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A study of financial performance of private banks; Evidence from the case of selected private banks in Ethiopia

By

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Approval of Certification

This is to certify that the project prepared by Araya Getachew entitled "A study of the financial performance of Private banks: Evidence from the case of selected private banks in Ethiopia" and submitted in fulfillment of the requirement for the degree of masters of science in Business Administration compiles with the regulation of the university (college) and meets the accepted standards set to originality and quality.

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List of Tables

List of figures

Acronyms

AQ	Asset quality
AU	Asset Utilization
CA	Capital Adequacy
EM	Equity Multiplier
LM	Liquidity management
MGTE	Management efficiency
NPM	Net Profit Margin
ROA	Return on Asset
ROE	Return on Equity

Contents

Abstract

Evaluating the technical and operational efficiency of banks is a key consideration to assess the performance of banks. Besides making sure optimum level of capital, achieving enough liquidity and allowing appropriate expense management are the key determinant of financial performance of banks. In various studies different methods are applied to evaluate banks' performance. The most common method of financial performance measurement is based on balance sheet and income statement analysis. The main purpose of the study at hand is to evaluate the financial performance of the selected dominant private Banks in the Ethiopian financial market. The study further provided evidence of how the dominant private bank has been financially performing over the course of 10-yearperiod. Audited annual reports from online resource of a total of three dominant private banks covering the year 2013 to 2022 were used in the study. This study applies analytical tools by using ratio analysis and panel data using regression equation based on audited financial statements. The research found out that according to financial ratio analysis tools Awash bank showed a highest performance in the ratios for the period whereas Dashen bank performed better than Abyssinian bank during the period. Furthermore, on both panel fixed model estimations of log of return on asset and Log of return on equity, Liquidity Management and Management efficiency in log form are explanatory variables that are major determinants.

Key words: financial performance, financial ratio analysis, panel data regression

CHAPTER ONE

1.Background

1.1. Introduction

The Ethiopian financial law that was issued in 1963 separated the role of commercial and central banking bringing two separate bodies. Following the regime change of the 1974 the government extended its tight control over the whole economy and nationalizing major corporations (Ermias B. 2017). After the Derg regime was changed, the EPRDF government liberalized the whole economic system. Accordingly, the government declared monetary and banking proclamation of 1994 empowering the national bank of Ethiopia as a legal entity to supervise and license, financial institutions such as banks, microfinance, and cooperative and saving institutions.

Since the mid 1990's entry into the financial market has become easy with focus on technical and financial requirements not as such a decisive and difficult factor to meet. The financial market is gaining considerable low risk factor which attracts sufficient number of participants which could lead to financial progress for the financial institutions. From this point of view the threats of competition from substitute banks is very low or limited from domestic banks. However relatively the low cost of doing the business and low capital requirement does not protect exiting companies from new entrants as there is high level of risk if the competition is open to foreign banks.

The number of financial institutions has increased from time to time with the result the introduction of several private commercial banks were witnessed since 1994 over the past three decades in Ethiopia .The government owned banks were the major dominant banks in the financial sector for nearly two decades in the period before liberalization was taking place in the early1990’s. After liberalization reform of the early 1990's the first private bank (Awash bank) came into picture in the financial sector followed by two other banks Dashen bank and Abyssinian bank. In later years the establishment of several other private banks continue to dominate the financial sector heavily in terms of the equity creation and various measures that assess the performance of banks.

The expansion of private banks is a key to success to assist Ethiopia's economic progress. In the financial sector, one of the major problems being loans are not targeted by taking into account the risk of the borrower and the return of the loan to the lending bank (Abdu M. 2019). This practice inevitably leads to capital to be shifted to inefficient firms and contributes to the build-up of nonperforming loans in the bank's portfolio. (Admassu and Asayehgn, 2014). Moreover, all private banks in Ethiopia use majority of their debt to finance their asset. (Ermias B. 2017). This has huge implications for the banks because the main source of finance for the banks are savings.

In general, financial institutions play a significant role in resource mobilization of economies. They mobilize funds from depositors to investors in a continuous manner to effectively achieve income to be is earned enough to cover their expenditure. (Abdu M. 2019). The financial intermediation function of financial institutions is regarded to play significant role in the economy such that wealth is distributed in the way investors are running their business and equally depositors and customers receive a regulated supply of money in times of their need.

Financial performance of banks in particular has important significance for economic progress. Good financial performance rewards return to investors, while poor performance can lead to loss and crisis which affects economic progress (Ermias B. 2017). Both bank specific factors and macroeconomic situations affect the performance of a bank, while bank specific factors are internal and affect individual characteristics; macroeconomic situations are external factors. Financial performance is thus the direct result of the operational and technical efficiency and effectiveness of the management in making use of the resources achieved in the form of sales turnover, employment, or sock prices (Abdu M. 2019).

Assessing the technical and operational efficiency of banks is thus a key consideration to evaluate the performance of banks as is measured by various performance criteria. Especially the financial aspect of banks is evaluated by using the such measure as the operating efficiency status, liquidity position or debt management and profitability analysis in traditional manner. Management efficiency of banks is a measure of the degree management in using its resource efficiently to achieve the ultimate objective of the business expressed in terms of revenue growth and productivity growth all of which ultimately translate into higher market value of company than its competitors. Technical efficiency on the other hand indicates the performance

of banks in key technical areas rated higher or lower based on standards set on the industry level. Operation efficiency also measures best quality performance in key operation areas of the business.

In addition to technical and operational criteria financial criteria such as profitability measurement is another key performance measurement in assessing the performance of private banks. Banks are said to be profitable if they are earning enough amount of money over and above their expenditure and achieving some level of excess money enough to keep the interest of their shareholders or owners. The following ratios are commonly used profitability indices Return on asset, Return on equity and Net income margin.

Besides making sure optimum level of capital, achieving enough liquidity, and maintaining appropriate expense management are key determinant of financial performance of private banks. (Abdu M. 2019) Especially ensuring optimum level of assets by private banks is important for better operational and technical as well as financial performance of banks. The purpose of this study was to conduct performance analysis of private banks in Ethiopia with respect to these criteria.

1.2. Statement of Problem

In financial statement analysis usually, the task is done to measure financial performance using financial ratios from the data obtained in income statement or balance sheet account or record of banks. The first category of financial statement shows the net profit of a business after deducting all business expenses from the total revenue for a given period. It is prepared for a given period say a month a quarter six months or a year. The second category of financial statement presents the net worth or capital of a business entity indicating the owners record of assets and liability as per a given date.

From financial ratios one of the key performance factor of banks is expense management efficiency measure. It is a degree of how banks are using their operating fund into meaningful purpose. This is such important determinant in evaluating the performance of banks in terms of financial status assessing the level of their operation if they are operating at optimal level of efficiency. It generally describes how the business is managing its expense in terms cost effectiveness of its operation in its various revenue generating activities.

Yet another key factor in assessing financial performance is assessing the liquidity position of banks showing how banks are liquid enough if they have enough level of liquid asset to change or use their fund for various operating activities. If the business has the necessary flow of fund out of managing its resources the business is said to liquid enough in managing its assets or properties.

The degree of solvency or debt management position of banks is one key performance targets of firms in achieving adequate level of financial status so that banks are not indebted to perform their day-to-day operation in a way they are smoothly running their financial well-being. Solvency or debit to equity ratio is the most common denominator or index used in analyzing the financial or debt position of a business indicating the rate of debit effectiveness and its management over time.

The above-mentioned performance criteria are the major indicators in evaluating the performance of banks determining the key performance targets to evaluate or assess the effectiveness of the minimum level of financial position of banks in the world in general and in Ethiopia in particular.

Evaluation of performance of banks in terms of their financial wellbeing has attracted increased attention since recently (Muhabie, 2015 cited by Abdu M. 2019). However existing literatures did not show accurately how the performance of banks is affected by the determinant factors (Abdu M. 2019). There is still little evidence how performance analysis aimed at evaluating bank specific factors affect selected banks with conclusive facts.

A growing volume of past studies has discussed the importance financial sector for economic progress. In this regard the studies conducted on banks have focused on evaluating the performance of several different private banks that has wide performance measurements criteria and diverse period of study coverage. Besides data on financial performance of private banks are acquired mainly through income statement and balance sheet data.

This study here covers private banks which has operated for the last 10 years period covering from 2013-2022. The purpose of the study is to investigate the performance of selected private banks in Ethiopia. This is done in two ways firstly through financial ratios. Furthermore, panel

data analysis is applied to the ten-year data of profitability index or financial measure applying different models for return on asset and return on equity measurement. Cross section analysis of the bank's profitability performance measured in the dependent variables across time is analyzed over the ten-year period to indicate the profitability performance of the banks over the last decades. The factor or determinant will be the performance targets in terms of liquidity position debt management, asset quality, capital adequacy and expense management efficiency.

1.3. Objectives of the study

The main objectives of the study were to investigate the performance of selected private banks in Ethiopia for the period 2013- 2022 with the following specific objectives

- Analyze the profitability performance of the selected banks
- Analyze the liquidity performance of the selected banks.
- Analyze the solvency or debt management of those banks
- Analyze the factors affecting the return on equity of those banks
- Analyze the factors affecting return on asset of those banks

1.4. Research questions

The following research questions were analyzed in the course of study

1. How are the profitability ratios of the selected banks during the period performing
2. How is liquidity ratio of the selected banks performing during the period
3. How is the debt ratio of the selected banks performing through the period

1.5. Research Hypothesis

The hypothesis that was investigated in the study is summarized below

1. There is negative and significant relationship between capital adequacy ratio and financial performance pf private banks in Ethiopia
2. There is positive and significant relationship between asset quality ratio and financial performance pf private banks in Ethiopia
3. There is positive and significant relationship between liquidity management ratio and financial performance pf private banks in Ethiopia
4. There is negative and significant relationship between management efficiency ratio and financial performance pf private banks in Ethiopia

1.6. Significance of the Study

Banks have a unique role in the economy sector in that consumers save their money in banks so as to grow their wealth. At the same time borrowers want to use this money to invest which helps fuel economic activity. In other words, banks use consumer's saving to become lenders to these borrowers. Thus, banks are the optimal mechanism for the economy to carefully balance the needs of savers or lenders and borrowers.

Bank runs can happen when too many customers demand more money from the bank than it currently has on hand since banks don't actually hold all of their reserves in liquid form. As a result, banks are the finest economic entity for determining whether a borrower is creditworthy and, consequently, for choosing which investments are suitable for society's money.
However, if lenders seek their money back because they need it for an unforeseen scenario, it may cause problems for the bank. As a result, the bank may fail since the data it holds regarding customers' credit worthiness may be lost. The lack of information limits chances for economic growth by making it more difficult for society to direct savings toward the best investment options

For smooth functioning of financial institutions, the need to be profitable and become financially viable is vital. For long term sustainability of the financial institutions in general and for banks in particular the need to be able to generate adequate income in the form of interest and commission to result in enough profit to supplement smooth running of the business in addition to meeting the operating expense of the business and owners or shareholder's interest is essential. Thus, the need to study the financial performance of banks arise.

1.7. Scope of the study

In various studies different methods are applied to evaluate banks' performance. The most common method of financial performance of banks is based on balance sheet and income statement analysis. The main purpose of the study is to investigate the financial performance of the selected dominant private banks in the Ethiopian financial market. The research plans to provide evidence of how the banks has been financially performing over the course of 10-year period. Audited annual reports of a total of three dominant private banks covering the year 2013 to 2022 were used in the study.

This paper uses analysis of financial information by using ratio analysis and panel data using regression equation based on their general audited financial statements. The research further used four types of performance measurement based on financial ratio; profitability performance, liquidity performance, debt management and asset adequacy. The paper investigates the statistically significant effect of financial factors on profitability performance of selected private banks in Ethiopia measured by ROA (Return on asset), ROE (Return on Equity).

CHAPTER TWO

2. Literature Review

2.1. A brief History of Ethiopian Banking

The history of modern banking dates back to early nineteen when the first bank was established under the name of Abyssinian bank. Other foreign banks also entered into the Ethiopian market in subsequent period. In 1931 the Ethiopian government purchased bank of Abyssinian and changed the name with Bank of Ethiopia to be the first national bank on the continent. However, it was not until the 1960's that a stable and rapid financial sector development took place in the country.

Thus, the development of modern banking system took one of the following phases or stages in the country.

1960-1974

During this period the Bank of Ethiopia was operating as both a commercial and a central bank entity until when it was remodeled into today's National Bank of Ethiopia and the Commercial Bank of Ethiopia. The former assumed the central governing functions while the latter took up commercial banking role of the old bank.

Additionally, there were privately held banks functioning alongside the government-controlled Commercial Bank of Ethiopia, and banks with foreign equity ownership, was also in existence. In addition to commercial banks, there were special financial institutions that provided development and mortgage financing

1974-1991

All privately held financial institutions in Ethiopia were nationalized after the communist revolution and a state-owned mono bank system was developed as a result. The remaining

privately owned commercial banks were nationalized and amalgamated into the Commercial Bank of Ethiopia since they were relatively small.

During this time the nationalized banks were formed into one commercial bank (the Commercial Bank of Ethiopia), and a national bank was recreated in 1976. Besides the Development Bank of Ethiopia (DBE) and the Construction and Business Bank (CBB) and one insurance company (Ethiopian Insurance Company)—were formed. (Dereje A. 2018)

Post 1991 period to present

Along with the publicly owned financial institutions, new privately held ones were also permitted to operate. However, the government was certain that foreign banks would not be permitted to operate in Ethiopia, not even as small partners with Ethiopian banks. The main institutional change that was proposed in the earlier period was very much less radical than elsewhere in Africa.

2.2. Current status of Banking Industry In Ethiopia

In Ethiopia various banks have been in the seen in the financial market contributing significantly to the growth of the industry. The commercial bank of Ethiopia has been in the forefront bringing the idea of competition in the banking industry. After engaging in the banking Industry for 50 years ago through the directive under the government control commercial bank has been dominating the financial market and has been the local leader in the market. Similarly, there has been several banks entering and controlling the market since 1994 after the proclamation by the government was issued.

According to new report by Ethiopian Business review there are more than 30 banks in the country competitive in the local market for banking service operating with more than 10000 branches. They have dominantly replicate for positive benefit of the traditional saving and credit institutions that has been operating for years and years now. It is now a new trend in Ethiopia with several private banks making their presence felt in the country and experiencing a sharp rise spurring up in the opening of new branches across the country.

The report showed the Ethiopian banking sector grew in financial growth indicators such as asset, capital deposit loan distribution and loan collection. The report also indicated total bank deposit average at ETB 1.7 trillion in 2022 bringing Ethiopia's deposit to GDP ratio to 26 Pct the average being 56 Pct for low- and middle-income economies. In particular it is viewed that public development banks should do more to combine their resources with those of private sector.

2.3. The current Regulatory framework of Banking in Ethiopia

In recent period Ethiopia is making monumental reforms in the financial sector. The country's plan to smoothly transition into middle income economy must be backed by a strong financial ecosystem. The National Bank of Ethiopia in this regard need to exercise broader financial regulation across the banking sector.

There are two opposing views about financial regulation; the financial repression view regards financial regulation such as interest rate as a control mechanism and whereas the liberalization view on the other hand considers financial liberalization as important policy tool to increase competition in the financial sector (Mekonen K, et al 2014).

The government of Ethiopia took wide range of steps and considers financial liberalization as gradual process. (Mekonen K, et al 2014). Considering liberalization of banking sector as one pillar of nation's economic growth the government is introducing several reforms and among them is the comprehensive reform for allowing foreign banks to enter the financial sector particularly Kenyan Banks to operate in Ethiopia. For this reason, the government started actions to amend half a century old financial code which to ease out restrictions on foreign banking making investment in Ethiopia (Ethiopian Herald March 31, 2022).

2.4. Theoretical Evidence on Financial ratio Analysis

Tsiyon S. 2017 in her study described the fact that financial performance analysis is the process of identifying the financial strength and weakness of the firm by properly establishing relationship between the items of the balance sheet, profit and loss account. The items of balance sheet include the asset, liability, capital whereas the items of profit and loss account include operating income and operational and regulatory expenses and profit or loss. The nature of analysis will differ depending on the nature of the analyst.

Suppliers of long-term debt perform analysis concerned with the longterm solvency and survival. They analyze the firm's profitability over time and its ability to generate cash to be able to pay interest and to repay principal (Tsiyon S. 2017). Suppliers' responsibility in general is to ensure the goods and services they deliver are timely available for the normal or smooth running of its operational functions.

On the other hand, long-term creditors perform analysis on financial statement. But they put more emphasis on the firm's project or performance of the financial statement to make analysis about solvency and profitability of institution (Tsiyon S. 2017). Creditors are also interested about the risk associated with borrowing potential of their customers in a way that the fund they allocate to these firms are generating adequate earning in terms of interest.

According to Tsiyon S. 2017 investors who have invested their money in the firm's earnings. concentrate on the analysis of the firm earning ability and future ability. They focus on the analysis tools measuring the existing and potential profit generating capability of a firm. Profitability analysis tools such as ratio analysis are important in this regard.

Management of the firm will be interested in every aspect of the financial analysis. It is the overall responsibility to see that the resource of the firms is used more effectively and efficiently and that the firm's financial condition is sound (IM PANDY, 2002). Management of a firm are highly concerned about the internal and external factors affecting the ability of firm to use its resources to generate adequate income for its normal activity.

The term "ratio analysis" comes from the Latin word for "ratio.". reason, ratio, and rational relation are some of the many English equivalents to the Latin word. A ratio is typically described as "the indicated quotient of two mathematical expressions.". Furthermore, a ratio can come about when a number is divided by another and when two things are compared to one another (Tsiyon S. 2017).

An operational definition of a financial ratio is the relationship between values, according to Tsiyon S. 2017. According to her a relationship implies comparing two values mathematically leading to the creation of a financial ratio. For ratio use indexes, this numerical comparison is crucial. By financial managers and other interested outside parties, they are used to make quantitative judgments about the bank's financial wealth and analysis of the company.

As a tool for identifying and assessing performance trend, financial ratios also provide a ready comparison of financial performance and condition over time. It serves as a general guideline for future financial and operational decisions in order to prevent disastrous outcomes from other mechanical interpretations when management is under-informed or presented with ambiguous information (Phillip R. Davies, 2009). Financial ratio users are able to assess whether current financial conditions are favorable or not.

The financial analyst employs a set of criteria to assess the bank's financial health and performance. One of the ratios they frequently use is the ratio of their competitors. It compares a company to the same, carefully chosen firms, particularly to its most forward-thinking and prosperous rivals at the same time. Industry ratios are projected ratios created using the project or perform financial statement of the same firm and ratios specific to the industry to which the firm belongs (IM PANDY, 2002).

There are as many as 429 businesses ratios, according to some authors. However, specific ratios should only be chosen based on the nature of business concerns and the environments in which they operate (IM Pandey, 2002). The number of ratios should be kept to a minimum with all possible diligence. Different categories can be used to categorize financial ratios.

Financial ratios may be categorized as a based on their significance. The first ratio is primary ratio. Operating profit to value of production, cost of production to value of production, and net sales to capital employed are some of the ratios that are included under primary ratios. The following ratios are typically included in the secondary ratios categories: direct material cost to value of production; direct material per factory employee; output or work per factory employee; and goods for sales per factory employees (Tsiyon S. 2017).

According to their sources, ratios can be divided into three categories: combined ratios, income statement ratios, and balance sheet ratios. Ratios that express the relationship between items taken from the balance sheet are known as balance sheet ratios. Examples include the debt-to-equity ratio, current assets to current liabilities (also known as the "Quick Ratio"), and others. Gross profit to sales, net profit to sales, and operating ratios are a few examples of

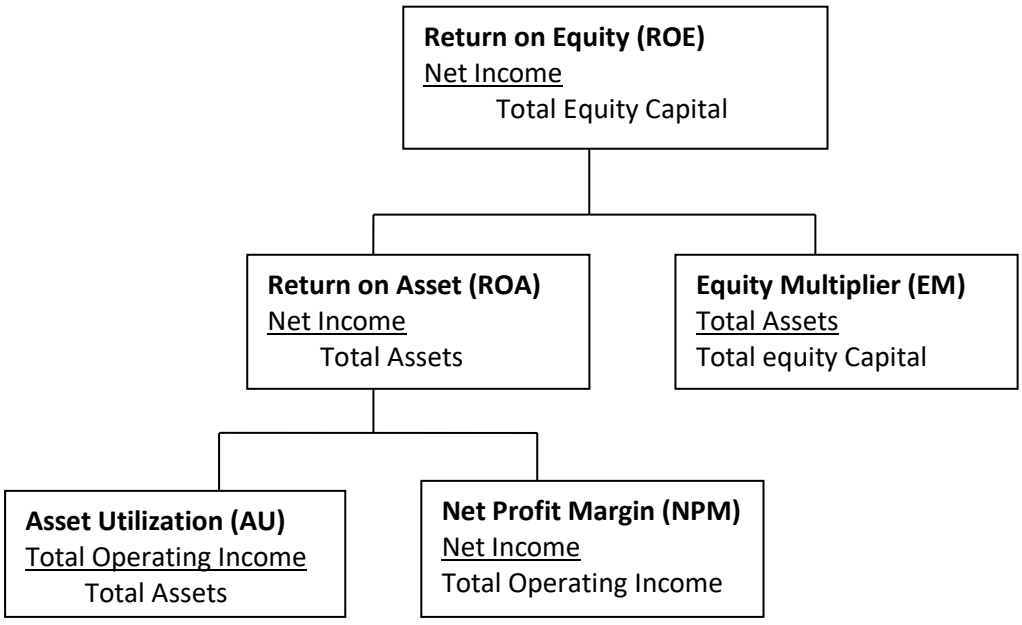
the ratios that deal with the relationship between items of the profit and loss account. The ratios known as combined ratios show the relationship between two figures, one taken from the income statement and the other from the balance sheet. Activity ratios, also known as turn over ratios, return on capital employed, and return on shareholders' equity are also few examples. (Tsiyon S. 2017).

According to the nature of the items or the relationship with which ratios are explained, according to the same author, ratios can be categorized. Ratios can also be categorized as financial ratios and operating ratios. The topics covered by financial ratios are non-operational items that have a financial nature. Examples of this include equity debt ratio, quick ratio, and current ratio. The relationships between the components of the company's operations are explained by the operating ratios. Examples include ratios measuring turnover or activity, earnings, and expenditures.

According to Tsiyon S. 2017, the most significant and widely used classification of ratios is based on the function or purpose that each ratio is expected to serve. They comprise the profitability ratio, activity ratio, solvency ratio, and liquidity ratio. In addition, they are known as fictional ratios.

2.5. Performance Indicators of Banks

Figure 1. Performance indicators



Solvency or debt management (Liability ratio)

This is a measure for survival of organizations. Banks involve in certain amount of risk for their long run survival of business usually the solvency or debt risk measures their performance against their debt conditions. If a bank has got excessive amount of bad loans or its market is declining its capital will be limited to absorb such loss. If in certain conditions the depositors become uninterested to lend their money in large number the bank may be declared to be in a position of solvency.

To evaluate the solvency risk equity capital is measured against to total asset. When the ratio declines the bank may be said to be at higher risk of solvency. Other measure of solvency risk includes the comparison of equity capital against risk assets taken as a ratio. Risky assets generally include loans and securities and plant asset and any intangible asset associated with the existence of bank such as good will (Bezabih S. 2006).

Liquidity risk (Current ratio)

This is the measure of uncertainty associated with the ability of banks to meet sudden bulk amount of withdrawal. Banks may face a certain amount of risk when the borrowing capacity of the bank to meet deposit withdrawal is at risk. Under such conditions banks may be forced to meet their emergency needs by borrowing. This has led to banks to be in short of the cash when they borrow their liquid cash from other banks (Bezabih S. 2006).

This borrowing of cash has certain level of risk because banks have to borrow cash at higher interest rate than the rate at which other banks are borrowing money. This is a significant level of decline in the liquidity which may cause the banks to pay higher interest rate. Banks use the following indicators of liquidity the ratio of net loans to total asset and the ratio of cash asset and government securities to total asset (Bezabih S. 2006).

Credit risk (asset quality)

This is the measure of uncertainty associated with collection of loans. It is the probability that its assets especially loans will go down and become worthless. It is generally a relatively small percentage of total loans that relatively gets bad to make banks susceptible to failure. There are various ratios that help to calculate the credit risk of a company. The ratio of provision of bad loans to total loans is the most measures to assess the asset quality. While charge off or bad loans are loans against which the banks have declared worthless. The ratio of provision for bad

loan to total loans indicates the extent to which the bank asserts its position or makes allowance for loan loss or bad loans (Bezabih S. 2006).

Capital adequacy (capital ratio or capital structure)

It is a minimum level of capital the bank is expected to meet to assume its operations. The method to measure capital adequacy is constructed by various model. It is adequacy of banks structure where the banks' capital is adequate enough to enable it to meet all of its liability to depositors and other creditors. One important measure is the ratio between capital and the bank asset. The formula for measuring capital adequacy is given by the ratio of shareholders equity to total assets. Alternatively, as the item of balance sheet carry different level of risk it can also be compared as the measurement of shareholders equity against weighted risk asset multiplied by 100 where the weighted risk asset is the sum of bank asset in different class where there are n class of asset times capital coefficients.

Equity Multiplier

This is one measure of banks performance that shows the extent to which the existing assets are supported by capital. It reflects a direct measure of financial leverage of the bank (Bezabih S. 2006) It shows the extent to which the bank's resources must be backed by a debt. Each equity absorbs losses on the assets the higher the multiplier the greater the business is exposed to failure. However, the more the banks potential to produce high return for its shareholders the higher the multiplier.

Return on equity

This ratio measures the amount of income obtained from the investment or the capital. It is a measure of return to banks shareholders or owners measuring a net benefit that the owners are receiving from their investment on the bank. This ratio compares the net profit of the bank with total equity. Higher return on equity increases the market value the bank in the market and the owners also expect higher profit out of it.

Return on Asset

This is another indicator of bank profitability performance. It is a measure of earning potential or return to banks as a result of banks activity which is expressed in terms of its asset. It compares the net profit against the total asset as a ratio. In other way, it is expressed as profit for a given unit of asset which indicates the measure how the bank's assets are converted into profit. It is important to note as the asset level goes down, it is probable that return on asset will decline.

Efficiency

Generally, there are two types of efficiency measures that the bank used to assess its performance. The first measures the banks performance in terms of operating efficiency or technical efficiency which is related to banks internal operation or activity. The second is allocative efficiency or price efficiency which measures how the banks resource are being used in the most highly valued manner (Bezabih S. 2006).

Yet another efficiency measure is the efficiency the management is able to achieve the desired objective of the organization. This indicates how much the management is converting its asset into net earnings. The higher the ratio implies management is able to generate more income with its available resource. The return on asset is an example of this efficiency measure.

Asset Utilization

This is a measurement of the ability of a bank to use asset to earn its income. This ratio shows how far the bank is utilizing its asset to generate income from its operating activity. It is given by the ratio of total operating income to total asset. The higher the income potential that the bank is able to generate for each unit of asset, the higher the profitability of the bank will be. High values for these ratios show that the assets of the bank are efficiently used to earn adequate profit. (Bezabih S. 2006)

2.6. Review of previous empirical studies

The elements that may have an influence on the financial performance of six private commercial banks in Ethiopia from 2011 to 2017 were examined in the study by Abdu (2018). Descriptive statistics, the Pearson Correlation Coefficient, and multiple linear regression were

used as analytical tools. In this study, the dependent variables are return on equity and return on asset. whereas the independent variables are bank size, liquidity management, asset quality, management effectiveness, and capital sufficiency. According to the study, enough capital, effective management, and bank size all positively and statistically significantly affect profitability.

The study by Melaku et al 2017 analyzed the financial performance of banks using CAMEL analytical method. The study assessed six banks using 10 years data obtained from financial reports. Interesting feature of this study was the inclusion of additional dependent variables measurements. The study analyzed using both descriptive and panel data analysis model to measure the impact of CAMEL elements on profitability indicators such as return on equity and return on asset. The study also revealed that NIB bank rated the highest performing bank, while Awash bank and Bank of Abyssinia rated the least.

Privately owned banks that have been in operation since 2005 for a total of eleven years are the subject of an Ermias 2017 study. To demonstrate the relationship between the four performance measurements—profitability, liquidity, debt and credit measurement—the study used a descriptive analysis with ratio tools and Pearson correlation. According to the study's findings, privately owned banks generally performed profitably and had adequate liquidity, but a substantial percentage of their loans were locked into non-liquid assets.

Financial ratios can be used to investigate a company's profitability and assess the "quality" of its earnings, according to a study by Ashenafi et al. from 2014. The top seven Ethiopian commercial banks' financial reports for the years 2009 to 2012 were analyzed in the study. The study's findings showed that Commercial Bank of Ethiopia had the greatest return on equity during the study period, however this was primarily due to its high levels of borrowing. Wegagen Bank had the most consistent earnings throughout time, whereas Dashen Bank consistently improved during the study period.

Research conducted in 2010 by Yesuf looked at the Commercial Bank of Ethiopia's financial performance before and after liberalization. The study used a before-and-after case approach to look at the bank's financial performance before and after liberalization. The study included

both primary data from the chosen employees and management who worked in a variety of bank operations and secondary data from the Commercial Bank of Ethiopia's audited annual reports for the study period between 1976 and 2009.The major finding of the study is the fact that performance of the bank after the liberalization is in a better position than before liberalization period. Finally, the study showed that the bank should do its level best to further improve its performance and further reform measures should be divisive like lifting the minimum interest rate, modifying the commercial code to incorporate new article, and attempt to fully liberalize the foreign banking market.

A study by Elisabet J. et al. (2017) demonstrates how panel data analysis can be used to evaluate the current condition of companies listed on the Bucharest Stock market while taking into account determining factors. Return on equity is a tool for evaluating financial performance. Return on assets and financial leverage are two major determining factors that have been proposed in the research. In this study, panel data analysis was performed to two case studies with fixed and random effects model. Based on the outcomes of applying the model test one of the two types of models was chosen. The study covers Romanian businesses that were listed on the Bucharest Stock Exchange (BSE) between 2006 and 2015.,

A study by Sheaba R.et al (2017) examines Nine banks, two from the public and seven from the private sectors, from all commercial banks that began doing business before 2005.The factors that affect their performance were determined to be both bank- and industry-specific factors. The return on asset was chosen as the dependent variable. From the annual audited financial accounts, a panel data set spanning 11 years was collected. Different analytical tools have all been used in the data analysis process. From the independent variable capital adequacy, asset quality, managerial efficiency, earnings ratio, and liquidity ratio, are statistically significant predictors on the performance of the banks. Although the sector growth rate was determined to be statistically negligible, this suggests that it had little impact during the study period (2005 to 2015)

One of the major research questions examined in the study by Lelissa T. (2019) was how external influences connect to bank performance. The study has established a panel regression model including explanatory factors from the banking and macroeconomic sectors. Three dependent performance indicators, including two relating to profit and the third being a pricing

model, were used to run the regression model. In the majority of the models, the chosen variables have developed a link with performance. The outcome demonstrated that factors outside of management's control affect bank performance. These include the macroeconomic conditions like trade balance and economic development. Performances are also impacted by factors relating to the sector, such as the rate of market expansion and availability of cost-saving deposits. The study has thus disproved the claim that external influences (macroeconomic and sector-specific) have no bearing on performances.

A study by Jan Horas V. et. al (2019) evaluates how asset management affects financial performance. This study uses a single independent variable and appears straightforward. After evaluating a number of other factors, the optimal model is chosen, and fixed asset turnover (FATO) is the more pertinent variable to explain the dependent variables. The panel data analysis used in this study spans the years from 2013 to 2017 and includes six companies. According to the findings of hypothesis testing, FATO is an independent variable that significantly and positively affects ROA. This indicates that in order to increase the company's profitability, asset management is required.

Gudata A. 2015 examines financial performance over a five-year period (2007-2011). Commercial bank of Ethiopia takes the top spot for managing assets, while Awash International Bank tops the list for profitability performance. The final finding explains why commercial bank of Ethiopia is bottom in terms of managing liquidity. Last but not least, of all the sample banks under consideration, United Bank, a privately held bank, placed highest in terms of solvency and risk management.

The study by Abebaw K. 2014 assesses Ethiopia's financial and banking sector. ANOVA and Kruskal-Wallis tests, as well as statistical techniques like percentages, growth rates, mean values, have been employed. The ratios of total financial assets to GDP, deposits to GDP, loans to GDP, and loans to deposits all show a rise in financial intermediation over the research period.

Using panel fixed effects, a study by Ayalew Z. (2021) investigates the relationship between capital structure, and profitability of private banks in Ethiopia for the period between 2013/14 to 2018/19. In the study, 16 private banks were surveyed. According to the findings of the

regression analysis, changes in bank profitability are mostly explained by variations in capital structure factors and some bank-specific characteristics. Greater ROA and net interest margin profitability metrics are frequently linked to comparatively larger total and short -term debt ratios, and credit risks. In terms of profitability, older banks are in a satisfactory position than their younger ones. At least for the ROA model, it is discovered that the influence of size is notably negative, suggesting that Ethiopian private banks are not operating at their full potential.

A study by Akpotor V. et.al 2020 found out how capital sufficiency affected the financial statements of five banks that were randomly chosen and implemented the ex post facto methodology, producing a total of 50-year end observations. To determine the descriptive, correlational, and regression statistics, the data were evaluated. The study's findings suggest that shareholders' equity and loans and advances have a favorable and significant relationship with financial performance. The study also found a negative and substantial correlation between client deposits and financial performance and came to the conclusion that listed deposit money banks in Nigeria perform better financially when they have adequate capital in place.

Vasani S. (2020) assess the performance of a few Indian private sector banks. Eight private banks were chosen as a sample for the study. The minimum and maximum Net Profit Ratio, Descriptive Statistics, and One-Way ANOVA test are the statistical techniques used in the study to assess the performance of the banks. The study's timeframe is between 2011–12 and 2018–19, and all secondary data were used to create this analysis. The study's findings show that the selected banks' net profits differ significantly from one another.

Tamilarasu S. et al (2022) in their study attempts to derive a comparison between the financial performance of the public and private sectors concerning internal and external factors that influence the overall performance of the banking industry. The study might prove helpful in reinforcing the central policies and identifying factors that are adversely affecting performance so that banks can equip themselves in a better way to counteract any financial shocks that may occur in the future. The goal of this research was to examine the financial performance of a few public and private sector banks from 2017 to 2021. The study concluded that both public sector banks and private sector banks need to focus on decreasing their non-performing assets

as they seriously dent the profitability of banks by affecting its revenue. Banks need to work from the perspective of improving revenue and also cutting expenses if they wish to reinforce their banking performance.

A study by Syed Q. et al (2014) dealt with financial performance of private banks in Pakistan. The data is collected from financial statements analysis of financial Sector issued by State bank of Pakistan. The sample size consists of top ten private commercials banks of Pakistan. They used regression analysis and correlation technique in order to address the issue. Bank size and Operational efficiency is negatively related with ROA and positive relationship was found with Assets management ratio. While, Bank size is positively related with Interest Income and Asset Management and Operational Efficiency is negatively related with Interest Income.

C Vanlalzawna (2016) studied the financial performance of four selected banks in India using CAMEL supervisory rating Model had been employed in the study for rating the. In the present study, the researcher has attempted to evaluate two major public and private sector banks in India in a comparative analysis using accounting tools of ratio analysis and five key indicators of CAMEL Model. Data for the study has been collected over a period of ten years from 2005-06 to 2014-15, from respective annual reports.

2.7. The conceptual framework of the study

The study is organized in such a way the performance of banks is expressed as profitability indicators on one hand and the determinant will be the performance targets in terms of banks liquidity position debt management, asset quality, capital adequacy and expense management efficiency to affect the profitability ratios on the other hand.

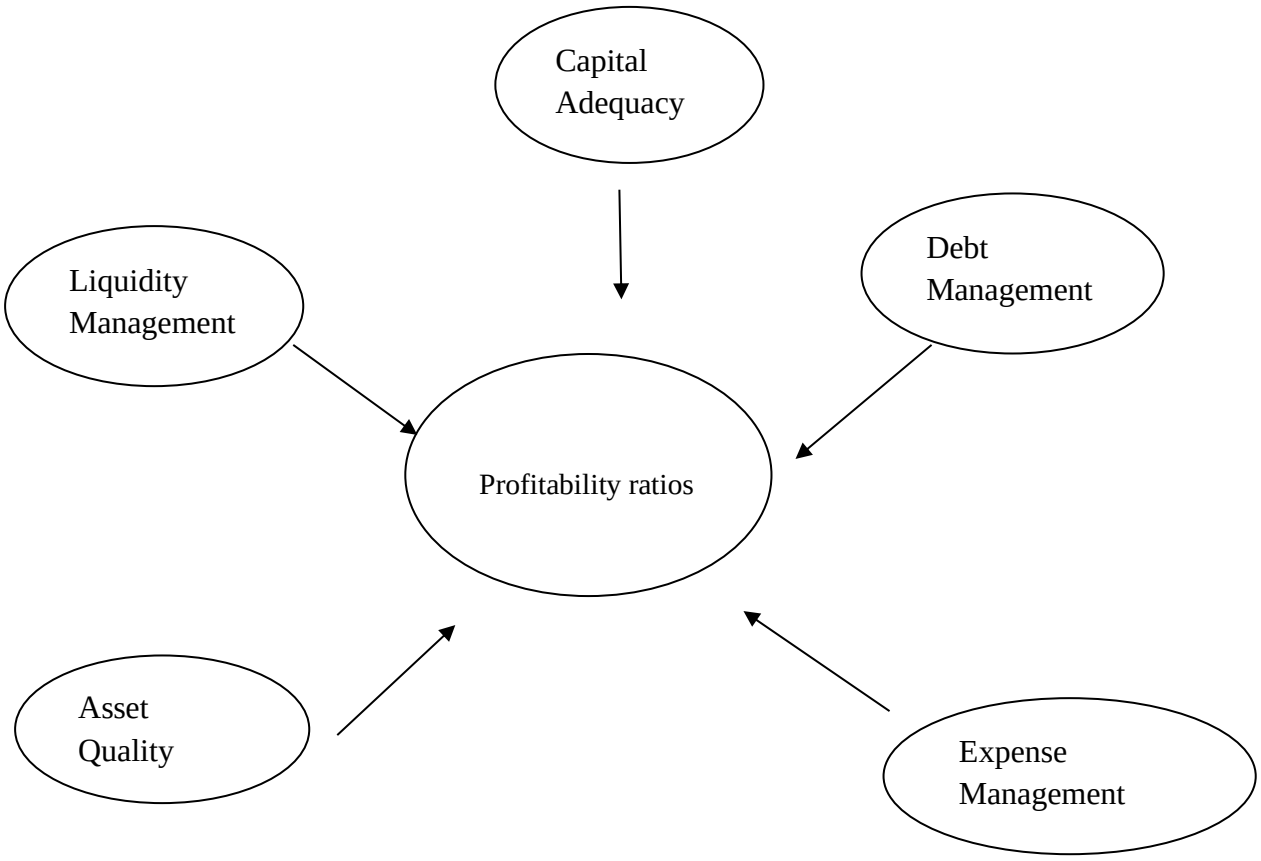


Figure 2: Conceptual framework of the study

CHAPTER THREE

3. Research Methods

3.1. Research design

The research approach of this research can be considered as hypotheses testing type, because it will test the different hypotheses formulated, and it can also be of descriptive type of research design since it describes the association between bank's performance and its major determinants obtained from data in the form of the annual report of banks.

3.2. Target Population and Sample Design

The target population was 28 private banks which were operating in the banking businesses in Ethiopia. The study used a sampling technique to purposively select 3 banks based on the years of the establishment. The banks which were established after 1996 were not included in the study because the study included those dominant private banks that are prominent based on revenue growth and wealth accumulation during the last two decades.

3.3. Data Source

The study is conducted based on the data from audited financial reports. The study depends on second hand data source. Those data are collected from online sources obtained from official website of the selected private banks.

3.4. Method of data analysis

The collected data was analyzed using statistics tools like mean, percentage, and ratios. Besides, panel regressions were estimated to investigate look into the relationship between dependent and independent variables using GRETL application software.

3.5. Descriptive Statistic Analysis

The study included the data and the variables including profitability measurements, liquidity management, capital adequacy, asset quality and management efficiency for the observation of the three banks taken over the entire time period from 2013 to 2022.

3.6. Econometric Analysis

Regression Model Specification

Two models were used in the study with one dependent variable and four similar explanatory variables each. A sort of legitimistic transformation of the model was done for panel estimation of the model A fixed effect model estimation of return on asset and, return on equity is given below.

$ROA_{it}=\beta_o + \beta_1 CA_{it}+ \beta_2 AQ_{it}+ \beta_3 MGTE_{it}+ \beta_4 LM_{it}+\epsilon_{it}$……**Model 1**

$ROE_{it}=\beta_o + \beta_1 CA_{it}+ \beta_2 AQ_{it}+ \beta_3 MGTE_{it}+ \beta_4 LM_{it}+ \epsilon_{it}$……**Model 2**

Where,

ROA_{it}=Return on Asset of the bank i in year t

ROE_{it}= Return on Equity of the bank i in year t

β_o= Constant

ϵ_{it} =Error term where i is cross sectional at year t

$\beta_1, \beta_2, \beta_3,$ andβ_4 are coefficients indicating the rate of change of financial performance as of the independent variables

CA_{it}=Capital Adequacy for Bank i in year t

AQ_{it}=Asset quality for Bank i in year t

$MGTE_{it}$=Management efficiency for Bank i in year t

LM_{it}= Liquidity management for Bank i in year t,

And t= 2013 -2022

Definition of variables and their measurement

List of variables	independent variables and their measurement
Capital Adequacy (CA)	Total capital /total assets
Asset quality (AQ)	Provision for doubtful loans/ Total loan
Management efficiency (MGTE)	Total expense /Total income
Liquidity management (LM)	Loan deposit ratio (Total loan / total customers deposit)
	Dependent variables
Return on Asset (ROA)	Gross profit /Total asset
Return on Equity (ROE)	Gross profit / Total Shareholders' equity

CHAPTER FOUR

4. Data Analysis and Interpretation of the Study

The main purpose of this chapter is to analyze data taken from Annual report of selected private obtained from banks website. The data was analyzed with statistical tools such as mean median and standard deviation as calculated in the following section.

Table 1 : Summary Statistics, using the observations

Variable	Mean	Median	S.D.	Min	Max
Loan deposit ratio	0.688	0.678	0.118	0.531	0.929
Capital Adequacy	0.121	0.122	0.0145	0.0831	0.154
Asset quality	0.0102	0.0118	0.00547	0.000319	0.0213
Management efficiency	0.676	0.653	0.0778	0.553	0.810
Return on Asset	0.0315	0.0319	0.00706	0.0190	0.0447
Return on Equity	0.2647	0.2673	0.06563	0.1467	0.4065

The mean and median figure for Loan deposit ratio is highest ratio from all observations followed by the management efficiency value of the observations. The standard of deviation is highest for loan deposit ratio followed by management efficiency value and return on equity.

4.1 Financial Ratio Analysis

The financial ratios, which have been selected to evaluate the financial performance of the selected private bank in Ethiopia are ratios such as liquidity performance, debt management, capital adequacy and profitability indicators. In this study, a time series observation of 10 years (2013-2022) financial performance of the banks is compared by using different ratio analysis.

4.1.1. Liquidity Management ratio

Analysis of liquidity management ratio expressed as the ratio of total loan to total deposit for the three banks for the ten-year period starting from 2013 to 2022 was done in the following figure. The analysis shows that Abyssinian bank has shown a highest liquidity ratio in the end of the period followed by Awash and Dashen Bank. In the beginning of the period in 2013 has shown similar liquidity ratio in all of the three banks. The ratio was steadily increasing from the starting period for Awash bank while it showed some stagnation in the initial period of the ten year and later a sharp increment in the ratio in the following period for Dashen Bank. Similarly, the ratio has shown a decline in the beginning of the ten year and then a steady increment in the ratio in the period afterwards.

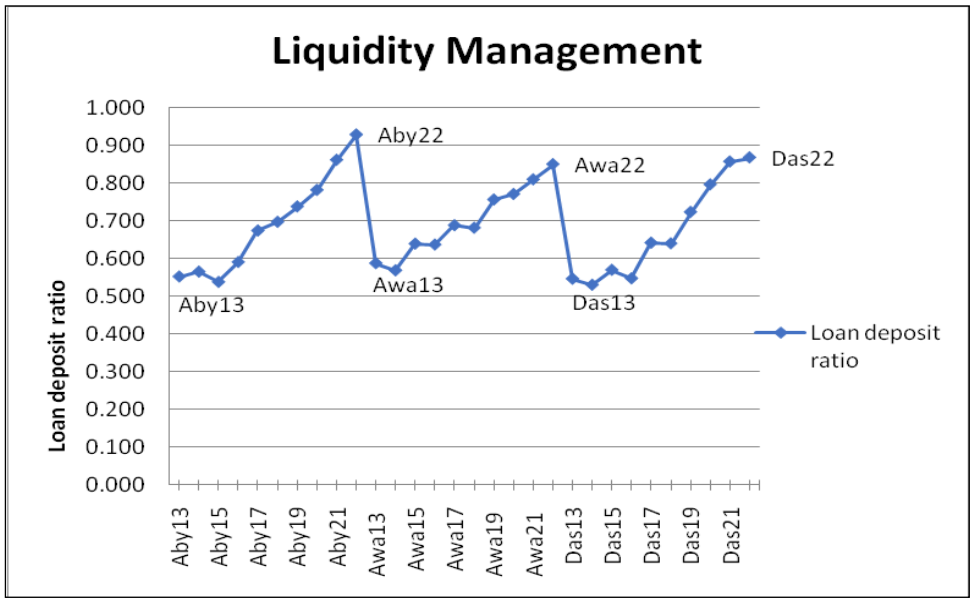


Fig.3 Time series graph for Liquidity Management for the period 2013-2022

The analysis further shows that the liquidity ratio is showing a general increasing trend throughout the period indicating that the loan granted to different borrowers is increasing relative to the deposit the customers are saving for all the banks in consideration. Thus, banks need to take appropriate measure to reduce or sustain their liquidity ratio so that banks could solve their liquidity problem at times they face low deposit.

4.1.2. Debt Ratio

Analysis of debt management as expressed in the ratio of total liability to the total asset is detailed in the following figure. The debt ratio has reached highest level for Abyssinian Bank and lowest for Dashen bank throughout the ten-year period. In the meantime, it has declined and returned to some high level in the middle of the period and further declined afterwards and returned to pick period at the end of the period. For Awash bank the debt ratio has been suppressed throughout the period with some highs recorded in the middle and end of the period. For Dashen bank the debt ratio has started at some high level and declined in the middle of the period then returned highest ratio near the end of the period.

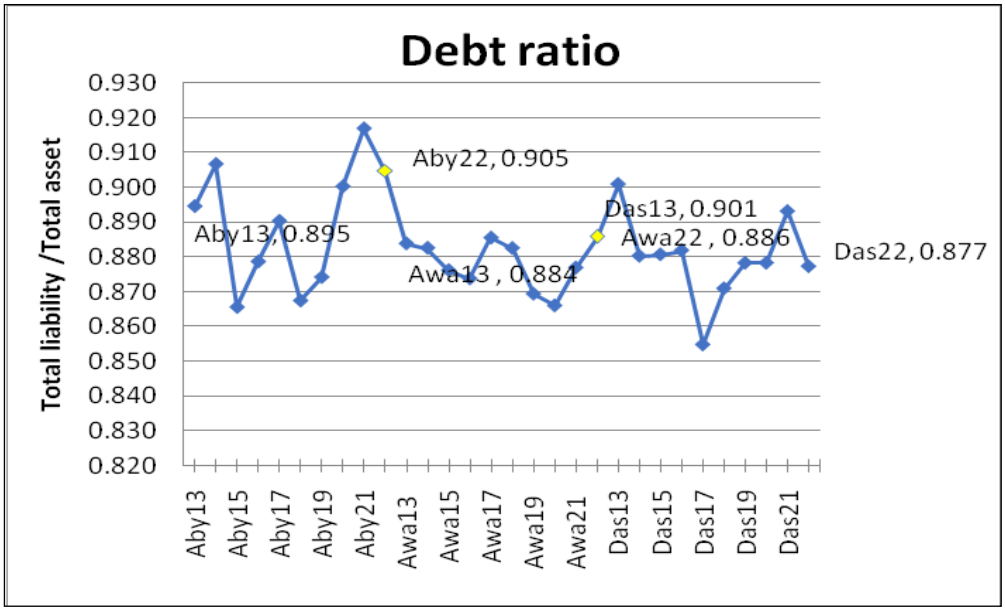


Fig 4 Time series graph for Debt ratio for the period 2013-2022

The analysis shows that the debt ratio is showing a general varying trend throughout the period for all the three banks under consideration. The liability that is associated with the banks decrease during the initial period for Abyssinian bank relative to its asset than the end of period. Whereas for Dashen bank and Awash bank the ratio become stable for most of the period indicating the liability that outsiders of bank are owing the bank is generally stagnating relative to their asset.

4.1.3. Capital Adequacy

Capital adequacy or sufficiency is the term used to describe the ratio of total equity to total asset. The highest and lowest ratio is recorded for Abyssinian bank in the middle and near the end of the 10-year period. The ratio increased towards the middle of the period while it continuously declined towards the end of the period. The ratio averaged around 0.12 for Awash bank throughout entire period. Whereas the ratio picks in the middle of the period for Dashen bank and constantly reached 0.12 for the rest of the period. The capital adequacy ratio generally fluctuated between 0.1 and 0.14 for the ten-year period for all the three banks except the highest and lowest recorded at some point during the period.

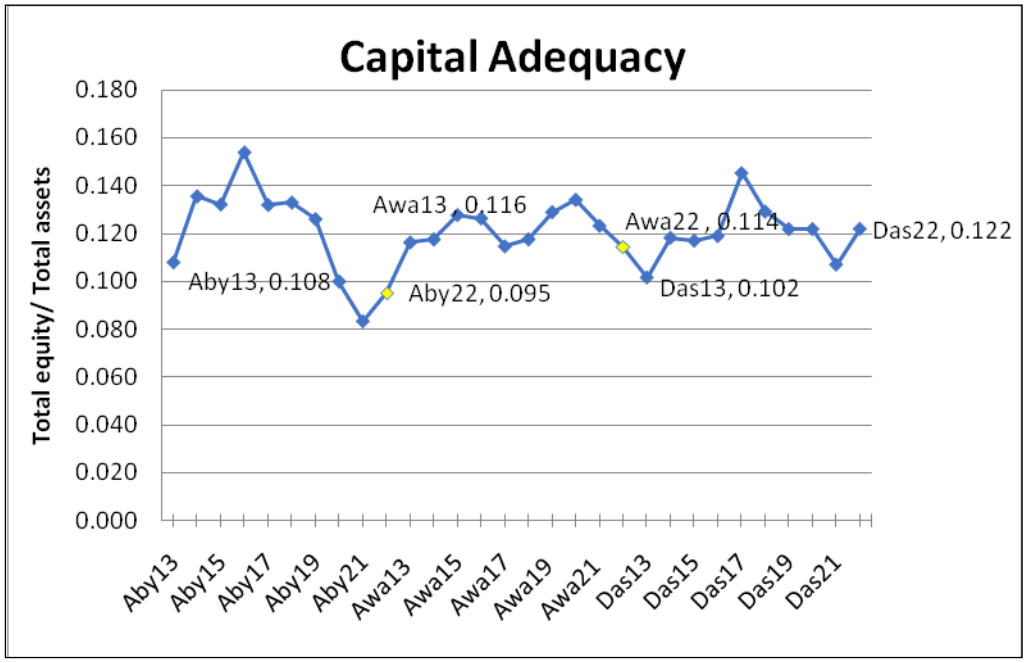


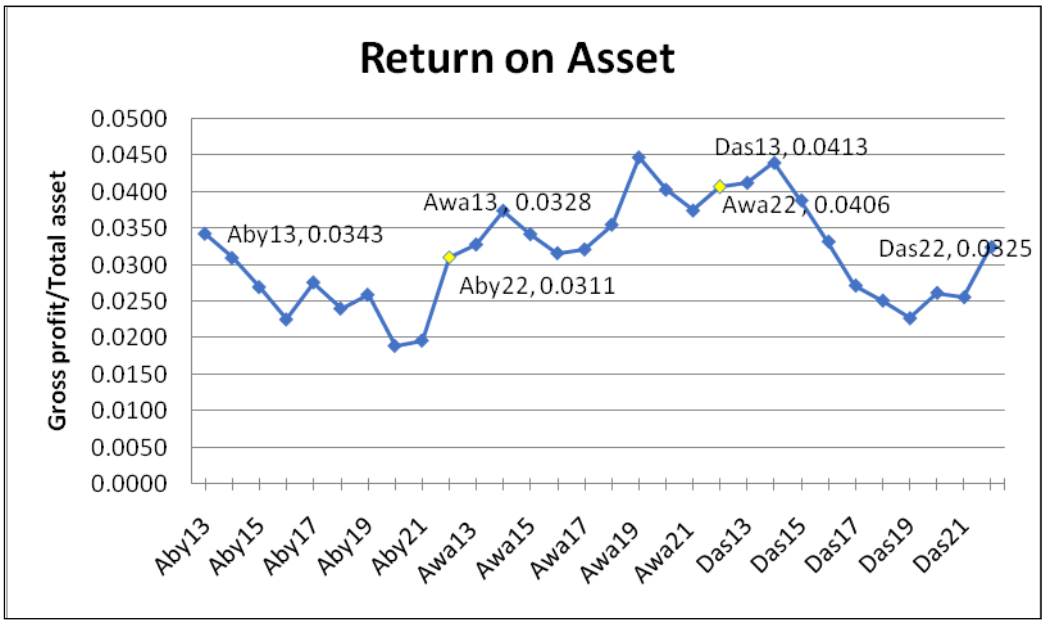
Fig 5. Time series graph for Capital adequacy for the period 2013-2022

The analyis further shows that the capital adequacy ratio was declining for Abyssinain bank in the period ending indicating the equity of the bank is decling relative to the asset . The rato was stable during the period for Awash and Dashen bank showing the capital to asset ratio was in good condition and it shows that for most of the period the asset is locked or generating a relatively stable capital .

4.1.4. Profitablity Ratio

4.1.4.1. Return on Asset

As indicated in the following figure return on asset ratio for Abissinian Bank is on average lower than Dashen bank which is lower than Awash Bank . Awash bank recorded the highest ratio at 0.045 near the end of the ten year period which is similar with Dashen bank recorded in the intial period .Abissinian bank recorded the lowest ratio near the end of the study period



. Fig 6 . Time series graph for Return on Asset for the period 2013-2022

The return on asset ratio for the period indicates that the gross profit was increasing for awash bank relative to asset of the bank while it declines for majority of the period for Abyssianian and Dashen bank with some improvement seen during the last few years for both of the banks. This generally implies that the operating expense was growing at faster rate than the operating income for the banks in the period that has declining ratios. The opposite was true for Awash bank which has shown a higher or faster growth of income than the expense.

4.1.4.2. Return on Equity

As indicated in the following graph similar to the time series graph for return on asset the average retun on equity was lower for Abissinian bank than Dashen bank which in turn is lower than the ratio for Awash Bank .Dashen bank recorded a highest return on equity ratio at 0.040 at the beinging of the period and Abissinian bank recorded the lowest ratio of 0.015 at the middile of the period . Similarly the ratio has shown an increasing trend over the period for Awash bank while it has shown a bow shape for both Dashen and Abissinian bank.

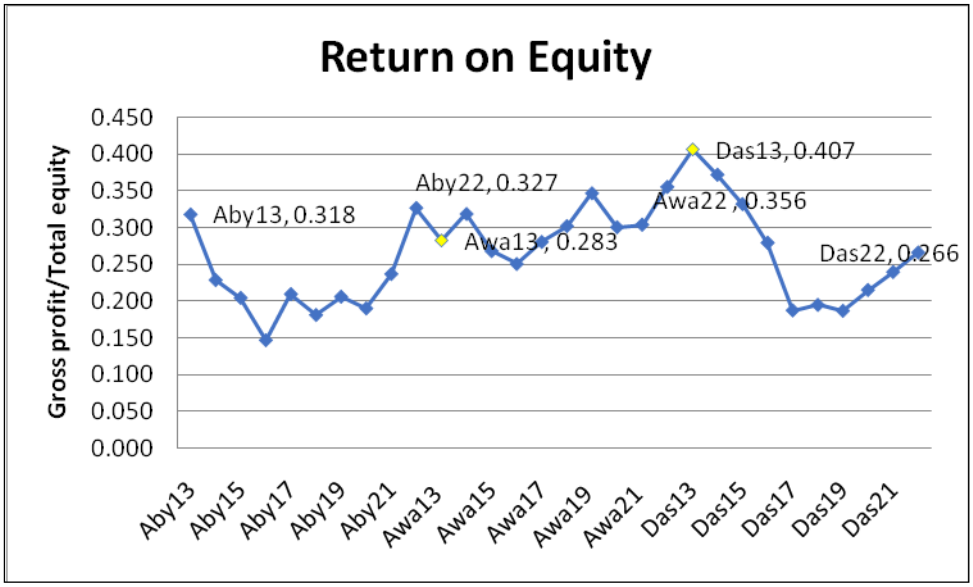


Fig 7. Time series graph for Return on equity for the period 2013-2022

The return on equity ratio for the time period shows that the gross profit was rising for Awash Bank relative to the bank's assets, while it was declining for the majority of the time for Abyssianian and Dashen Bank, although there had been some improvement in recent years for both banks. This generally implies that during the period the operating expenses for the banks were growing more quickly than the operating income. For Awash Bank, on the other hand, the income growth rate has been higher or faster than the expense growth rate.

4.2 . Econometric Analysis

4.2.1. Panel data regerssion result of the log tranformation of model 1

The model 1 as explained in the methodology part was investigated for panel data analysis. The base model was regressed and was found to be diagnosed for the different econometric tests. The result of the panel fixed model regression with robust standard of error was shown in the following table.

Table 2: Model 1: using 30 observations Including 3 cross-sectional units
And 10 Time-series period
Dependent variable: l_ROA

	Coefficient	*Robust Std. Error*	*t-ratio*	*p-value*	
const	−3.13537	0.453865	−6.908	0.0203	**
l_LM	0.688386	0.186238	3.696	0.0660	*
l_CA	0.449719	0.199510	2.254	0.1529	
l_AQ	0.0123140	0.0236692	0.5203	0.6547	
l_MGTE	−2.34623	0.111870	−20.97	0.0023	***

Mean dependent var	−3.481554	S.D. dependent var	0.230997
Sum squared resid	0.113494	S.E. of regression	0.070246
LSDV R-squared	0.926656	Within R-squared	0.879975
Log-likelihood	41.08984	Akaike criterion	−68.17969
Schwarz criterion	−58.37130	Hannan-Quinn	−65.04190
rho	−0.013263	Durbin-Watson	1.651099

The R^2-value 0.8799 was significant showing that 87.99% of the total variation was explained by the independent variables included in model while the remaining 12.01% was accounted for by the error term. Also, the constant term and the slope coefficients for Management efficiency ratio in log form has negative signs which showed that they were negatively related to log of

return on asset ratio and is statistically significant at 5%. Again, the result revealed that log of return on asset is not significantly related to log of Capital adequacy and log of asset quality. Of all the four slope coefficients only log of liquidity management ratio was statistically significant at 10 % of significant level. And slope coefficients for log of management efficiency ratio was statistically significant at 1% of significant level.

4.2.2. Result of test analysis of log transformation of Model 1

Investigation of test analysis for joint test indicated that the P -value for the test statistic is very small showing joint test on the repressors is rejected on the assumption we have failed to include some variables that are important in explaining the dependent variable as an independent variable. The hypothesis that the variable and repressors jointly affect the dependent variable and are most important is not a valid assumption thus some other variables need to include in the model.

The joint test on the regressors included

Test statistic: F (4, 2) = 8.74803e+16

p-value = P (F (4, 2) > 8.74803e+16) = 1.14311e-17

Investigation of test analysis for the groups as having differing intercept indicated that the P -value for the test statistic is higher than the acceptable significance level showing that the hypothesis is not rejected on the assumption the groups have common intercept. The hypothesis that the groups or the units have common intercept cannot be rejected based on the test result of a given data.

Null hypothesis: The groups have a common intercept

Test statistic: F (2, 17.8) = 1.79461

p-value = P (F (2, 17.8) > 1.79461) = 0.194915

The test for heteroskedasticity and the corresponding hypothesis is not rejected on the assumption that the units have a common error variance rejected proving the idea that the error variance has homogeneously distributed. The p- value for the test statistics is shown to be higher figure than the rejection criteria indicating that the error terms have a common variance to be accepted based on underlying assumption.

Null hypothesis: the units have a common error variance

Asymptotic test statistic: Chi-square (3) = 1.22406

p-value = 0.747239

The test for autocorrelation is done using the null hypothesis that no first order autocorrelation exist is not rejected using the critical value of test statistic indicating that there is higher probability of accepting that it lies in the acceptance region. The hypothesis is accepted that the error terms are not serially auto correlated and there is higher degree or probability that we will accept the values will be valid.

Null hypothesis: No first-order autocorrelation (rho = -0.5)

Test statistic: F(1, 2) = 6.85656

p-value = P(F(1, 2) > 6.85656) = 0.120126

4.2.3. Panel data regerssion result of the log transformation of model 2

The table below indicates the panel estimation of the Return on equity for the fixed effect model.

Table 3: Model 2: using 30 observations including 3 cross-sectional units

And time series period of 10 year

Dependent variable: l_ROE

	Coefficient	*Robust Std. Error*	*t-ratio*	*p-value*	
const	−3.13537	0.453865	−6.908	<0.0001	***
l_LM	0.688386	0.186238	3.696	0.0012	***
l_CA	−0.550281	0.199510	−2.758	0.0112	**
l_AQ	0.0123140	0.0236692	0.5203	0.6079	
l_MGTE	−2.34623	0.111870	−20.97	<0.0001	***

Mean dependent var	−1.359669	S.D. dependent var	0.254049
Sum squared residue	0.113494	S.E. of regression	0.070246
LSDV R-squared	0.939363	Within R-squared	0.917663
Log-likelihood	41.08984	Akaike criterion	−68.17969
Schwarz criterion	−58.37130	Hannan-Quinn	−65.04190
rho	−0.013263	Durbin-Watson	1.651099

The R2 -value is 0.9177 was significant showing that 91.77% of the total variation was accounted for by the independent variables included in model while the remaining 8.23 was accounted for by the error term. Also, several differential slope coefficients and the constant term have negative signs which indicated that they were negatively related to log form of

Return on Equity ratio. Again, the result revealed that log of return on equity is not statistically significantly related to log of Asset quality. However, of all the four different slope coefficients only the slope for log of Asset quality is not statistically significant. It is further concluded that the 5 % significant level of the slope coefficient for log of capital adequacy is statistically significant and the log of liquidity management and log of management efficiency is highly significant at 1% of significance level.

4.2.4. Result of test analysis of log transformation of Model 2

The hypothesis that the groups or the units have common intercept cannot be rejected based on the test result of a given dataset, as evidenced by the P-value for the test statistic which is being higher than the acceptable significance level after investigation of test analysis for the groups as having differing intercept.

Null hypothesis: The groups have a common intercept
Test statistic: F (2, 17.8) = 1.79461
p-value = P (F(2, 17.8) > 1.79461) = 0.194915

The hypothesis that the units have a common error variance is not rejected by the test for heteroskedasticity, proving the homogeneous distribution of the error variance. According to the underlying assumption, the error terms' common variance is accepted because the p-value for the test statistics is higher than the rejection criteria.
Null hypothesis: the units have a common error variance
Asymptotic test statistic: Chi-square (3) = 1.22406
p-value = 0.747239

The test for autocorrelation is performed using the null hypothesis that there is no first order autocorrelation exist and is not rejected using the critical value of test statistic. The hypothesis is accepted that the error terms are not serially auto correlated and there is a higher degree or probability that we will accept the values will be valid.

Null hypothesis: No first-order autocorrelation (rho = -0.5)
Test statistic: F (1, 2) = 6.85656
p-value = P (F (1, 2) > 6.85656) = 0.120126

4.2.5. Correlation coefficient matrix of the variables

The result of the Correlation is summarized in table below and each relationship is discussed under the table.

Table 4: Correlation coefficients, using the observations

5% critical value (two-tailed) = 0.3610 for n = 30

l_ROA	l_LM	l_CA	l_AQ	l_MGTE	l_ROE	
1.0	-0.2507	0.0792	-0.2310	-0.8865	0.8701	l_ROA
	1.0	-0.3382	-0.1916	0.5529	-0.0607	l_LM
		1.0	-0.0662	-0.0079	-0.4224	l_CA
			1.0	0.1668	-0.1773	l_AQ
				1.0	-0.8021	l_MGTE
					1.0	l_ROE

The relationship between variables such as log of LM (liquidity management ratio, log of management efficiency ratio and log of Asset quality ratio with respect to log of return on asset ROA and log of return on equity is negative correlation. This shows when the liquidity management and asset quality is increased the ratio of the ROA and ROE decreases. In addition, management efficiency is highly correlated with as compared to other ratios. Capital adequacy ratio in log form is least correlated with log of ROA while it is moderately correlated with log of ROE.

Chapter Five

5. Conclusion and Recommendations

5.1 Conclusion and Summary

The major findings of the study were as follows;

In terms of Debt management ratio, Awash bank recorded ratios during the ten-year period which are lower than Dashen bank which in turn has similar ratio figures with Abyssinian during the period in question.

With regard to liquidity management ratio all the three banks showed similar trend during the period which is a continuous increment year after year.

As to capital adequacy indicators Abyssinian bank showed a more fluctuating trend during the period next to Dashen bank during which Awash bank has shown more stable ratio.

From profitability analysis perspective Awash bank showed a higher performance in the ratio for the period whereas Dashen bank performed better than Abyssinian bank during the period

On both panel fixed model estimations of log of ROA and Log of ROE, Liquidity Management and Management efficiency in log form are explanatory variables that are significant in determining the profitability indicators. To some degree asset adequacy or capital ratio have become significant explanatory variables in determining the ROE in log form. However, no asset quality indicators were significant in determining the profitability ratios.

5.2 Recommendation

Based on the findings of the study the following recommendations are forwarded.

The study showed that, Management efficiency, capital adequacy and Liquidity management were the key factors on financial performance of the selected private banks in Ethiopia. This finding will encourage company management to properly manage their resources to improve company profitability.

As the ratio ROA and ROE is negatively related with the ratio of total expense /total income. The result indicates that as the ratio of management efficiency increases ROA and ROE decrease and vice versa. Therefore, it is necessary for bank management to document main strength and weakness of respective private bank.

Based on financial ratio analysis measures such as liquidity management, A bank should continue its improvement of liquidity position in order to compare itself with other banks. So, management of the bank should maintain its liquidity position by using different alternatives like sell of stock & bond and also by improving its current asset turnover.

Debt ratio, capital adequacy and profitability analysis indicators, of all the three banks under comparison indicated Dashen bank performed higher next to Awash bank which is the highest performer of all the banks. So, bank managers should search for a way out to keep appropriate amount of capital adequacy, debt and profitability ratios, so that they can improve the financial performance of the banks. They should develop an appropriate strategy that will enable them to exploit the opportunities created from the growing banking industry.

6.References

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Annex 1 Birr in billions

Bank -year	Shareholders equity	Total assets	Provision for doutful loan	Total loan	Deposit	Total expense	Total Income	Gross profit	Total Liability
Aby13	1.10	10.20	0.06	4.70	8.50	0.50	0.90	0.35	9.12
Aby14	1.53	11.29	0.08	5.15	9.10	0.66	1.01	0.35	10.24
Aby15	1.81	13.70	0.09	5.99	11.12	0.83	1.21	0.37	11.86
Aby16	2.59	16.82	0.11	8.09	13.68	1.25	1.63	0.38	14.78
Aby17	3.34	25.32	0.18	14.03	20.80	1.69	2.38	0.70	22.54
Aby18	4.25	31.98	0.21	17.99	25.79	2.51	3.27	0.77	27.74
Aby19	4.95	39.29	0.31	23.70	32.10	3.26	4.29	1.02	34.34
Aby20	5.68	56.89	0.45	37.25	47.63	4.59	5.67	1.08	51.21
Aby21	8.65	104.05	1.12	76.58	88.88	8.15	10.20	2.05	95.40
Aby22	14.22	149.45	1.76	113.33	122.05	12.06	16.72	4.65	135.24
Awa13	2.07	17.78	0.06	7.71	13.11	0.84	1.42	0.58	15.72
Awa14	2.60	22.11	0.03	9.18	16.12	1.09	1.92	0.83	19.51
Awa15	3.21	25.14	0.08	12.48	19.51	1.44	2.30	0.86	22.03
Awa16	3.93	31.15	0.02	15.45	24.24	1.84	2.82	0.99	27.21
Awa17	4.81	41.97	0.09	22.58	32.78	2.41	3.76	1.35	37.17
Awa18	6.50	55.27	0.01	31.30	45.91	3.44	5.41	1.96	48.77
Awa19	9.64	74.77	0.09	47.26	62.46	4.71	8.06	3.35	65.00
Awa20	11.97	89.28	0.59	57.27	74.27	6.61	10.21	3.60	77.31
Awa21	15.85	128.70	0.52	87.54	108.07	8.92	13.74	4.82	112.84
Awa22	20.95	183.39	0.86	129.24	152.01	13.19	20.64	7.45	162.44
Das13	2.00	19.70	0.19	8.70	15.90	1.00	1.82	0.81	17.75
Das14	2.60	22.00	0.17	9.40	17.70	1.19	2.15	0.97	19.37
Das15	2.90	24.80	0.18	11.30	19.80	1.55	2.52	0.96	21.84
Das16	3.40	28.60	0.21	12.50	22.80	1.78	2.73	0.95	25.22
Das17	5.23	36.00	0.23	17.89	27.85	2.40	3.46	0.98	30.77
Das18	5.87	45.43	0.34	23.06	35.99	3.29	4.43	1.14	39.56
Das19	6.85	56.22	0.23	32.37	44.72	4.30	5.58	1.28	49.37
Das20	8.32	68.26	0.21	42.61	53.49	5.77	7.56	1.79	59.95
Das21	10.13	94.70	0.34	63.90	74.55	7.83	10.26	2.43	84.57
Das22	14.28	117.14	0.55	79.20	91.24	9.10	12.91	3.80	102.76

Annex 2 Financial Ratios

bank Year	Asset quality	Capital Adequacy	Management Efficiency	Return on Asset	Return on Equity	Liquidity Management
Aby13	0.0119	0.108	0.556	0.0343	0.318	0.553
Aby14	0.0151	0.136	0.653	0.0310	0.229	0.566
Aby15	0.0150	0.132	0.686	0.0270	0.204	0.539
Aby16	0.0135	0.154	0.767	0.0226	0.147	0.591
Aby17	0.0127	0.132	0.710	0.0276	0.210	0.675
Aby18	0.0117	0.133	0.768	0.0241	0.181	0.698
Aby19	0.0132	0.126	0.760	0.0260	0.206	0.738
Aby20	0.0121	0.100	0.810	0.0190	0.190	0.782
Aby21	0.0147	0.083	0.799	0.0197	0.237	0.862
Aby22	0.0155	0.095	0.721	0.0311	0.327	0.929
Awa13	0.0073	0.116	0.589	0.0328	0.283	0.588
Awa14	0.0034	0.117	0.568	0.0375	0.319	0.569
Awa15	0.0064	0.128	0.626	0.0342	0.268	0.640
Awa16	0.0012	0.126	0.650	0.0317	0.251	0.637
Awa17	0.0042	0.115	0.641	0.0322	0.281	0.689
Awa18	0.0003	0.118	0.637	0.0355	0.302	0.682
Awa19	0.0020	0.129	0.585	0.0447	0.347	0.757
Awa20	0.0102	0.134	0.647	0.0403	0.301	0.771
Awa21	0.0059	0.123	0.649	0.0375	0.304	0.810
Awa22	0.0067	0.114	0.639	0.0406	0.356	0.850
Das13	0.0213	0.102	0.553	0.0413	0.407	0.547
Das14	0.0178	0.118	0.553	0.0440	0.372	0.531
Das15	0.0160	0.117	0.617	0.0389	0.332	0.571
Das16	0.0168	0.119	0.652	0.0332	0.280	0.548
Das17	0.0127	0.145	0.695	0.0272	0.187	0.642
Das18	0.0145	0.129	0.742	0.0252	0.195	0.641
Das19	0.0070	0.122	0.771	0.0228	0.187	0.724
Das20	0.0049	0.122	0.763	0.0262	0.215	0.797
Das21	0.0054	0.107	0.764	0.0256	0.240	0.857
Das22	0.0070	0.122	0.705	0.0325	0.266	0.868