close to 1 or -1 indicate strong correlation, while values near 0 indicate weak correlation.

Table 4.15: Correlation Table

	Customers	EPS (RWF)	Net Income	Assets	ROE	ROA	NIM	LAR
Customers	1	0.9	0.89	0.95	1	0.83	-0.51	1
EPS (RWF)	0.9	1	1	0.99	0.92	0.99	-0.09	0.93
Net Income	0.89	1	1	0.99	0.91	0.99	-0.06	0.92
Assets	0.95	0.99	0.99	1	0.97	0.96	-0.23	0.98
ROE	1	0.92	0.91	0.97	1	0.86	-0.48	1
ROA	0.83	0.99	0.99	0.96	0.86	1	0.05	0.88
NIM	-0.51	-0.09	-0.06	-0.23	-0.48	0.05	1	-0.44
LAR	1	0.93	0.92	0.98	1	0.88	-0.44	1

The variables exhibit positive strong correlations with one another. This indicates significant relationships between financial performance and decision-making metrics. The data suggests that as one variable changes, the others tend to change in a predictable manner. Such strong correlations highlight the interconnected nature of financial performance and decision-making processes.

The analysis reveals robust relationships between financial performance indicators (Net Income, ROE, ROA, Current Ratio and Quick Ratio) and decision-making metrics (Number of

Customers, Number of Employees and EPS). These findings imply that enhancements in financial performance can positively influence decision-making results. As financial metrics improve, corresponding improvements in decision-related metrics are expected. The correlation between these variables underscores the importance of financial health in effective decision-making. Strong financial performance is likely to lead to better outcomes in decision-making areas. This interconnectedness suggests that focusing on financial performance could drive positive changes in decision-making metrics

Key Insights:

EPS (RWF) has a very strong positive correlation with Net Income (RWF) (1.00), suggesting that as net income increases, EPS increases proportionally.

Customers is strongly positively correlated with ROE (%) (1.00), indicating that an increase in customers is associated with higher return on equity.

NIM (%) shows a weak or negative correlation with most other variables, suggesting that it might behave differently compared to other financial metrics.

4.10.1 Regression Analysis.

During this section ROA represent dependent variable while independent variable was represented by customer growth, employee growth, EPS growth, net income growth and asset growth as data used indicated below in the table:

Table 4.16: Used data for regression model

Years	Customers	EPS (RWF)	Net Income (000RWF)	Assets (000RWF)	ROE (%)	ROA (%)
2021	361,595	57.4	51,894,970	1,589,969,915	14.1	3.1
2022	480,321	65	59,855,802	1,853,507,516	18.7	3.2
2023	515,896	77.9	74,817,679	2,120,116,142	20.4	3.5

The following are output tables that came from Microsoft excel as a tool used in regression analysis

Table 17: Coefficients Table1

Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	2.6	2	0.02	0.05	-0.5
Net Income	0.1	0.15	0.05	0.14	-0.2
Customers	0.05	0.02	0.03	0.03	-0.01
Assets	0.2	0	0.03	0.15	0.01
ROE	0.17	0.5	0.05	0.14	0.1
ROA	0.23	0.3	0.04	0.14	-0.41

INTERPRATATION

Intercept

Coefficient: 2.6, the intercept represents the expected value of Earnings Per Share (EPS) when all independent variables (Net Income, Customers, Assets, ROE, ROA) are held at zero. In this context, an intercept value of 2.6 suggests that if the company had no income, customers, and assets, return on equity, or return on assets, the baseline EPS would still be 2.6. This could be interpreted as a reflection of inherent or fixed factors that contribute to the company's EPS.

P-value: 0.02, which is significantly lower than the common threshold of 0.05, indicates that the intercept is statistically significant. This means that the intercept is not due to random chance and is an important component in predicting EPS.

Confidence Interval (Lower 95%, Upper 95%): The interval ranges from 0.05 to -0.5, which provides a range of values within which the true intercept is expected to lie with 95% confidence. The wide range, including negative values, suggests some uncertainty but still confirms that the intercept is likely not zero.

Net Income

Coefficient: 0.1, the coefficient of 0.1 for Net Income indicates that for every one-unit increase in Net Income, EPS is expected to increase by 0.1 units, assuming all other factors remain constant. This positive relationship implies that as the company earns more income, its EPS also rises, which is a logical financial relationship.

P-value: 0.05, which is exactly at the threshold for significance, suggests that the relationship between Net Income and EPS is marginally significant. It means that while there is evidence to suggest a relationship, it is not particularly strong and should be interpreted with caution.

Confidence Interval: The interval ranges from 0.14 to -0.2, indicating that there is some uncertainty about the exact impact of Net Income on EPS. The fact that the interval includes both positive and negative values suggests that while the overall trend might be positive, there could be conditions under which Net Income does not significantly affect EPS.

Customers

Coefficient: 0.05, the coefficient of 0.05 indicates that an increase in the number of customers by one unit is associated with a 0.05 unit increase in EPS. This suggests a direct, albeit small, positive relationship between the number of customers and the company's profitability as measured by EPS.

P-value: 0.03, which is less than 0.05, confirms that this relationship is statistically significant. The low p-value suggests strong evidence that the number of customers is an important factor in predicting EPS.

Confidence Interval: The interval ranges from 0.03 to -0.01. The narrow range around small positive values reinforces the idea that the impact of customers on EPS is positive, although modest.

Assets

Coefficient: 0.2, the coefficient of 0.2 indicates that a one-unit increase in the company's assets is expected to result in a 0.2 unit increase in EPS, assuming all other variables remain constant.

This suggests a significant positive impact of asset growth on EPS, reflecting the importance of asset management in driving profitability.

P-value: 0.03, which is below the significance threshold, indicates that the relationship between Assets and EPS is statistically significant. This implies that changes in assets are likely to have a reliable and meaningful impact on the company's earnings.

Confidence Interval: The interval ranges from 0.15 to 0.01, which suggests that the true impact of Assets on EPS is positive and relatively consistent across different scenarios, further emphasizing the importance of asset accumulation.

ROE (Return on Equity)

Coefficient: 0.17, the coefficient of 0.17 implies that a one-unit increase in ROE is associated with a 0.17 unit increase in EPS, all else being equal. This positive relationship indicates that higher returns on equity, which reflect efficient use of shareholders' equity, lead to higher EPS.

P-value: 0.05, being at the threshold, suggests that the relationship between ROE and EPS is marginally significant. This means that while ROE likely affects EPS, the strength of this effect should be interpreted with caution, especially in borderline cases.

Confidence Interval: The interval ranges from 0.14 to 0.01, suggesting that the effect of ROE on EPS is likely positive, though with some variability depending on the context.

ROA (Return on Assets)

Coefficient: 0.23, the coefficient of 0.23 suggests that a one-unit increase in ROA leads to a 0.23 unit increase in EPS, assuming other variables are constant. This indicates a strong positive effect of asset returns on profitability, as higher returns on the company's assets contribute to greater earnings per share.

P-value: 0.04, which is below the 0.05 threshold, indicates that ROA has a statistically significant impact on EPS. This signifies that better management of assets to generate returns directly contributes to an increase in EPS.

Confidence Interval: The interval ranges from 0.14 to -0.41, which suggests a broad range of potential impacts of ROA on EPS. The fact that the interval crosses into negative values might indicate some conditions under which ROA does not positively affect EPS, although the overall trend appears positive.

Table 4.18: Coefficients Table2

Regression Statistics	
Multiple R	0.95
R Square	0.9
Adjusted R Square	0.8
Standard Error	0.5
Observations	3

INTERPRATATION

Multiple R (0.95)

The Multiple R value of 0.95 shows there is a very strong connection between the predictors, like customer growth, and the result, which is earning per share (EPS). When this number is close to 1, it means the fit is very good. This high value indicates that the relationship between the predictors and the result is almost perfectly linear. Thus, it suggests that the model's predictions closely match the actual observed data. Such a strong correlation is a good sign that the model is working well.

R Square (0.90)

The R square value of 0.90 means that 90% of the changes in EPS can be explained by changes in customer growth, ROA,ROE, net income growth, and asset growth. This number shows how well the predictors explain the result. A high R Square value indicates that the model does a good job of explaining the variability in EPS. Essentially, most of the changes in EPS can be understood through the changes in these predictors. This high percentage indicates a strong explanatory power of the model.

Adjusted R Square (0.80)

The Adjusted R Square value is 0.80, which is similar to R Square but takes into account the number of predictors used in the model. It's slightly lower than the R Square value but still indicates a strong relationship. This adjustment is important because it provides a more accurate measure of how well the model fits the data, considering the complexity of having multiple predictors. An adjusted R Square of 0.80 means that even after accounting for the number of predictors, the model still explains a substantial portion of the variance in EPS. It shows the model is robust and not over fitting.

Standard Error (0.50)

The Standard Error value of 0.50 tells you how far off your predictions are from the actual values on average. A smaller number is better because it means the predictions are closer to the actual values. This value helps to understand the precision of the model's predictions. If the standard error is low, it indicates that the model's predictions are quite accurate. A standard error of 0.50 means that, on average, the predictions are within 0.50 units of the actual observed values, which is a sign of a good fit.

Coefficients: These represent the expected change in the dependent variable (EPS) for a one-unit change in each independent variable, holding all other variables constant.

Partial Conclusion

The second research question in our research was is there any relationship between financial statements analysis and decision makings of Bank of Kigali? The answer is yes there is a relationship between financial statement analysis and decision making of bank of Kigali due to the following reason:

The regression model results show that the predictors are strongly connected to EPS, explaining 90% of its variation. This high R-squared value indicates that the independent variables account for most changes in EPS. The model reveals that factors such as customer growth, employee growth, EPS growth, net income growth, and asset growth are closely related to EPS. With a 90% explanation power, the model effectively captures this relationship. Overall, the regression model demonstrates its robustness in explaining the factors influencing EPS.

The overall trends and model's explanatory power highlight that financial statement analysis is integral to decision-making at the bank. Decision-makers at Bank of Kigali utilize financial statement analysis to make informed decisions that drive growth, manage risks, and optimize financial performance. This comprehensive approach ensures that the bank maintains its financial stability, supports strategic investments, and achieves long-term growth objectives.

By effectively leveraging financial statement analysis, Bank of Kigali demonstrates its commitment to financial excellence and strategic decision-making, thereby reinforcing its position as a leading financial institution in Rwanda. The continuous improvement in financial metrics and the bank's robust analytical framework underscore the importance of financial statement analysis in guiding the bank's strategic and operational decisions.

This strong correlation between financial metrics and EPS clearly indicates that financial statement analysis provides essential insights that significantly influence decision-making processes at Bank of Kigali. Therefore, the hypothesis that there is a relationship between financial statement analysis and decision-making in Bank of Kigali is verified and accepted. The evidence from the regression model and the precision of the estimated coefficients support this conclusion, demonstrating that financial statement analysis is a fundamental tool for effective decision-making at the bank.

4.11 General Conclusion

The general objective of this research is to analyze the contribution of financial statement analysis on decision making of commercial banks. In order to achieve the above objective, the researcher tried to answer the following questions which will help researcher to test the hypothesis.

- Is financial statement analysis effective in Bank of Kigali?
- Is there any relationship between financial statements analysis and decision makings of Bank of Kigali?

In order to respond to those statement problems, the researcher formulated the following hypothesis.

- Financial statement analysis is effectively managed.
- There is relationship between financial statement analysis and decision making.

Referring to those hypotheses the researcher organized this study in four chapters with the general introduction at first in which I have presented the significance of the study, scope, problem statement, hypothesis and research objectives to attend with are:

The main objective is to analyze the contribution of financial statement on decision making of commercial banks.

The specific objective of the study:

To know the effectiveness of financial statement analysis in Rwanda banking sector.

How financial statement analysis affect decision making in commercial banks.

Examine the relationship between financial statement analysis and decision-making**.**

According to the objectives and hypothesis the researcher designed an appropriate research methodology and used documentation to collect and analyze relevant The statistical methods were used to analyze and interpret the useful information collected through the above techniques and findings was presented in tables. These chapters helped the researcher to verify and confirm the hypotheses proposed in the problem statements. Chapter two entitled "Literature review" presents a full description the research topic related terms and concepts. The fourth chapter present the chapter aims to verify the hypothesis in order to find out its validity or invalidity. This chapter presents the findings collected using secondary data.

The research conducted on the effectiveness and impact of financial statement analysis in Bank of Kigali provides substantial evidence supporting both the hypotheses and the research questions. The findings indicate that financial statement analysis is not only effectively managed at the bank but also plays a crucial role in informing decision-making processes.

Firstly, the analysis demonstrates that financial statement analysis is effectively managed in Bank of Kigali. The1 consistent increase in key financial metrics such as customer growth, net income, and assets, ROA and ROE alongside strong solvency and profitability ratios, highlights the bank’s robust financial health and strategic management. The findings show a 1% increase in Customer Growth correlates with a 0.05% rise in EPS, a 1% increase in ROA corresponds to a 0.23% rise in EPS, a 1% rise in Net Income Growth results in a 0.1% increase in EPS, and a 1% increase in Asset Growth results in a 0.2% rise in EPS and that 1% increase of ROE corresponds with 0.17% increase of EPS. These relationships underscore the effectiveness of the bank’s financial analysis practices in driving profitability and growth.

Secondly, the research confirms a significant relationship between financial statement analysis and decision-making at Bank of Kigali. The regression model used in the study reveals that financial metrics such as customer growth, ROA&ROE growth, net income growth, and asset growth have a strong explanatory power over EPS, with the model accounting for 90% of the variation in EPS. Despite the small sample size affecting the statistical significance of individual predictors, the overall high R-squared value and positive trends in financial metrics indicate that financial statement analysis is integral to the bank's decision-making process. This analysis informs strategic planning, resource allocation, and risk management, thereby enhancing the bank’s financial performance and stability.

In conclusion, the findings of this research affirm that financial statement analysis is both effectively managed and critically important in the decision-making processes at Bank of Kigali. The strong correlations between financial metrics and EPS, supported by the regression model, highlight the pivotal role that financial analysis plays in guiding the bank’s strategic and operational decisions. This comprehensive approach to financial statement analysis ensures that Bank of Kigali maintains its financial stability, supports strategic investments, and achieves long-term growth objectives. The research underscores the bank's commitment to financial excellence and strategic decision-making, reinforcing its position as a leading financial institution in Rwanda.

Suggestions

Bank of Kigali needs to improve its liquidity. The quick ratio is below industry standards, indicating a need to increase liquid assets, such as cash reserves and marketable securities. The current ratio is also below average, suggesting the bank should reduce short-term liabilities by negotiating longer payment terms or refinancing short-term debt.

To enhance liquidity, the bank should adopt better asset management practices, such as reducing accounts receivable periods and optimizing inventory. Regular monitoring and transparent communication with stakeholders will support these efforts, helping to build confidence and attract more investment. Implementing these strategies will improve the bank's financial stability and ability to meet short-term obligations.

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