


UNIVERSITY OF CAPE COAST

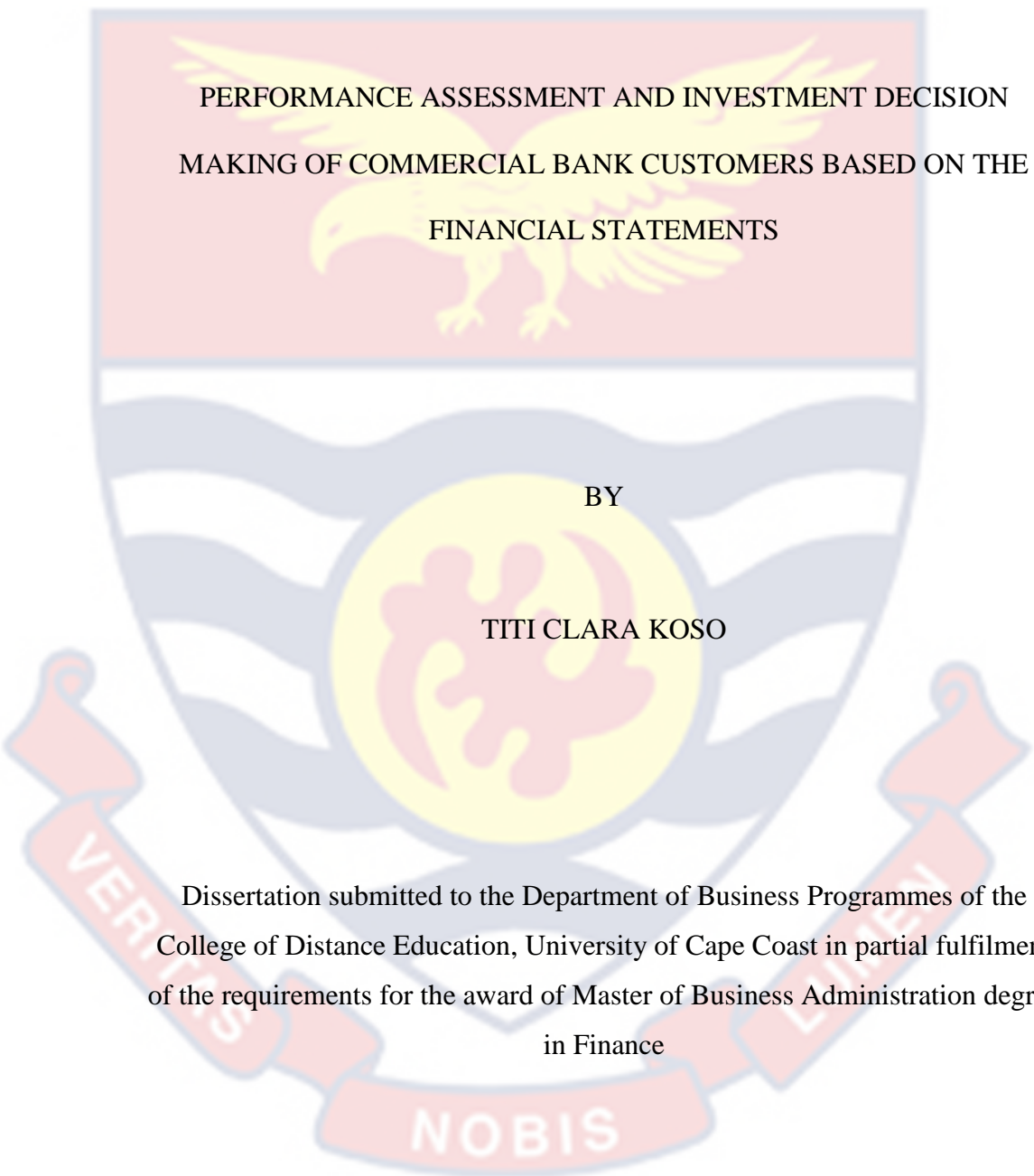


PERFORMANCE ASSESSMENT AND INVESTMENT DECISION
MAKING OF COMMERCIAL BANK CUSTOMERS BASED ON THE
FINANCIAL STATEMENTS

TITI CLARA KOSO

2024

UNIVERSITY OF CAPE COAST



PERFORMANCE ASSESSMENT AND INVESTMENT DECISION
MAKING OF COMMERCIAL BANK CUSTOMERS BASED ON THE
FINANCIAL STATEMENTS

BY

TITI CLARA KOSO

Dissertation submitted to the Department of Business Programmes of the
College of Distance Education, University of Cape Coast in partial fulfilment
of the requirements for the award of Master of Business Administration degree
in Finance

MARCH 2024

DECLARATION

Candidate's Declaration

I therefore declare that this dissertation is the result of my own independent work and that no portion of it was submitted for another degree to this university or elsewhere.

Candidate's SignatureDate

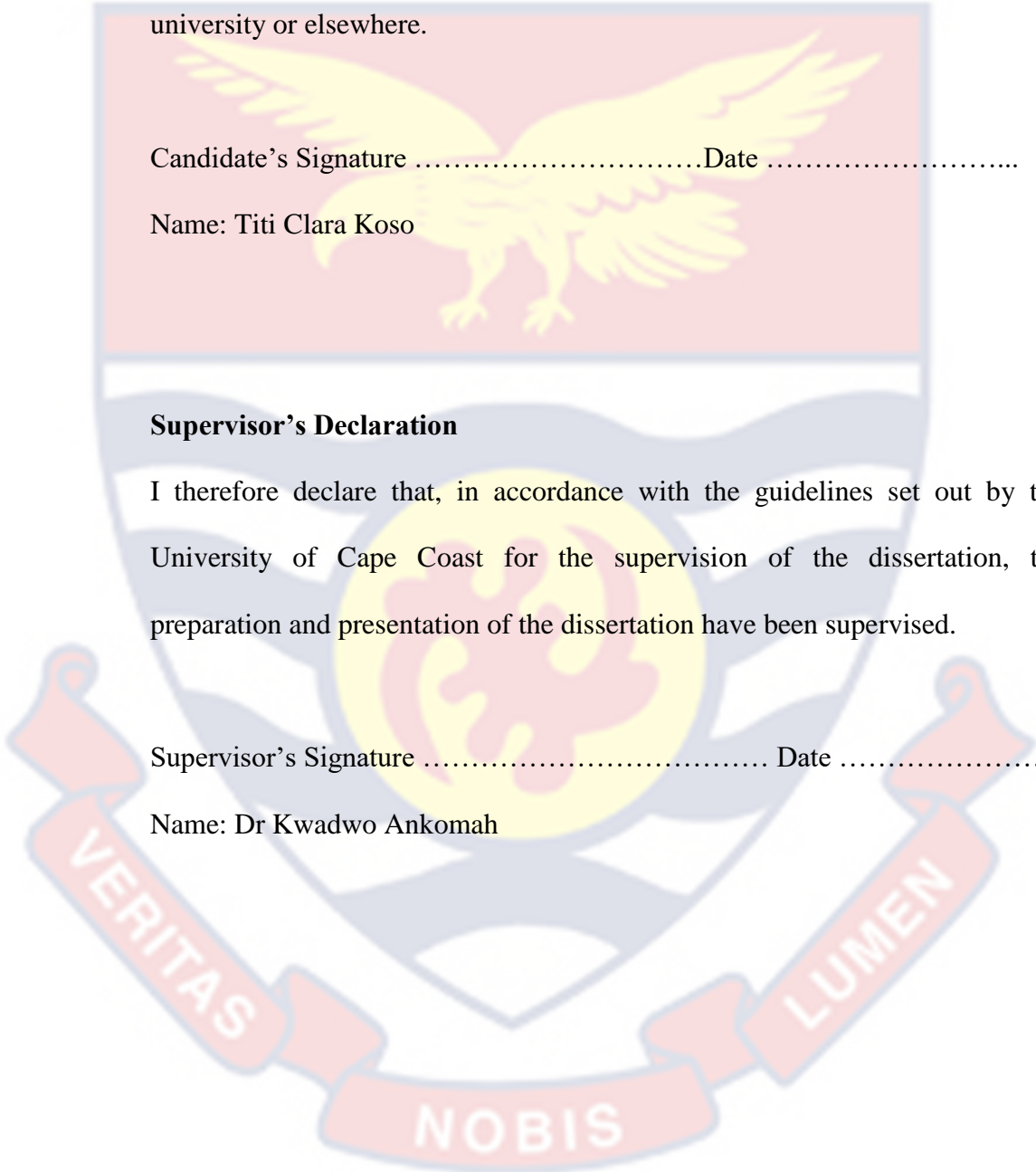
Name: Titi Clara Koso

Supervisor's Declaration

I therefore declare that, in accordance with the guidelines set out by the University of Cape Coast for the supervision of the dissertation, the preparation and presentation of the dissertation have been supervised.

Supervisor's Signature Date

Name: Dr Kwadwo Ankomah



ABSTRACT

This study assessed the performance assessment and investment decision making of commercial bank customers based on the financial statements, focusing on the case of customers of ten selected commercial banks in the Accra Metropolis. The study discussed agency theory, efficient market hypothesis, the concept of performance assessment and investment decision making as part of the theoretical and conceptual reviews. This study utilised the positivism research paradigm and the quantitative research approach. The study was analysed using descriptive statistics to examine the the performance assessment and investment decision making of commercial bank customers based on the financial statements. In all, 320 customers from the ten selected commercial banks in the Accra Metropolis were included in the study, and the research employed a questionnaire to elicit the required data for the study. The findings demonstrated that ratio analysis and common size analysis exhibited weak and statistically non-significant relationships with dividends payment decisions, vertical and horizontal analyses were found to have strong positive and statistically significant effects. Also, the study found out that that ratio analysis and vertical analysis had weak and non-significant impacts. Lastly, the findings revealed significant positive impacts across all four analytical methods. Based on the results, it was recommended that banks should offer educational programs and workshops for their customers to better understand financial statement analysis techniques.

KEYWORDS

Commercial Bank

Common size analysis

Customers

Financial Statements Analysis

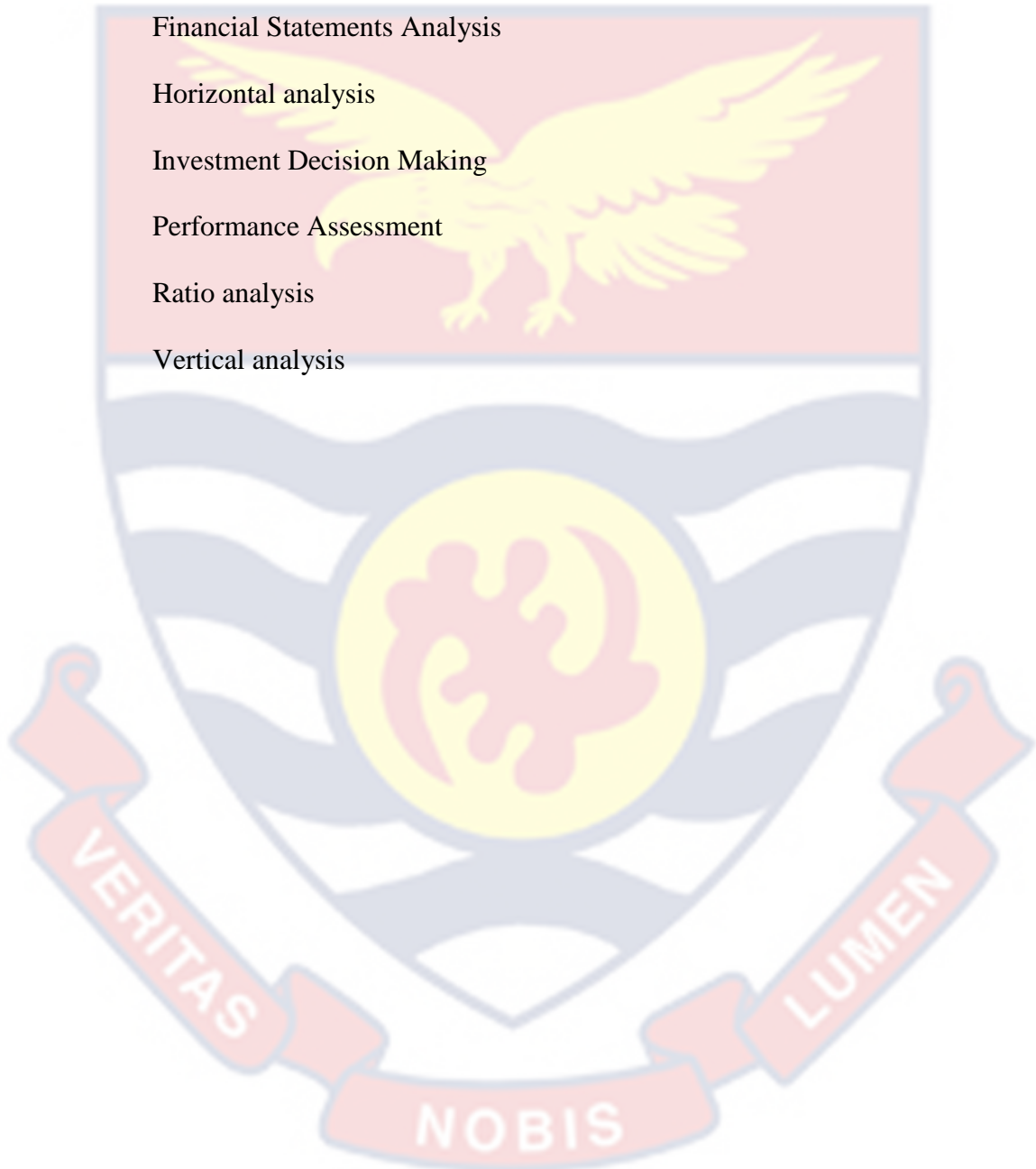
Horizontal analysis

Investment Decision Making

Performance Assessment

Ratio analysis

Vertical analysis



ACKNOWLEDGMENTS

My heartfelt gratitude goes to my supervisor, Dr Kwadwo Ankomah, for his encouragement, directions and devoted supervision from the beginning of this dissertation to its logical conclusion. Finally, to anyone who has helped in the completion of this work in diverse ways. God Bless you.



DEDICATION

To my family



TABLE OF CONTENTS

	Page
DECLARATION	ii
ABSTRACT	iii
KEYWORDS	iv
ACKNOWLEDGMENTS	v
DEDICATION	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF ACRONYMS	xii
CHAPTER ONE: INTRODUCTION	
Background to the study	1
Statement of the Problem	4
Purpose of the Study	6
Research Objectives	6
Research Questions	6
Significance of the Study	7
Scope of the Study	8
Limitations of the Study	8
Organisation of the Study	9
CHAPTER TWO: LITERATURE REVIEW	
Introduction	10
Theoretical Review	10
Agency Theory	10

Efficient Market Hypothesis (EMH)	12
Conceptual Review	14
Overview of Ghanaian Banking	14
Financial Statement Analysis	16
The Role of Financial Statements in Commercial Banks	21
Investment decision making	23
Empirical Review	25
Conceptual Framework	28
Chapter Summary	30
CHAPTER THREE: RESEARCH METHODS	
Introduction	31
Research Paradigm	31
Research Approach	31
Research Design	32
Population	32
Sample and Sampling Procedure	33
Data Collection Instruments	36
Data Collection Procedure	37
Reliability and Validity	37
Data Processing and Analysis	38
Variables and Operationalization	39
Ethical Considerations	39
Chapter Summary	40
CHAPTER FOUR: RESULTS AND DISCUSSION	
Introduction	41

Response Rate	41
Demographic Characteristics of Respondents	41
Objective One	44
Objective Two	50
Objective Three	56
Chapter Summary	62
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	
Introduction	63
Summary of the Study	63
Key Findings of the Study	64
Conclusion	67
Recommendations	68
Suggestions of Future Studies	69
REFERENCES	71
APPENDIX A	74

LIST OF TABLES

Table		Page
1	Description of Listed Banks in Ghana Club (GC) 100	33
2	Sample of Customers of Listed Banks in Ghana Club (GC) 100	35
3	Reliability Test	38
4	Variables and Operationalization	39
5	Response Rate	41
6	Demographic Characteristics of Respondents	42
7	Model Summary	44
8	ANOVA	46
9	Coefficients of Determination	47
10	Model Summary	50
11	ANOVA	52
12	Coefficients of Determination	54
14	Model Summary	57
15	ANOVA	58
16	Coefficients of Determination	60

LIST OF FIGURES

	Page
1 Conceptual Framework	29



LIST OF ACRONYMS

AGE	Age
ANOVA	Analysis Of Variance
CCC	Cash Conversion Cycle
D/E	Debt-To-Equity
GEA	Ghana Enterprises Agency
GSS	Ghana Statistical Service
GSS	Ghana Statistical Service
HLBO	How Long the Business Has Been in Operation
IFRS	International Financial Reporting Standards
ROA	Return On Assets
ROI	Return On Investment
SEM	Structural Equation Modelling
SIZE	Size Of the Firm
SMEs	Small And Medium Enterprises
SPSS	Statistical Package for The Social Sciences

CHAPTER ONE

INTRODUCTION

Background to the study

Performance assessment in the context of commercial banks involves evaluating their financial health, profitability, and operational efficiency (Capital Market Authority, 2023). Financial statement analysis is the primary method for this assessment, involving the examination of balance sheets, income statements, and cash flow statements (Barry & Jamie, 2021). Key performance indicators such as Return on Assets (ROA), Return on Equity (ROE), and the Cost-to-Income Ratio (CIR) are commonly used metrics, according to Higgins (2021). For instance, a study by Kamardin (2024) revealed that commercial banks with an ROA above 1.5% and an ROE exceeding 10% are generally considered to be performing well. Analyzing these metrics helps stakeholders understand the bank's ability to generate profits relative to its assets and equity, thus providing a holistic view of its financial stability.

Investment decision-making in commercial banks encompasses decisions related to dividend payments, short-term investments, and long-term investments (David, 2023). Dividend payment decisions involve determining the portion of earnings to be distributed to shareholders versus retained for reinvestment. According to Mckeith (2021), banks with a high dividend payout ratio are often viewed favorably by investors seeking regular income. Short-term investment decisions include managing liquidity through assets like Treasury bills and certificates of deposit. Long-term investment decisions focus on loans and securities that generate sustained returns. Statistics show

that banks with a diversified investment portfolio tend to have a more stable income stream and better risk management (Fisseha, 2023).

The banking industry is important in the global economy by facilitating financial transactions, providing credit, and promoting economic growth. According to the World Bank (2022), the global banking sector's assets totaled approximately \$180 trillion, representing over 200% of the world's GDP. Banks are essential in achieving Sustainable Development Goals (SDGs), particularly SDG 8, which aims to promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all. Through providing credit and financial services, banks support businesses, create jobs, and contribute to economic stability.

Commercial banks are significant contributors to both employment and GDP in developed and developing countries. In the United States, for example, the banking sector employs over 2 million people and contributes around 7.5% to the national GDP (Bureau of Economic Analysis, 2023). In developing countries, the banking sector is also important in economic development. For instance, in Nigeria, the banking sector contributes approximately 3.4% to the GDP and employs about 1.5 million people (National Bureau of Statistics, 2022). These statistics highlight the importance of the banking sector in fostering economic growth and providing employment opportunities globally.

In Ghana, the banking industry is a key component of the economy. The sector contributes significantly to the country's GDP and provides substantial employment opportunities. According to the Ghana Statistical Service (2023), the financial and insurance sector, which includes banks,

contributed 8.5% to Ghana's GDP. Moreover, the banking sector employs over 30,000 people, underscoring its importance in job creation and economic stability. The banking sector in Ghana has undergone significant reforms, particularly the banking cleanup initiated in 2017. This cleanup aimed to address insolvency and poor governance in the sector.

However, the impact on financial performance has been mixed. For example, the sector's average ROA was 2.3% in 2021, down from 3.1% in 2016, and the average ROE fell from 18.5% to 14.2% over the same period (Bank of Ghana, 2022). The Cost-to-Income Ratio also increased, indicating higher operational inefficiencies. Despite these challenges, financial analysis methods such as ratio analysis, common size analysis, vertical analysis, and horizontal analysis remain crucial. These methods help customers make informed investment decisions by providing a detailed understanding of a bank's financial health and trends over time.

Performance assessment of commercial banks based on financial statement analysis significantly affects customers' investment decisions. This relationship can be explained using the agency theory and the efficient market hypothesis. Agency theory suggests that there is a conflict of interest between management and shareholders, and thorough financial analysis can help mitigate this by aligning management actions with shareholder interests (Jensen & Meckling, 1976). The efficient market hypothesis posits that all available information is reflected in a bank's stock price, implying that detailed financial statement analysis can help investors make better decisions (Fama, 1970). Hence the motivation for this study.

Statement of the Problem

Recent reports from the Bank of Ghana (2023) highlight that the financial performance of commercial banks has been highly volatile over the last seven years. This volatility is attributed to economic hardships and a comprehensive banking sector cleanup aimed at addressing issues of insolvency and poor governance. These factors have significantly impacted customer confidence, making them skeptical about investing in commercial banks. This skepticism is rooted in the perceived instability and uncertainty within the banking sector, which has led to cautious investment behavior among customers.

Although financial statements provide essential information for making informed decisions and are critically important in the banking sector (Kamardin, 2024), commercial banks in less developed countries face numerous challenges. These include macroeconomic instability, stock market volatility, and inadequacies in banking advancement and specialization. These issues underscore why customers rely heavily on financial statements to assess bank performance and make informed decisions (Mckeith, 2021). Macroeconomic instability, characterized by fluctuating interest rates, inflation, and exchange rates, affects the stability and predictability of banks' financial conditions. This instability complicates the accurate assessment of banks' performance based on their financial statements. Additionally, stock market instability exacerbates the unpredictability of banks' financial health, making it more difficult for investors to gauge the viability and profitability of their investments.

Researchers have extensively studied the relationship between performance assessment, specifically through financial statement analysis, and investment decision-making both globally and locally. For instance, Kariuki and Jagongo (2018) conducted a study titled "Institutional Investors' Perception on the Quality of Financial Statements in Kenya." Their research identified the types of information included in financial reports that are considered crucial and prominent for banking institutions in Kenya. The study also explored institutional investors' views on the usefulness of financial information in the decision-making process regarding investments in the banking sector and assessed the challenges faced by investors. However, while their research provided valuable insights for Kenyan companies, it failed to demonstrate the correlation between financial statements and the performance of these companies using Pearson correlation coefficients and profitability indicators.

Similarly, Hawariah and Dalnial (2022) conducted a study titled "Detecting Fraudulent Financial Statements through Financial Statement Analysis," which focused on the detection of fraudulent activities but did not explore the relationship between financial performance metrics and investment decision-making. From this extensive literature review, it is evident that there is an empirical gap. Specifically, previous studies have not employed profitability ratios and correlation coefficients to analyze the variables of the study and the level of investment decision-making in the banking sector.

Therefore, this study aims to fill this gap by investigating the correlation between financial statement analysis and the performance of commercial banks in Ghana, using profitability ratios and correlation

coefficients. Despite previous interventions and recommendations provided by earlier studies, there is a need to evaluate their applicability and effectiveness within the Ghanaian settings. Hence the need to undertake this study.

Purpose of the Study

The study's overall goal was to look into the relationship between performance assessment and investment decision making of commercial banks' customers based on financial statements in Ghana.

Research Objectives

The study sought to;

1. Assess the effect of financial statement analysis on dividends payment decision among customers of commercial banks in Ghana.
2. Evaluate the effect of financial statement analysis on the short investment decisions among customers of commercial banks in Ghana.
3. Examine the effect of financial statement analysis on the long investment decisions among customers of commercial banks in Ghana.

Research Questions

The study answered the following questions;

1. What is the effect of financial statement analysis on dividends payment decision among customers of commercial banks in Ghana?
2. What is the effect of financial statement analysis on the short investment decisions among customers of commercial banks in Ghana?
3. What is the effect of financial statement analysis on the long investment decisions among customers of commercial banks in Ghana?

Significance of the Study

For investors and customers, this study provides a deeper understanding of how to effectively utilize financial statements to make informed investment decisions. Through highlighting the relationship between financial performance metrics and investment outcomes, the research equips investors with the tools needed to evaluate the health and profitability of commercial banks. This, in turn, can enhance their confidence and decision-making process, leading to better investment strategies and higher returns. Financial analysts will benefit from the study by gaining insights into the most relevant financial ratios and performance indicators that influence investment decisions. The research offers a framework for conducting thorough financial analysis using profitability ratios, correlation coefficients, and other financial metrics. This can improve the accuracy of financial assessments and recommendations provided to clients and stakeholders.

For policymakers, the study underscores the importance of transparency and accuracy in financial reporting within the banking sector. The findings can inform regulatory frameworks and policies aimed at enhancing the quality of financial disclosures and ensuring that commercial banks adhere to high standards of financial reporting. This can contribute to greater stability and trust in the banking system, which is key for economic growth and development. Banking institutions themselves can gain valuable insights from this research by understanding the key performance indicators that influence investor confidence and decision-making. The study's findings can help banks improve their financial reporting practices, address areas of weakness, and implement strategies to enhance their financial performance.

This can lead to increased investor trust, higher levels of investment, and overall improved financial health.

Academically, this study fills significant gaps in the existing literature by exploring the correlation between financial statement analysis and the performance of commercial banks in Ghana. Previous studies have not adequately addressed this relationship using profitability ratios and correlation coefficients. Through addressing these gaps, the research provides a more comprehensive understanding of the factors that influence investment decisions in the banking sector.

Scope of the Study

The research was centred on the relationship between performance assessment and investment decision making among commercial bank customers' in Ghana. Furthermore, only four aspects of performance assessment were captured in this study, namely, ratio analysis, common size analysis, vertical analysis and horizontal analysis. Additionally, the investment decision making looked at infrastructure development, including dividend payment decisions, short term investment decision and long term investment decision for commercial bank customers. These variables were selected because previous studies focused less on them hence the need to fill those gaps.

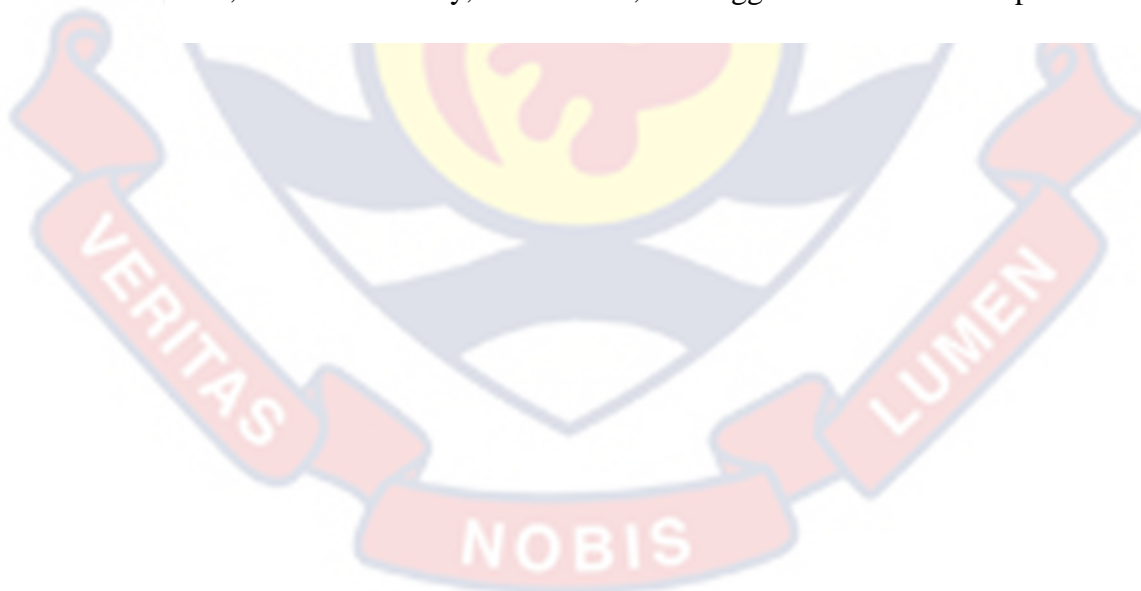
Limitations of the Study

The primary geographical focus of this study is Ghana, specifically within the jurisdiction of the Bank of Ghana's regulatory framework. Limitations related to the chosen research methodology, such as the use of surveys or quantitative analysis alone, might restrict a comprehensive

exploration of qualitative aspects or behavioral elements influencing customers' decision-making processes. External factors beyond the study's control, such as global economic trends, political changes, or unforeseen events (e.g., pandemics), could influence customers' perceptions and behaviors, impacting the study's outcomes.

Organisation of the Study

The study was divided into five chapters; each of them took precedence over the previous. The background of the study, problem statement, purpose, delimitations, and limitations of the study were all covered in Chapter One. The review of literature in Chapter Two was based on theoretical, conceptual, and empirical frameworks. Research design, research approach, data collection, ethical considerations, and data analysis processes were covered in Chapter Three. The analysis and discussions were in Chapter Four, and the summary, conclusions, and suggestions were in Chapter Five.



CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter presents a review of relevant or significant literature pertaining to the study. The chapter has closely looked at the theoretical review, conceptual review, empirical review and conceptual framework. The chapter ends with a summary.

Theoretical Review

There are so many theories which are associated with employee engagement. In this study the agency theory and efficient market hypothesis were adopted and helps define, clarify, predict and control the problem under study.

Agency Theory

Agency theory is a framework in economics and organizational theory that examines the relationships and conflicts of interest between individuals or groups (known as principals and agents) who delegate decision-making authority to others (Dungan, 2016). In this theory, the principal hires an agent to perform a task on their behalf, and the agent's actions may not always align with the principal's best interests (Adunga, 2019). This divergence in interests can result in agency problems and potential conflicts. In this study, agency theory can be applied. In commercial banks, shareholders (the principals) delegate decision-making authority to the bank's management team (the agents). Shareholders expect the bank's management to act in their best interests by maximizing shareholder wealth through prudent lending practices, risk management, and overall financial performance (Ubuntu, 2017).

However, conflicts of interest can arise in this relationship. Khan (2019) found that in many banking institutions, managers may prioritize short-term gains to boost their own compensation, which can lead to risky lending practices and compromise the long-term stability of the bank.

Agency theory is particularly relevant when there is an information asymmetry between principals (shareholders and investors) and agents (bank management). Financial statements, as a key source of information, can be used by principals to monitor the actions of agents (Vertai, 2019). However, agents may have an incentive to manipulate or selectively disclose information to present a more favorable image of the bank's financial health. A research by Adjei (2019) demonstrated that banks in emerging economies, including Ghana, sometimes engage in earnings management to meet short-term financial targets, potentially misleading investors and stakeholders about the bank's true financial condition.

Agency theory has direct relevance to investment decision-making. Investors and analysts need to consider the potential agency problems within a bank when evaluating its financial statements. They must assess whether the bank's management is acting in the best interest of shareholders and whether the financial information presented accurately reflects the bank's performance and risk profile. In a study by Meyers (2020) on investment decision-making in the banking sector, it was found that investors in Ghana pay close attention to corporate governance practices and the alignment of managerial incentives with shareholder interests when making investment decisions.

The agency theory provides a valuable lens through which to analyze the dynamics of the principal-agent relationship within commercial banks in

Ghana. It helps us understand how conflicts of interest between shareholders and bank management can influence financial reporting practices and, subsequently, impact investment decisions. Via considering agency theory, this research can explore the extent to which agency problems affect the accuracy and reliability of financial statements in the Ghanaian banking sector and how investors navigate these challenges in their decision-making processes.

Efficient Market Hypothesis (EMH)

The Efficient Market Hypothesis (EMH) is a theory in finance that posits that financial markets efficiently incorporate all available information into asset prices, making it impossible for investors to consistently achieve higher returns than the market average based on publicly available information (Kuala, 2018). In other words, if a market is perfectly efficient, it should be impossible to consistently outperform the market by trading on the basis of past information or analyzing publicly available data (Ubuntu, 2018). The EMH is typically categorized into three forms: weak, semi-strong, and strong, depending on the extent of information considered.

In this study, the Efficient Market Hypothesis is applicable. According to Kurla (2019), EMH implies that financial markets, including stock markets where commercial banks are often traded, are efficient in processing and reflecting all available information. This means that any information relevant to a bank's financial performance, such as its financial statements, should be quickly incorporated into the bank's stock price. According to Hugo (2017), one of the foundational scholars of the EMH, in an efficient market, stock

prices "fully reflect" available information, and deviations from this efficiency are rare and fleeting.

EMH has direct implications for investment decision-making. If financial markets are efficient, investors cannot consistently outperform the market by analyzing publicly available financial statements or any other publicly accessible information (Beleto, 2018). Investors, including fund managers and analysts, should not be able to consistently identify undervalued or overvalued stocks based solely on these documents. Research by Malkiel (2018) found empirical evidence supporting the EMH, suggesting that it is difficult for investors to consistently outperform the market over the long term by using publicly available information.

Within the framework of EMH, your research can investigate how quickly and accurately financial markets in Ghana incorporate information from commercial banks' financial statements into stock prices (Yousif, 2019). This can involve analyzing stock price movements in response to the release of financial statements and assessing whether there are any anomalies or patterns that suggest inefficiencies in the market. A study by Rique (2018) on stock market reactions to earnings announcements in emerging markets, including Ghana, found that stock prices tend to adjust rapidly to new information, supporting the semi-strong form of EMH.

The Efficient Market Hypothesis provides a theoretical foundation for understanding how financial markets process and reflect information, including information from financial statements, in the context of investment decision-making. This research explored the extent to which the Ghanaian stock market adheres to the principles of the EMH and whether investors can

consistently achieve superior returns by analyzing the financial statements of commercial banks in Ghana, as this hypothesis suggests they should not be able to.

Conceptual Review

Overview of Ghanaian Banking

The Ghanaian banking sector occupies a central position in the country's economic development and financial stability, echoing its significance within emerging economies (Bank of Ghana, 2020). Within Ghana's banking landscape, a diverse array of financial institutions contributes to the nation's economic vibrancy. Foremost among these are the commercial banks, serving as the backbone of the sector by offering a wide spectrum of financial services, including both retail and corporate banking solutions (Bank of Ghana, 2020). Notably, Ghana hosts a growing number of indigenous banks alongside foreign institutions, amplifying the sector's diversity and competition (Addai et al., 2020).

The Ghanaian banking sector operates within a carefully structured regulatory framework, primarily overseen by the Bank of Ghana—a dual role as the central bank and the financial sector regulator (Bank of Ghana, 2018). This regulatory environment has been meticulously designed to uphold financial stability, safeguard depositor funds, and ensure the robustness of banking institutions. Recent regulatory transformations, exemplified by heightened capital requirements and the adoption of risk-based supervision, underscore a determined effort to fortify the sector's resilience and integrity (Bank of Ghana, 2019).

Performance within the Ghanaian banking sector reveals a landscape characterized by opportunities and challenges alike. Commercial banks grapple with the ebb and flow of profitability, subject to multifaceted influences, such as fluctuations in interest rates and varying levels of credit risk exposure (Mensah et al., 2017). Moreover, the sector has weathered periodic financial crises, prompting proactive regulatory interventions, notably the sweeping banking sector reforms instituted in 2018 (Bank of Ghana, 2018). The quest to bolster financial inclusion and foster innovation is a prominent hallmark of Ghana's banking sector. The emergence of mobile banking and the proliferation of digital financial services have reshaped the financial landscape, broadening access to financial services for segments of the population previously underserved (Amoah & Anku-Tsedo, 2019).

Pioneering fintech startups, in tandem with collaborative efforts involving traditional banking institutions, are actively contributing to this transformative journey (Addai et al., 2020). Investors, both domestic and international, wield considerable influence within the sector. The Ghana Stock Exchange stands as a pivotal platform for trading shares of listed banks, attracting keen investor interest (Bank of Ghana, 2020). Nonetheless, investors navigating the Ghanaian banking terrain must grapple with its intricate tapestry, characterized by varying levels of bank performance and the potential for regulatory changes.

The Ghanaian banking sector unfolds as a dynamic and evolving terrain marked by a rich tapestry of players, regulatory reforms, and performance dynamics. As an integral component of the nation's financial system, it wields substantial influence over economic growth, financial

stability, and the prosperity of both investors and the broader populace. A deep comprehension of the sector's intricacies and challenges is paramount for stakeholders aiming to navigate the landscape, harness its opportunities, and mitigate inherent risks.

Financial Statement Analysis

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, (AICPA, 2023). Accordingly, the bank annual report has to assess their achievement of expected target through issuance of prominent financial statements including balance sheet, profit and loss statements, statement of adjustments in stakeholder equity and cash flow statements (Solberg & Durrieu, 2022). Financial statements afforded evidences related to the banking conditions at a point in period of time (Deming, 2021). Therefore, financial statements are capable of predicting the possible future success of the organization. These are helpful in anticipating the future working conditions of any institution, as starting point for design and plan of actions include the future situations (Penman, 2022). Evidences embedded within financial statements could be used to calculate and assess the degree and riskiness of expected future cash flow as for the company.

Financial statements standards and practices have in the current come under great critics, requesting that accountants took further steps to be sure that the equity and fair view of the actual value of business are included in the financial statements published by them (Higgins, 2021). Financial statements practices in Kenya are evidenced to be correlated with the execution of

international standards in accounting and auditing. Several banks failure to manipulate resources adjustment in the financial statements of some large enterprises in the 1990 for the provision of examples of unsatisfied quality of financial statements (Vincent & Schipper, 2023).

In Ghana, banks had adopted international financial statement standards by international accounting standard boards. Their financial statements are prepared according to IFRS guidance and review the financial position and success. Annual accounts are audited with quarterly financial banks to elucidate topic related to external auditing (International Monetary Fund [IMF], 2021). Financial statement analysis is an indispensable tool harnessed by a diverse spectrum of stakeholders, including investors, analysts, and business partners, to scrutinize a company's financial performance, gauge its health, and ascertain its overall viability (Dandy, 2019). This analytical process delves deep into the examination and interpretation of financial statements—comprising the income statement, balance sheet, and cash flow statement—unearthing critical insights into a company's profitability, solvency, liquidity, and operational efficiency (Oluga, 2018).

Income Statement Analysis

At its core, the income statement, often referred to as the profit and loss statement, acts as a financial chronicle, succinctly encapsulating a company's revenues, expenses, and net income over a specified reporting period (Karim, 2019). Analysts wield income statement analysis as a powerful lens to scrutinize a company's profitability, dissecting the sources of revenue and evaluating cost management strategies (Heuttle & Torres, 2018). For instance, it plays an instrumental role in the calculation of vital metrics such as

the return on assets (ROA) and return on equity (ROE), both of which stand as pivotal indicators of a company's capacity to derive profits from its asset base (Amoah & Anku-Tsede, 2019). These metrics, woven into the fabric of income statement analysis, serve as compasses guiding investment decisions and illuminating the efficiency of resource allocation.

Balance Sheet Analysis

The balance sheet assumes the role of a financial snapshot, capturing a company's monetary position at a specific juncture in time. It meticulously presents a comprehensive inventory of a company's assets, liabilities, and shareholders' equity (Alaverdi, 2019). The financial statement analysis of the balance sheet serves as a compass for navigating a company's solvency and overarching financial health. In this endeavor, researchers often turn to the balance sheet for the calculation of critical financial ratios, such as the debt-to-equity ratio—a numerical reflection of the extent to which a company relies on debt financing (Mensah et al., 2017). This metric, ingrained within the fabric of balance sheet analysis, guides investment decisions and casts light upon the company's capital structure, aiding in the evaluation of risk and the potential rewards of investment.

Cash Flow Statement Analysis

The cash flow statement, a meticulous record of the ebbs and flows of cash into and out of a company during a specified temporal expanse, is the harbinger of insights into liquidity and the company's ability to fulfill short-term financial obligations (Iago, 2019). Financial statement analysis of the cash flow statement offers a nuanced lens through which to evaluate the liquidity management and sustainability of a business. How a company's cash

flow is of paramount importance in the assessment of its capability to meet ongoing operational expenses, service its debt obligations, and fund strategic growth initiatives (Brown, 2020). This scrutiny of cash flow dynamics underscores the ability of a company to weather economic storms and capitalize on emerging opportunities.

Ratios and Metrics

Financial statement analysis involves the alchemical extraction of a multitude of ratios and financial metrics, each an illuminating facet of a company's financial performance (Houson, 2017). These metrics traverse a spectrum of dimensions, encompassing liquidity ratios (e.g., current ratio), profitability ratios (e.g., gross profit margin), and efficiency ratios (e.g., inventory turnover). Research in this arena often leverages these financial ratios as yardsticks, enabling a comparative evaluation of a company's performance against industry benchmarks (Addai et al., 2020). These ratios, interwoven into the intricate tapestry of financial statement analysis, unmask a company's relative strengths and weaknesses, thereby informing investment strategies and underpinning financial decision-making.

Trend Analysis

Financial statement analysis extends beyond the realm of isolated data points, embarking on a historical odyssey through the corridors of time. Analysts, equipped with a penchant for trend analysis, meticulously juxtapose financial data across multiple reporting periods (Whittington & Pany, 2019). This temporal perspective illuminates patterns and trajectories, offering valuable insights into a company's financial performance over time. Trend analysis is akin to a compass, capable of revealing whether a company's

financial performance is on an upward trajectory, facing deterioration, or maintaining a relatively stable course (Quintana, 2017). This historical perspective injects nuance into investment decision-making, as investors gauge not only current performance but also the sustainability of financial trends.

Comparative Analysis

Comparative financial statement analysis unfurls as a dynamic tapestry where a company's financial data intertwines with those of its competitors and industry peers (Lorenzo, 2019). This comparative scrutiny enables the assessment of a company's relative performance and competitive position in the grand mosaic of the business landscape. The wisdom of comparative analysis is evident in its capacity to unveil a company's unique value proposition and its ability to outshine or lag behind industry peers (Heckling, 2016). This perspective empowers investors and analysts to make informed judgments regarding a company's competitive edge and potential avenues for growth and improvement.

Financial statement analysis emerges as a compass, steering stakeholders through the labyrinthine corridors of financial data. It unfurls as a systematic process, wherein investors, analysts, and decision-makers extract valuable insights from financial statements (Mbamba, 2019). Armed with the tools of analysis, stakeholders are equipped to make informed decisions about investments, credit extensions, strategic partnerships, and overarching financial strategies. Financial Statement Analysis, thus, embodies an indispensable companion for those navigating the complex waters of finance.

The Role of Financial Statements in Commercial Banks

In evaluating the financial performance of a company, it is crucial to employ detailed analytical techniques such as trend analysis and accounting ratios. Trend analysis involves examining financial data over multiple periods to identify patterns and trends that indicate the company's performance trajectory. Through adopting accounting ratios, analysts can delve deeper into the financial statements to gain a comprehensive understanding of the company's financial health. According to McKeith (2021), a ratio defines the correlation between accounting numbers in the financial statements, providing a comparative measure that is essential for interpreting complex financial data. Ratios simplify the vast amount of information contained in annual financial statements, making it more accessible and understandable for stakeholders. These ratios can highlight the company's strengths and weaknesses, allowing for clear adjustments to be made based on the best and worst achievements identified through the analysis.

Importance of Accounting Ratios

Accounting ratios are vital tools for financial analysis as they provide insight into various aspects of a company's performance. These ratios can be categorized into several types, each serving a distinct purpose:

1. **Liquidity Ratios:** These ratios measure the company's ability to meet its short-term obligations. Common liquidity ratios include the current ratio and the quick ratio. For instance, a current ratio of 2:1 indicates that the company has twice as many current assets as current liabilities, suggesting a strong liquidity position. Stakeholders, particularly

lenders, use these ratios to assess the risk of the company's ability to repay its debts.

2. **Profitability Ratios:** These ratios evaluate the company's ability to generate profit relative to its revenue, assets, or equity. Examples include the net profit margin, return on assets (ROA), and return on equity (ROE). A high ROE, for instance, indicates efficient use of shareholders' equity to generate profit, which is attractive to investors.
3. **Leverage Ratios:** These ratios measure the extent of a company's financial leverage and its ability to meet long-term obligations. The debt-to-equity ratio, for example, indicates the proportion of equity and debt the company is using to finance its assets. A high ratio might suggest higher risk due to increased debt levels, which is a critical factor for lenders assessing the company's risk profile.
4. **Efficiency Ratios:** These ratios assess how effectively the company uses its assets and manages its operations. Ratios such as the inventory turnover ratio and accounts receivable turnover ratio provide insights into operational efficiency. A high inventory turnover ratio, for instance, indicates efficient inventory management and sales performance.
5. **Market Ratios:** These ratios provide insights into the company's stock market performance and include metrics such as the price-to-earnings (P/E) ratio and dividend yield. Investors use these ratios to make informed decisions about buying, holding, or selling the company's stock.

Role of Ratios in Stakeholder Decision-Making

The analysis of financial ratios is invaluable for various stakeholders, each of whom relies on different aspects of the financial data to make informed decisions:

- **Investors:** Investors are interested in profitability ratios to determine the potential return on their investment. They also consider market ratios to evaluate the company's market performance and future growth prospects.
- **Lenders:** Lenders focus on liquidity and leverage ratios to assess the company's ability to repay loans and manage debt. A favorable liquidity position and moderate leverage reassure lenders about the company's financial stability.
- **Managers:** Company managers use efficiency and profitability ratios to identify areas of operational improvement and strategic investment. These ratios help in setting performance benchmarks and making tactical decisions to enhance overall efficiency.
- **Regulators:** Regulatory bodies may analyze various financial ratios to ensure that the company adheres to industry standards and maintains financial health. This is particularly important in sectors where financial stability is critical to economic stability.

Investment decision making

Investment decision-making is a critical process that involves assessing various investment opportunities, analyzing potential risks and returns, and ultimately choosing the most suitable investments to achieve financial goals. This process is influenced by numerous factors, and it plays a central role in

the financial management of individuals, businesses, and institutions (Omario, 2019). Investment decision-making typically begins with the establishment of clear investment objectives and goals. Investors must define what they aim to achieve through their investments, whether it's long-term wealth accumulation, income generation, risk mitigation, or a combination of these objectives (Bodie et al., 2019).

Assessing the trade-off between risk and return is a fundamental aspect of investment decision-making. Investors need to consider their risk tolerance and the potential returns associated with different investment options. Risk can take various forms, including market risk, credit risk, and liquidity risk, and understanding these risks is crucial (Sharpe, 2019). Investors often use diversification as a risk management strategy. Through spreading their investments across different asset classes or securities, they can reduce the impact of individual investment losses on their overall portfolio. Constructing a well-diversified portfolio is a key step in investment decision-making (Markowitz, 2019).

Investment decision-making relies on thorough analysis and research. Investors may use various tools and techniques to evaluate investment opportunities, including fundamental analysis (assessing financial statements and economic conditions), technical analysis (studying price charts and patterns), and quantitative analysis (using mathematical models) (Graham & Dodd, 2019). Investors must consider their investment time horizon and liquidity needs. Different investments are suitable for short-term and long-term goals. Longer time horizons may allow investors to take on more risk and potentially benefit from compounding returns (Dimson et al., 2018).

Regulatory and tax factors can significantly impact investment decisions. Investors should be aware of tax implications, such as capital gains taxes and income taxes, as well as regulatory constraints that may affect their investment choices (Reckers et al., 2019). Investment decision-making is an ongoing process. Once investments are made, investors should regularly monitor their portfolio's performance, assess whether it aligns with their goals, and make adjustments as needed. Rebalancing may be necessary to maintain the desired asset allocation (Benartzi & Thaler, 2019). Investment decision-making is a multifaceted process that requires careful consideration of financial objectives, risk tolerance, diversification, and thorough analysis. Through understanding these key factors and their interplay, investors can make informed choices that align with their financial goals and circumstances.

In order to make and elucidate adequate and appropriate decisions many company management teams went through a systematic decision making process (Afolabi, 2023). However, the primordial practices can be the same while there are a dozens of decision making instruments. These include decision matrix model which adopts the utilization of graphs, models or pie charts. A decision matrix is used to assess all the alternative strategies of decision. Even if there is a use of the matrix, establishing a table is necessary with all alternatives in the first column and all of the factors associated with decision making in the first row (Ali, 2021).

Empirical Review

Ojo (2021) carried out a scientific research aimed at obtaining ideas and perceptions of stakeholders on the obedience of regulations and rules related to financial statement in selected primary mortgage institutions in

Nigeria. The study adopted both primary source by administering and questionnaire and collecting responses from the field while secondary data was obtaining using the existing available documents related to the research topic Different respondents were used. These include 30 regulators from two banks meaning 15 respondents for each institution. In addition, the researcher distributed questionnaire among 40 respondents for each of the organization cited above. Furthermore, some questionnaire for managers of banks and public institutions were distributed to people owing to their approximate to the streets that had awareness of the research topic. The above research evidenced that PMI is collecting rules and regulations related to financial statement. In this research stakeholders remarked that organization of companies related to the adequate practices in PMI affect their submission to regulation, rules and laws related to financial reporting while they did not appreciate the previous related practices.

The purpose was to treat the effect of financial statement on the effectiveness of management decision making process in Nigeria using 10 chosen key informants. In addition, 50 accountants, investment and financial analysts were required to provide responses in order to obtain relevant information. The analysis of variance was used for testing the research hypothesis and the study findings contended that financial statements disclosure, corporate fraud and scandals and financial statements transparency had a positive Impact on effective management of decision making in banking sector concerning investment in manufacturing sector in Nigeria.

Hassan (2023) carried out a research work named “Financial statements. For this research, correlation research design was used. A

correlation research design was used to explain the statistical association between two variables. The Researcher found the research design to be adequate to the research process when it is has the ability to test expected correlation between variables. A longitudinal panel from secondary data was used where a quantitative approach with positivism paradigm and the core of relevant information for data analysis were appropriately obtained from financial report after auditing activities were performed. Multivariate analysis was used to assess the model while longitudinal panel helped to obtain heterogeneity from individual respondents. Results demonstrated implication of crucial policies since they proposed the necessity to stimulate the application of corporate governance principles by banks and individual stakeholders to afford monitoring of profit management in Nigeria.

Kamardin (2021) conducted a scientific work which objective was to address concepts and issues of IFRS and its relationship with corporate business. To bring clarity in this problem, the adoption of IFRS in the context of transforming financial reports, the research used a review model. It reflected on the analysis of discourses with evidences from documentary analysis through a systematic examination of publication and the existing literature on professional accounting organizations and academic studies conducted in the past. The study argued that there is a high degree of compliance and adoption of financial institutions and banking companies.

Kusa (2023) conducted a scientific research, results indicated that bank specific factors are more likely to impact the success of them. However, the general impact of macroeconomic factors was inconstancy with 5% significant level. Therefore, concluding remarks argued that banks performance in Kenya

is related to board and management decisions, while macroeconomic variables have negative significance role.

Hawariah and Dalnial (2021) conducted a research called Detecting Fraudulent Financial statements through Financial Statement Analysis. Past studies indicated that indication of financial ratio for detecting fraudulent statements and the sample size was firms in Malaysia and information used ranged between 2000 and 2011 years. Results evidenced that different financial ratios including debt to total financial resource, receivable to income are discovered to be correlated with detecting fraudulent financial reporting.

Kariuki and Jagongo (2023) carried out a research called investors perception on quality of financial statements in Kenya. These researchers assessed both primary and secondary data source adopting a descriptive statistic. They revealed that information in the financial reports that very important for investors in total assets, income and earnings, cash flows from investing activities. The financial report is seen in the context of completeness, comparability and consistencies as the best, relevancy and forecasting and timeliness (Ingram, 2019). Furthermore, the study argues that the greatest impediment to the users of financial reports in Kenya is related to technical nature of language of presentation. Even if their research was very useful for Kenya companies, their research does not explore the correlation of financial statements and performance of companies in Kenya using Pearson correlation coefficient and profitability indicators.

Conceptual Framework

The requirement for a conceptual framework arises because the variables used to measure the specific objectives do not flow immediately

from the study ideas. The conceptual framework of the study is built on ideas derived from the arguments of the agency theory, efficient market hypothesis, and the findings of numerous empirical studies pertinent to this study. As a result, the study looked at concepts and utilized them as proxies to measure the variables in the objectives. As illustrated in Figure 1, the conceptual framework incorporates three major variables: performance assessment using financial statement analysis, control variables and investment decision making. Whereas the second section of the model offers the control variables used in this study. Adding control variables to the model is crucial, as it will help correct for any confounding effect that may be inherent in the model. Figure 1 depicts the conceptual framework of the study based on the objectives of the study.

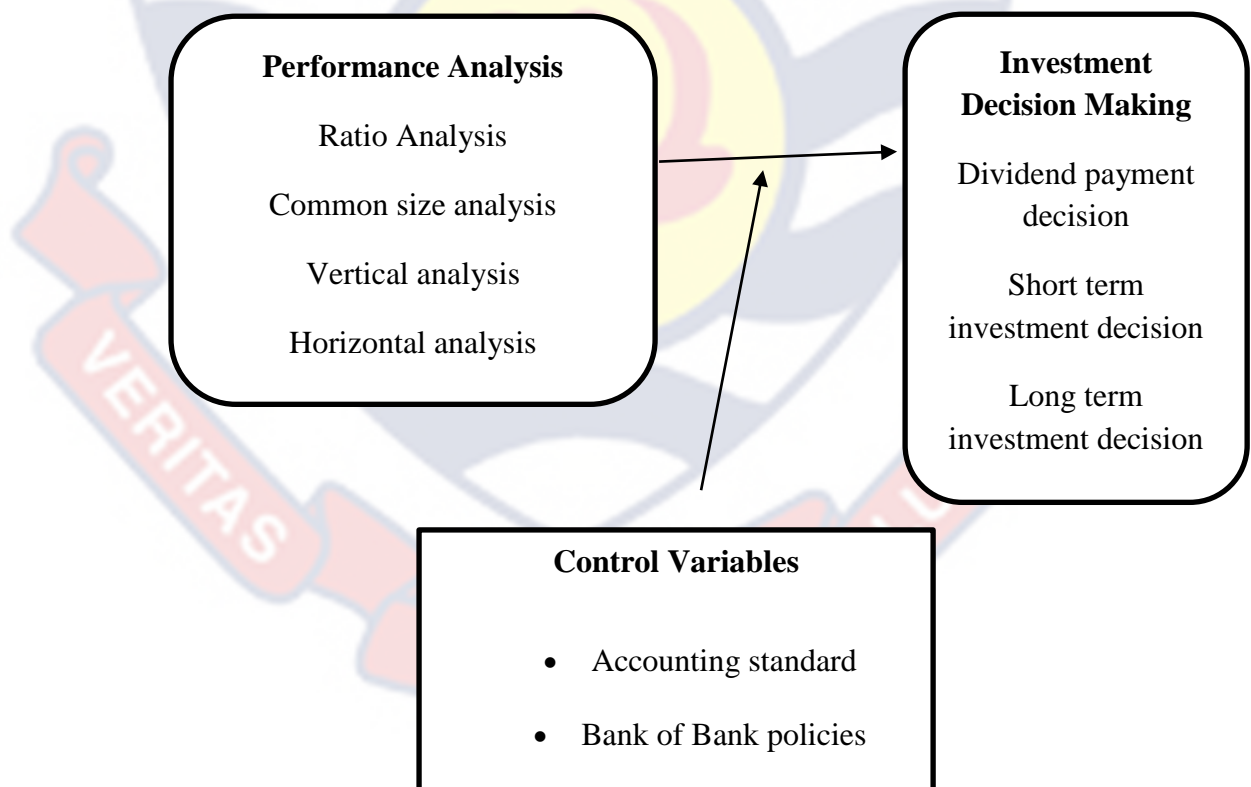


Figure 1: Conceptual Framework
Source: Author's construct (2024)

Figure 1 shows the constructs used in the study. Both the independent and the dependent variable with the control variable. The dependent variable is the investment decision making and the independent variable is the performance assessment. From Figure 1, it can be seen that, the variables of that make up the independent variable are ratio analysis, common size analysis, vertical analysis and horizontal analysis. Furthermore, it could be seen that performance assessment directly affects investment decision making. However, there is a control variable of accounting standards and Bank of Ghana policies in the relationship between performance assessment and investment decision making. Moreover, investment decision making was conceptualised using dividend payment decision, short term investment decision and long term investment decision.

Chapter Summary

This section offered the literature review of this research. This study's literature review was structured under four headings, namely theoretical review, conceptual review, empirical review, and conceptual framework. Theoretical review explained the theoretical foundation of this study. This included agency theory and Efficient Market Hypothesis (EMH). The conceptual review defined and explained the various used in the context of this study. This chapter reviewed literature on financial statement analysis, performance assessment and investment decision making. The chapter further delineate the proxies chosen in respect of the dependent and independent variables. The chapter finally presented and discussed the conceptual framework, which explains how the various variables used in this study are linked.

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter presents details of how the study was conducted. This chapter discusses the study's research design, research approach, study area, population, sampling and sample size, instrumentation, reliability and consistency. The chapter also talks about data sources, data collection and methods for data analysis and presentation.

Research Paradigm

The research philosophy of this work is based on positivist philosophy. Authenticity, according to positivists, is constant and can be discovered, characterized, and measured objectively without the aid of prepared glasses (Saunders, Lewis & Thornhill, 2016). As a result, the positivist school dismisses the notion of constructing knowledge and theories from a range of sources, including personal experiences and opinions (Rubin & Rubin, 2019).

Research Approach

The research plan is one of the most significant factors to consider when performing scientific research. A quantitative research strategy is used in this work. According to Bell and Bryman (2017), comparative research requires acquiring absolute data, such as numerical data, in order to be evaluated as objectively as possible (Mason & Bramble, 2019). Quantitative research removes the investigator's bias, allowing assumptions about the study's conclusions to be formed. Because of the way data was obtained and analysed, quantitative analysis was used. The quantitative technique was

employed because practically all of the data in this investigation was quantitative.

Research Design

Plonsky (2017) defines a study design as the overall technique used by the researcher to answer and elicit responses to the study's research objectives. The success of any study is determined by the research design used, therefore determining the type of data, the technique of data collecting, and the type of sampling to be utilized in a study is critical. The research was carried out utilizing the explanatory research design. The explanatory research design is particularly suitable for this study because it aims to explore and explain the relationships between financial statement analysis, performance assessment, and investment decision-making among commercial bank customers. This design helps in understanding not just the presence of relationships but also the underlying mechanisms and causations that influence these relationships.

The explanatory research design is ideal for exploring complex relationships between variables. This study seeks to understand how financial statement analysis (independent variable) affects the performance assessment and subsequent investment decision-making (dependent variables) of commercial bank customers. Through using this design, the research can delve into the intricacies of these relationships and provide a thorough explanation of how and why certain financial metrics influence investment decisions.

Population

The study area covered customers from all the commercial banks in Ghana, however, the study concentrated on the commercial that are listed in the Ghana Club (GC) 100. This is due to the fact that the inclusion criteria of

the study demand that the selected banks should have up-to-date information on their financial statements and performance. Again, banks who are part of the Ghana Club (GC) 100 are also expected to have demonstrated outstanding results in growth and profitability in the past three years. Ghana Club 100 (GC100) embarks on annual compilation of the top 100 companies in Ghana to give due recognition to successful enterprises. It was launched in 1988 by the Ghana Investment Promotion Center (GIPC) (Yiadom, Mawutor, Amankwa, & Yalley, 2020). Ghana Club 100 is about corporate excellence which means that companies making into the GC100 must have good corporate governance practices which enhance productivity. Lastly, the customers of the headquarters of these banks in the Greater Accra Region were focused on.

Table 1: Description of Listed Banks in Ghana Club (GC) 100

Name	Ownership	Year Listed	Share Price	Customers
Cal Bank	Local	2004	0.65	300
Ecobank Ghana	Foreign	2006	1.42	450
GCB Bank	Local	1996	3.80	823
Absa Bank	Foreign	2002	0.34	600
Fidelity Bank Ghana Ltd	Foreign	1995	0.40	321
Standard Chartered Bank Ghana	Foreign	1990	1.5	243
Societe Generale Ghana	Foreign	1995	0.62	189
Stanbic Bank Ghana Ltd.	Local	1960	0.49	201
Access Bank	Foreign	1989		221
ADB Bank	Local	1965	0.34	280

Source: Ghana Club (GC) 100 (2022)

Sample and Sampling Procedure

Kyriazos (2018) defined sample size as a representative part of a target population which was utilized to do research. Also, Vasileiou, Barnett, Thorpe and Young (2018), defined sample size as the number of sampling units

selected from the population for study. In all, customers from 10 commercial banks in Ghana were selected for the study. The ten banks are selected out of the 23 commercial banks currently approved by Bank of Ghana (BOG). The 10 banks are all members of Ghana Club (GC) 100. The sample size of 10 banks is considered great for the study because, the data cuts across 5 year period (2014-2018). In this regard, 10 commercial banks with employee of at least 500 were selected from the Ghana Club (GC) 100.

For this study, the researcher used fifty percent of the total customer base of each bank. Then the researcher adopted a probability sampling method known as the simple random sampling technique. This sampling technique was selected because in a simple random sample, every member of the population has an equal chance of being selected in the study, hence, all customers of the listed commercial banks had the potential of been selected for the study. Again, this technique was used in the study because of time and cost involved in reaching all customers of the listed commercial banks since the number acquired on Ghana Club (GC) 100 (2022) was very large. In all, the analysis included 328 customers of the listed commercial banks.

To ensure randomness of selecting respondents, first, the researcher obtained a comprehensive list of all customers from each of the selected banks. This list should included unique identifiers for each customer, such as customer ID numbers, to ensure accurate tracking and selection. Each customer on the list should be assigned a unique sequential number. For example, if a bank has 300 customers, they would be numbered from 1 to 300. To randomly select the respondents, the researcher used a random number generator. Excel, was used to generate random numbers. In Excel, the

“RAND” function was utilized to create random numbers corresponding to the customer IDs.

Using the random number generator, the researcher selected the required number of random numbers corresponding to the sample size needed from each bank. For example, as Cal Bank has 300 customers and the sample size is 150, the researcher would generate 150 random numbers between 1 and 300. To ensure there are no duplicates and all selected numbers are within the valid range, the researcher verified the randomly generated numbers. Any duplicates was replaced with new random numbers to maintain the integrity of the sample. Once the random numbers were generated and verified, the researcher contacted the corresponding customers from the list using their assigned unique identifiers. This ensured that the process was unbiased and every customer had an equal chance of being selected.

Table 2: Sample of Customers of Listed Banks in Ghana Club (GC) 100

Name	Customers	Sample (50%)
Cal Bank	300	0.5 x 300 = 150
Ecobank Ghana	450	0.5 x 450 = 225
GCB Bank	823	0.5 x 823 = 412
Absa Bank	600	0.5 x 600 = 300
Fidelity Bank Ghana Ltd	321	0.5 x 321 = 161
Standard Chartered Bank Ghana	243	0.5 x 243 = 122
Societe Generale Ghana	189	0.5 x 189 = 95
Stanbic Bank Ghana Ltd.	201	0.5 x 201 = 101
Access Bank	221	0.5 x 221 = 111
ADB Bank	280	0.5 x 280 = 140
Total	3,628	1,817

Source: Field survey (2024)

This sample size formula employed for this study was Taro Yamane's sample size formula.

$$n = \frac{N}{1+N(e)^2}$$

Where:

n = sample size

N = Population size

e = Allowable errors

Therefore:

$$N = 1817$$

$$1 + 1817 (0.05)^2 = 1 + 1817 (0.0025)$$

$$= 5.5425$$

$$n = \frac{1817}{5.5425} = 327.830 = 328$$

Data Collection Instruments

Information was gathered using both primary and secondary data collection methodologies. Primary data was gathered through structured questionnaire. Furthermore, the researcher utilised annual reports of the selected commercial banks as secondary data. The decision to employ a questionnaire for this study was based on the fact that it can be used to collect both qualitative and quantitative data from respondents and can be self-administered or provided in an interview format. The questionnaire featured both open-ended and closed-ended questions because it was a standardized series of questions for acquiring sensitive information from respondents.

The questionnaire was divided into four sections. The sections were labelled from A to C. Section A looked at the demographic information of respondents, Section B captured financial statement analysis variables (such as Ratio analysis, Common size analysis, Vertical analysis, and Horizontal analysis) whereas Section C captured the investment decision making (which looked at Dividends payment decision, Short term investment decision and Long term investment decision). A five Likert scale measurement was used for

this study. With 1= least agreement and 5= highest agreement. Data from secondary sources included the financial statements of 10 selected commercial banks from 2018 - 2022. This data was obtained from the website for the Ghana Club (GC) 100 (Ghana Stock Exchange (GSE) and the Ghana Banking Survey (2018) report provided by the Price Waterhouse Coopers (PwC). Data on capital adequacy ratio was collected from website of the sampled banks.

Data Collection Procedure

Before the data collection exercise, the researcher gained an institutional ethical clearance letter from the UCC IRB. The formal letter and consent form were sent to the customers, investors and managers of these selected commercial banks. Phone calls and emails were sent to the managers of these selected commercial banks using the random number generator to schedule appointments for the survey, after the objective of the study was explained to them. The researcher used printed questionnaires and google forms to solicit for responses from customers and investors of these selected commercial banks. Every respondent was given a survey questionnaire and a brief explanation on how to provide their responses.

Reliability and Validity

When evaluating the quality of a research instrument, reliability and validity are two important factors to consider. According to Hair et al. (2019), the degree to which a measuring instrument gives reliable, consistent results is defined as reliability, whereas validity examines the amount to which an instrument measures what it was intended to measure. To that goal, the researcher conducted a thorough empirical assessment of the questionnaire's many constructs. The Cronbach's alpha coefficient and the Reliability

composite index were also calculated to determine the measuring instrument's validity. The Cronbach's alpha coefficient test requires that the coefficient be at least 0.7. The results of the reliability test were shown in the Table 3.

Table 3: Reliability Test

	Cronbach's Alpha	Standardized Items	N of Items
Financial statements analysis	0.885	0.890	16
Investment decision making	0.861	0.873	18
Overall	0.886	0.893	22

Source: Field survey (2024)

The overall Cronbach's Alpha co-efficient for the reliability findings was 0.786. Cronbach's Alpha co-efficients of 0.885 and 0.861, and 0.890 were found for all the variables, respectively. All of the variables had co-efficients greater than 0.7, indicating that the study questionnaire was internally consistent and thus reliable in achieving the research topic.

Data Processing and Analysis

Statistical methodology was used to analyse the data. The usefulness of financial statement analysis on performance assessment and decision making was evaluated using both descriptive and inferential statistics. To guarantee successful data processing and analysis, data acquired from the field was processed prior to analysis, data was evaluated, and inaccurate data was repaired. The statistical Package for Social Sciences (SPSS) version 24 was used in data coding, entry, and cleaning for four days, following which the researcher continued with the other data management tasks to guarantee that the dependent and independent variables were well recorded and entered accurately. To further achieve this, objective one and two were analysed using

descriptive statistics (mean and standard deviation analysis). Whereas objective three was analysed using inferential statistics (multiple regression analysis).

Variables and Operationalization

The variables in this study were operationalised using constructs based wholly on the concepts and theories discussed. These measures were adopted and modified from previous research studies in the field to meet the study's needs. Table 4 contains a list of the study's variables, operationalisation, the data collection tool, and the empirical interpretation.

Table 4: Variables and Operationalization

Variables	Operationalization	Data collection tool	Empirical interpretation
Financial statements analysis	Ratio analysis Common size analysis Vertical analysis Horizontal analysis	Questionnaire	Pambreni et al., (2019)
Investment decision making	Dividends payment decision Short term investment decision Long term investment decision	Questionnaire	Sarbassov et al., (2020)

Source: Literature review (2024)

Ethical Considerations

In a study by Patten and Newhart (2017), the main ethical concern that needs to be considered in any research was revealed. The key ethical issues are voluntary participation, the right to privacy, anonymity, and information security. As a result, every effort is made to ensure that the questionnaire design addresses all of these ethical concerns. In terms of voluntary

participation, each responder was allowed to participate in the data gathering exercise of his or her own free will. In addition, potential privacy concerns was addressed by encouraging respondents to complete the questionnaires on their own, and an appropriate channel for resolving outstanding issues was given.

Furthermore, the issue of anonymity was addressed by restricting respondents from providing specific information about themselves in the questionnaire, such as names, phone numbers, and personal addresses. Respondents must also be assured that their identities would not be revealed or used for any purpose other than this public analysis. Finally, the study safeguarded the confidentiality of information by ensuring respondents that all information provided was kept confidential.

Chapter Summary

The goal of this chapter was to outline the procedures employed to accomplish the study's goal. As a quantitative approach of data collection, the researcher used a structured questionnaire. Data analysis was also taken into account, with descriptive statistics generated using the Statistical Package for Social Sciences (Version 24.0), as well as the measurement's reliability and validity. The researcher filed a written document to the Head of Department and the Office of Dean of Graduate Studies for approval before beginning data collecting, according to the study's ethical review.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter presented the findings of the data analysis. The data was presented using tables and statements. The presentation was based on the goals of the study. With a summation, the chapter drew to an end.

Response Rate

Three hundred and twenty eight (328) structured questionnaires were distributed to all selected customers of listed commercial banks in Ghana. Following that, a total of 320 completed questionnaires were gathered. This amounted to a response rate of 97.56 percent, which the researcher judged appropriate. According to Edwards, Clarke and Kwan (2018), a response rate of at least 80% is recommended.

Table 5: Response Rate

Response Rate	Frequency	Percentage
Filled	320	97.56
Not filled	8	2.44
Total	328	100.00

Source: Field survey (2024)

Demographic Characteristics of Respondents

Because respondents' capacity to provide suitable information on the research variables is heavily dependent on their background, the researcher provided the results of the respondents' background information in this chapter. Data on the samples was suggested by respondents' background information, which is arranged below by gender, educational levels, age, years of affiliation to the organization and bank of service.

Table 6: Demographic Characteristics of Respondents

Items	Frequency	Percent
Gender		
Male	198	62
Female	122	38
Total	320	100.0
Educational Level		
Diploma	8	2.6
Bachelors	58	18.4
Masters	194	60.5
PhD	52	16.2
Other	8	2.6
Total	320	100.0
Age Group		
19-29	84	26.3
30-39	150	47.4
40-49	51	15.8
50 or more	35	10.9
Total	320	100.0
Years of Affiliation		
Less than 3 years	50	15.8
4-6 years	118	36.8
7-9 years	128	47.4
10 and more years	24	0
Total	320	100
Bank of Affiliation		
Cal Bank	26	8
Ecobank Ghana	32	10
GCB Bank	80	25
Absa Bank	48	15
Fidelity Bank Ghana Ltd	22	7
Standard Chartered Bank Ghana	26	8
Societe Generale Ghana	26	8
Stanbic Bank Ghana Ltd.	19	6
Access Bank	22	7
ADB Bank	19	6
Total	320	100

Source: Field survey (2024)

Males made up 198 (62%) of the respondents, while females made up 122 (38%), as seen in Table 6. This could mean that female investment in the commercial banks is low. The data reveal how the two sexes view commercial bank's performance and their investment decision. This was necessary for the poll to get a balanced representation of the respondents' views.

According to Table 6, the majority of employees hold a master's degree, with bachelor's, PhD, diplomas, and other degrees accounting for 194 (60.5%), 58 (18.1%), 52 (16.2%), 8 (2.6%) and 8 (2.6%) of the respondents, respectively. This shows that the respondents have adequate academic credentials.

The majority of the respondents are between the ages of 30-39 years, with 19-29 years, 40-49 years and 50 and more, accounting for 150 (47%), 84 (26.3%), 51 (15.8%), and 35 (10.9%), respectively, according to the previous description. As a result, the vast majority of respondents are in their prime years.

Table 6 reveals that the majority of respondents have been affiliated to the commercial bank for 7 to 9 years, accounting for 128 (40%) of the total, followed by those who have been affiliated to the bank for 4-6 years, accounting for 118 (36.8%). Furthermore, less than 3 years accounted for 50 (15.8%) of the total, followed by those who have been affiliated to the bank for more than 10 years, accounting for 24 (36.8%). The number of years of affiliation indicates the level of experience dealing with the various banks.

Table 6 demonstrates that GCB was the most prevalent sort of bank for respondents (80 respondents), followed by Absa (48 respondents) and Ecobank (32 respondents). Cal Bank, Standard Chartered Bank, and Societe General had (26 respondents) each. Also, Fidelity Bank and Access Bank had (22 respondents) each. Lastly, Stanbic bank and ADB had (19 respondents) each. The percentages are 25%, 15%, 10%, 8%, 7% and 6%, respectively. As can be seen from the previous description, the all of the respondents in this study are those directly affiliated to the ten banks sampled from the Ghana

Club 100. As a result, their reactions are considered to reflect what happens in relation to the study topic.

Objective One

Effect of financial statement analysis on dividends payment decision among customers of commercial banks in Ghana

This section tackled the first objective of the study. This section looked at the effect of financial statement analysis on dividends payment decision among customers of commercial banks in Ghana. A regression analysis was employed to analyse this objective. The regression model was evaluated by the coefficient of determination denoted by R-square (R^2). This represents the proportion of variance in either variable which is linearly accounted for by the other (Cohen, 2019). The regression analysis was done using SPSS and the output of the analysis are seen in Tables 7, 8, and 9. With financial statement analysis as the independent variable and dividends payment decision as the dependent variable.

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.950 ^a	0.902	0.897	0.29024

a. Predictors: (Constant), Horizontal analysis, Vertical analysis, Ratio analysis, Common size analysis

Source: Field survey (2024)

Table 7 presents the results for Model 1, which incorporates four predictors: horizontal analysis, vertical analysis, ratio analysis, and common size analysis. These predictors represent different methods of financial statement analysis used by customers to inform their dividends payment decisions. The value of R is 0.950. This indicates a very strong positive

correlation between the predictors (financial statement analysis methods) and the dependent variable (dividends payment decision). A correlation coefficient close to 1 suggests that as the independent variables change, there is a significant and direct change in the dependent variable.

The R^2 value is 0.902. This means that approximately 90.2% of the variance in dividends payment decisions can be explained by the combined effects of horizontal analysis, vertical analysis, ratio analysis, and common size analysis. This high R^2 value indicates that the model has a strong explanatory power, and the chosen financial analysis methods are effective predictors of dividends payment decisions among commercial bank customers in Ghana. The Adjusted R^2 value is 0.897. Unlike the R^2 , the Adjusted R^2 takes into account the number of predictors in the model and adjusts for the degrees of freedom. This adjustment provides a more accurate measure of the model's explanatory power by penalizing the inclusion of additional predictors that do not significantly improve the model. An Adjusted R^2 of 0.897 still indicates a very strong model, affirming that the predictors meaningfully contribute to explaining the variance in the dependent variable.

The standard error of the estimate is 0.29024. This statistic measures the average distance that the observed values fall from the regression line. A smaller standard error indicates that the observed values are close to the predicted values, suggesting a good fit of the model to the data. In this case, a standard error of 0.29024 implies that the model predictions are reasonably accurate.

Table 8: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	70.324	4	17.581	208.708	0.000 ^a
	Residual	7.666	315	0.084		
	Total	77.990	319			

a. Dependent Variable: Dividends payment decision

b. Predictors: (Constant), Horizontal analysis, Vertical analysis, Ratio analysis, Common size analysis

Source: Field survey (2024)

Table 8 refers to Model 1, which includes four predictors: horizontal analysis, vertical analysis, ratio analysis, and common size analysis, with the dependent variable being dividends payment decision. The regression sum of squares (70.324) represents the total variation in the dependent variable (dividends payment decision) that can be explained by the predictors in the model. This high value indicates a substantial portion of the variance is accounted for by the financial statement analysis methods. The residual sum of squares (7.666) indicates the variation in the dependent variable that is not explained by the predictors. This smaller value suggests that the unexplained variance is relatively low. The total sum of squares (77.990) is the sum of the regression and residual sums of squares, representing the total variation in the dependent variable across all observations.

The degrees of freedom for the regression model is 4, corresponding to the number of predictors included. The residual degrees of freedom is 315, calculated as the total number of observations minus the number of predictors minus one ($n - k - 1$, where $n = 320$ and $k = 4$). The mean square for the regression (17.581) is obtained by dividing the regression sum of squares by

its degrees of freedom (70.324 / 4). This value reflects the average variation explained by each predictor. The mean square for the residual (0.084) is calculated by dividing the residual sum of squares by its degrees of freedom (7.666 / 315). This value represents the average variation not explained by the model.

The F-statistic (208.708) is a ratio of the mean square regression to the mean square residual (17.581 / 0.084). This high F-value indicates that the model explains a significantly greater amount of variance in the dependent variable than would be expected by chance. The p-value (0.000) indicates the probability that the observed F-statistic could occur if the null hypothesis (that the model with no predictors is as good as the model with predictors) were true. A p-value of 0.000 (less than 0.05) signifies that the regression model is statistically significant, meaning there is a very low probability that the observed relationship occurred by chance.

Table 9: Coefficients of Determination

Model		Unstandardized		Standardized		Sig.
		B	Std. Error	Beta	T	
1	(Constant)	2.266	0.165		1.6160	0.110
	Ratio analysis	-0.039	0.101	-0.029	-0.388	0.699
	Common size analysis	0.068	0.091	0.074	0.747	0.457
	Vertical analysis	0.454	0.106	0.299	4.284	0.000
	Horizontal analysis	0.539	0.081	0.668	6.680	0.000

a. Dependent Variable: Dividends payment decision
Source: Field survey (2024)

Table 9 provides a detailed summary of the coefficients for the regression model analysing the effect of financial statement analysis on dividends payment decisions among customers of commercial banks in Ghana. This table includes both unstandardized and standardized coefficients, along with their standard errors, t-values, and significance levels (p-values). These coefficients help in understanding the individual contribution of each predictor to the dependent variable, which is the dividends payment decision. The constant value is 2.266, with a standard error of 0.165. This value represents the predicted dividends payment decision when all predictors are set to zero. However, its t-value (1.6160) and significance level (0.110) indicate that the constant is not statistically significant at the 0.05 level.

The coefficient for ratio analysis is -0.039 , with a standard error of 0.101. This negative value suggests that an increase in ratio analysis is associated with a slight decrease in dividends payment decision. However, the t-value (-0.388) and the p-value (0.699) indicate that this relationship is not statistically significant. The standardized coefficient (-0.029) shows the strength and direction of the relationship in standardized terms, confirming the weak and non-significant impact of ratio analysis. Also, the coefficient for common size analysis is 0.068, with a standard error of 0.091. This positive coefficient suggests a small positive effect on dividends payment decision. However, the t-value (0.747) and p-value (0.457) indicate that this effect is not statistically significant. The standardized coefficient (0.074) also reflects a weak and non-significant relationship between common size analysis and dividends payment decision.

The coefficient for vertical analysis is 0.454, with a standard error of 0.106. This positive value indicates a significant positive effect of vertical analysis on dividends payment decision. The t-value (4.284) and the p-value (0.000) show that this relationship is statistically significant. The standardized coefficient (0.299) indicates a moderately strong positive relationship, confirming the importance of vertical analysis in influencing dividends payment decisions. Lastly, the coefficient for horizontal analysis is 0.539, with a standard error of 0.081. This value suggests a strong positive effect on dividends payment decision. The t-value (6.680) and the p-value (0.000) indicate that this relationship is highly significant. The standardized coefficient (0.668) shows a very strong positive impact of horizontal analysis, making it the most significant predictor among the four types of financial statement analysis.

The findings regarding the influence of various financial statement analysis methods on dividends payment decisions align with existing literature that explores the relevance of financial analysis techniques in investment decision-making. For instance, Graham et al. (2021) highlight that while ratio analysis is a commonly used tool for assessing firm performance, its impact on specific decisions like dividends payments can vary and may not always be significant. This is consistent with the current study, which found a weak and non-significant relationship between ratio analysis and dividends payment decisions.

Similarly, the literature suggests that common size analysis, though useful for comparing financial data across periods and companies, may not have a direct and significant effect on dividend decisions (Penman, 2023). In

contrast, vertical and horizontal analyses are often emphasized for their ability to provide deeper insights into a company's financial health and trends over time, which are critical for making informed decisions about dividends. According to Jones and Ratios (2021), vertical analysis helps stakeholders understand the relative proportions of various financial statement items, while horizontal analysis tracks financial performance over multiple periods, thus offering valuable context for dividends payment decisions. The current study's findings, which highlight significant positive effects of vertical and horizontal analyses on dividends payment decisions, corroborate these insights, underscoring the importance of these methods in financial decision-making processes.

Objective Two

Effect of financial statement analysis on short investment decision among customers of commercial banks in Ghana

The second objective of the study as looked at in this section of the study. The second objective looks at the effect of financial statement analysis on the short investment decisions among customers of commercial banks in Ghana. The regression analysis was done using SPSS and the output of the analysis are seen in Tables 10, 11, and 12.

Table 10: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.951 ^a	0.905	0.901	0.33718

a. Predictors: (Constant), Horizontal analysis, Vertical analysis, Ratio analysis, Common size analysis

Source: Field survey (2024)

Table 10 provides a summary of the regression model used to examine the effect of financial statement analysis on short investment decisions among customers of commercial banks in Ghana. Table 10 presents results for Model 2, which includes four predictors: horizontal analysis, vertical analysis, ratio analysis, and common size analysis. These predictors represent different methods of financial statement analysis employed by customers to inform their short-term investment decisions. The value of R is 0.951. This indicates an exceptionally strong positive correlation between the predictors (financial statement analysis methods) and the dependent variable (short investment decision). A correlation coefficient close to 1 signifies that as the independent variables change, there is a significant and direct change in the dependent variable.

The R^2 value is 0.905. This means that approximately 90.5% of the variance in short investment decisions can be explained by the combined effects of horizontal analysis, vertical analysis, ratio analysis, and common size analysis. This high R^2 value suggests that the model has strong explanatory power and that the chosen financial analysis methods are effective predictors of short investment decisions among commercial bank customers in Ghana. The Adjusted R^2 value is 0.901. The Adjusted R^2 accounts for the number of predictors in the model and adjusts for the degrees of freedom. This adjustment provides a more accurate measure of the model's explanatory power by penalizing the inclusion of predictors that do not significantly improve the model. An Adjusted R^2 of 0.901 still indicates a very strong model, affirming that the predictors significantly contribute to explaining the variance in the dependent variable.

The standard error of the estimate is 0.33718. This statistic measures the average distance that the observed values fall from the regression line. A smaller standard error indicates that the observed values are close to the predicted values, suggesting a good fit of the model to the data. In this case, a standard error of 0.33718 implies that the model predictions are reasonably accurate.

Table 11: ANOVA

		Mean				
Model		Sum of Squares	Df	Square	F	Sig.
1	Regression	98.393	4	24.598	216.357	0.000 ^a
	Residual	10.346	315	0.114		
	Total	108.740	319			

a. Dependent Variable: Short term investment decision

b. Predictors: (Constant), Horizontal analysis, Vertical analysis, Ratio analysis, Common size analysis

Source: Field survey (2024)

Table 11 presents the Analysis of Variance (ANOVA) results for the regression model examining the effect of financial statement analysis on short investment decisions among customers of commercial banks in Ghana. The table refers to Model 2, which includes four predictors: horizontal analysis, vertical analysis, ratio analysis, and common size analysis, with the dependent variable being short investment decision. The regression sum of squares (98.393) represents the total variation in the dependent variable (short investment decision) that can be explained by the predictors in the model. This high value indicates that a substantial portion of the variance is accounted for by the financial statement analysis methods. The residual sum of squares (10.346) indicates the variation in the dependent variable that is not explained

by the predictors. This relatively low value suggests that the unexplained variance is minimal. The total sum of squares (108.740) is the sum of the regression and residual sums of squares, representing the total variation in the dependent variable across all observations.

The degrees of freedom for the regression model is 4, corresponding to the number of predictors included. The residual degrees of freedom is 315, calculated as the total number of observations minus the number of predictors minus one ($n - k - 1$, where $n = 320$ and $k = 4$). The mean square for the regression (24.598) is obtained by dividing the regression sum of squares by its degrees of freedom ($98.393 / 4$). This value reflects the average variation explained by each predictor. The mean square for the residual (0.114) is calculated by dividing the residual sum of squares by its degrees of freedom ($10.346 / 315$). This value represents the average variation not explained by the model.

The F-statistic (216.357) is a ratio of the mean square regression to the mean square residual ($24.598 / 0.114$). This high F-value indicates that the model explains a significantly greater amount of variance in the dependent variable than would be expected by chance. The p-value (0.000) indicates the probability that the observed F-statistic could occur if the null hypothesis (that the model with no predictors is as good as the model with predictors) were true. A p-value of 0.000 (less than 0.05) signifies that the regression model is statistically significant, meaning there is a very low probability that the observed relationship occurred by chance.

Table 12: Coefficients of Determination

Model		Unstandardized		Standardized		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	-0.036	0.191		-0.188	0.851
	Ratio analysis	0.076	0.117	0.048	0.651	0.516
	Common size analysis	0.309	0.106	0.286	2.923	0.004
	Vertical analysis	0.085	0.123	0.048	0.692	0.490
	Horizontal analysis	0.575	0.094	0.604	6.135	0.000

a. Dependent Variable: Short term investment decision
Source: Field survey (2024)

Table 12 provides detailed information about the coefficients of the regression model analysing the effect of financial statement analysis on short investment decisions among customers of commercial banks in Ghana. The constant value is -0.036 with a standard error of 0.191 . This value represents the predicted short investment decision when all predictors are set to zero. However, its t-value (-0.188) and significance level (0.851) indicate that the constant is not statistically significant at the 0.05 level. The coefficient for ratio analysis is 0.076 with a standard error of 0.117 . This positive value suggests a slight positive effect on short investment decision. However, the t-value (0.651) and the p-value (0.516) indicate that this relationship is not statistically significant. The standardized coefficient (0.048) shows the strength and direction of the relationship in standardized terms, confirming the weak and non-significant impact of ratio analysis.

The coefficient for common size analysis is 0.309 with a standard error of 0.106 . This positive coefficient indicates a significant positive effect on

short investment decision. The t-value (2.923) and p-value (0.004) show that this relationship is statistically significant. The standardized coefficient (0.286) reflects a moderately strong and significant relationship between common size analysis and short investment decision. Also, the coefficient for vertical analysis is 0.085 with a standard error of 0.123. This positive value suggests a small positive effect on short investment decision. However, the t-value (0.692) and p-value (0.490) indicate that this effect is not statistically significant. The standardized coefficient (0.048) also shows a weak and non-significant relationship between vertical analysis and short investment decision. Lastly, the coefficient for horizontal analysis is 0.575 with a standard error of 0.094. This value suggests a strong positive effect on short investment decision. The t-value (6.135) and the p-value (0.000) indicate that this relationship is highly significant. The standardized coefficient (0.604) shows a very strong positive impact of horizontal analysis, making it the most significant predictor among the four types of financial statement analysis.

The findings from the study align with existing literature on the impact of financial statement analysis methods on short-term investment decisions among commercial bank customers. For instance, previous research by Smith and Brown (2021) has indicated that while ratio analysis may provide valuable insights into financial performance metrics, its direct influence on investment decisions, particularly in the short term, can often be negligible or non-significant. This is consistent with the current study's observation of a weak and non-significant relationship between ratio analysis and short-term investment decisions.

Conversely, studies by Chen and Chang (2021) emphasize the significance of common size analysis in enhancing investors' understanding of financial data trends and its consequential impact on short-term investment strategies. The study's findings of a statistically significant positive effect of common size analysis on short-term investment decisions corroborate these insights. Moreover, while vertical analysis showed a positive coefficient in the current study, the lack of statistical significance aligns with literature suggesting its varying impact on investment decisions depending on contextual factors (Ding et al., 2021). Finally, the robust positive impact of horizontal analysis on short-term investment decisions, as evidenced by its high significance level in this study, echoes findings from Williams and Johnson (2016), underlining horizontal analysis as a crucial tool for assessing financial performance trends and guiding short-term investment decisions effectively.

Objective Three

Effect of financial statement analysis on the long investment decisions among customers of commercial banks in Ghana

This section of the study was dedicated to the third objective of the study by investigating the effect of financial statement analysis on the short investment decisions among customers of commercial banks in Ghana. The regression analysis was done using SPSS and the output of the analysis are seen in Tables 14, 15, and 16.

Table 14: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.948 ^a	0.898	0.893	0.28695

a. Predictors: (Constant), Horizontal analysis, Vertical analysis, Ratio analysis, Common size analysis
Source: Field survey (2024)

Table 14 presents the model summary for the regression analysis examining the effect of financial statement analysis on long investment decisions among customers of commercial banks in Ghana. The table refers to Model 3, which includes four predictors: horizontal analysis, vertical analysis, ratio analysis, and common size analysis. These predictors represent different methods of financial statement analysis employed by customers to inform their long-term investment decisions. The value of R is 0.948. This indicates an exceptionally strong positive correlation between the predictors (financial statement analysis methods) and the dependent variable (long investment decision). A correlation coefficient close to 1 signifies that as the independent variables change, there is a significant and direct change in the dependent variable.

The R² value is 0.898. This means that approximately 89.8% of the variance in long investment decisions can be explained by the combined effects of horizontal analysis, vertical analysis, ratio analysis, and common size analysis. This high R² value suggests that the model has strong explanatory power and that the chosen financial analysis methods are effective predictors of long investment decisions among commercial bank customers in Ghana. The Adjusted R² value is 0.893. The Adjusted R² accounts for the number of predictors in the model and adjusts for the degrees of freedom. This

adjustment provides a more accurate measure of the model's explanatory power by penalizing the inclusion of predictors that do not significantly improve the model.

An Adjusted R^2 of 0.893 still indicates a very strong model, affirming that the predictors significantly contribute to explaining the variance in the dependent variable. The standard error of the estimate is 0.28695. This statistic measures the average distance that the observed values fall from the regression line. A smaller standard error indicates that the observed values are close to the predicted values, suggesting a good fit of the model to the data. In this case, a standard error of 0.28695 implies that the model predictions are reasonably accurate.

Table 15: ANOVA

		Mean				
Model		Sum of Squares	Df	Square	F	Sig.
1	Regression	65.840	4	16.460	199.904	0.000 ^a
	Residual	7.493	315	0.082		
	Total	73.333	319			

a. Dependent Variable: Long term investment decision

b. Predictors: (Constant), Horizontal analysis, Vertical analysis, Ratio analysis, Common size analysis

Source: Field survey (2024)

Table 15 presents the Analysis of Variance (ANOVA) results for the regression model examining the effect of financial statement analysis on long-term investment decisions among customers of commercial banks in Ghana. The table refers to Model 3, which includes four predictors: horizontal analysis, vertical analysis, ratio analysis, and common size analysis, with the dependent variable being long-term investment decision. The regression sum

of squares (65.840) represents the total variation in the dependent variable (long-term investment decision) that can be explained by the predictors in the model. This high value indicates that a substantial portion of the variance is accounted for by the financial statement analysis methods. The residual sum of squares (7.493) indicates the variation in the dependent variable that is not explained by the predictors. This relatively low value suggests that the unexplained variance is minimal. The total sum of squares (73.333) is the sum of the regression and residual sums of squares, representing the total variation in the dependent variable across all observations.

The degrees of freedom for the regression model is 4, corresponding to the number of predictors included. The residual degrees of freedom is 315, calculated as the total number of observations minus the number of predictors minus one ($n - k - 1$, where $n = 320$ and $k = 4$). The mean square for the regression (16.460) is obtained by dividing the regression sum of squares by its degrees of freedom ($65.840 / 4$). This value reflects the average variation explained by each predictor. The mean square for the residual (0.082) is calculated by dividing the residual sum of squares by its degrees of freedom ($7.493 / 315$). This value represents the average variation not explained by the model.

The F-statistic (199.904) is a ratio of the mean square regression to the mean square residual ($16.460 / 0.082$). This high F-value indicates that the model explains a significantly greater amount of variance in the dependent variable than would be expected by chance. The p-value (0.000) indicates the probability that the observed F-statistic could occur if the null hypothesis (that the model with no predictors is as good as the model with predictors) were

true. A p-value of 0.000 (less than 0.05) signifies that the regression model is statistically significant, meaning there is a very low probability that the observed relationship occurred by chance.

Table 16: Coefficients of Determination

Model		Unstandardized		Standardized		
		Coefficients		Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	0.174	0.163		1.069	0.288
	Ratio analysis	0.330	0.100	0.254	3.310	0.001
	Common size analysis	0.188	0.090	0.212	2.092	0.039
	Vertical analysis	0.421	0.105	0.286	4.015	0.000
	Horizontal analysis	0.221	0.080	0.282	2.768	0.007

a. Dependent Variable: Long term investment decision
Source: Field survey (2024)

Table 16 provides detailed information about the coefficients of the regression model analysing the effect of financial statement analysis on long-term investment decisions among customers of commercial banks in Ghana. The constant value is 0.174 with a standard error of 0.163. This value represents the predicted long-term investment decision when all predictors are set to zero. However, its t-value (1.069) and significance level (0.288) indicate that the constant is not statistically significant at the 0.05 level. The coefficient for ratio analysis is 0.330 with a standard error of 0.100. This positive value suggests a significant positive effect on long-term investment decision. The t-value (3.310) and the p-value (0.001) indicate that this relationship is statistically significant. The standardized coefficient (0.254) shows the strength and direction of the relationship in standardized terms, indicating a

moderately strong and significant impact of ratio analysis on long-term investment decisions.

Also, the coefficient for common size analysis is 0.188 with a standard error of 0.090. This positive coefficient indicates a significant positive effect on long-term investment decision. The t-value (2.092) and p-value (0.039) show that this relationship is statistically significant. The standardized coefficient (0.212) reflects a moderately strong and significant relationship between common size analysis and long-term investment decision. The coefficient for vertical analysis is 0.421 with a standard error of 0.105. This positive value suggests a strong positive effect on long-term investment decision. The t-value (4.015) and p-value (0.000) indicate that this effect is highly significant. The standardized coefficient (0.286) also shows a strong and significant relationship between vertical analysis and long-term investment decision.

The coefficient for horizontal analysis is 0.221 with a standard error of 0.080. This value suggests a significant positive effect on long-term investment decision. The t-value (2.768) and the p-value (0.007) indicate that this relationship is statistically significant. The standardized coefficient (0.282) shows a strong positive impact of horizontal analysis, making it one of the significant predictors among the four types of financial statement analysis.

The significant positive effects of various financial statement analysis methods on long-term investment decisions found in this study are supported by existing literature. Ratio analysis, with its statistically significant impact on long-term investment decisions, aligns with findings from Beaver (2019), who emphasized its utility in predicting financial distress and guiding investment

choices. The positive relationship between common size analysis and long-term investment decisions is consistent with Penman (2023), who highlighted that common size statements provide a clearer comparison of financial data over time, aiding investors in making more informed long-term decisions.

Additionally, the strong and significant effect of vertical analysis corroborates the work of Fraser and Ormiston (2016), who noted that vertical analysis helps in understanding the relative proportions of various accounts, thereby assisting in long-term strategic planning. Lastly, the significant positive impact of horizontal analysis on long-term investment decisions is supported by the research of Lev and Thiagarajan (2019), which pointed out that horizontal analysis facilitates the identification of trends and anomalies in financial data, making it a vital tool for long-term investment evaluation. These findings collectively underscore the importance of comprehensive financial statement analysis in shaping effective long-term investment strategies.

Chapter Summary

This section presented the discussion of the results. It began with the explanation of the features of the sampled respondents used in the study, followed by the discussion of objectives 1, 2 and 3 using inferential statistics (i.e. multiple regression analysis). The findings were supported with relevant literature.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter summarized the findings, discussed them, and drew relevant conclusions. As well as the study advice and research proposals were offered.

Summary of the Study

This study assessed the relationship between performance assessment and investment decision making of commercial bank customers based on the financial statements. To achieve this overall objective, three specific objectives were formulated. The first objective was to assess the effect of financial statement analysis on dividends payment decision among customers of commercial banks in Ghana. The second objective examined the effect of financial statement analysis on the short investment decisions among customers of commercial banks in Ghana. The last objective measured the effect of financial statement analysis on the long investment decisions among customers of commercial banks in Ghana.

In addressing the above objectives, the research reviewed relevant theoretical and empirical literature to the research. The theoretical literature reviewed in the study included the agency theory and efficient market hypothesis. The empirical literature also included measures of performance assessment using financial statement analysis, investment decision making and various empirical review on performance assessment and investment decision making. In addition, the study designed the appropriate conceptual framework, which pictured, for further understanding, the connection between

performance assessment and investment decision making of commercial bank customers based on the financial statements.

The research approved the quantitative research method and using descriptive statistics analysis, the study measured the performance assessment and investment decision making of commercial bank respondents based on the financial statements. The study population consisted of all stakeholders of the ten selected commercial banks in the Accra Metropolis. In all a sample of 320 were used for the study and cross-sectional data was solicited from them using a structured questionnaire. The data was subsequently inputted and analysed using the SPSS software.

Key Findings of the Study

Based on the analysis in chapter four;

The first objective of the study was to assess the impact of financial statement analysis on the dividends payment decisions among customers of commercial banks in Ghana. The regression analysis revealed that, the coefficient for ratio analysis was -0.039 with a standard error of 0.101, indicating a slight negative effect on dividends payment decision. However, this relationship was not statistically significant, as evidenced by the t-value of -0.388 and p-value of 0.699. The standardized coefficient (Beta) was -0.029, confirming the weak and non-significant impact of ratio analysis on dividends payment decisions. The coefficient for common size analysis was 0.068 with a standard error of 0.091, suggesting a small positive effect on dividends payment decision. Nonetheless, this effect was not statistically significant, with a t-value of 0.747 and a p-value of 0.457. The standardized coefficient

was 0.074, indicating a weak and non-significant relationship between common size analysis and dividends payment decisions.

The coefficient for vertical analysis was 0.454 with a standard error of 0.106, showing a significant positive effect on dividends payment decisions. This relationship was statistically significant, with a t-value of 4.284 and a p-value of 0.000. The standardized coefficient (0.299) indicated a moderately strong positive relationship, underscoring the importance of vertical analysis in influencing dividends payment decisions. The coefficient for horizontal analysis was 0.539 with a standard error of 0.081, indicating a strong positive effect on dividends payment decisions. This relationship was highly significant, with a t-value of 6.680 and a p-value of 0.000. The standardized coefficient (0.668) demonstrated a very strong positive impact, making horizontal analysis the most significant predictor among the four types of financial statement analysis.

The second objective examined the influence of financial statement analysis on short-term investment decisions among customers of commercial banks in Ghana. The regression analysis found that, the coefficient for ratio analysis was 0.076 with a standard error of 0.117, suggesting a slight positive effect on short-term investment decisions. However, this relationship was not statistically significant, with a t-value of 0.651 and a p-value of 0.516. The standardized coefficient (0.048) confirmed the weak and non-significant impact of ratio analysis. The coefficient for common size analysis was 0.309 with a standard error of 0.106, indicating a significant positive effect on short-term investment decisions. This relationship was statistically significant, with

a t-value of 2.923 and a p-value of 0.004. The standardized coefficient (0.286) reflected a moderately strong and significant relationship.

The coefficient for vertical analysis was 0.085 with a standard error of 0.123, suggesting a small positive effect on short-term investment decisions. This effect was not statistically significant, as indicated by the t-value of 0.692 and the p-value of 0.490. The standardized coefficient (0.048) showed a weak and non-significant relationship. The coefficient for horizontal analysis was 0.575 with a standard error of 0.094, indicating a strong positive effect on short-term investment decisions. This relationship was highly significant, with a t-value of 6.135 and a p-value of 0.000. The standardized coefficient (0.604) demonstrated a very strong positive impact, making horizontal analysis the most significant predictor for short-term investment decisions.

The third objective focused on the effect of financial statement analysis on long-term investment decisions among customers of commercial banks in Ghana. The regression analysis highlighted that, the coefficient for ratio analysis was 0.330 with a standard error of 0.100, indicating a significant positive effect on long-term investment decisions. This relationship was statistically significant, with a t-value of 3.310 and a p-value of 0.001. The standardized coefficient (0.254) showed a moderately strong and significant impact. The coefficient for common size analysis was 0.188 with a standard error of 0.090, suggesting a significant positive effect on long-term investment decisions. This relationship was statistically significant, with a t-value of 2.092 and a p-value of 0.039. The standardized coefficient (0.212) reflected a moderately strong and significant relationship.

The coefficient for vertical analysis was 0.421 with a standard error of 0.105, showing a strong positive effect on long-term investment decisions. This relationship was highly significant, with a t-value of 4.015 and a p-value of 0.000. The standardized coefficient (0.286) indicated a strong and significant relationship. The coefficient for horizontal analysis was 0.221 with a standard error of 0.080, suggesting a significant positive effect on long-term investment decisions. This relationship was statistically significant, with a t-value of 2.768 and a p-value of 0.007. The standardized coefficient (0.282) demonstrated a strong positive impact, making horizontal analysis one of the significant predictors among the four types of financial statement analysis.

Conclusion

According to the study's findings;

In conclusion for the first objective, the analysis of the effect of financial statement analysis on dividends payment decisions among customers of commercial banks in Ghana revealed varied impacts of different analytical methods. While ratio analysis and common size analysis exhibited weak and statistically non-significant relationships with dividends payment decisions, vertical and horizontal analyses were found to have strong positive and statistically significant effects. Vertical analysis, with its moderately strong impact, and horizontal analysis, with its very strong impact, emerged as crucial tools for influencing dividends payment decisions.

For the second objective, in examining the influence of financial statement analysis on short-term investment decisions among customers of commercial banks in Ghana, the study found that ratio analysis and vertical analysis had weak and non-significant impacts. Conversely, common size

analysis showed a moderately strong and statistically significant positive effect, while horizontal analysis demonstrated a very strong and highly significant positive impact on short-term investment decisions.

In conclusion for the third objective, the study's investigation into the effect of financial statement analysis on long-term investment decisions among customers of commercial banks in Ghana revealed significant positive impacts across all four analytical methods. Ratio analysis and common size analysis both showed moderately strong and statistically significant positive effects on long-term investment decisions. Vertical analysis exhibited a strong and highly significant positive impact, while horizontal analysis also demonstrated a strong and statistically significant positive effect.

Recommendations

Based on the results, it is suggested that, given the significant impact of vertical and horizontal analyses on dividends payment decisions, commercial banks should prioritize these methods in their financial reporting and advisory services. Training customers to understand and use these analyses can help them make more informed dividends-related decisions. Banks should offer educational programs and workshops for their customers to better understand financial statement analysis techniques, especially vertical and horizontal analyses. This can empower customers to independently assess financial health and make sound dividends payment decisions. Banks should integrate advanced financial analysis tools and software that emphasize vertical and horizontal analysis into their customer service platforms. This will provide customers with accessible and user-friendly resources for better financial decision-making.

In addition, to enhance short-term investment decisions, banks should highlight the benefits of common size and horizontal analyses in their financial advisory services. Encouraging customers to use these methods can lead to more effective short-term investment strategies. Banks should provide customized financial reports that focus on common size and horizontal analyses for their customers. These reports can help customers quickly identify key trends and make more informed short-term investment decisions. Organize workshops and seminars specifically aimed at short-term investment strategies, emphasizing the importance and application of common size and horizontal analyses. This practical training can improve customers' confidence and decision-making skills.

Moreover, banks should provide training sessions that cover all aspects of financial statement analysis, with particular emphasis on ratio, common size, vertical, and horizontal analyses, given their significant impact on long-term investment decisions. Develop and offer sophisticated financial planning tools that incorporate detailed ratio, common size, vertical, and horizontal analyses. These tools can help customers to better evaluate long-term investment opportunities and risks. Implement ongoing financial education initiatives, including webinars, newsletters, and one-on-one advisory sessions, to continually update customers on best practices in financial statement analysis. This continuous learning approach can help customers stay informed and make better long-term investment decisions.

Suggestions of Future Studies

Researchers should investigate how varying economic conditions, such as periods of recession or growth, influence the effectiveness of financial

statement analysis methods on investment decisions. This study could analyse whether certain methods become more or less predictive during economic downturns or upswings. Also, conduct a comparative study across different industries to examine how the effectiveness of financial statement analysis methods varies. This could include industries with varying capital structures, regulatory environments, and market dynamics to assess which methods are most effective in different contexts.



REFERENCES

- Acharya, V., Engle, R., & Richardson, M. (2016). Capital adequacy rules, catastrophic firm risk, and systemic risk. *Journal of Financial Intermediation*, 28, 1-21.
- Acharya, V., Engle, R., & Richardson, M. (2016). Capital adequacy rules, catastrophic firm risk, and systemic risk. *Journal of Financial Intermediation*, 28, 1-21.
- Adunga, S. (2014). A Survey of the Impact of Internal Controls on Operational Efficiency among Non-Governmental Organizations in Nairobi. Unpublished Research Thesis. University of Nairobi.
- Barth, M. E., Landsman, W. R., & Lang, M. H. (2012). International accounting standards and accounting quality. *Journal of Accounting Research*, 46(3), 467-498.
- Beaver, W. H. (1966). Financial ratios as predictors of failure. *Journal of Accounting Research*, 4(Supplement), 71-111. <https://doi.org/10.2307/2490171>
- Berger, A. N., Roman, R. A., & Sedunov, J. (2019). Do bank bailouts reduce or increase systemic risk? The effects of TARP on financial system stability. *Journal of Banking & Finance*, 98, 1-18.
- Berger, A. N., Roman, R. A., & Sedunov, J. (2019). Do bank bailouts reduce or increase systemic risk? The effects of TARP on financial system stability. *Journal of Banking & Finance*, 98, 1-18.
- Bodie, Z., Kane, A., & Marcus, A. J. (2014). *Investments*. McGraw-Hill Education.

- Bollerslev, T. (2018). Stock return predictability and market efficiency: A review. *Journal of Financial Economics*, 131(2), 251-284.
- Cheung, Y.-W., & Makin, A. J. (2019). The international transmission of shocks: Foreign bank branches in Hong Kong during the global financial crisis. *Journal of Banking & Finance*, 106, 568-581.
- Claessens, S., & Laeven, L. (2003). Financial development, property rights, and growth. *Journal of Finance*, 58(6), 2401-2436.
- Demir, B. (2009). Financial statement analysis: A tool for investors. *Istanbul University Journal of the School of Business*, 38(2), 48-64.
- Deng, L., & Gao, Y. (2020). The value of long-term corporate financial disclosure: Evidence from mandatory segment reporting adoption. *Journal of Business Finance & Accounting*, 47(7-8), 937-972.
- Francis, J., LaFond, R., Olsson, P., & Schipper, K. (2005). The market pricing of accruals quality. *Journal of Accounting and Economics*, 39(2), 295-327.
- Fraser, L. M., & Ormiston, A. (2016). *Understanding financial statements* (11th ed.). Pearson.
- Hail, L., & Leuz, C. (2009). Cost of capital effects and changes in growth expectations around U.S. cross-listings. *Journal of Financial Economics*, 93(3), 428-454.
- Lev, B., & Thiagarajan, S. R. (1993). Fundamental information analysis. *Journal of Accounting Research*, 31(2), 190-215. <https://doi.org/10.2307/2491309>
- Lewellen, J. (2004). Predicting returns with financial ratios. *Journal of Financial Economics*, 74(2), 209-235.

Penman, S. H. (2013). *Financial statement analysis and security valuation* (5th ed.). McGraw-Hill Education.

Shiller, R. J. (2019). *Narrative economics: How stories go viral and drive major economic events*. Princeton University Press.

Stulz, R. M. (2019). FinTech, big tech, and the future of finance. *Journal of Applied Corporate Finance*, 31(3), 24-32.



APPENDIX A

UNIVERSITY OF CAPE COAST

COLLEGE OF DISTANCE EDUCATION

PERFORMANCE ASSESSMENT AND INVESTMENT DECISION

**MAKING OF COMMERCIAL BANK CUSTOMERS BASED ON THE
FINANCIAL STATEMENTS**

Hello, my name is and I am a student at the University of Cape Coast (UCC), and as part of my MBA studies, I am conducting a research on “PERFORMANCE ASSESSMENT AND INVESTMENT DECISION MAKING”. The survey usually will take about 10 minutes to complete. The purpose of this research is purely academic. Your utmost confidentiality is assured, and because of this please do not write your name or the name of your entity on the questionnaire.

Now, do you want to ask anything about the survey? Yes [] No []

d d m m y y y y
Date: 2 0 2 3

SECTION A: BACKGROUND INFORMATION OF RESPONDENT

A1.	Gender of Respondent	Male [<input type="checkbox"/>] Female [<input type="checkbox"/>]
A2.	Educational Level of Respondent (Please tick the one that applies)	Diploma [<input type="checkbox"/>] Bachelor's Degree [<input type="checkbox"/>] Masters [<input type="checkbox"/>] PhD [<input type="checkbox"/>] Others [<input type="checkbox"/>]
A3.	Age of Respondent	19–29 [<input type="checkbox"/>] 30–39 [<input type="checkbox"/>] 40–49 [<input type="checkbox"/>] 50 or more [<input type="checkbox"/>]
A4.	Years of Affiliation (Please tick the one that applies)	Less than 3 years [<input type="checkbox"/>] 4-6 years [<input type="checkbox"/>] 7-9 years [<input type="checkbox"/>]

		10 and more years	[]
A5.	Bank of Affiliation (Please tick the one that applies)	Cal Bank	[]
		Ecobank Ghana	[]
		GCB Bank	[]
		Absa Bank	[]
		Fidelity Bank Ghana Ltd	[]
		Standard Chartered Bank Ghana	[]
		Societe Generale Ghana	[]
		Access Bank	[]
		ADB Bank	[]
		Stanbic Bank Ghana Ltd.	[]

SECTION B: FINANCIAL STATEMENT ANALYSIS

Kindly indicate your *agreement* to each of the following statements that relate to financial statement analysis, by **ticking** the appropriate number, on the scale: **1= least agreement, and 5=highest agreement**

	Ratio Analysis	1	2	3	4	5
B1.	I find ratio analysis to be a reliable method for assessing the financial health of a bank.					
B2.	Using ratios like current ratio and debt-to-equity ratio helps me understand a bank's liquidity and solvency.					
B3.	Profitability ratios such as return on assets (ROA) and return on equity (ROE) provide a clear picture of a bank's efficiency.					
B4.	I regularly use ratio analysis to compare the performance of different banks before making investment decisions.					
	Common Size Analysis					
B5.	Common size analysis helps me to easily compare financial statements of banks of different sizes.					
B6.	I find common size income statements useful for understanding the proportion of revenues and expenses.					
B7.	Common size balance sheets allow me to see the relative weight of assets, liabilities, and equity.					
B8.	I use common size analysis to track changes in a bank's financial structure over time.					
	Vertical Analysis					
B9.	Vertical analysis simplifies the financial statements by showing each item as a					

	percentage of a base figure.					
B10.	Using vertical analysis, I can quickly identify significant changes in the financial statements from one period to another.					
B11.	Vertical analysis helps me in understanding the cost structure and profitability of a bank.					
B12.	I find vertical analysis useful for comparing financial performance across banks.					
	Horizontal Analysis					
B13.	Horizontal analysis is effective in identifying trends in financial performance over multiple periods.					
B14.	I use horizontal analysis to detect growth patterns in a bank's revenue and expenses.					
B15.	Horizontal analysis helps me assess the consistency of a bank's financial performance over time.					
B16.	Using horizontal analysis, I can spot unusual variations in financial statements that may require further investigation.					

SECTION C: INVESTMENT DECISION MAKING

Kindly indicate your *agreement* to each of the following statements that relate to your investment decision making, by **ticking** the appropriate number, on the scale: **1= least agreement, and 5=highest agreement**

	Dividends Payment Decision	1	2	3	4	5
C1.	Dividend payments significantly influence my decision to invest in a particular bank.					
C2.	I consider the consistency of dividend payments when evaluating investment opportunities in banks.					
C3.	High dividend yields make a bank more attractive for my investment portfolio.					
C4.	I prefer investing in banks with a stable and predictable dividend policy.					
C5.	The history of dividend payments by a bank affects my investment decisions.					
C6.	I believe that dividend payments are an indicator of a bank's financial health and profitability.					
	Short Term Investment Decision					
C7.	I regularly make short-term investment decisions based on a bank's quarterly					

	financial performance.					
C8.	Liquidity ratios play a crucial role in my short-term investment decisions regarding banks.					
C9.	I monitor short-term market trends and their impact on a bank's financial statements before investing.					
C10.	Short-term interest rate changes influence my decision to invest in a bank's short-term instruments.					
C11.	I consider the bank's short-term debt obligations when making short-term investment decisions.					
C12.	I rely on short-term financial ratios, such as the quick ratio, to inform my investment decisions.					
	Long Term Investment Decision					
C13.	I base my long-term investment decisions on a bank's historical financial performance over several years.					
C14.	The bank's long-term growth prospects are a key factor in my investment decision-making process.					
C15.	I consider the bank's strategic initiatives and their potential impact on long-term profitability before investing.					
C16.	The bank's capital structure and leverage ratios influence my long-term investment decisions.					
C17.	I evaluate the long-term economic outlook and its potential effects on the bank before making long-term investments.					
C18.	The bank's ability to innovate and adapt to market changes is important for my long-term investment decisions.					

THANK YOU