



Addis Ababa University

College of Business and Economics

Department of Business Administration

**ANALYZING FINANCIAL PERFORMANCE TRENDS OF
COMMERCIAL BANKS IN ETHIOPIA: IMPLICATIONS FOR
INVESTOR ENGAGEMENT IN THE EMERGING CAPITAL MARKET**

BY: Setna Abayrom

A Thesis Submitted to Addis Ababa University College Of
Business and Economics, In Partial
Fulfillment of The Requirements for The Degree of Master of Business
Administration

Addis Ababa, Ethiopia

June, 2024

Addis Ababa University
College of Business and Economics

**ANALYZING FINANCIAL PERFORMANCE TRENDS OF
COMMERCIAL BANKS IN ETHIOPIA: IMPLICATIONS FOR
INVESTOR ENGAGEMENT IN THE EMERGING CAPITAL MARKET**

BY: Setna Abayrom

ID No. /7907/14

Advisor: Dr. Mesfin Fikre

Addis Ababa, Ethiopia

Date: June 2024

DECLARATION

This is to certify that the thesis prepared by Setna Abayrom, entitled: Analyzing Financial Performance Trends of Commercial Banks in Ethiopia: Implications for Investor Engagement in the Emerging Capital Market and submitted in partial fulfillment of the requirements for the degree of Master of business administration complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

Name of the student: Setna Abayrom Wossen

Signature..........Date...27/6/24.....

Approved by the Examining Committee

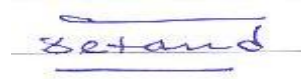


Name of the Advisor Dr. Mesfin Fikre Signature.....Date...27/6/24...

Name of the Internal Examiner Dr. Meskerem Mitiku Signature.....Date...27/6/24....



Name of the External Examiner Dr. Getie Andualem Signature...



Date...25/6/2024

ACKNOWLEDGEMENTS

First of all, I would like to praise the Almighty God for empowering me to successfully carry out this research project. I would also like to extend my sincere gratitude to my advisor Dr. Mesfin Fikre, for his unreserved support and great guidance to successfully complete this work.

My grateful thanks also go to employees of different commercial banks for their positive Cooperation in giving me relevant financial data for the study.

Finally, I would like to deliver my gratitude to families and friends whose names are not Listed above, without your support it would be difficult to be successful.

Contents

<i>List of Figures</i>	<i>vii</i>
<i>LIST OF TABLE</i>	<i>viii</i>
<i>LIST OF ACRONYMS AND ABBREVIATIONS</i>	<i>ix</i>
<i>ABSTRACT</i>	<i>x</i>
<i>CHAPTER ONE</i>	<i>1</i>
<i>1. INTRODUCTION</i>	<i>1</i>
1.1. Background of the Study	1
1.2. Overview of Banking Environment in Ethiopia	2
1.3. Statement of the Problem	4
1.4. Research Questions	5
1.5. Objective of the study	6
1.5.1. General Objective of the Study	6
1.5.2. Specific Objective of the Study	6
1.6. Significance of the study	6
1.7. Scope of the study	7
1.8. Limitations of the Study	7
1.9. Organization of the study	8
<i>CHAPTER TWO</i>	<i>8</i>
<i>2. REVIEW OF RELATED LITERATURE</i>	<i>8</i>
2.1. Theoretical Review	9
2.1.1. Real options theory	9
2.1.2. The Internal Funds Theory of Investment	9
2.1.3. Cash Flow Theory	9
2.1.4. Neoclassical Theory	10
2.2. The banking Sector and Performance Measurement	10
2.2.1. The Camel Approach of measurement of financial performance	11
2.3. The Nature of Capital Market	14
2.3.1. The development of Capital Market in Ethiopia	14
2.3.2. The nexus between bank Performance and Capital Market	16
2.4. Empirical review	18
<i>CHAPTER THREE</i>	<i>21</i>

3. RESEARCH DESIGN AND METHODOLOGY.....	21
3.1. Research Design	22
3.2. Research Approach Adopted	22
3.3. Population and Sampling Procedure	23
3.3.1. Population of the Study	23
3.3.2. Sample Frame	23
3.4. Data Collection, Presentation and Analysis Techniques	23
3.4.1. Data and Data Collection Instruments	23
3.4.2. Data Presentation and Analysis	24
CHAPTER FOUR.....	26
4. ANALYSIS AND DISCUSSION.....	26
4.1. Profitability Ratios	26
4.1.1. Return on Assets (ROA)	26
4.1.2. Return on Equity (ROE)	29
4.1.3. Net Interest Margin	31
4.1.4. Profit Margin	33
4.2. Liquidity Ratios	35
4.2.1. Liquid Asset to Deposit Ratio (LADR)	35
4.2.2. Loan to Deposit Ratio (LDR)	37
4.2.3. Loan to Asset Ratio (LAR)	39
4.3. Solvency and Risk Ratios	41
4.3.1. Debt-Equity Ratio (DER)	41
4.3.2. Equity Multiplier (EM)	43
4.3.3. Capital Adequacy	45
4.3.4. Asset Quality	47
CHAPTER FIVE	49
5. SUMMARY, CONCLUSION AND RECOMMENDATIONS.....	49
5.1. Summary	49
5.2. Conclusion	49
5.3. Recommendation	52
REFERENCES.....	55

List of Figures

Figure 4. 1 Return on Asset ratio of the selected banks in this study	27
Figure 4. 2 Return on equity ratio by the selected banks in this study	30
Figure 4. 3 Net interest margin of the selected banks in this study	32
Figure 4. 4 Profit margin of the selected banks in this study	34
Figure 4. 5 Liquid to asset ratio of the selected banks in this study	36
Figure 4. 6 Loan to deposit ratio of the selected banks in this study	37
Figure 4. 7 Loan to asset ratio of the selected banks in this study	41
Figure 4. 8 Debt to Equity ratio of the selected banks in this study	43
Figure 4. 9 Equity multiplier of the selected banks in this study	45
Figure 4. 10 Total capital to total asset ratio of the selected banks in this study	46
Figure 4. 11 Allowance for Doubtful Account to Net Advance Ratio of the selected banks in this study	48

LIST OF TABLES

Table 4. 1 Return on asset of the selected banks in this study	28
Table 4. 2 Return on Equity by the selected banks in this study	29
Table 4. 3 Net Interest Margin of the selected banks in this study	31
Table 4. 4 Profit margin of the selected banks in this study	33
Table 4. 5 Liquid to asset ratio of the selected banks in this study	35
Table 4. 6 Loan to deposit ratio of the selected banks in this study	39
Table 4. 7 Loan to Asset Ratio of the selected banks in this study	40
Table 4. 8 Debt to Equity ratio of the selected banks in this study	41
Table 4. 9 Equity multiplier of the selected banks in this study	44
Table 4. 10 Total capital to total asset ratio of the selected banks in this study	46
Table 4. 11 Allowance for Doubtful Account to Net Advance Ratio of the selected banks in this study	47

LIST OF ACRONYMS AND ABBREVIATIONS

AB: Abay Bank
AIB: Awash International Bank
BOA: Bank of Abyssinia
CAP: Capital adequacy
CBE: Commercial Bank of Ethiopia
DB: Dashen Bank
DER: Debt-Equity Ratio
EM: Equity Multiplier
GDP: Gross domestic Product
GOV: Government of Ethiopia
INF: General Inflation Rate
IRM: Interest rate margin
IRS: Interest rate Spread.
LAR: Loan to Asset Ratio
LADR: Liquid Asset to Deposit Ratio
LDR: Loan to Deposit Ratio
NBE: National Bank of Ethiopia
NIM: Net Interest Margin
NPL: Non-performing loans
PM: Profit Margin
ROA: Return on Asset
ROE: Return on Equity
UB: United Bank
UK: United Kingdom
WB: Wegagen Bank
ZB: Zemen Bank

ABSTRACT

This research paper examines the financial performance trends of commercial banks in Ethiopia and explores their implications for investor engagement in the emerging capital market. The study aims to address the following statement of the problem: Despite the growth and development of the Ethiopian banking sector, there is a lack of comprehensive analysis on the financial performance of commercial banks and its impact on investor engagement in the capital market. This knowledge gap hinders investors' ability to make informed decisions and hampers the overall growth and stability of the capital market. Therefore, this research seeks to fill this gap by conducting a detailed analysis of financial performance indicators of commercial banks in Ethiopia. The study focuses on analyzing key financial ratios related to profitability, liquidity, solvency, and risk of eight commercial banks in Ethiopia. The research design adopts a quantitative approach, utilizing data collection instruments and techniques to gather financial data from the banks' annual reports from 2013-2022. The findings reveal the performance of each bank in terms of profitability ratios, liquidity ratios, and solvency and risk ratios. The research provides valuable insights to investors, regulators, and stakeholders, enabling them to better understand the financial health of commercial banks and make informed investment decisions in the emerging capital market. The conclusions and recommendations drawn from this study contribute to enhancing the understanding of commercial banks' financial performance and their role in the emerging capital market, ultimately promoting economic growth and development in Ethiopia.

Key words: Banks, Ethiopia, Financial performance

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Study

Banks are indispensable in the economy, coordinating variables such as individuals, companies, and even countries. Capital mobility, involving capital allocation and formation through investing, issuing bonds, and trading securities, hinges on the viability and solidity of banks. Highly profitable and well-capitalized banks are pivotal in the capital market, facilitating transactions like bond underwriting and share trading, thereby funding corporate and governmental growth projects. Key financial performance metrics such as profitability, efficiency, solvency, and liquidity allow stakeholders to assess a bank's money-making capabilities. High-performing banks enhance economic development by streamlining the saving-investment process, making it more efficient and accessible. Performance measurement systems are crucial for achieving corporate goals, formulating strategies, making investment decisions, and compensating managers. (Teker, Teker, & Kent, 2011).

Since, the capital market and the banks are connected, assessment of the performance of the commercial banks in Ethiopia is vital. Investors in the emerging capital market need to be aware of the financial performance trends in order to make informed investment decisions. These trends can provide insights into the growth potential and profitability of companies operating in the emerging capital market. (Espinoza & Vredenburg, 2010).

The primary activity of commercial banks is to manage their portfolios and gain profits, as their focus is on financial performance. The assessment of financial statements has an important role to perform as it looks into things in detail. In general, the concept of portfolio management involves how commercial banks run their assets and liabilities. Portfolio management is a complex strategy that entails handling of both assets and liabilities and this is for the purpose of maximizing of profits and minimizing losses. Even though bank profits are among the key goals of bankers, the matters of safety and liquidity are of no less importance. Actually, these three factors—monetization, making a profit, and safety are the main objectives of monetary policy.

Consequently, commercial banks should aim at the achievement of acceptable dividends without violating the existence of sufficient liquidity and safety standards.(Aspachs ,2015).

Level of liquidity of the Ethiopian banks is associated to the size of the banks, kind and nature of its activities and complexities. liquidity management implies a structured decision making framework comprising policies on funding, liquidity limits and liquidity management procedures in times of crisis. Those managers at higher level of authority with domain-specific knowledge and experience are the most valuable assets for perfect liquidity management.(Greuning and Bratonovic ,2004).

Commercial banks often come up against a variety of issues which encompass investors as well as shareholder matters. Inability to mint enough liquidity and inappropriate repayment to depositors may damage the banks' reputation that can cause the shareholders to sell their stocks. Therefore, this can decrease stock values which cause less profits for banks and hence worsening their problems (Wang Y. J., 2012).

1.2. Overview of Banking Environment in Ethiopia

Modern banking in Ethiopia commenced in 1905 with the founding of the Bank of Abyssinia, which operated under a fifty-year franchise granted to the British-owned National Bank of Egypt. This marked a significant milestone in introducing financial services to a country where they were previously unfamiliar (Alemayehu, 2006).

The history of the development of the Ethiopian commercial banking has been characterized by several stages. In 1931, Haili Selassie took the reforms to the banking sector and initiated them, which transformed the Bank of Abyssinia into the Bank of Ethiopia that offer central and commercial banking services until the Italian invasion of 1936. During the time of this invasion, the Bank of Italy as well became the only legal tender in the Ethiopian territory. After liberation from Italy, in 1943, State Bank of Ethiopia was started with different departments becoming issuing banks and commercial banks. Following their segregation in 1963, the National Bank of Ethiopia was created as a central bank and an issuing bank whereas the Commercial Bank of

Ethiopia came into existence. Prior to 1974, many institutions that were both publicly owned and private ones made their appearance as well.

In the period before 1974 only one government-owned entity dominated the country's banking sector, the State Bank of Ethiopia (SBE). Nevertheless, the establishment of the Addis Ababa Bank in 1964 privately owned was the beginning of a diversification of the industry as it expanded its branch network providing improved banking services notably in the major urban centers and key trade routes across the country. During the Derg regime (1974-1991), the CBE became the only commercial bank in the country whose operations were directed towards development improvement to improve the living standards of the population rather than making a profit only.

The transition from the Derg to the EPRDF government in 1991 brought significant changes to Ethiopia's economic policies, leading to transformations in the banking sector. The Monetary and Banking Proclamation of 1994 established the National Bank of Ethiopia as an independent judicial entity, distinct from the government, and outlined its core functions. Proclamations No.83/1994 and No.84/1994 provided the legal framework for private sector participation in banking, a practice that had been prohibited during the Derg regime.

As a consequence, privately owned commercial banks commenced springing up in the market, particularly with the launch of Awash International Bank in 1994 and fifteen other privately owned banks. From Addison and Alemayehu (2001), it could be argued that the government's financial development approach favored gradualism as well as macroeconomic stability (Addison and Alemayehu, 2001). The Ethiopian financial sector is composed mostly by 3 public banks, 16 private banks, one public insurance company, and 13 private insurance companies and 31 microfinance institutions. For the time being state-owned banks with the dominance of the Commercial bank of Ethiopia which controls almost 80% of banking sector assets are the main player in the financial sector.

The Ethiopian government has made changes to banking rules and policies with focus on ensuring that banks exhibit good governance practices and the stability and security of the

banking sector, while the enforcement is currently in progress. NBE is the regulatory authority for the minimum deposit rate. It is currently set at 7%, while the interest rate on loans is liberalized. Furthermore, the government of Ethiopia issues treasury bills that have maturities of 28 days, 3 months and 6 months at a lower rate than the bank deposit rate. Even with these reforms, banking coverage remains low, as only 3,402 people per branch are using commercial banks as of the 2022/23 financial year, mainly concentrated within urban areas and, thus, Ethiopia ranks among the least banked countries in sub-Saharan Africa.

Liquidity management in Ethiopian banking industry, as explained in the NBE Annual Report of 2022, deals with overall net liquidity position of commercial banks, through collection of deposits, lending and borrowing. The capacity of commercial banks in Ethiopia to extend liquid fund to their customers largely determines their operational functioning. The balance of liquidity levels is vital for banks to effectively be able to address the needs of both their current and new clients. Nevertheless, even though banks play crucial role in the conversion of short term deposits into long period loans, some uncertainties will remain on the issue of liquidity risk management. This study paper is determined to evaluate eight commercial banks in Ethiopia and assess their financial performance. The performance assessment was done to provide investors, customers, and colleagues valuable information regarding the capital markets in the banking industry for better decisions.

1.3. Statement of the Problem

The development of the Ethiopian banking sector will be a driving force to attract more foreign direct investment, leading to the expansion of the capital market and altering investment decisions. Investors can understand the health of the financial sector by analyzing banks' financial statements. Besides, banks will be beneficiaries of the capital market as it serves as a source of funding.

Banks act in capital markets in several roles including liquidity provision to investors, lending, and trading securities, and also banks can be funded on the capital market. Investors rely on financial performance metrics to make investment decisions and a bank's profitability, asset

quality, liquidity, and capital adequacy ratios give investors the perspectives of its growth prospects and financial stability.

The absence of a complete understanding of the commercial banks' financial performance is a significant challenge for both investors and stakeholders. The investment decisions they make are primarily based on timely and correct data. Therefore, lack of data is capable of hindering informed investment decisions and impeding the sectors growth and development within the capital market. According to Warren Payne, & Zdenek Drabek (2002), the lack of transparency and availability of comprehensive financial information poses a significant barrier to investor confidence and foreign investment development. This is supported by Gelos and Wei (2005), who argue that opacity in financial reporting can significantly deter foreign investment and hamper market efficiency.

This research will address this important research void through the analysis of the financial statements of eight commercial banks in Ethiopia, including CBE, AIB, BOA, DB, WB, UB, ZB, and AB. Through a study of the banks's financial statements from 2013 to 2022, this research tries to recognize the development, uniformities or changes in metrics such as liquidity, profitability, and stability. Finally, the work produced by this research is expected to help investors with the right information needed in making optimal investment decisions in the Ethiopian capital market.

1.4. Research Questions

1. What patterns and trends can be observed in the financial performance indicators?
2. What are the possible implications of the financial performance of commercial banks on their ability to attract investors and actively participate in the upcoming capital market?
3. What are the capital adequacies, and asset quality levels of the eight commercial banks in Ethiopia?
4. How does the liquidity and profitability position of the eight commercial banks, contribute to their financial stability and strength?

1.5.Objective of the study

1.5.1. General Objective of the Study

The main objective of the study was to evaluate the financial performance of commercial banks in Ethiopia and provide stakeholders with relevant information for making informed investment decisions in the upcoming capital market.

1.5.2. Specific Objective of the Study

The specific objectives of the study were:

1. To Identify trends and patterns in the financial performance indicators in Ethiopia, specifically in eight selected commercial banks.
2. To Assess the implications of the financial performance on investor attraction and participation in the capital market.
3. To identify the financial stability, capital adequacy and asset quality of the eight commercial banks in Ethiopia.
4. To see the liquidity standard, evaluate the position and level of the eight commercial banks in Ethiopia.

1.6. Significance of the study

This study has many important implications for the Ethiopian banking industry and stakeholders, but also for the financial environment. Firstly, the study evaluates the financial performance of eight commercial banks in Ethiopia and yields useful results to stakeholders such as investors, policymakers, and regulatory institutions, concerning the stability, profitability, and management of liquidity. They are important for forming the right investment decisions, adapting the best regulatory policies, and ensuring financial stability in the country as a whole.

Secondly, this study's conclusions enrich the existing knowledge of banking and finance in Ethiopia. Through analyzing trends, patterns, and movements of financial performance indicators,

assessing the dynamics of liquidity management, and figuring out the points where improvements are possible, this study improves the understanding of the factors that influence the operation and results of commercial banks in Ethiopia. This knowledge can offer a base for future studies or serve as a foundation for addressing the topic of the banking sector in the emerging capital market from a research perspective. Overall, this study holds the key to be considered in decisions making process, academic understanding, and help banks achieve better economic growth through the upcoming capital market.

1.7. Scope of the study

This thesis paper mainly focuses on evaluating the financial performance of eight selected commercial banks in Ethiopia, and its indications on the financial stability, attractiveness, and overall financial health of banks in the newly emerging capital market. The study is conducted on the performance of the banks for the period ranging from 2013 to 2022. For this specified period, what are the trends and patterns in the financial statements and profitability indicators of the selected commercial banks in Ethiopia; financial stability, capital adequacy, and asset quality assessment of the eight commercial banks; examination of liquidity standards, and overall position of the commercial banks; and providing stakeholders, investors, and businessmen with comprehensive insights into the financial performances of the commercial banks.

1.8. Limitations of the Study

This research paper, thus, aims at giving you comprehensive information on financial performance of commercial banks in Ethiopia; however, some restrictions are also considered. As a first objective, the study covers only eight (8) commercial banks in Ethiopia, which may not fully represent all banks in the country. As a result, the findings may not be applicable to all the banks being operative in Ethiopia.

Additionally, this research majorly on quantitative data by means of financial statements can not reflect the qualitative purview of the banks' operations and the external market dynamics which might be crucial in influencing the financial performance. Generally speaking, such analysis is unable to delve deeper into the surrounding environment where these banks operate.

1.9. Organization of the study

This research report comprises five chapters. The first chapter offers an overall introduction to the entire report. In chapter two, a review of related literature is presented. Chapter three outlines the methodology utilized in the research. The fourth chapter encompasses data presentation, analysis, and interpretation. Finally, the last chapter concludes the entirety of the research and offers pertinent recommendations based on the findings obtained throughout the research process.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

This chapter delves the performance measurement of Banks, the performance of commercial bank of Ethiopia, capital market. Furthermore, the chapters clearly present empirical reviews on and the relationship between commercial bank's performance and Investor Engagement in the capital market.

2.1.Theoretical Review

2.1.1. Real options theory

Conventional corporate finance literature has faced criticism for neglecting the impact of uncertainty on corporate investment behavior. Recent studies highlight the importance of uncertainty surrounding companies' prospects in explaining past model shortcomings (Baum et al., 2008). The real-options approach, known for its flexibility in handling irreversible investments, emerges as a promising solution to bridge the gap between investment and uncertainty. By recognizing the value of delaying investment decisions to await new market information, this approach provides a more comprehensive framework for analyzing corporate investment behavior in uncertain scenarios (Morikawa, 2016).

2.1.2. The Internal Funds Theory of Investment

Tinbergen (1938) introduced the internal funds theory, positing that investment decisions hinge primarily on profit levels. The theory suggests that investment choices are closely tied to profitability, ensuring the availability of funds for new ventures. Alternatively, corporate managers often base investment decisions on the availability of both internal and external funds.

2.1.3. Cash Flow Theory

The cash flow theory posits that current and past cash flows and profits serve as reliable indicators of future earnings, influencing investment decisions (Bischoff, 1971). Moreover, cash flow is perceived as a funding source, and as internal funds diminish, the cost of external funding

risks due to market imperfections. The management and information theoretic approaches to investing, identified by Cherian (1996), can be viewed as modern interpretations of liquidity theory, emphasizing the role of internal finance in driving investments.

2.1.4. Neoclassical Theory

According to neoclassical theory, investment is influenced significantly by interest rates. In contrast to the accelerator model, neoclassical theory posits that desired capital stock is determined not only by planned production but also by the ratio of output price to the implicit rental price of capital goods services (Bischoff, 1971). This approach focuses on profit maximization within a Cobb-Douglas production framework. Supply-side economists argue that cutting tax rates promotes investment and work motivation, while Keynesian economists emphasize how taxes impact consumption and demand (Bodie, Alex, & Marcus, 2009). Monetary policy primarily influences interest rates, with money supply expansions leading to lower rates and increased investment demand (Galbraith, 1987).

2.2. The banking Sector and Performance Measurement

A bank, as typically defined, is an establishment engaged in the activities of loan provision and deposit acceptance from the general public (Mishkin, 2001). Thus, at the core of their operations, banks must attract deposits in both local and foreign currencies from the public to facilitate lending to borrowers and foreign currency users, thereby generating income.

The proclamation of money and banking identified as No. 83/1994 delineates that the functions of a bank encompasses various activities, including receiving funds, negotiating promissory notes, accepting deposits, extending credit, and trading in precious metals and foreign exchange. Despite the exhaustive list provided in the proclamation, an analysis of banks' balance sheets and income statements, as highlighted in the NBE report (2015/16), reveals that the primary focus of banks largely revolves around intermediation activities.

Research on banking performance can generally be categorized into two groups based on the metrics utilized. The first group employs measures of the prices of specific banking products and services to gauge firm performance, while the second group utilizes profitability metrics like

such as return on assets. However, relying on the price of a single banking product as a performance indicator can be misleading due to the multifaceted nature of a bank's output. Profitability measures, though more informative, pose challenges in interpretation due to the complexities of accounting procedures involved. Molyneux and Forbes (1995) underscore the importance of profitability measures that consolidate all product profits and losses into one figure, as they are deemed more suitable for overcoming the issue of cross subsidization. Evanoff and Fortier (1988) provide further rationale for the preference of profit measures, emphasizing the possibility of considerable cross-subsidization among products and variations in pricing strategies in different markets. Thus, the prevalent approach in literature for measuring banking system performance aims to distinguish well-performing banks from those performing poorly (Berger and Humphrey, 1997).

The primary method employed by bank regulators to monitor performance is the CAMEL approach, which combines various components of bank performance that management is expected to address to enhance overall performance.

2.2.1. The Camel Approach of measurement of financial performance

The CAMEL method for evaluating financial performance originated in 1979 with the introduction of the Uniform Financial Institutions Rating System (UFIRS) in US banking institutions, which established ratings for onsite examinations. CAMEL, an acronym for Capital Adequacy, Asset Quality, Management Efficiency, Earnings, and Liquidity, comprises distinct components used to assess banks' operational performance and soundness.

In this system, each bank undergoing an onsite examination is assessed based on five critical aspects of its operations and performance: Capital, Asset Quality, Management, Earnings, and Liquidity (Sahajwala & Van den Bergh, 2000). These dimensions reflect the bank's financial performance, condition, operational soundness, and regulatory compliance (Muluaalem, 2015). Each factor is rated on a scale from 1 (best) to 5 (worst), and a composite rating is then derived from these component ratings, serving as the primary indicator of the bank's current financial health. This composite rating also ranges from 1 (best) to 5 (worst) and includes a degree of

subjectivity based on the examiners' overall assessment in light of the individual component ratings (Sahajwala & Van den Bergh, 2000).

Components of CAMEL Approach

i. Capital Adequacy

Capital adequacy evaluates whether the amount of capital a bank holds is sufficient to withstand unexpected financial shocks (Kosmidou, 2009; Baral, 2005). Ermias (2016) highlighted that it indicates the overall financial health of banks and their management's ability to meet additional capital requirements. This capital is necessary to balance the bank's risk exposure, including credit, market, and operational risks, allowing the bank to absorb potential losses and protect its debt holders (Mulalem, 2015; Ahsan, 2016). Various scholars use different parameters to assess capital adequacy. For instance, Dang (2011), Hamdu et al. (2015), and Mulualem (2015) utilize the capital to risk-weighted assets and leverage ratio. In contrast, Misra & Aspal (2013) measure it using the Capital to Risk-Weighted Assets, Debt to Equity Ratio, Advances to Assets, and Government Securities to Total Investments. Other researchers like Dakito (2015), Tefaye (2014), Hamdu et al. (2015), Minyahil (2015), Mulualem (2015), Ermias (2016), Anteneh et al. (2013), and Aspal & Dhawan (2014) focus on the Capital Adequacy Ratio (CAR), Debt Equity Ratio, and Advances to Assets Ratio.

ii. Asset Quality

The asset quality of a bank is a specific variable that influences its performance. The health of a bank is directly impacted by the quality of its assets. Asset quality is a crucial factor that helps banks understand the level of credit risk they face (Olweny, 2011; Baral, 2005). Chen et al. (2009) describe credit risk as the potential for loss when a debtor fails to repay a loan, including both principal and interest. Default occurs when a debtor cannot meet legal obligations or violates loan conditions, which can happen with various debt instruments such as bonds, mortgages, loans, and promissory notes (Kongri, 2015). According to Grier (2007), poor asset quality is a leading cause of bank failures. Indicators of asset quality include nonperforming loans (NPLs) ratios, which serve as proxies for asset quality, and provisions for loan loss reserves (Frost, 2004 as cited by Mulalem). Hamdu et al. (2015) evaluate asset quality by

examining the ratio of loan loss provision to total loans and total assets. Mulualem (2015) uses ratios such as NPLs to total loans, NPLs to total equity, and allowance for loan loss ratio. Altan et al. (2014) assess asset quality by looking at the ratio of fixed assets to total assets. Other ratios used to evaluate asset quality include Non-Performing loans to Gross Loans, Allowance for Doubtful loans to Loans outstanding, Gross NPAs to Net Advances ratio, Net NPAs to Net Advances ratio, Total Investments to Total Assets ratio, Net NPAs to Total Assets ratio, and Percentage Change in Net NPAs (Ermias, 2016; Tesfaye, 2014; Mulualem, 2015; Anteneh et al., 2013; Minyahil, 2015).

iii. Management Quality

Management quality refers to the ability of the board of directors and management to identify, measure, and control the risks associated with the institution's activities. It also ensures the safe, sound, and efficient operation of the institution in compliance with applicable laws and regulations (Uniform Financial Institutions Rating System, 1997, as cited by Mulalem, 2014).

iv. Earning Quality

Earning quality primarily assesses a bank's profitability and productivity, indicating the potential for future earnings growth and sustainability (Ahsan, 2016). A bank relies on its earnings to perform various activities such as funding dividends, maintaining adequate capital levels, creating investment opportunities for growth, strategizing new activities, and sustaining its competitive position. To measure management efficiency, different financial ratios are used as proxies. Rahman et al. (2009) and Sangmi and Nazir (2010) use the ratio of operating profit to income, while Nassreddine et al. (2013) use the ratio of costs to total assets. Golin (2001) uses the ratio of operating costs to net operating income and the operating expenses to assets ratio, whereas Olweny (2011) adopts the ratio of operating costs to net operating income.

v. Liquidity Performance

The liquidity ratio evaluates a bank's ability to meet its current obligations. Banks generate revenue by mobilizing deposits and providing funds to creditors, necessitating the ability to meet

depositor demands promptly. Failure to do so results in liquidity risk. Effective fund management practices should ensure that an institution maintains sufficient liquidity to meet its financial obligations on time and can quickly liquidate assets with minimal loss (Mulalem, 2015). Banks profit by mobilizing short-term deposits at lower interest rates and lending or investing these funds at higher long-term rates, making it crucial to avoid mismatching lending interest rates.

2.3.The Nature of Capital Market

According to Investopedia (as retrieved on 14/04/2024), capital markets are venues where funds are exchanged between providers and those in need of capital. Providers, such as banks and investors, supply capital, while businesses, governments, and individuals seek it. These markets facilitate the sale of financial instruments like equities and debt securities and are divided into primary and secondary markets. The stock market and bond market are among the most well-known capital markets, aimed at improving transactional efficiency by connecting suppliers with those seeking capital and providing a platform for securities exchange.

- Capital markets are places where funds are exchanged between providers and seekers of capital
- Providers typically include banks and investors, while seekers are businesses, governments, and individuals.
- These markets involve the sale of financial instruments such as equities and debt securities.
- They are divided into primary and secondary markets.
- The stock market and bond markets are the most well-known capital markets.

2.3.1. The development of Capital Market in Ethiopia

The development of Ethiopia's capital market dates back to the Imperial era under Emperor Haile-Selassie when the nation made its first attempt to establish a capital market. This early effort was hampered by ideological opposition from the subsequent military regime, which favored a socialist economy over a market-oriented approach. Despite these challenges, significant strides were made, notably in 1965 with the establishment of the Share Trading Group. Key institutions such as the Addis Ababa Bank and the Commercial Bank of Ethiopia played pivotal roles in early share trading activities, marking the beginning of structured financial market operations in the country. (Yonnas Kefle, 2024).

The end of the socialist era in the early 1990s and the rise of the Ethiopian People's Revolutionary Democratic Front (EPRDF) rekindled Ethiopia's aspirations to develop its capital market. The establishment of the Ethiopian Commodity Exchange (ECX) in 2008 was a significant milestone, laying the groundwork for a broader capital market ecosystem. This development was further bolstered in 2014 with the formation of the Ethiopian Securities and Exchange Board, which provided the necessary regulatory oversight to foster market growth.

The approval of the Capital Markets Establishment Proclamation and the National Bank of Ethiopia's ten-year implementation plan in 2021 marked a crucial step in creating a comprehensive legal framework for the capital market. The plan prioritized market development, capacity building, and infrastructure enhancement. The subsequent establishment of the Capital Market Authority, an independent regulatory body accountable to the Prime Minister, underscored Ethiopia's commitment to creating a robust regulatory environment. This body is tasked with safeguarding investors, upholding market integrity, and overseeing securities brokers and dealers.

Ethiopia faces several challenges in developing its capital market, including limited liquidity, underdeveloped infrastructure, and economic volatility. High inflation and unstable currency values pose significant risks, deterring long-term investment. Additionally, the market's lack of diversity and dominance by a few large entities limit competition and increase price volatility (Yonnas Kefle, 2024). Addressing these challenges requires concerted efforts in policy coordination, infrastructure investment, and financial education to foster a dynamic and inclusive market environment.

Significant progress has been made with the implementation of the 'Capital Market Service Providers Licensing and Supervision Directive No. 980/2024', effective from January 2024. This directive regulates the licensing of market service providers, reflecting a proactive approach by Ethiopian authorities to foster growth and innovation within the capital market. As of March 2024, several banks, including Zemen, Sinqee, Debub Global, and Awash, hold shares in the exchange, indicating growing institutional participation.

Ethiopia is well-positioned to become a leader in African capital markets, provided it continues to address infrastructural and regulatory challenges. The establishment of efficient, transparent, and secure trading platforms, along with a reliable clearing and settlement system, are crucial for building a robust capital market. Additionally, ensuring macroeconomic stability through coordinated monetary and fiscal policies will create a conducive environment for investment and market growth.

2.3.2. The nexus between bank Performance and Capital Market

The nexus between bank performance and the capital market is a multifaceted and crucial aspect of the financial ecosystem. Banks, as intermediaries between savers and borrowers, play a pivotal role in the allocation of capital within an economy. Concurrently, the capital market serves as a platform for the buying and selling of financial instruments, facilitating the flow of funds between investors and businesses. Understanding the interplay between these two entities is essential for comprehending the broader dynamics of the financial system.

Bank performance, often measured by metrics such as return on assets (ROA), return on equity (ROE), net interest margin (NIM), and efficiency ratios, reflects the effectiveness of a bank in utilizing its resources to generate profits while managing risks. A robust capital market provides banks with avenues for capital raising, risk management, and investment opportunities, thereby influencing their performance. (Khan, S. (2022)).

The relationship between bank performance and the capital market is characterized by various channels and mechanisms:

- i. **Capital Adequacy and Regulatory Compliance:** Banks require adequate capital to maintain solvency and comply with regulatory requirements. The capital market offers avenues for raising additional capital through equity issuances or debt instruments such as bonds. A bank's ability to access capital markets efficiently can enhance its financial flexibility and resilience. (Khan, S. (2022).
- ii. **Funding and Liquidity Management:** Capital markets provide banks with diverse funding sources beyond traditional deposits. Access to capital markets enables banks to diversify their funding base, manage liquidity more effectively, and reduce dependence on short-term funding, thereby mitigating liquidity risk.
- iii. **Risk Management and Hedging:** Banks utilize capital market instruments such as derivatives to hedge against interest rate, foreign exchange, and credit risks. Effective risk management strategies facilitated by capital markets can bolster a bank's stability and resilience in volatile environments, consequently enhancing its performance.
- iv. **Investment Opportunities and Asset Quality:** Capital market conditions influence the investment decisions of banks, impacting the composition and quality of their asset portfolios. Favorable capital market conditions may encourage banks to invest in higher-yielding assets, while adverse conditions may prompt a more conservative approach, affecting asset quality and profitability.
- v. **Market Sentiment and Investor Confidence:** Bank performance is also influenced by market sentiment and investor confidence, which are shaped by capital market dynamics such as stock prices, bond yields, and credit spreads. Positive market sentiment can enhance investor perception of a bank's prospects, leading to lower funding costs and improved access to capital markets.

Several empirical studies have explored the relationship between bank performance and the capital market, providing insights into the various channels through which they interact. For example, research by Berger and Bouwman (2009) found evidence of a positive relationship between bank capital levels and market valuation, highlighting the importance of capital adequacy in enhancing investor confidence and market perception of bank performance.

Similarly, studies by Demirgüç-Kunt and Huizinga (2010) and De Jonghe (2010) demonstrated the impact of capital market development on bank risk-taking behavior and performance. They found that well-developed capital markets facilitate risk-sharing, diversification, and efficient allocation of capital, ultimately contributing to enhanced bank performance and financial stability.

In nutshell, the relationship nexus between bank performance and the capital market is characterized by a complex interplay of factors, including capital adequacy, funding dynamics, risk management, investment decisions, and market sentiment. A deep understanding of these dynamics is essential for policymakers, regulators, investors, and market participants to foster a resilient and efficient financial system that supports sustainable economic growth.

2.4. Empirical review

Various approaches are employed to assess a company's financial performance. It's evident that banks turning a profit over a given period might not necessarily indicate financial robustness and well-being. This is because the primary goal of any business is to enhance shareholder wealth rather than solely focusing on short-term gains. Relying solely on profitability metrics may not accurately gauge the financial performance of firms overall, especially in the case of banks.

According to Teshome M (2015), during the operational period of 2015, Dashen Bank faced poor performance compared to the previous three periods (from 2012-2014), and the bank didn't have many loans outstanding, although its liquidity position was good. Additionally, the liquidity ratio improved from year to year.

A study was conducted to investigate the performance of seven public and four private banks under the title of "CAMEL model analysis of selected public and private sector banks in India." The results revealed that private banks outperformed the public banks, with the first four ranks based on the CAMEL elements going to the private sector banks (Kiran, K. (2018)).

Aguenas et al (2017) studied the effects of CAMEL ratios on the efficiency of Moroccan bank performance. The authors found that the efficiency of Moroccan banks was better for the period between 2004 and 2014, and they also reflected the effects of CAMEL elements on bank efficiency. The findings show that capital adequacy, asset quality, management efficiency, and

liquidity have a positive impact on efficiency, whereas earning performance has been insignificant.

A study conducted by Abdullah M (2015), titled "An empirical analysis of liquidity, profitability, and solvency of Bangladesh banks using a Z-score model," found that out of the 29 investigated banks in Bangladesh, only 7 were in a healthy financial position, while the remaining 22 were found to be insolvent during the period under study. In another study conducted by Ali M (2016), focusing on bank profitability and its determinants in Pakistan through panel data analysis after the financial crisis, the banks in Pakistan were managed well to mitigate external factors like inflation and GDP affecting bank profitability.

Trofimov et al (2018) found that non-performing loans and cost efficiency have a significant negative relationship with commercial bank performance in Malaysia. However, bank size was found to have a significant positive relation with commercial bank performance in Malaysia. According to Chowdhury, T. S. (2019), a substantial rise in loan collections adversely affects the ROA and ROE of the banking industry. Chowdhury also reflects that a reduction in credit supply by an individual bank would decrease its market share and profit.

Anteneh *et al.* (2013), in their study entitled "Health Checkup of Commercial Banks in Ethiopia," assessed the health of eight private and public commercial banks using the 10-year annual reports of each bank (2000-2010). The findings showed that the independent variables in the CAMEL framework highly explained the performance variables, namely return on assets and return on equity. Private banks were in a better position than public banks in terms of asset quality, management quality, and earning ability, while public banks fared better in capital adequacy. However, liquidity position was high for both private and public commercial banks.

Minyahil (2013) explored the performance of seven commercial banks in Ethiopia over the period 2004/5 to 2010/11. The results showed that during the study period, the performance of commercial banks in Ethiopia mainly changed in accordance with directives from the National Bank of Ethiopia (NBE).

Mulalem (2015) studied the financial performance of 14 commercial banks using the CAMEL approach for the period 2010 to 2014. The findings of his study showed that Wegagen Bank

stood in the first position, followed by Bunna International Bank and Lion International Bank, while Construction and Business Bank secured the lowest position. In addition to descriptive analysis, he used a fixed-effect regression model to investigate the impact of CAMELS factors on financial performance, i.e., ROA and ROE. The results showed that capital adequacy, asset quality, and management efficiency had a negative relation, whereas earning and liquidity showed a positive relationship with both profitability measures with strong statistical significance, except for capital adequacy in the case of ROA and asset quality for ROE.

Hamdu *et al.* (2015) evaluated the soundness of selected commercial banks by referring to audited annual reports from the years 2003 to 2013. The study's results showed that the CAMEL framework is the best-fit measurement for Ethiopian banks, providing comprehensive results that are very helpful for the governor in setting well-determined policies and procedures. Dakito (2015) explored the performance of eight commercial banks for the period of 2000 to 2013 using the CAMEL approach through descriptive and econometric analyses. The findings showed that NIB's overall performance was good. Furthermore, he measured the relationship between capital adequacy and financial performance using a GLS regression model. The regression results exhibited the existence of a positive relationship between capital adequacy and bank performance.

Ermias (2016) examined the financial performance of six senior private commercial banks over the period 2000 to 2014 using the CAMEL model. The study found that UNB, NIB, and BOA held the 1st to 3rd ranks based on the CAMEL model composite rating system. The findings also indicated that bank-specific factors incorporated in the CAMEL model affect up to 67.5% of the changes in profitability of private commercial banks in Ethiopia.

As it has been discussed above, the CAMELS approach the most commonly recognized approach which is useful to evaluate the financial institutions such as banks on the basis of SIX critical dimensions. Nevertheless, the sensitivity to market risk, which requires a well-developed financial market, is not commonly used in the developing countries studies. This is therefore, the candidate has clearly identified ten important performance indicators banking sector which includes, return on assets (ROA), return on equity (roe), net interest margin (NIM), profit margin (pm), liquid asset to deposit ratio (LADR), loan to deposit ratio (LDR), loan to asset ratio (LAR),

debt-equity ratio (DER), equity multiplier (EM), capital adequacy ratio (CAR) and asset quality (AQ).

2.5. Research Gap

Despite extensive literature on the financial performance of commercial banks and the evolving capital market in Ethiopia, significant gaps remain that warrant further investigation. There is limited research on how traditional bank performance metrics influence investor engagement in the capital market, and empirical evidence linking the stages of capital market development with bank performance is scarce.

As far as the candidate's experience, exposure and effort is concerned, prior academic researches which have been reviewed by the candidate were limited to three to six banks and most of these studies were also conducted by taking primary data mainly the perception of bank employees. However, in this study a total of eight banks and a 10 years' panel data pertinent to selected banks' achievement in line with KPIs has been considered. Additionally, comparative studies with similar emerging markets and long-term analyses of financial performance trends are needed to provide deeper insights into the unique challenges and opportunities within Ethiopia's financial ecosystem. Addressing these gaps can enhance understanding and inform better decision-making for policymakers, investors, and financial institutions.

CHAPTER THREE

3. RESEARCH DESIGN AND METHODOLOGY

The main focus of this chapter is to introduce the research method applied to the study. The chapter is organized as follows: Section 3.2 deals with the study methods used. In section 3.3, we will discuss the population and sampling design of the study. After that, we dealt with data collection, analysis, and presentation skills in section 3.4.

3.1. Research Design

The research utilizes descriptive financial ratio analysis to describe, measure, and analyze the operational performance of the commercial banks over a period from 2013 to 2022. Descriptive research aims to accurately and systematically describe a population, situation, or phenomenon. In this case, financial ratio analysis provides a clear picture of the banks' financial health and performance trends over the specified period.

Additionally, a comparative analysis is employed. This involves comparing the financial performance of the selected banks with industry standards. Such comparative analysis helps to contextualize the performance of the banks within the broader industry trends in the Ethiopian banking sector. It also allows for identifying relative strengths and weaknesses among the banks, offering insights into areas that may require strategic improvements.

3.2. Research Approach Adopted

This research used a quantitative analysis to evaluate the financial performance of 8 chosen commercial banks in Ethiopia. Quantitative research involves the systematic empirical study of subject matter, through statistical, mathematical, or computer-related data (Creswell 2009). The aim of a quantitative research is to create and apply the mathematical theories, models and/or hypotheses concerning the properties of phenomena. Quantitative research is based on the measurement which is central to it due to it connecting empirical observations with the mathematical expressions of quantitative relationships. Quantitative data is any data in numerical form like statistics, percentages, and etc. Quantitative research is the type of research which is mostly derived from the scientific methods. The quantitative approach is using the collection and analysis of numerical data from the banks financial statements, including income statements, balance sheets, and cash flow statements. They serve as the basis for accounting ratios, whereby the profitability, liquidity, and capital adequacy among others are objectively measured. Thus, the research utilized descriptive financial ratio analysis to measure, describe and analyze the operational performance of commercial banks in Ethiopia spanning from 2013 to 2022.

In the research approach, a comparative analysis was also employed, whereby the financial performance of the selected commercial banks is compared with industry standards. Through this trend of analysis, we will be able to connect the findings with what is happening in the Ethiopian banking sector, especially the performance of the banks.

However, the quantitative research approach employed in this study provides an all-encompassing view that facilitates the systematic analysis and evaluation of the financial performance of commercial banks in Ethiopia, offering stakeholders vital insights to support the evidence-driven decision-making process in the banking sector and the larger financial arena.

3.3. Population and Sampling Procedure

This section dealt with the population selected for this study.

3.3.1. Population of the Study

In this study, the focus is on banking in Ethiopia. It is based annual reports of the year 2013 to the year 2022, Ethiopia consists of 26 Commercial banks. As a result the study used eight commercial banks namely Commercial Bank of Ethiopia (CBE), S.C, Awash International Bank S.C (AIB), Wegagen Bank S.C (WB), Bank of Abyssinia S.C (BOA), United Bank (UB), Dashen Bank (DB), Zemen Bank S.C (ZB) and Abay Bank(AB).

3.3.2. Sample Frame

The study selected a sample frame comprising eight commercial banks for the research. This decision was driven by the availability of structured data spanning from 2013 to 2022, which facilitated thorough analysis. The chosen banks include Commercial Bank of Ethiopia (CBE), S.C, Awash International Bank S.C (AIB), Wegagen Bank S.C (WB), Bank of Abyssinia S.C (BOA), United Bank (UB), Dashen Bank (DB), Zemen Bank S.C (ZB) and Abay Bank(AB). Thus, the sample frame matrix is structured with 10 rows (representing the years from 2013 to 2022) and 8 columns (representing the selected commercial banks), totaling 80 observations.

3.4. Data Collection, Presentation and Analysis Techniques

3.4.1. Data and Data Collection Instruments

This study uses a descriptive financial ratio analysis to measure, describe, and analyze the operational performance of commercial banks in Ethiopia over the period from 2013 to 2022. The research employed a quantitative approach, utilizing secondary data gathered from the financial statements of commercial banks. These financial statements include income statements, balance sheets, and cash flow statements, to ultimately provide the complete numerical data indispensable in assessing the financial performance of the banks over the certain period. Besides that, liquidity, profitability, asset quality, and capital adequacy ratios, which are calculated using the extracted data, are computed as well. These ratios possess a great potential for understanding the bank's operational efficiency, financial stability and investment attractiveness. The data was obtained from the websites of the banks, as well as their annual reports and financial statements. Implementing proper data gathering methods helped researchers incorporate the strong points and weaknesses of any data source to correct the risk of drawing the incorrect conclusions. Continuation of the research that use methods accurate for data collection improves value and credibility of the research findings (Koul 2016). The method of structuring document review will be used for this research in the collection of the required data that would contribute to the fulfillment of the study objectives.

3.4.2. Data Presentation and Analysis

In order to achieve the objective of the study, the study was primarily based on panel data, which were collected through structured document review. In this research paper, a structured approach is adopted to systematically analyze the financial performance of the eight selected banks in Ethiopia over the period from 2013 to 2022. The collected financial data, including income statements, balance sheets, and cash flow statements, are organized and analyzed to derive meaningful insights into various aspects of the banks' performance.

Next, financial ratios are calculated based on the collected data to assess key aspects of the banks' performance, including liquidity, profitability, asset quality, and capital adequacy. Ratios such as the current ratio, return on assets (ROA), return on equity (ROE), non-performing loans

ratio, and capital adequacy ratios are computed to evaluate the banks' operational efficiency, financial health, and risk management practices.

Furthermore, comparative analysis is conducted to benchmark the performance of the selected banks against industry averages. This comparative analysis provides context for interpreting the findings and assessing the relative performance of the banks within the Ethiopian banking sector.

Data visualization techniques, such as charts, graphs, and tables, are utilized to present the findings in a clear and concise manner. Visual representations enhance the understanding of complex financial data and facilitate the communication of key insights to stakeholders.

CHAPTER FOUR

4. ANALYSIS AND DISCUSSION

This chapter presents an analysis of the collected data along with the empirical findings. Since it's a comparative analysis of eight banking sectors—CBE, AIB, BOA, DB, WB, UB, AB, and ZB each sector is measured against the other. Along with a comparison of one bank's performance to that of other banks, the first empirical results of ratio analysis are presented.

4.1. Profitability Ratios

This section discusses the analysis and empirical results of the ratios that reveal information about the profitability of banks. The Return on Equity (ROE), Profit Margin (PM), Net interest margin (NIM) and Return on Assets (ROA) ratios are included in this section.

4.1.1. Return on Assets (ROA)

It assesses how efficiently a bank is using its assets to generate profits. It is calculated by dividing the net income of the company by its average total assets expressed in percentage. A higher ROA suggests that the company is more efficient in utilizing its assets to generate profit (Table 4.1). CBE ROA declines from 2013 to 2014, from 3.31% to 3.13%, and then from 2015 to 2018, from 3.19% to 2.42% and 2.19% to 1.01%. CBE has increased by 1.79% in the last two years, with a 1.01% increase in 2018 and a 1.79% increase in 2019. But it is somewhat different in the case of Zemen banks except that it does not show any dynamic changes. It increases from 3.34% to 5.13% in the financial year 2015, and 2020 (3.56 %) to 2021(4.45%) during the financial operation.

When comparing the ROA AIB and BOA awash international bank shows good trend in the year 2019 which is 3.8% and both sectors are showing downward trend in the year 2019-2020 United bank has shown little increase in the year 2013-2014 but in the financial year starting from 2015-2022 are still observed similar ROA, DB shows a good trend in the year 2013 and 2014 and showing downward trend from 2015 to 2020.

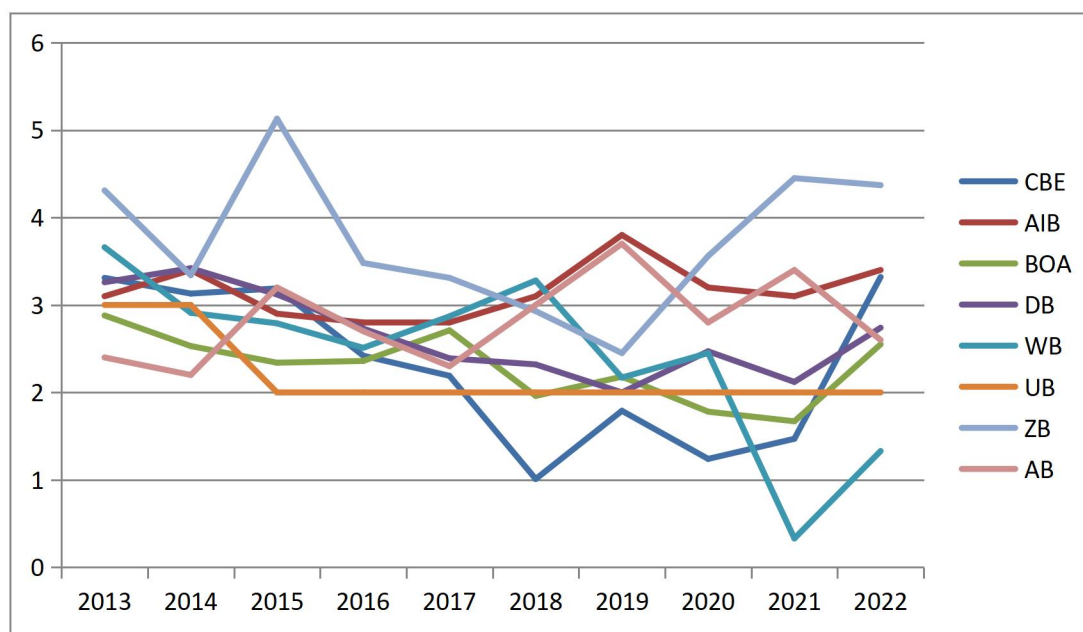


Figure 4. 1 Return on Asset ratio of the selected banks in this study

Table 4.1 shows that Zemen bank's ROA is higher than other banks from 2013 to 2022, but higher in 2015. According to Ross, Westerfield & Jaffe (2005), higher ratios indicate better managerial performance. This means Zemen banks perform better than other banks in terms of managerial performance. Overall, Zemen bank's mean ROA of 5.13% is greater than that of other banks, which indicates that Zemen bank is more profitable than other banks.

Zemen Bank showed the highest increase in ROA in 2015, going from 3.34% in 2014 to 5.13% in 2015. In that year, Zemen bank's profit more than doubled, but its assets only increased by the percentage increase in its profit. Simply stated, Zemen Bank achieved a noticeably greater profit margin for each Birr that it possessed in 2015. Zemen Bank may have been able to increase its profit margin by increasing its revenue or by maintaining its profit margin while generating more revenue, indicating improved cost control, according to a closer examination of its capacity to generate higher profits.

On the other hand, Abay bank ROA is decreasing in the financial year of 2013(2.4%) to 2014 (2.2%), 2015 (3.2%) to 2016 (2.7%) and 2019 (3.7%) to 2020 (2.8%) during their operation year. And increasing from the year 2017 (2.3%) to the financial year of 2018 (3%). In general, Abay bank scoreless percentage of ROA when comparing to other banks, Zemen Bank produced an average of 3.73% of its total assets during the study period, as shown by Table 4.1's mean return

on asset (ROA) of 3.73%. For every Ethiopian birr (ETB) invested in the bank's assets, the most profitable bank in Ethiopia made 3.73% of profit after taxes. Awash bank (3.16%) and Abay bank (2.83%) are closest followed ones. On the other hand, UB the least profitable one made 2.2% profit after taxes on each birr invested in the company's assets.

Even if all other spreads and expenses are the same, the bank with more equity capital will report a greater ROA than the bank with less equity capital. As a result, as previously stated, increased equity capital raises most operational asset ratios, such as the interest margin, gross income margin, and ROA, while decreasing operating income ratios (such as the percentage of noninterest income and the cost/income ratio) and operating equity ratios. Based on the analysis, this led to Zemen Bank's greater ROA. This is due to a very straightforward reason. To support a certain amount of assets, a bank with a stronger equity capital has to borrow less. Its interest expenses are consequently reduced, which raises the interest margin. A larger gross income to asset ratio follows from this. A higher net income follows if the increased amount of equity has no impact on costs and provisions.

Table 4. 1 Return on asset of the selected banks in this study

		Year										
No	Bank	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Average
1	CBE	3.31	3.13	3.19	2.42	2.19	1.01	1.79	1.24	1.47	3.32	2.31
2	AIB	3.1	3.4	2.9	2.8	2.8	3.1	3.8	3.2	3.1	3.4	3.16
3	BOA	2.88	2.53	2.34	2.36	2.71	1.96	2.18	1.78	1.67	2.55	2.30
4	DB	3.26	3.42	3.12	2.73	2.39	2.32	2.00	2.47	2.12	2.74	2.66
5	WB	3.66	2.91	2.79	2.51	2.87	3.28	2.17	2.45	0.33	1.33	2.43
6	UB	3	3	2	2	2	2	2	2	2	2	2.2
7	ZB	4.31	3.34	5.13	3.48	3.31	2.93	2.45	3.56	4.45	4.37	3.73
8	AB	2.4	2.2	3.2	2.7	2.3	3.0	3.7	2.8	3.4	2.6	2.83

Source: - Researcher's own computation from 2013-2022 banks annual report

4.1.2. Return on Equity (ROE)

This ratio can also be used to predict profitability. It assesses bank profitability in relating to equity. The higher the ratio, the more profitable the bank, Table 4.2 displays the ROE of the selected eight banks. As below table specify the ratio of net income to average shareholder's equity measures the return on equity.

The return on total equity of Abay bank Share Company declines from 2014 to 2015, and 2016 to 2017, 2019 to 2020, and finally 2021 to 2022. It indicates lower return on equity in year 2013. However, in the year 2019 its return on equity is better than the other years under study. According to the table, CBE's ROE begins to rise in 2014-2015, rising from 67.91% to 71.85%. Finally, it shows a slight improvement in 2022 (31.5%). ROE of AIB increases in the start from the financial year between 2016 to 2019 (21.5% to 23.7%) and 31.3 to 41.1 and then shows decreasing trend from 2014 with value 27.2%. In 2015 with a value of 23%.

Table 4. 2 Return on Equity by the selected banks in this study

		Year										
No	Bank	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Average
1	CBE	69.32	67.91	71.85	60.40	32.56	11.70	23.57	19.05	25.64	31.5	41.35
2	AIB	24.2	27.2	23.0	21.5	23.7	31.3	41.1	32.4	31.9	32.1	28.85
3	BOA	26.29	20.53	17.47	18.33	22.68	15.74	16.90	16.06	18.73	28.30	20.10
4	DB	31.33	30.69	26.41	23.15	20.57	18.84	16.00	20.28	18.72	23.71	22.97
5	WB	19.99	16.02	15.46	14.39	17.27	22.10	15.29	17.69	2.50	10.38	15.11
6	UB	24	20	17	18	17	21	22	19	17	16	19.20
7	ZB	33.14	24.33	31.98	21.57	22.96	21.53	17.70	23.71	27.10	25.05	24.91
8	AB	12.8	14.6	21.5	17.5	15.4	20.4	23.5	18.1	23.2	18.5	18.54

Source: - Researcher's own computation from 2013-2022 banks annual report

From the table the analysis shows CBE score the highest ROE from the financial year 2015 with the value of 71.85% and 67.91% in 2014, and finally 69.32% in the beginning of 2013 this indicates that the bank was more profitable in the year 2015, 2014, and 2013 respectively. This shows the bank have a higher ROE shows that the bank is effectively using the contributions of equity investors to generate additional profits and return and better the bank management is at

converting its equity capital in to net income. When compared with the bank average CBE banks are above the other banks average in all years except in the financial year 2018, 2019, 2020 and 2021 which is 11.70%, 23.57%, 19.05 and 25.64% respectively below the other bank.

While in the case of Wegagen bank the ratio become slightly deteriorated and decrease from 17.69% to 2.5% in the financial year of 2021 This indicates that the bank needs attention during in this financial year in order to use effectively. The contribution of equity investors to increase earnings and provide investors with a profit margin that is appealing. The table below shows that during the time under analysis, CBE recorded a slightly higher ROE level than the other bank at the level of the Ethiopian banking system. This indication exhibits a steady trend that is noticeable. Immediate followers were awash bank and zemen bank average of 28.85% and 24.91% respectively. Based on the analysis of the ROE state owned bank and private banks have been in an upward and downward trend in their ROE for all the ten years.

Generally, mean ROE of wegagen bank i.e. 15.11% is less than that of other bank sector which explains that wb is less profitable than other private banks in terms of ROE. So from the table 4.2, it is clear that performance of wb is less profitable than other private banks in terms of ROE in the financial year's one reason for such a dramatic decrease in ROE compared to the other banks and its equity relative to its total capital is very high.

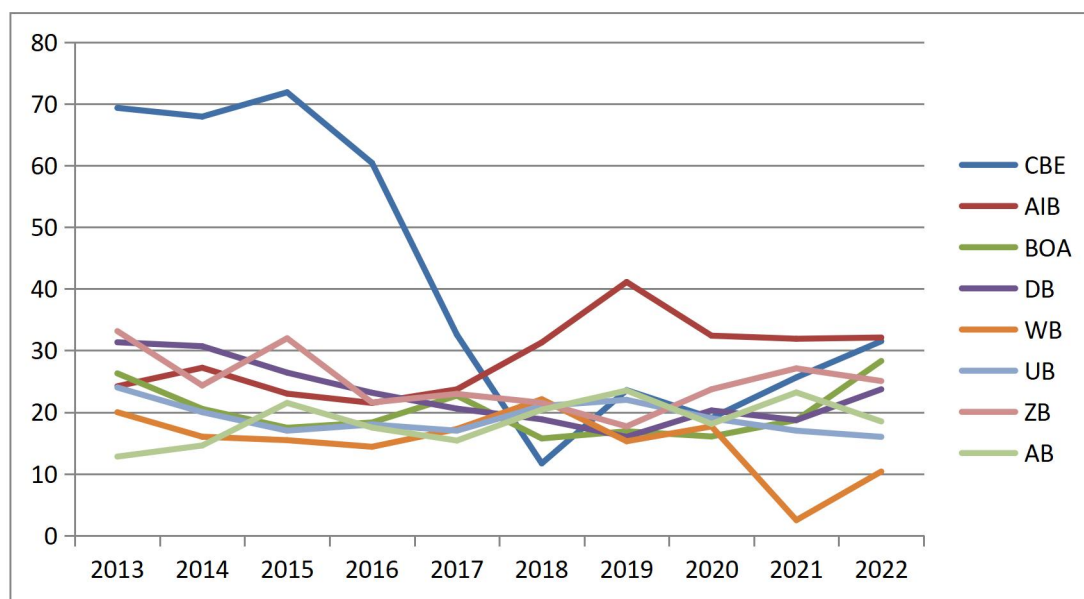


Figure 4. 2 Return on equity ratio by the selected banks in this study

4.1.3. Net Interest Margin

In relation to net interest income to their average interest-earning assets, net interest margin (NIM) is a measurement of the difference between interest income earned by banks or other financial institutions and interest paid to their lenders (for example, deposits). Net interest margins are crucial to banks because they charge one rate for loans and another for payments to deposits. Net interest margin shows the quality of management decision. When there is a higher operating income that shows there is high interest income but lower interest expense.

From the 2013 table, the first thing that stands out is that Zemen Bank had the lowest net interest margin of all the banks that year, at 1.82%. Following that, Zemen Bank's net interest margin increased steadily throughout the following years, reaching 3.19% in 2020, 3.88% in 2019 and 5.80% in 2020. This increase in net interest margin suggests Zemen has been able to earn an increasing amount of interest spread on the assets it invests in. Zemen Bank's increased net interest revenue throughout this period was the reason behind this improvement.

Table 4. 3 Net Interest Margin of the selected banks in this study

		Year										
No	Bank	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Average
1	CBE	4.16	3.90	4.40	4.47	4.01	4.53	4.19	4.15	3.76	5.68	4.33
2	AIB	4.0	4.0	4.3	5.0	5.2	6.4	6.2	7.0	5.9	6.5	5.45
3	BOA	4.90	4.90	5.29	5.11	6.68	6.25	6.75	6.05	8.27	4.90	5.91
4	DB	3.51	3.54	3.95	3.72	4.03	5.08	5.05	6.01	6.13	6.57	4.76
5	WB	5.09	5.12	5.22	5.37	5.52	6.30	6.34	6.54	7.20	6.34	5.90
6	UB	7.0	7.4	7.6	7.5	7.1	7.8	7.6	8.5	7.9	9.3	7.8
7	ZB	1.82	3.19	3.07	2.62	2.38	2.97	3.88	5.80	4.97	5.41	3.61
8	AB	4.7	4.6	5.0	5.7	5.1	5.1	5.4	5.8	6.5	7.4	5.53

Source: - Researcher's own computation from 2013-2022 banks annual report

United bank earned the highest net interest margin in 2022 of 9.3%. It has been above all the selected bank average all years. It was the highest among the banks under this study. In the other

case Awash bank net interest margin were increase from the year 2017(5.2%) to 2018(6.4%) and from the financial year of 2019(6.2%) to 2020(7%). Similarly, Wegagen Bank's net interest margin showed a slight increase throughout the financial year 2013(5.09%) to 2014(5.12%), 2015(5.22%) to 2016(5.37%), and 2017(5.52%) to 2018(6.30%), 2019(6.34%) to 2020(6.54%) and in the financial year of 2021(7.20%) and in last it declines the net interest margin in the financial year of 2022(6.34%). On the other hand, CBE's net interest margin was increased in the financial year of 2021(3.76%) to 5.68% in the financial year of 2022, and 2015(4.40) to in the financial year 2016(4.47%) and a decline of net interest margin of in the year 2013(4.16%) to 2014(3.90%) and 2019(4.15%) to 2020(4.15%).

It is an essential indicator of a bank's income from lending activities. A higher ratio indicates greater earning potential, and vice versa. According to table 4.3, UB, BOA, and WB were registered the highest earning capacity of 7.8%, 5.91%, and 5.90%, respectively. ZB had the lowest earning capacity, which was 3.61%. On average, all banks' earning capacity increases year after year.

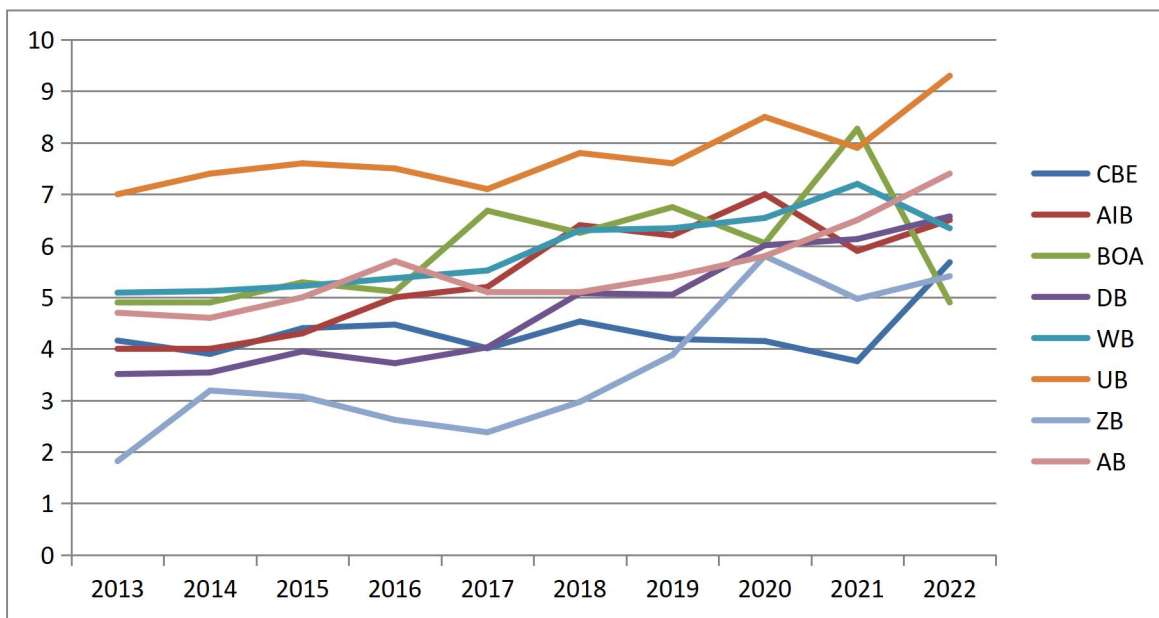


Figure 4. 3 Net interest margin of the selected banks in this study

4.1.4. Profit Margin

The operational income in relation to revenue is measured by this ratio. Generally speaking, a larger operational margin is better since a lower profit margin (in comparison to similar firms) could indicate higher accounting expenses. An additional indicator of a bank's success is its profit margin. It is the remaining amount after all expenses have been paid. Lowering the need for external funding and increasing net income are two benefits of increased profit margins. The profit margin (PM) ratio indicates the effectiveness of the banks in managing expenses. The profit margin of CBE has shown an increasing trend from 14.6% in 2020 to 16.55% in 2021, and 27.30 in 2022. And in 2014-2018 it decreased its profit margin but shows an improvement then after to 21.15 % in 2019. After that it decreased until the end of the analysis period and ends with 27.30% in the financial year of 2022.

Table 4. 4 Profit margin of the selected banks in this study

Year												
No	Bank	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Average
1	CBE	42.73	38.71	37.78	30.37	29.69	13.77	21.15	14.61	16.55	27.30	27.23
2	AIB	30.9	32.2	28.0	26.3	26.7	27.6	30.3	25.4	24.7	25.9	27.80
3	BOA	30.62	26.73	24.17	22.08	23.84	17.19	18.12	15.02	13.15	19.36	21.03
4	DB	33.40	33.22	28.99	26.60	22.14	20.97	18.99	21.33	19.46	24.47	24.96
5	WB	36.10	29.80	26.57	24.50	24.83	25.70	19.35	18.83	2.53	11.05	21.93
6	UB	31	27	21	20	19	20	20	18	17	14	20.70
7	ZB	23.24	40.39	30.53	28.83	25.81	23.86	30.56	34.45	33.23	35.91	30.68
8	AB	22.6	19.6	25.2	23.2	20.5	24.2	27.5	24.7	26.0	21.6	23.51

Source: - Researcher's own computation from 2013-2022 banks annual report

In the other case the profit margin of awash international bank shows an increasing their profit margin in the financial year 2013-2014 with 30.9% and 32.2% of profit margin respectively and 26.7% in 2017, 27.6% in 2018 and finally it shows an improvement in the year 2019 with profit margin of value of 30.3%. Bank of Abyssinia shows a decreasing profit margin within the financial year of 2014, 2015 and 2016 with value of 26.73% to 24.17% and 22.08% respectively

and there is a little improvement in the year 2021 with a profit margin value of 13.15% to 19.36% of their profit margin in the financial year 2022.

In comparing Dashen bank with other private bank the profit margin is slightly decreasing in the consecutive financial year from 2014-2019, 33.22% to 28.99% in the financial year of 2014-2015, and 26.60% to 22.14% in the financial year 2016-2017 and 20.97% to 18.99 in the year 2018-2019 respectively. In other hand Wegagen bank also shows the same trend with Dashen bank its profit margin were decrease consecutive financial year starting from the year 2014-2015 with profit margin value of 29.8% to 26.57% and 25.7% to 19.35% in the year 2018-2019 respectively in last the bank shows the least profit margin in the financial year of 2021 with a value of 2.53% comparing with another private bank.

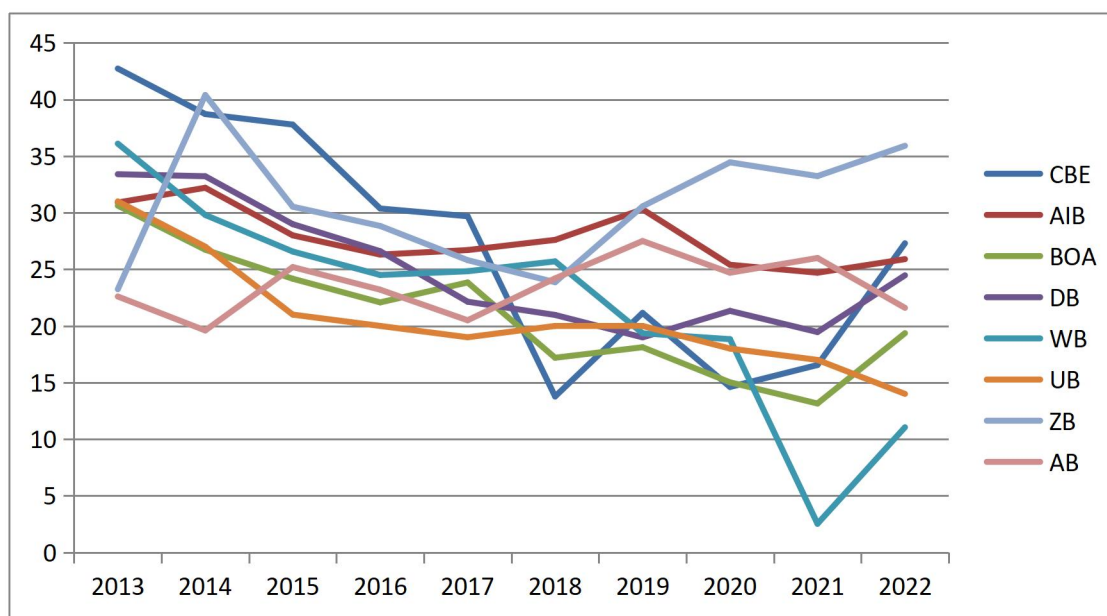


Figure 4. 4 Profit margin of the selected banks in this study

Based on the profit margin analysis of the selected bank among the result CBE and ZB score the highest profit margin among the rest bank with a value of 42.73% in the year 2013 and 40.399% in the year 2014 respectively. From table 4.3 it can be seen that profit margin of CBE is greater than other private banks in all the analysis period except a little above in 2018, 2020 and 2021. Overall, the average Profit Margin of awash international bank i.e. 27.80% is greater than that of CBE i.e. 27.23%. So, it can be concluded profit margin of zemen bank, awash bank and

commercial banks have the highest profit margin value of ZB (30.68%), AIB (27.80%) and CBE (27.23%). UB had the lowest average, which was 20.70%

4.2.Liquidity Ratios

4.2.1. Liquid Asset to Deposit Ratio (LADR)

The Liquid Asset to Deposit Ratio (LADR) is a financial metric that evaluates a bank's liquidity position by comparing its liquid assets to its total deposits. It measures the proportion of a bank's liquid assets to its total customer deposits. This ratio indicates the liquidity situation and capacity of a bank to satisfy the demands of its depositors for cash withdrawals. It raises customer trust while reducing the possibility of profiting from cash.

Table 4. 5 Liquid to asset ratio of the selected banks in this study

		Year										Average
No	Bank	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
1	CBE	23.06	16.76	10.36	11.08	14.68	11.51	15.80	16.44	15.93	18.75	15.44
2	AIB	28.5	33.6	21.0	25.4	22.9	26.8	19.1	20.5	17.1	21.7	23.64
3	BOA	28.49	30.19	56.42	22.76	16.61	17.41	13.91	13.35	13.60	15.14	22.79
4	DB	38.24	37.00	27.91	30.19	18.91	19.57	13.62	16.34	15.72	18.53	23.60
5	WB	36.75	35.85	24.79	27.96	27.85	19.74	18.18	21.15	15.39	30.44	25.81
6	UB	26	36	23	22	19	20	13	15	11	11	19.60
7	ZB	44.3	49.28	30.19	40.25	42.01	39.58	21.74	30.29	31.69	29.95	35.98
8	AB	38.7	34.2	24.6	23.3	26.8	30.8	28.1	24.8	20.1	24.4	27.59

Source: - Researcher's own computation from 2013-2022 banks annual report

The bank is more liquid if the ratio is higher. Stated differently, the bank can fulfil its short-term obligations more easily and maintains a larger margin of safety. The purpose of evaluating liquidity is to make sure that every bank can satisfy the demands of its clients for daily cash deposit withdrawals. In this sense, it's critical for banks to operate with an aware mix of liquid assets. This is supervised by NBE, and since liquidity issues are frequently what cause banks to fail, such analyses should be conducted more regularly. Any licensed bank must keep liquid

assets equal to at least 25% of its entire demand, including time deposits, savings accounts, and other liabilities with maturities shorter than one month, as per NBE Directive No. SBB/44/2008.

From table 4.4 Liquid Asset to Deposit Ratio (LADR) of CBE increases from the year 2015(10.36%) to 2016 (11.08%), 2021(15.93%) to 2022(18.75% (and then shows decreasing till the end of the year i.e. (23.06% to 16.76% in the year 2013-2014 and 14.68% to 11.51% in the year 2017-2018). On the contrary, the LADR of Awash Bank decreases from 33.6 % in 2014 to 21.0% in 2015 25.4% in 2016 to 22.90% in 2017 and in the year 2018 from 26.8% to 19.10% in the year 2019. After that it shows a continuously upward trend ending with 28.5% in 2013 and 33.6% in 2014, 22.9% in 2017 to 26.8% in 2018, and 17.1% in 2021 in to 21.7% in the year 2022.

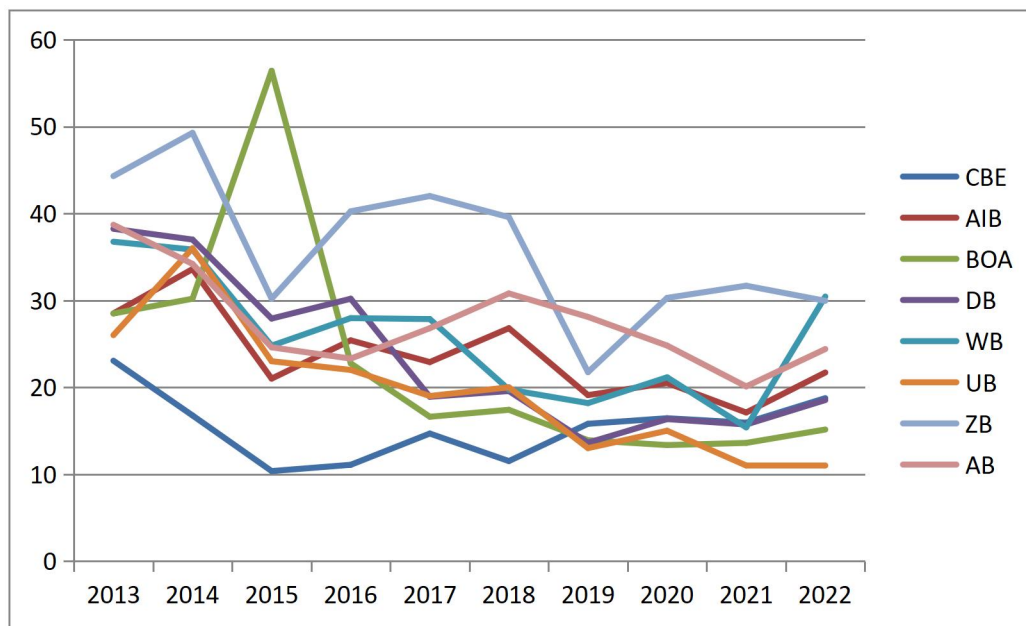


Figure 4. 5 Liquid to asset ratio of the selected banks in this study

From the analysis of liquid asset to deposit ratio of the selected bank BOA shows an increasing LADR from 28.49% in the year 2013 in to 30.19% in the year 2014. And radical increase of their LADR from 30.19% in the year 2014 to 56.42% in the year 2015 and then from the financial year 2018-2021 a decrease almost with a constant result of liquid asset to deposit ratio. Based on the above analysis of liquid asset to deposit ratio of abay bank shows a declining of LADR from the financial year of 2013(38.7%) to 2014(34.2%), 2015(24.6%) to 2016(23.3%), 2019(28.1%)

to 2020(24.8%), and increasing from the financial year of 2017(26.8%) to 2018(30.8%) and finally raised from 2021(20.1%) to 2022(24.4%) during the operation time.

Compared to the average mean of their liquid asset to deposit ratio of the bank, Zemen bank are above the selected bank average in all analysis years which is 35.98%. And abay bank also have the highest liquid asset to deposit ratio based on the analysis comparing to other banks with a value ratio of 27.59%, and also wegagen bank also shows the highest liquid asset to deposit ratio of 25.81%. CBE had the lowest average, which was 15.44%

4.2.2. Loan to Deposit Ratio (LDR)

One of a bank's most crucial responsibilities is managing its liquidity. the institution will experience financial loss if the funds are not utilized efficiently. Having cash on hand but not using it produces no profit. The bank won't be able to cover demand withdrawals from depositors, installment payments from creditors, and eventually other contingent liabilities if it doesn't have enough liquid cash on hand. As a result, the institution will be in an overtrading position and will have difficulty borrowing funds at a high rate. Maintaining a well-balanced cash position means steering clear of both an excessive and insufficient cash position. Customers deposit money with the goal of withdrawing it out as soon as they need it, including any interest that has accumulated. Banks must so constantly keep a sufficient amount of liquidity.

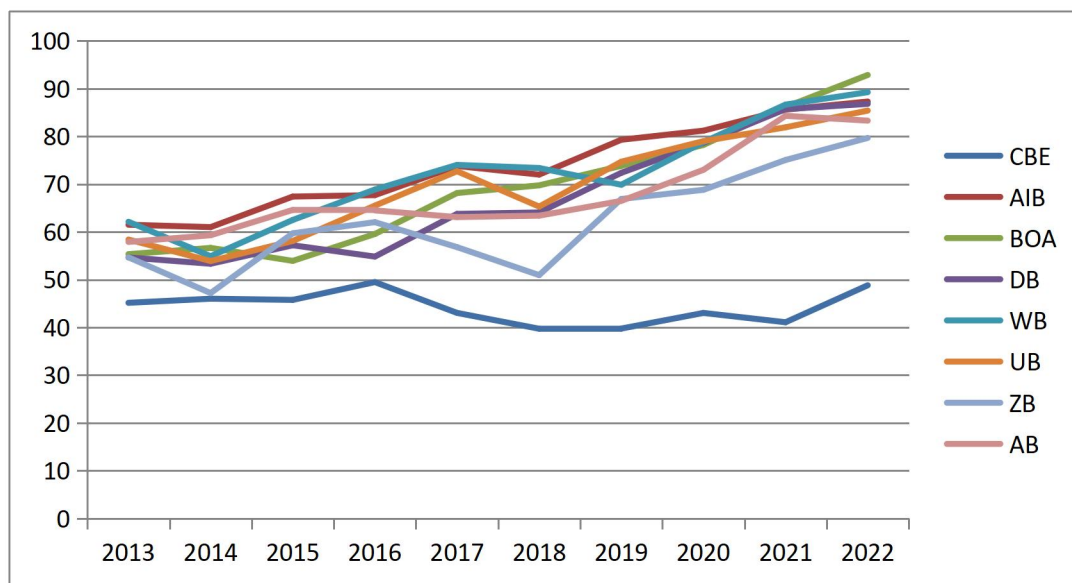


Figure 4. 6 Loan to deposit ratio of the selected banks in this study

The Loan to Deposit Ratio is determined by taking the total value of the bank's loans and dividing it by the total value of the bank's deposits, then expressing the result as a percentage. This ratio is a key measure of bank liquidity. A lower loan-to-deposit ratio (LDR) indicates that banks are better able to fulfil their short-term obligations because they have more deposits than loans available to consumers. It lowers bank risk and lowers the likelihood of making money on deposits.

As shown in table 4.5 below loan to deposit ratio (LDR) of CBE decreases from the year 2016 (49.49%) to 2017 (43.04%), and 2020(43.03%) to 2021(41.08%) and again shows a slight fall in 2015 (45.76%).Abay bank scores an increasing loan to deposit ratio in the financial year from the beginning of 2013(57.9%) to 2014(59.3%), 2019(66.5%) to (2020(73%) finally it declines from the year of 2021(84.3%) to 2022(83.3%). Contrary in the analysis in 2013, it shows an increasing loan to deposit ratio it starts to upward from 45.15% to 46.01%) % and again slightly increased in 2021 to 41.08% to 48.82% in the financial year of 2022.

From the loan to deposit ratio (LDR) of selected bank awash bank it impressive increased from the financial year of 2014-2022 but it's loan to deposit ratio downward a little in the financial year of 2013(61.5%) to 2014(61%). The trends in loan to deposit ratio of awash bank is different from other selected bank based on the analysis of loan to deposit ratio it scores the highest ratio throughout the financial year of the bank. In the case of Bank of Abyssinia, it demonstrate a decreasing trend from year 2014(56.65% to the financial year of 2015(53.93%) but shows the highest growth in 2022 i.e. 92.86% which confirms their high level of risk taking in order to earn profit as banking industry major profit still flows from this source.

When compared Dashen bank with other bank its loan to deposit ratio were increasing from the financial year of 2017 to the end of 2022 as shown in the table 4.5 below, and slightly decreasing the loan to deposit ratio in the year 2013(54.65%) to 2015(53.33%) and 2015(57.20%) to 2016(54.83%). Wegagen bank also score the highest loan to deposit ratio comparing with other bank in the financial year of 2022(89.26%) and slightly decrease from the year 2013(62.12%) to the year 2014(54.91%) were downward decrease and it begin to upward increase from the financial year of 2019(69.87%) to 2020(78.80%) and also in the financial period of 2021

(86.66%) into the year 2022(89.26%). When it is compared with the average CBE is less than the other selected private bank in the whole year of the analysis period.

Overall, the mean Loan to Deposit Ratio of Commercial Bank of Ethiopia (44.18%),Bank of Abyssinia (60.83%)& zemen bank(62.18%) were registered the lowest ratio and AIB has the highest ratio which is 73.67%.CBE is less than that of other banks which leads to the conclusion that CBE is more liquid than other banks in terms of Loan to Deposit Ratio.

Table 4. 6 Loan to deposit ratio of the selected banks in this study

Year												
No	Bank	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Average
1	CBE	45.15	46.01	45.76	49.49	43.04	39.72	39.76	43.03	41.08	48.82	44.18
2	AIB	61.5	61.0	67.4	67.7	73.8	72.0	79.3	81.2	85.6	87.3	73.67
3	BOA	55.34	56.65	53.93	59.56	68.14	69.75	73.83	78.21	86.15	92.86	60.83
4	DB	54.65	53.33	57.20	54.83	63.77	64.07	72.37	78.64	85.71	86.81	67.14
5	WB	62.12	54.91	62.50	68.87	74.03	73.38	69.87	78.80	86.66	89.26	72.04
6	UB	58.4	53.9	58.1	65.5	72.7	65.3	74.7	79.0	81.9	85.4	69.48
7	ZB	54.67	47.18	59.71	62.04	56.81	50.95	66.90	68.81	75.06	79.68	62.18
8	AB	57.9	59.3	64.6	64.5	63.1	63.4	66.5	73.0	84.3	83.3	67.98

Source: - Researcher's own computation from 2013-2022 banks annual report

4.2.3. Loan to Asset Ratio (LAR)

The Loan to Asset Ratio (LAR) is a financial metric used by banks and financial institutions to evaluate the proportion of their total assets that are financed by loans. It measures the extent to which a bank's assets are tied up in loans .The loan to asset ratio is one of the factors frequently used to gauge bank-specific risk. The bank has less liquidity the higher the ratio. It indicates that banks may find it difficult to fulfill their short-term obligations because they have extended more loans than their capacity. LAR of state and private owned banks is shown below in table 4.6. From the table LAR of CBE decreases from the year 2017(30.66%) to the year 2018 (30.14%). It decreases again in 2020(29.54%) to 2021(28.95%) and then starts to increase in the year 2022to 30.84%.

Loan asset ratio of awash bank shows different pattern. It decreases from 2013 (46.84%) to 44.78% in 2014. And starts to increase in 2015(51.38%) and continuously go up and ends to highest level of the analysis year in the year 2022 (69.19%). When it compares BOA with other bank its loan to asset ratio were decline from the financial year of 2013(45.36%) to 44.88% in the year 2014, and continuously increase form the year 2016 to the year of 2022.

Table 4. 7 Loan to Asset Ratio of the selected banks in this study

		Year										Average
No	Bank	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
1	CBE	34.72	35.59	35.41	35.82	30.66	30.14	28.89	29.54	28.95	30.84	32.06
2	AIB	46.84	44.78	51.38	51.39	53	56.18	62.78	63.03	66.85	69.19	56.54
3	BOA	45.36	44.88	43.21	47.61	54.99	55.59	59.60	64.68	72.65	74.66	56.32
4	DB	43.87	42.94	45.76	43.67	51.17	50.76	57.57	61.63	67.48	67.61	53.25
5	WB	44.11	39.27	44.28	46.36	48.86	53.98	54.07	60.93	65.66	67.05	52.46
6	UB	46.30	42.07	47.19	48.78	54.09	53.05	60.48	63.45	65.71	66.84	54.80
7	ZB	38.57	33.22	44.25	44.13	41.06	40.43	51.80	52.70	55.77	60.14	46.21
8	AB	43.21	46.14	50.44	49.69	49.01	47.86	50.29	57.48	66.32	65.35	52.58

Source: - Researcher's own computation from 2013-2022 banks annual report

The loan to asset ratio of dashen bank on the other hand increase from the year 2017(51.17% to the year 2018(50.76%), 2019(57.57%) to the year of 2020(61.63%) and finally from the year of 2021(67.48%) to the financial year of 2022(67.61%). Table 4.6 and Figure7 shows that, LAR of AB is on increasing trend over the years under the study except it decrease in 2015 to 2016. And 2017 to 2018. LAR of AB increased to 50.44% in 2015 from 46.14 % in 2014. And from 50.27% to 57.48%. A clear sign of increased financial stress is the rising trend of AB LAR over the period, which AB is showing by taking on significant loans and holding fewer liquid assets. However, this suggests that profitability may improve going forward and is consistent with our findings derived from AB's profitability ratios during that time.

When it is compared to the average CBE is below the other bank in all years whereas the reverse is true for private banks like awash bank which is on top of from the average of 56.54% which indicates that the bank have face a challenge to meet their short-term obligation in the operation

time. Commercial Bank of Ethiopia (32.06%), zemen bank(46.21%) & Wegagen bank(52.46%) were registered the lowest ratio and AIB has the highest ratio which is 56.54%.

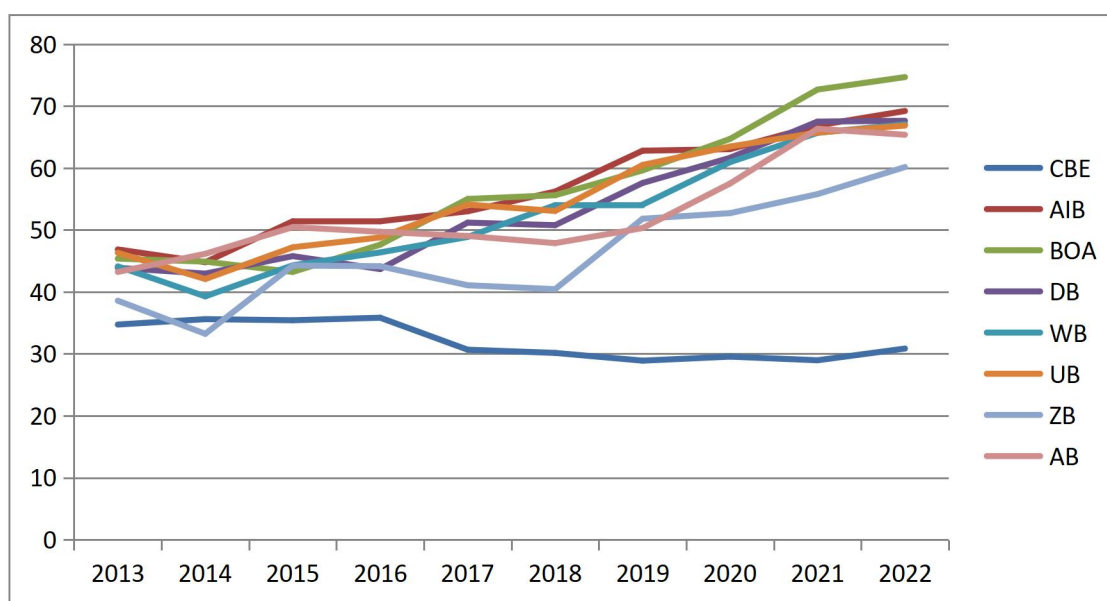


Figure 4. 7 Loan to asset ratio of the selected banks in this study

4.3. Solvency and Risk Ratios

This section presents an analysis and empirical findings of those ratios that measure banks' capacity to fulfill long-term obligations.

4.3.1. Debt-Equity Ratio (DER)

It shows the total amount of debt and equity shares utilized to fund a bank's assets. It indicates the percentage of bank financing that comes from investors and creditors. It is the proportion of capital provided by creditors to capital provided by shareholders. It depicts the relationship between the share of assets provided by shareholders and the share of assets provided by creditors. Lower debt-to-equity ratio values are favorable, indicating less risk and the higher the ratio, the riskier the bank's operations and the greater the likelihood that the bank will default on its debts. As a result, this ratio assesses banks' ability to absorb financial shocks.

Table 4. 8 Debt to Equity ratio of the selected banks in this study

Year

No	Bank	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Average
1	CBE	15.79	21.01	21.9	25.90	10.04	11.16	13.19	15.44	17.42	16.28	16.81
2	AIB	7.00	6.93	6.73	6.76	8.00	10.35	9.65	8.89	9.47	7.75	8.15
3	BOA	8.17	6.38	6.55	11.87	7.72	6.53	6.94	9.02	11.35	9.51	8.40
4	DB	8.65	7.45	7.47	7.51	7.67	6.74	7.21	7.21	8.35	7.15	7.54
5	WB	4.68	4.38	4.68	4.77	5.24	6.16	5.93	6.47	6.91	6.68	5.59
6	UB	7.31	6.54	7.52	7.33	7.71	8.49	8.26	7.03	7.35	8.30	7.58
7	ZB	5.57	4.97	5.38	6.36	6.35	6.15	5.30	4.92	4.61	4.61	5.42
8	AB	4.77	6.07	5.40	5.44	5.65	5.83	5.15	5.54	6.10	5.95	5.59

Source: - Researcher's own computation from 2013-2022 banks annual report

Table 4.7's debt-to-equity ratio indicates the percentage of the bank that was financed with debt as compared to equity. With an average score of 5.59%, ZB was placed in first place, followed by Ab and WB, which were rated next to Zemen Bank.. This indicates that the debt to equity for ZB, AB and WB, was respectively, 5.42%, 5.59%, and 5.59%. Because of its largest debt ratio—which is 16.81% on average compared to equity, CBE was ranked last. The data also revealed that the average score was trending upward from year to year. With all this on hand, one can deduce that on average CBE, AIB, BOA, DB, WB, AB, UB, and ZB used debt value of birr 16.81, 8.15, 8.40, 7.54, 5.59, 5.59, 7.58, and 5.42 per 1 equity share to finance their assets respectively. Meanwhile, ZB, AB, and WB is the most solvent bank for it registered the lowest DER.

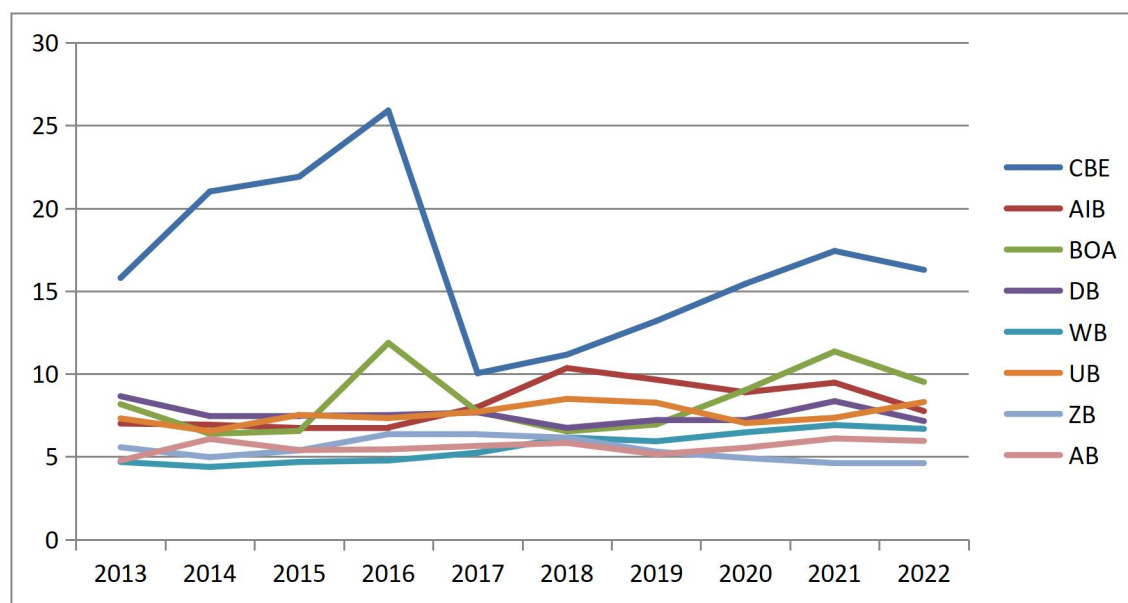


Figure 4. 8 Debt to Equity ratio of the selected banks in this study

4.3.2. Equity Multiplier (EM)

It shows the asset value divided by the equity held by shareholders. It determines It indicates how much of a company's assets are financed by shareholders' equity. In general terms, a lower equity multiplier is preferable as it shows that the bank can fund its assets with less debt. As demonstrated in Table 4.8 and the attached Figure, AB's continual rising EM trend was observed throughout the first three years of the study's operation, but stability in the credit and solvency indicator was noted for the 2019–2020 fiscal years.

However, it's clear that AIB's EM performance increased over the first two years of the study and then fluctuated during the remaining financial years, maintaining a consistent EM ratio. Furthermore, it can be observed that BOA's EM movement declined throughout the fiscal years 2013–2014 and 2017–2018, and it declined again in 2021–2022, with the exception of the first two years, during which its credit and solvency situation evaluated in terms of EM decreases significantly.

Table 4. 9 Equity multiplier of the selected banks in this study

No	Bank	Year										Average
		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
1	CBE	20.93	21.66	22.50	24.97	14.86	11.60	13.20	15.31	17.47	12.94	17.54
2	AIB	7.7	8.0	7.8	7.7	8.4	10.2	10.9	10.2	10.2	9.4	9.05
3	BOA	9.13	8.13	7.47	7.75	8.38	8.01	7.75	9.05	11.22	11.08	8.80
4	DB	9.62	8.98	8.46	8.49	8.60	8.12	8.00	8.21	8.84	8.64	8.60
5	WB	5.46	5.52	5.54	5.73	6.03	6.73	7.04	7.23	7.69	7.79	6.48
6	UB	8	8	8	8	9	9	9	9	8	9	8.50
7	ZB	7.29	6.24	6.19	6.93	7.36	7.24	6.66	6.08	5.74	5.61	6.53
8	AB	5.3	6.5	6.7	6.4	6.6	6.8	6.4	6.4	6.9	7.0	6.49

Source: - Researcher's own computation from 2013-2022 banks annual report

In addition, WB showed an increasing EM trend in 2013 to 2018 and 2020 to 2022 but decreasing movement during 2018 to 2019 of fiscal years of the study period. Moreover, WB experienced continuous increment and decrement of EM trend over the 2013 to 2018 and 2019 to 2020 financial years of the study respectively while in the other fiscal years it showed irregularity across the other years. In last ZB shows irregular decrease of their EM of their operation and an increase from the financial year of their operation 2016 to 2017 and declining trend of 2013 to 2014, 2018 to 2019 and 2021 to 2022 of their operation.

As exhibited above WB, AB and ZB held with lowest average of 6.48%, 6.49% and 6.53% respectively in this particular parameter. To contrary cbe is seen to be at the higher with an average ratio of 17.54%.

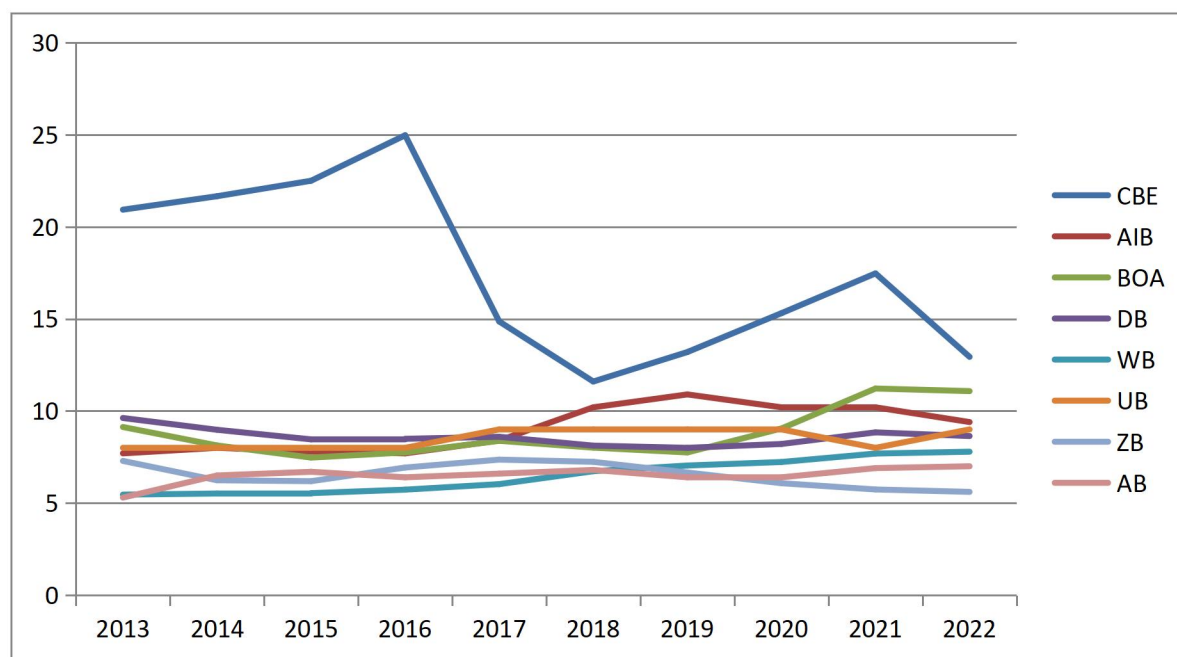


Figure 4. 9 Equity multiplier of the selected banks in this study

4.3.3. Capital Adequacy

A significant amount of capital is required for any financial organization to stay afloat and prevent failure. This ratio is used to assess if a bank has enough capital on hand to cover unforeseen losses in the future. The ability of a bank to withstand a storm is determined by its capital adequacy. It is the capital required to control the risks that a financial institution is exposed to, including market, credit, and operational risks, in order to prevent losses and protect creditors.

The Total Capital to Total Asset Ratio is an important metric that indicates a bank's capital adequacy. It shows the proportion of a bank's total assets that are funded by regulatory capital. Most banks have maintained relatively stable ratios, with some fluctuations, but a few have seen more significant changes. The Commercial Bank of Ethiopia (CBE) stands out, with its ratio spiking to 9.09% in 2017 before declining again, while the Wegagen Bank (WB) ratio has steadily decreased from 17.61% in 2013 to 12.65% in 2021.

With average scores of 15.72%, 15.46%, and 15.23% for the periods under consideration, Zemen Bank, Wegagen Bank, and Abay Bank had the first three highest ratios. This means that, in the

event that losses from risk assets occur, their respective equity capital will be absorbed by Zemen Bank, Wegagen Bank, and Abay Bank. At 5.96%, the average percentage for the biggest government bank, CBE, was the lowest. The average score also shows a declining tendency from year to year throughout the financial year, while CBE was cited on the last position with the average CAR of 5.96%.

Table 4. 10 Total capital to total asset ratio of the selected banks in this study

No	Bank	Year										Average
		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
1	CBE	4.71	4.54	4.37	3.72	9.09	8.23	7.05	6.08	5.43	6.38	5.96
2	AIB	12.51	12.61	12.95	12.89	11.11	8.81	9.39	10.11	9.55	11.42	11.14
3	BOA	10.90	13.56	13.25	12.62	11.47	13.27	12.60	9.98	8.33	9.51	11.55
4	DB	10.43	10.36	11.83	11.81	11.75	11.53	12.91	12.18	10.69	12.28	11.58
5	WB	17.61	18.60	17.61	17.33	16.02	13.97	14.42	13.39	12.65	13.02	15.46
6	UB	12.03	13.26	11.74	12.00	11.49	10.54	10.80	12.45	11.98	10.75	11.70
7	ZB	15.19	16.73	15.68	13.59	13.60	13.99	15.88	16.88	17.83	17.82	15.72
8	AB	17.32	14.14	15.63	15.53	15.04	14.64	16.27	15.29	14.09	14.39	15.23

Source: - Researcher's own computation from 2013-2022 banks annual report

Moreover, the average Capital ratio for the study period were above the minimum requirement settled by the regulatory organization. The result shows that ZB, WB and AB were at the better position to withstand the potential losses, whereas CBE lacks internal strength to withstand the potential losses if they suffer when compared to its competitors.

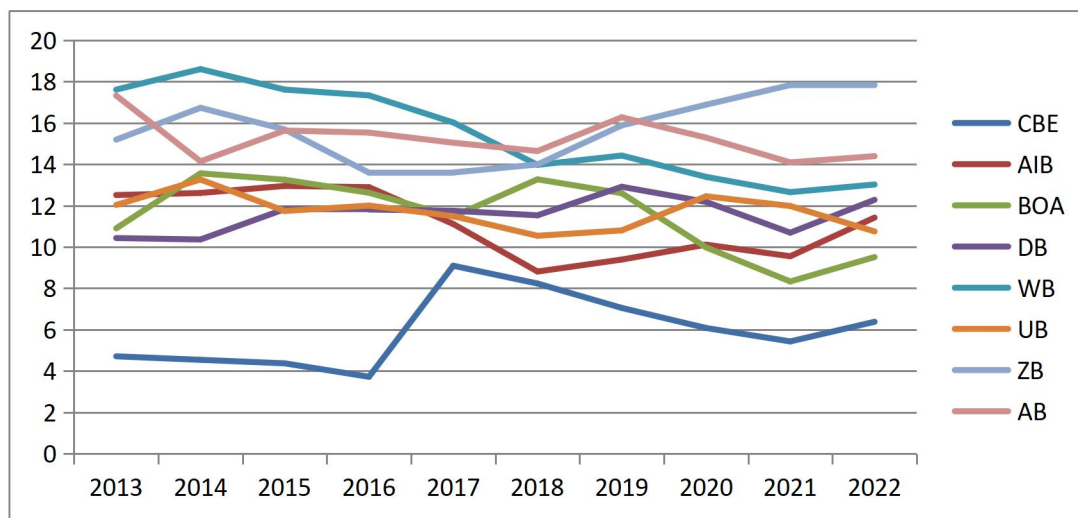


Figure 4. 10 Total capital to total asset ratio of the selected banks in this study

4.3.4. Asset Quality

An institution's asset quality reflects its ability to survive asset losses, as asset impairment threatens its solvency. Indicators of asset quality include non-performing loans (NPLs), which are proxies for asset quality, and allowances for loan loss reserves. Banks are required by law to maintain adequate loan loss reserves to cover bad loans. The ratio of provision for loan losses to total loans is used to assess the soundness of the loan portfolio. Divide the loan loss provision by the total loan amount to determine asset quality. In comparison with the competition, the bank with the lowest loan loss provision to total loan ratio will have better asset quality. Since the quality of an institution's assets greatly affects its capacity to generate revenue, asset quality is an essential requirement for any financial organization.

The main cause of banking problems is declining asset quality. The amount and severity of nonperforming assets, recoveries, and provisions all affect asset quality. It will be essential for understanding banking.

Table 4. 11 Allowance for Doubtful Account to Net Advance Ratio of the selected banks in this study

		Year										
No	Bank	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Average
1	CBE	2.76	2.77	2.72	4.10	4.58	3.75	4.44	5.46	5.24	4.67	4.05
2	AIB	2.36	2.32	1.77	1.55	1.48	0.82	0.87	1.77	1.75	1.85	1.65
3	BOA	2.04	1.84	1.52	1.37	1.28	1.18	1.34	1.22	1.49	1.57	1.49
4	DB	2.30	1.89	1.71	1.74	2.06	0.99	0.65	0.22	0.54	0.72	1.28
5	WB	2.29	1.70	1.61	1.65	1.39	1.78	2.20	2.00	4.82	4.71	2.42
6	UB	1.90	1.46	1.24	1.32	1.25	1.32	0.52	0.69	0.95	1.96	1.26
7	ZB	9.34	9.66	5.84	4.61	4.78	3.35	2.21	1.77	1.64	1.38	4.46
8	AB	1.26	1.22	1.25	1.44	1.13	1.74	1.48	1.90	1.47	1.44	1.43

Source: - Researcher's own computation from 2013-2022 banks annual report

The "Allowance for Doubtful Accounts to Net Advances Ratio" is a key measure that shows how prepared a bank is to handle potential losses from loans compared to the total amount of loans it has given out. This ratio is an important indicator of the bank's asset quality, helping assess the overall health of its loan portfolio. A lower ratio indicates a better quality asset, i.e. a loan, while a higher ratio indicates a lower quality loan. The Commercial Bank of Ethiopia (CBE) has exhibited with fluctuations ranging from a low of 2.76% in 2013 to a peak of 5.46% in 2020 before declining to 4.67% in 2022. Zemen Bank (ZB) also had a high average ratio of 4.46%, though its figure has steadily decreased from 9.34% in 2013 to just 1.38% by 2022. In contrast, several banks, such as Dashen Bank (DB), United Bank (UB), and Abay Bank (AB), have seen their ratios decline more substantially over the period, with DB's ratio falling from 2.30% in 2013 to 0.72% in 2022.

The efficiency of the bank is presented in Table 4.10. Therefore, UB (1.26%), DB (1.28%) and AB (1.43%) were registered the lowest ratio. The highest percentage or week performance was recorded by ZB (4.46%).

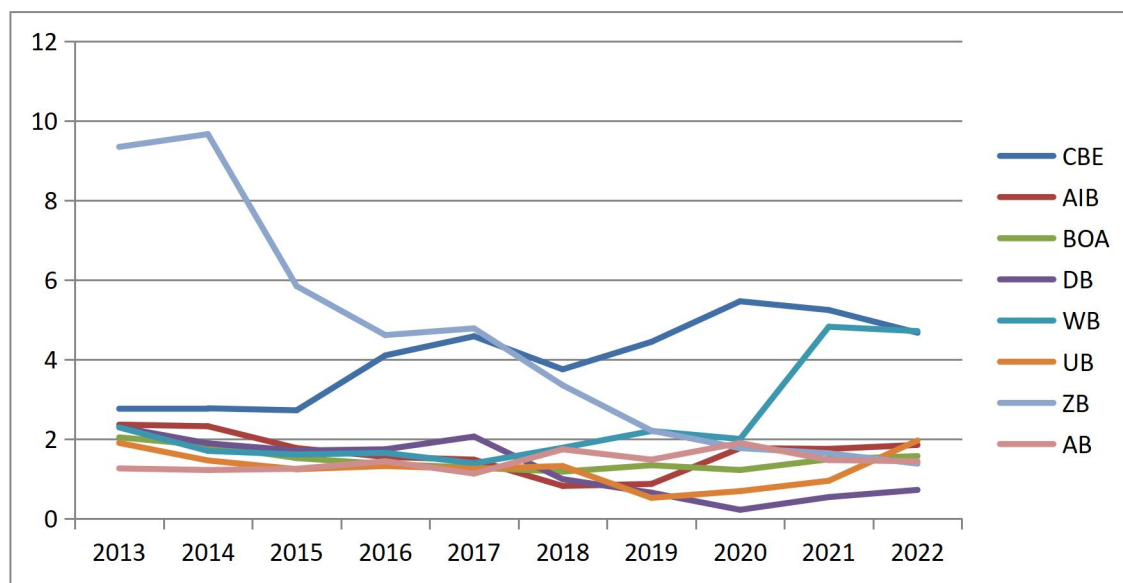


Figure 4. 11 Allowance for Doubtful Account to Net Advance Ratio of the selected banks in this study

CHAPTER FIVE

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Summary

This thesis, investigated the financial performance of commercial banks in Ethiopia from 2013 to 2022, aiming to bridge the gap in comprehensive analyses regarding the financial performance of these banks and its impact on investor engagement in the capital market. Focusing on key financial ratios related to profitability, liquidity, solvency, and risk, the study employed a quantitative research design with data collected from the annual reports of eight commercial banks. Key findings revealed varied profitability performance. Liquidity analysis indicated that some banks maintained strong liquidity positions, ensuring their ability to meet short-term obligations. Solvency and risk assessments highlighted the risk profiles and financial stability of the banks, with some showing high leverage, posing potential risks in volatile market conditions. The study provided valuable insights for investors, regulators, and stakeholders, emphasizing the importance of continuous monitoring and evaluation of financial performance to support the growth and development of Ethiopia's capital market. It concluded that a thorough analysis of financial performance indicators was crucial for enhancing investor confidence and engagement, recommending improvements in transparency and regulatory frameworks to support sustainable market growth.

5.2. Conclusion

The comparison of the financial indicators collected from eight commercial banks gives a glimpse into the underlying dynamics of the industry, which are very informative. Zemen bank consistently remained on the top of the list in terms of ROA during the period, which indicates that it had superior management performance and profitability as opposed to other banks. Awash Bank and Abay Bank are the closest followed ones. Moreover, ROE also differed across banks, CBE indicating fluctuation though on the whole providing a stable trend, particularly in stark contrast to private bank such as WB indicates that the bank needs attention in order to use effectively contribution of equity investors to generate additional profits and return the profits to investors to generate additional level. In addition, Net Interest Margin analysis is a source showing that UB reflecting its ability to generate interest income spread on assets. These

proficiency levels of profitability metrics illustrate a rationale for bank's investment attraction and their involvement in capital market. In summary, the analysis of profit margins across various banks reveals insights into their financial performance and operational efficiency. Banks such as Zemen Bank, Awash Bank and Commercial Bank of Ethiopia consistently demonstrate strong profit margins, indicating effective expense management and sustainable revenue generation. Conversely, banks experiencing fluctuations or declining profit margins, such as united bank may need to reassess their strategies to maintain financial stability. Overall, sustaining or improving profit margins is essential for banks to ensure long-term profitability and competitiveness in the banking sector, thereby making them more attractive to investors and strengthening their positions in the capital market.

When it comes to liquidity, there are a ratio such as Liquid Asset to Deposit Ratio, Loan to Deposit Ratio and Loan to asset ratio which give insight into banks' liquidity situation and is a matter of concern for financial stability. Zemen Banks tends to be always the best compared to the other in terms of LADR which is good for liquidity management. on the other hand, the commercial bank of ethiopia lower LDR means a healthier loan to deposit proportion, which makes the credit to be able to meet the short-term needs. Nevertheless, the loan to asset ratio gives a mixed picture of the liquidity risk as CBE has lower LAR which is a signal of adequate liquidity levels and reduced vulnerability. in the opposite AIB have the highest average indicates that the bank have a face challenge to meet short term obligation in the operation time. These are important aspects of liquidity management because they address the question of the banks' capacity to manage and control cash flows so that they could maintain operations at an optimal level and stimulate demand among investors keen on investments in capital markets.

In this evaluation of commercial banks solvency and risk ratios in Ethiopia, some major measures were studied, including the Debt-Equity Ratio, the Equity Multiplier, the Capital Adequacy Ratio, and the Asset Quality. These ratios enable to analyze the capacity of the borrower or institution to meet long-term commitments, control risks, and maintain financial stability.

Beginning with the Debt-Equity Ratio which shows the proportion of the funding provided by creditors to that contributed by shareholders, Zemen Bank , Abay Bank , and Wegagen Bank

portrayed higher competence as they all had lower DER values, meaning that they are less dependent on the debt and more on equity. On a contrary situation, Commercial Bank of Ethiopia showed the highest DER that signifies more use of debt-financing, thus potentially increasing the bank's risk profile.

The Equity Multiplier measures the value of assets per shareholder equity invested. Higher EM values are favorable because they mean the bank can finance its assets with more equity. The analyzation of EM trends showed banks having different performances during the study timeframe. While some banks, e.g. WB AB and ZB showed a steady ascending trend it indicates that the banks can finance it assets with less debt, others were characterized by ups and downs and indicated weak financial strategies that involved risks. Banks demonstrating strong solvency and effective risk management are more likely to attract investors and actively participate in the upcoming capital market, as these attributes reduce financial risks and enhance investor confidence.

Capital Adequacy Ratio plays a pivotal role in evaluating whether a bank can withstand any potential loss. The highest CARs were recorded for the ZB, WB, and AB banks, which signifies their capacity to compensate shrinkage from risk assets This indicates that these banks are in a stronger position to attract investors and actively participate in the upcoming capital market due to their robust financial health. Nevertheless, CBE showed up with the lowest CAR that could be an indication of weak internal positioning or a limited ability to bounce back. Although CBE fulfils the regulatory demands in the area, its CAR is still slightly behind that of the competitor banks, which suggests a prospective improvement in the risk management is necessary. This lag in CAR could potentially hinder CBE's ability to attract investors compared to its competitors.

Asset quality is the key factor in bank's financial stability and it reflects bank's ability to cope with asset loss. Non-performing loans ratios and loan loss provisions are main tools that are used in order to assess the quality of assets. The banks having a low ratio of the loan loss provisions to total loans compared to those that have a better asset quality compared to the banks with a higher ratio (ZB) of the loan loss provisions to total loans, for example, UB,DB and AB. This superior asset quality positions more attractive to investors, enhancing their ability to participate in the

capital market. Maintaining healthy asset quality is essential for dealing with risks and achieving long-term financial sustainability, which directly impacts a bank's attractiveness to investors.

In conclusion, the conduct of financial performance indicators analysis provides fruitful information on the bought points and the weaknesses of the commercial banks in Ethiopia. Through this understanding of these trends and patterns, all the stakeholders can be in a better position to make purposeful investments and participate in the market as it operates.

5.3. Recommendation

For Investors:

- Investors should consider diversifying their investments across banks that consistently demonstrate strong financial performance. For instance, banks such as Zemen Bank and Union Bank, with their superior Return on Assets (ROA) and Net Interest Margin (NIM), present attractive opportunities. Diversification will mitigate risks and maximize returns.
- Pay close attention to financial stability indicators such as the Debt-Equity Ratio (DER) and Capital Adequacy Ratio (CAR). Banks like Zemen Bank, Wegagen Bank, and Abay Bank, which have lower DER and higher CAR, offer more stable investment options.
- Evaluate banks' liquidity ratios, particularly the Liquid Asset to Deposit Ratio (LADR) and Loan to Deposit Ratio (LDR). Banks with favorable liquidity ratios indicate better cash flow management and lower liquidity risk.
- While financial indicators are crucial, they should not be the sole basis for investment decisions. Investors should also consider qualitative factors such as the bank's management quality, market position, regulatory environment, and macroeconomic conditions. Conducting thorough research and due diligence will provide a more holistic view of the bank's potential for growth and stability.

For Bank Management:

- Banks with lower profitability metrics, should reassess their strategies to improve their profitability indicators. This might involve optimizing cost structures, expanding revenue streams, and enhancing operational efficiencies.
- Banks need to maintain a low ratio of non-performing loans (NPLs) and ensure adequate loan loss provisions. This will enhance asset quality and reduce potential financial instability. Regular monitoring and proactive management of loan portfolios are crucial.
- For banks like the Commercial Bank of Ethiopia with lower CAR, it is essential to enhance capital buffers to meet potential losses. This can be achieved by retaining earnings, raising new equity capital, or improving risk-weighted asset management.
- Performing a comprehensive evaluation of strengths and weaknesses by using financial statement analysis is of the utmost importance. Banks must use their strengths to maximize the opportunities, and at the same time, they should be more active in correcting their weaknesses to respond to risks which will in turn, improve the overall performance.
- Upon the adoption of the capital markets, banks should expect the regulatory changes and update their operating practices as well as risk management accordingly. This will also possibly call for improvement of disclosure regulations, auditing standards, transparency, and alignment with standard capital regulations.

For Policymakers:

- Provide a robust regulatory framework that supports financial stability and investor protection. Ensuring that banks adhere to regulatory requirements, such as maintaining adequate capital and liquidity ratios, is critical.
- Policymakers should facilitate the entry of well-performing banks into the upcoming capital market. This includes streamlining listing procedures and providing incentives for banks that meet high financial performance standards.

Direction for future research

Future researchers aiming to build upon this study on the financial performance of commercial banks in Ethiopia could consider several directions to enhance the depth and breadth of their analysis. First, expanding the scope beyond the eight banks studied here would provide a more representative sample, encompassing a diverse range of bank sizes. Additionally, integrating qualitative research methods alongside quantitative financial data would offer insights into operational strategies, management practices, and external market dynamics influencing financial performance. Contextual analysis of broader economic, political, and social factors impacting banks, longitudinal studies to track trends over time, and comparative analyses with banks from other emerging markets would enrich understanding. Furthermore, investigating the effects of external factors like global economic trends and technological advancements on Ethiopian banks would provide a comprehensive view essential for informed decision-making by stakeholders and policymakers in the banking sector.

REFERENCES

- Abdullah M, (2015). An empirical analysis of liquidity, profitability and solvency of Bangladesh banks: journal of business and financial affairs.
- Addison T, Alemayehu G (2001). “Ethiopia’s New Financial Sector and its Regulation”, Discussion Paper No. 2001/55, World Institute for Development Economic Research).
- Aguenalous, Lahrech. A, bounakaya s, (2017). analyzing the banks efficiency as a measurement of performance in the Moroccan context: application of CAMEL frame work: international review of research in emerging markets and global economy 2017, volume 3, issue 1.
- Afza, T. and Nazir, M. (2009). Impact of aggressive working capital management policy on firm’s profitability. The IUP Journal of Applied Finance, Vol 15:20-30.
- Alemayehu G (2006). “The structure and Performance of Ethiopia’s Financial Sector in the Pre- and Post-reform period with a Special Focus on Banking”, Research paper No. 2006/112,
- Ali, K.; Akhtar, M.F. and Ahmed, H.Z. (2011), Bank specific and Macroeconomic Indicators of Profitability- Empirical Evidence from the Commercial Banks of Pakistan. International Journal of Business and social sciences, Vol.2, No. 6, pp: 237-241, April. Retrieved July 12, 2011.
- Ali, M. (2016). bank profitability and its determinants in Pakistan: a panel data analysis after financial crisis; journal of finance and economic research; volume 1, issue 1.
- Aspachs, O, Nier, E and Tieset, M 2005, „Liquidity, Banking Regulation and the Macroeconomy: Evidence on bank liquidity holdings from a panel of UK-resident banks“, Bank of England Working Paper.
- Baum, C.F., Stephan, A., Talavera,O.(2008). The effects of uncertainty on the leverage of non-financial firms. Economic Inquiry 47(2),216–225.
- Berger, A. N., & Bouwman, C. H. S. (2009). Bank liquidity creation. The Review of Financial Studies, 22(9), 3779-3837.

- Berger, A.N. and Humphrey, D.B. (1997) Efficiency of Financial Institutions: International Survey and Directions for Future Research. *European Journal of Operational Research*, 98, 175-212.
[http://dx.doi.org/10.1016/S0377-2217\(96\)00342-6](http://dx.doi.org/10.1016/S0377-2217(96)00342-6)
- Bischoff, Charles W. (1971). Business investment in the 1970s. A comparison of models. *Brookings Papers on Economic Activity*, no.1: 13-58.
- Bodie, Alex and Marcus (2009). *Essentials of Investments*. The McGraw-Hill/Irwin Series in Finance.
- Chen, Y., Guo, R. J., & Haung, R. L. (2009). Two Stages Credit Evaluation in Bank Loan Appraisal. *Journal of Economic Modeling* 26 (1) 63-70.
- Cherian, S. (1996). Stock market and investment: The signaling role of the market. *Policy Research Working Paper No, WPS 1612*.
- Chowdhury. T. S. (2019). a comparative study of profitability analysis in banking sector of Bangladesh: *Global journal of management and business research: administration and management*, volume 19, issue 8.
- Creswell, J W 2009, *Research design: Qualitative, quantitative, and mixed methods approach*, 3rd ed., Sage Publications, New York.
- Dakito, A. (2015). Assessment of Banking Performance Using Capital Adequacy in Ethiopia. *Economics* (6), 106–111. Retrived from <http://www.sciencepublishinggroup.com/j/econ>
- Daniel Kasahun (February 2024) digitally published on ebc
<https://ebc.et/english/newsdetails.aspx?newsid=5143>
- De Jonghe, O. (2010). Back to the basics in banking? A micro-analysis of banking system stability. *Journal of Financial Intermediation*, 19(3), 387-417.
- Demirgüç-Kunt, A., & Huizinga, H. (2010). Bank activity and funding strategies: The impact on risk and returns. *Journal of Financial Economics*, 98(3), 626-650.

- Ermias, M. (2016). Financial Performance of Private Commercial Banks in Ethiopia: CAMEL Approach. (Master thesis). Addis Ababa University.
- Evanoff, D.D., Fortier, D.L. Reevaluation of the structure-conduct-performance paradigm in banking. *J Finan Serv Res* **1**, 277–294 (1988). <https://doi.org/10.1007/BF00114854>
- Galbraith, J. K. (1987). A History of Economics: The Past as the Present. London: H. Hamilton.
- Gelos, R. G., & Wei, S. J. (2005). Transparency and international portfolio holdings. *The Journal of Finance*, 60(6), 2987-3020.
- Hamdu, K., W/Michael, S., & Yonas, M. (2015). Soundness of Ethiopian Banks. *International Journal of Finance and banking studies* 4(2) 2222-2847.
- <https://www.investopedia.com/terms/c/capitalmarkets.asp>
- Juan L. Espinoza, Harrie Vredenburg. *International journal of economics and business research*, 2010
- Khan, S. (2022). The impact of capital structure on bank performance in emerging markets; empirical evidence from GCC countries. *Financial Internet Quarterly*, 18(1), 56-65.
- kiran, K. (2018). A CAMEL model analysis of selected public and private sector banks in India; *international journal of management, IT and engineering*, vol. 8 issue 8.
- Minyahil, A. (2013). Performance of Commercial Banks of Ethiopia and Global Financial Crisis. (Master thesis). Addis Ababa University.
- Mishkin, F. (2001). The Transmission Mechanism and the Role of Asset Prices in Monetary Policy, Working Paper 8617, Cambridge, MA: National Bureau of Economic Research.
- <https://doi.org/10.3386/w8617>
- Molyneux, P., and Forbes, W. (1995). Market structure and performance in European banking. *Applied Economics*, 27:2, 155-159.

- Molyneux, P and Thornton, J 1992, „Determinants of European Bank Profitability: A Note“, *Journal of Banking and Finance*, Vol. 16, pp.1173-1178.
- Morikawa, M. (2016). Business uncertainty and investment: Evidence from Japanese companies. *Journal of Macroeconomics*, 49, 224–236.
- Mulualem, M. (2015). Analyzing Financial Performance of Commercial Banks in Ethiopia: CAMEL Approach. (Master thesis). Addis Ababa University.
- National bank of Ethiopia 2002-2014, Annual report.
- Olweny, T., & Shipho, T. (2011), Effects of banking sectorial factors on the profitability of commercial banks in
- Raghavan, R. (2003). Risk Management in Banks. Chartered Accountant
- Taker, S, Teker, D., & Kent, O. (2011). Measuring Commercial Banks“ Performance in Turkey: A Proposed Model. *Online Journal of Applied Finance & Banking*, 1(3). Retrieved December 28, 2020, from <http://www.Sciencpress.co>
- Teshome, M. (2015). Evaluating the Financial Performance of Ethiopian Banks Using Financial Indicators-A Case Study on Dashen Bank.
- Tinbergen, Jan. (1938). On the Theory of Business-Cycle Control. *Econometric* 6(1): 22–39.
- Trofimov, Ivan. D, et al. (2018). Determinants of commercial banks profitability in Malaysia: Munich personal RePEC Archive.
- Wang, Y. J. (2002). Liquidity Management, Operating Performance, and Corporate Value: Evidence from Japan and Taiwan. *Journal of Multinational Financial Management*, 12, 159-169.
- Warren Payne, & Zdenek Drabek (2002). The role of financial information transparency in attracting foreign direct investment. *Journal of Financial Economics*, 18(3), 795-793.

Yonas Kefale (April 14, 2024) digitally published on reporter
<https://www.thereporterethiopia.com/39599/>