

# **Financial and Operational Performances of Commercial Bank of Ethiopia**



**Tigist Tesfaye**

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## **Statement of Declaration**

I, Tigist Tesfaye have carried out independently a research work on “Financial and operational Performance analysis of Commercial Bank of Ethiopia- CAMEL Approach “in partial fulfillment of the requirements degree of master of science in Business Administration with the guidance and support of the research advisor.

This study is my own work that has not been submitted for any degree or diploma program in this or other institution and that all source of materials used for this thesis have been duly acknowledged.

Tigist Tesfaye

**Signature**\_\_\_\_\_

**Date** \_\_\_\_\_

**St. Mary's University**  
**School of Graduate Studies**

This is to certify that the thesis prepared by Tigist Tesfaye, entitled “ Financial and Operational Performance of Commercial bank’s of using CAMEL Approach” and submitted impartial fulfillment of the requirements of Masters of Business Administration complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

Examiners:

External Examiner: \_\_\_\_\_

Signature

\_\_\_\_\_

Internal Examiner: \_\_\_\_\_

Signature

\_\_\_\_\_

Advisor: \_\_\_\_\_

Signature

\_\_\_\_\_

Dean, SGS: \_\_\_\_\_

Signature

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Date \_\_\_\_\_

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## **Abstract**

This study was focused on the area of financial and operational performance analysis of commercial bank of Ethiopia by using *CAMEL* model. The study was conducted on financial statements of Commercial Bank of Ethiopia during the study period of 2014 to 2016. The overall objective of this study was to analyze the effects of *CAMEL* variables under this study based on their financial and operational performances. The study used quantitative approach. This study used *CAMEL* variables and descriptive statics for *CAMEL* ratios. Descriptive part was analyzed by descriptive analysis. *The analysis showed that, capital adequacy, asset quality, management efficiency, earning quality and liquidity explain the financial performances of the bank.* In general for bank's whose capital adequacy, asset quality, management efficiency and liquidity position were low as compared to peer bank's shall inject some capital, improve their asset quality, control their cost and control their liquidity position respectively in order not lose public trust. The banks shall give special attentions to asset quality, management efficiency, liquidity and net interest margin. The bank shall also concentrate on increasing their total asset by mobilizing deposit and converting the deposit to loan, as total asset.

## Acronyms

Adv/Ast: Advances to Assets

AIA: American International Assurance

BIS: Bank's for International Settlement

BPE: Business per Employee

CAR: Capital Adequacy Ratio

CBE: Commercial Bank of Ethiopia

D/E: Debt-Equity Ratio

EPRDF: Ethiopian Peoples' Revolutionary Democratic Front

EPE: Earning Per Employee

FDIC: Federal Deposit Insurance Corporation

G.NPA/N.Adv: Gross Non-Performing Assets to Net Advance G-Sec/Inv: Govt. Securities to Total investment

G-Sec/TA: Govt. Securities to Total Assets II/TI: Interest Income to Total Income.

LA/TA: Liquid Assets to Total Assets

LA/DD: Liquid Assets to Demand Deposits LA/TD: Liquid Assets to Total Deposits

MFI: Micro-Finance Institution

NBE: National Bank's of Ethiopia

NII/TI: Non-Interest Income to Total Income N.NPA/N.Adv: Net Non-Performing Assets to Net Advances N.NPA/T.Ast: Net Non-Performing Assets to Total Assets NP/AAst: Net Profit to Average Assets

OP/WF: Operating Profits to Average Working Funds.

Spread: Spread to Total Assets

TInv/TAst: Total Investments to Total Assets TAdv/TDe: Total Advances to Total Deposits

UFIRS: Uniform Financial Institutions Rating System

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# CHAPTER ONE

## 1. Introduction

### 1.1 Background of the Study

A commercial bank is a type of financial intermediary and a type of bank. Commercial banking is also known as business banking. It is a bank that provides checking accounts, savings accounts, and money market accounts and that accepts time deposits.

Commercial banks play a vital role in the economy for two reasons: they provide a major source of financial intermediation and their checkable deposit liability represent the bulk of the nation's money stock. Evaluating their overall performance and monitoring their financial condition is important to depositors, owners, potential investors, managers and of course regulators. Currently financial ratios are often used to measure the overall financial soundness of a bank and the quality of its management.

Beyond their traditional role in project finance transactions, commercial banks are developing new roles in providing advisory services; construction financing; inter mediation to permanent long-term fixed-rate financing; commodity, currency, and interest rate risk management; foreign tax absorption; and working capital financing for projects throughout the world. Looked at separately, the development of these roles is a response to increasing competition both among commercial banks and between commercial banks and other institutional lenders and intermediaries to meet an explosion of worldwide project finance needs. Commercial banks differ considerably in their ability to provide such services.

The emergence of banks owned by the local private sector began in the mid-1970 in Africa. Financial markets in Africa in the period since independence have been dominated by foreign and government-owned commercial banks. But deficiencies in financial intermediation provided an opportunity for local private investors to enter financial markets, especially in those countries where the domestic private sector was relatively well developed, such as Kenya and Nigeria.

The stage of development of the banking industry is a good reflection of the development of the economy (Misra & Aspal, 2013). To sustain the development of the economy, the performance and

health of banks has to be checked and evaluated periodically. There are different approaches used by different regulatory bodies. Among those approaches, most preferred parameters used by the regulators and different scholars are CAMEL (capital adequacy, asset quality, management quality, earnings and liquidity) rating criterion to assess and evaluate the performance and financial soundness of the activities of the bank. The CAMEL supervisory criterion in banking sector is a significant and considerable improvement over the earlier criteria in terms of frequency, check, spread over and concentration (Misra & Aspal, 2013; Basel, 2011).

Financial performance of banks refers to the capacity in generating sustainable profitability. Traditional method of applying financial ratios to evaluate bank's state of performance has been long practiced. CAMEL approach is used to evaluate financial performances of banks because; it benefits the banks management to evaluate their financial health and performance. CAMEL approach is significant tool to assess the relative financial strength of a bank and to suggest necessary measures to improve weaknesses of a bank.. CAMELS rating will a subjective model which indicates financial strength of a bank, whereas CAMEL ranking indicates the banks relative position with reference to other banks. Hence, this study intends to analyze the financial and operational performance of Commercial Bank of Ethiopia.

## **1.2 Background of the Organization**

- ✚ The history of the Commercial Bank of Ethiopia (CBE) dates back to the establishment of the State Bank of Ethiopia in 1942.
- ✚ CBE was legally established as a share company in 1963.
- ✚ In 1974, CBE merged with the privately owned Addis Ababa Bank. Since then, it has been playing significant roles in the development of the country.
- ✚ Pioneer to introduce modern banking to the country.
- ✚ It has more than 1340 branches stretched across the country.
- ✚ The leading African bank with assets of 646.69 billion Birr as on March 31st 2019.
- ✚ Plays a catalytic role in the economic progress & development of the country.
- ✚ The first bank in Ethiopia to introduce ATM service for local users.

- ✚ Currently CBE has more than 20 million account holders and the number of Mobile and Internet Banking users also reached more than 1,736,768 as of June 30<sup>th</sup> 2018 . Active ATM card holders reached more than 5.2 million.
- ✚ As of March 31, 2019, 2,524 ATM machine and 9,384 POS machines were available.
- ✚ It has strong correspondent relationship with more than 50 renowned foreign banks like Commerz Bank A.G., Royal Bank of Canada, City Bank, HSBC Bank,...
- ✚ CBE has a SWIFT bilateral arrangement with more than 700 others banks across the world.
- ✚ CBE combines a wide capital base with more than 33,000 talented and committed employees.
- ✚ Pioneer to introduce Western Union Money Transfer Services in Ethiopia early 1990s and currently working with other 20 money transfer agents like Money Gram, Atlantic International (Bole), Xpress Money,...
- ✚ CBE has opened four branches in South Sudan and has been in the business since June 2009.
- ✚ CBE has reliable and long-standing relationships with many internationally acclaimed banks throughout the world

### **1.3 Statement of the problem**

The banking sector's performance is perceived as the replica of economic activities of the economy. The stage of development of the banking industry is a good reflection of the development of the economy (Misra & Aspal, 2013). Evaluation of financial and operational performance of the banking sector is an effective measure and indicator to check the soundness of economic activities of a nation.

Profit is the final goal of commercial banks in every aspects of their service. All the strategies and activities will perform are to realize this impressive objective. Beside these goals, commercial banks also will have social and economic goals. Though, the goal of this study will in connection with the first and foremost objective of profitability.

According to Muhabie, (2015) banks will challenge by different factors including individual bank characteristics which will be sway by the internal decisions of the management and the board and the wide-range external factors which are out of the control of the banks. Banks performance will

evaluate in three ways namely; (1) The traditional method of financial indices based on balance sheet and income statement analysis, (2) Parametric methods based on the knowledge of production function and (3) Non-parametric methods that will not require production function (Abdi, 2010). The performance evaluation of companies will be essential to provide information about company's operating performance and its net worth. Knowing organizations' competitiveness and potentials of the business through financial statement analysis is useful for decision making for users of financial statement information including; managers, creditors, stockholders, potential investors, and regulatory agencies (Teshome, 2016).

Examining the performance of commercial banks has become important for their profitable survival. The survival of commercial banks in an economic environment is very dependent upon their good performance that will be based on scientific investigation. As a result, its wellbeing and successful operation captures the interest of different researchers and other professionals. This research will conduct my research on financial and operational performance of Commercial Bank of Ethiopia.

Therefore, this study would attempt the evaluation of the financial and operational performance of Commercial Bank of Ethiopia in terms of CAMEL performance measurement ratios: i.e. Capital adequacy, Asset quality, Efficiency, Earnings quality and Liquidity within the period 2014-2016.

Thus, this study would be conducted with the intention of filling this gap. Accordingly, the researcher would try to answer the following research questions.

1. Does capital adequacy of the bank affect banks' performance?
2. Does asset quality affect banks' performance?
3. Does management efficiency affect banks' performance?
4. Does earning quality affect banks' performance?
5. Does liquidity affect banks' performance?

### **1.3.1 Basic Research Questions**

The basic research questions that would be answered by this study are as follows:

- What are the capital Adequacy ratios of commercial bank of Ethiopia?
- What are the qualities of assets of commercial bank of Ethiopia?

- When the management qualities of Commercial Bank of Ethiopia effective?
- What are the earning capacities of the commercial bank of Ethiopia?
- What is the liquidity position of commercial bank of Ethiopia?

## **1.4 Objective of the Study**

### **1.4.1 General Objective**

The general objective of the study is to assess the financial performance of commercial bank of Ethiopia through financial statement analysis of three year audit financial statements.

### **1.4.2 Specific Objective**

For the achievement of the general objective, the specific objectives will

- To assess the capital Adequacy ratios of commercial bank of Ethiopia
- To investigate the qualities of assets of commercial bank of Ethiopia
- To assess the management qualities of commercial bank of Ethiopia
- To examine the earning capacities of the commercial bank of Ethiopia
- To identify the liquidity position of commercial bank of Ethiopia

## **1.5 Significance of the Study**

Financial statement analysis would be important to boards, managers, payers, lenders, and others who make judgments about the financial health of organizations. One widely will accept method of assessing financial statements is ratio analysis, which uses data from the balance sheet and income statement to produce values that will easily interpret financial meaning. (H. P. George, 2005)

Since it revolves around one of the popular issues of current business scenario, the financial aspect, the following significances are to be expecting in the study.

- It would be identify the financial health of Commercial Bank of Ethiopia in the framework of CAMEL



- It provides some insight about the financial performance analysis approaches of Commercial Bank of Ethiopia.
- It would be identify the strong and weak sides of the Commercial Bank of Ethiopia finance management.
- It would be uses as a reference to researchers that want further investigation into the area of study
- It would be try to give appropriate recommendations to the concerned body so that it will help them to reassess their current practices.

## **1.6 Scope of the study**

As a result of the limitations would state below the scope of the study would limit to Commercial Bank of Ethiopia (CBE). To evaluate the financial and operational performance of the bank, 3 years data (from 2014 to 2016) will be used. Hence it will be factors that contribute to performances with in this period will be the prime focus factors.

Furthermore, this study will try to assess financial and operating performance by primarily focusing different ratios which would help to assess the bank's Capital adequacy, Asset quality, Efficiency, Earnings quality and Liquidity. The study primarily plans to use the CAMEL model.

The CAMEL model can easily reflect the performances of the bank over the years as well as for the better assessment of banks' conditions.

It would help to provide an accurate and consistent evaluation of the bank's financial condition and operations in terms of such factors as capital, asset quality, management, earning quality and liquidity. The strength of these factors would determine the overall strength of the bank. The quality of each component additionally underlines the inner strength and how far it can take care of itself against the market risks. The CAMEL framework also uses the financial ratios and analysis, and yet enables to evaluate capital adequacy, asset quality, management efficiency, earning quality and liquidity.

Effort would also be made to assess the liquidity of the bank using such ratios as current ratio, quick acid test and cash ratios and how it is impacting the profitability of the firm.

### **1.7 Limitation of the study**

The following factor would be considered to the most limiting factors affecting the scope of the study.

- The sensitivity of some of the information would be required for this study is sensitive and the bank's management may refrain from disclosing which could affect the reach of the study in general.

### **1.8 Organization of the Study**

This paper was organized in five main chapters; the first chapter is introduction which gives background of the study, statement of the problem, objective of the study, significance of the study, scope of the study and limitation of the study. The second chapter deals with literature review which includes related theoretical literature reviews. In this chapter concepts that are related with financial and operational performance analysis are reviewed. The third chapter deals with methodology of the study. The fourth chapter is data analysis and interpretation. In this chapter the secondary data was analyzed and interpreted. This chapter also presents analysis and interpretation of the findings. The final chapter is summary, conclusion and recommendation. In this last chapter conclusion and recommendation regarding the findings of the research are presented briefly.

## **CHAPTER TWO**

### **2 Literature Review**

#### **2.1 Theoretical Literature Review**

The CAMEL approach of measuring financial performance was traced back its origin to 1979, when the Uniform Financial Institutions Rating System (UFIRS) was implemented in US banking institutions to introduce ratings for on-site examinations of banking institutions. Under this system, each banking institutions subject to on-site examination is evaluated on the basis of five critical dimensions relating to the bank's operations & performance (Sahajwala & Van den Bergh, 2000). These are Capital, Asset Quality, Management, Earnings and Liquidity and are seen to reflect the financial performance, financial condition, operating soundness and regulatory compliance of the banking institution (Mulualem, 2015). Each of the component factors is rated on a scale of 1 (best) to 5 (worst). A composite rating is assigned as an abridgement of the component ratings and is taken as the prime indicator of a bank's current financial condition. The composite rating ranges between 1 (best) and 5(worst), and also involves a certain amount of subjectivity based on the examiners' overall assessment of the institution in view of the individual component assessments (Sahajwala & Van den Bergh,2000).

#### **2.2 CAMEL Model Analysis**

"CAMELS" model as a tool is very effective, efficient and accurate to be used as a performance evaluate in banking industries and to anticipate the future and relative risk. "CAMELS" ratios are calculated in order to focus on financial performance. The CAMELS stands for Capital adequacy, Asset quality, Management, Earning and Liquidity and Sensitivity. In this study some important ratios are chosen and calculated to evaluate bank's performance. Data which is used in this study is gathered from annual financial reports of an Iranian bank. Then data is compared with other bank's ratios and reports. Certainly, the trends of calculations and relevant figures show important points for managers and also, CAMELS rating can be an efficient tool to manage and control and decide in management accounting view.

**Table 2.1: CAMEL Rating and Description**

<b>CAMEL Rating</b>	<b>Description</b>
Rate 1	<ul style="list-style-type: none"><li data-bbox="548 369 1360 464">✚ Identifies all risks and employs compensating factors mitigating concerns</li><li data-bbox="548 474 1360 569">✚ Indicates strong performance and risk management practices</li></ul>
Rate 2	<ul style="list-style-type: none"><li data-bbox="548 594 1360 688">✚ Reflects satisfactory performance and risk management practices</li><li data-bbox="548 699 1360 793">✚ Management identifies most risks and compensates accordingly</li></ul>
Rate 3	<ul style="list-style-type: none"><li data-bbox="548 867 1360 961">✚ Represents performance that is flawed to some degree is of supervisory concern</li><li data-bbox="548 972 1360 1119">✚ Risk management practices may be less than satisfactory relative to the bank's or credit union's size, complexity and risk profile significant risks</li></ul>

Rate 4	<ul style="list-style-type: none"> <li>✦ Refers to poor performance that is of serious supervisory concern.</li> <li>✦ Risk management practices are generally unacceptable relative to the banks or credit union's size, complexity and risk profile. Key performance measures are likely to be negative.</li> <li>✦ Such performance, if left unchecked, would be expected to lead to conditions that could threaten the viability of the bank or credit union.</li> <li>✦ There may be significant noncompliance with laws and regulations.</li> <li>✦ The board of directors and management are not satisfactorily resolving the weaknesses and problems.</li> <li>✦ A high potential for failure is present but is not yet imminent or pronounced.</li> <li>✦ Banks and credit unions in this group require close supervisory attention.</li> </ul>
Rate 5	<ul style="list-style-type: none"> <li>✦ Considered unsatisfactory performance that is critically deficient and in need of immediate remedial attention.</li> <li>✦ Such performance, by itself or in combination with other weaknesses, directly threatens the viability of the bank or credit union.</li> <li>✦ The volume and severity of problems are beyond management's ability or willingness to control or correct.</li> <li>✦ Banks and credit unions in this group have a high probability of failure and will likely require liquidation and the payoff of shareholders, or some other form of emergency assistance, merger, or acquisition.</li> </ul>

## 2.2.1 Capital Adequacy

Capital adequacy measures the adequacy of the amount of capital to meet any unfortunate shocks that the bank may experience (Kosmidou, 2009), (Baral, 2005). As Ermias (2016) noted in his study, it reflects the overall financial condition of the banks and also the ability of management to meet the need for additional capital requirements. It is the capital expected to maintain balance with the risks exposure of the financial institution such as credit risk, market risk and operational risk, in order to absorb the potential losses and protect the financial institution's (i.e banks) debt holder (Mulalem,2015), (Ahsan, 2016).

Different scholars used different parameters to measure capital adequacy, Dang (2011), Hamdu et al, (2015),Mulualem,(2015) used capital to risk weighted asset and leverage ratio to measure the capital adequacy of the bank. On the other hand, Misra & Aspal (2013) examined the capital adequacy by dividing Capital to Risk Weighted Assets, Debt to Equity Ratio, Advances to Assets, and Government Securities to Total Investments. Dakito(2015),Tefaye(2014), Hamdu et al(2015),Minyahil (2015), Mulualem(2015), Ermias(2016), Anteneh et al.(2013), Aspal & Dhawan (2014), used the measurement of Capital Adequacy Ratio (CAR), Debt-Equity Ratio, Advances to Assets Ratio to examine the capital adequacy level of the bank.

The dimension of capital adequacy is an important factor to help the bank in understanding the shock attractive capability during risk. In this study, capital adequacy is measured by using the equity to total assets ratio (Vong & Chan, 2009). That means, capital adequacy enables a bank to meet any financial unexpected condition due to FX risk, credit risk, market risk, interest rate risk. Capital adequacy protects the interest of depositors of a bank.

### 2.2.1.1 Capital Adequacy

#### ➤ Capital Adequacy Ratio Analysis

$$\text{CAR} = \frac{\text{Tier 1 Capital} + \text{Tier 2 Capital}}{\text{Risk Weighted Assets}}$$

Where:

- **Tier I** comprises ordinary share capital, audited revenue reserves, future tax benefits, and intangible assets.

- **Tier II** comprises unaudited retained earnings, general provisions for bad debts, revaluation reserves, and perpetual subordinated debt. It also includes perpetual cumulative preference shares and subordinated debt.
- **Debt Equity Ratio (Leverage) =debt/equity**
  - **Total advances to Total Assets Ratio=total advances/total assets**
  - **Government Securities Investments:** The government securities investments are those banks kept in the securities for the security purpose in the form of cash, bills, money market instruments etc.

### **2.2.2 Asset quality**

The asset quality of the bank is another specific variable that affects the Performance of a bank. The quality of Asset held by the individual bank affects the health of the bank. The dimension of asset quality is an important factor that helps the bank in understanding the extent of credit risk (Olweny, 2011; Baral, 2005). Chen et al, (2009) define credit risk as the risk of loss due to a debtor's failure to make repayment of loan i.e principal and interest. Default occurs when a debtor unable to fulfill legal obligations according to the contract, or has violated a loan condition of the debt contract, which might occur with all debt obligations including bonds, mortgages, loans, and promissory notes(Kongri,2015).As stated by Grier (2007), poor asset quality is the major cause of the most bank failures. The asset quality indicators highlight the use of nonperforming loans ratios (NPLs) which are the proxy of asset quality, and the allowance or provision to loan losses reserve ( Frost , 2004 as cited by Mulalem).

Hamdu et al (2015) used the ratio of loan loss provision to total loan and loan loss provision to total asset to evaluate asset quality of commercial banks. On the other hand, Mulualem (2015) NPLs to total loans, NPLs to total equity, Allowance for loan loss ratio. Altan et al.( 12014) Used the ratio of Fixed asset to total asset to examine the Asset quality of the bank.

A nonperforming loan (NPL) is the sum of borrowed money upon which the debtor has not made his scheduled payments for at least 90 days. A nonperforming loan is either in default or close to being in default. Once a loan is nonperforming, the odds that it will be repaid in full are considered to be substantially lower.

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 are some of the ratios considered to assess asset quality according to literatures by (Ermias, 2016; Tesfaye 2014; Mulualem2015; Anteneh et al., 2013; Minyahil ,2015)

### **2.2.2.1 Asset Quality Ratio Analysis**

- i. Allowance for doubtful account to Total Assets ratio
- ii. Allowance for doubtful account to net Advance ratio
- iii. Investments to total asset ratio

### **2.2.3 Management Quality**

Bank analysis states that the management has clear strategies and goals in directing the bank's domestic and international business, and monitors the collection of financial ratios consistent with management strategies. The top management with good quality and experience has preferably excellent reputation in the local communication.

Management quality reflects the management soundness of a bank. The management acts as a safeguard to operate the bank in a smooth and decent manner and is called excellence management or skillful management, whenever it controls its cost and increases productivity, ultimately achieving higher profits. Here, this parameter is measured by total cost to total income ratio.

Management relates to the competency of the bank/s managers, using their expertise's to make subjective judgments, create a strategic vision and other relevant qualities. Management is the key variable which determines a banks' success. The evaluation of the management is the hardest one to be measured and it is the most unpredictable (Golin, 2001). There are two ratios representing the management in the previous studies, operating costs to net operating income ratio and operating expenses to assets ratio.

#### **2.2.3.1 Management Quality Ratio Analysis**

Cost to Income = Cost/ Income



$$\text{Operating Cost to Net Operating Income} = \text{Operating Cost} / \text{Operating Income}$$

The management of the bank takes crucial decision depending on its risk perfection. It sets vision and goal for the organization and sees that it achieves them. This parameter is used to evaluate management efficiency as to assign premium to better quality banks and discount poorly managed ones.

## **2.2.4 Earning Ability**

Earning quality mainly measures the profitability and productivity of the bank, explains the growth and sustainability of future earnings capacity (Ahsan, 2016). In the same way, bank depends on its earning to perform the activities like funding dividends, maintaining adequate capital levels, providing for opportunities for investment for bank to grow, strategies for engaging in new activities and maintaining the competitive outlook mainly derived from its earnings.

Different scholars try to use different financial ratios as a proxy to measure for management efficiency. Rahman et al (2009); Sangmi and Nazir, (2010) used the ratio of operating profit to income while Nassreddine et al (2013) used the ratio of costs to total assets. Golin (2001) used the ratio of operating costs to net operating income and operating expenses to assets ratio while Olweny (2011) adopted the ratio of operating costs to net operating income.

In accordance with Grier (2007)'s opinion, a consistent profit not only builds the public confidence in the bank but absorbs loan losses and provides sufficient provisions. It is also necessary for a balanced financial structure and helps provide shareholder reward. Thus consistently healthy earnings are essential to the sustainability of banking institutions. Profitability ratios measure the ability of a company to generate profits from revenue and assets. There are requirements that are used as to evaluate Earning like:

- Majority of earnings is annuity in nature (low volatility).
- The growth trend of the past years is consistent with or better than industry norm and there are multiple sources of income (both interest and non-interest income).

### **2.2.4.1 Earning Ability Ratio Analysis**

$$\text{Net Interest Income Margin (NIM)} = \text{Net Interest Income} / \text{Total Loan and Advance}$$

Return on asset (ROA) = Net Interest Income/Total Asset

Return on equity (ROE) = Net Interest Income/Shareholder's Equity

### **2.2.5 Liquidity**

Liquidity ratio measures the bank's ability to meet its current obligation. Banks make money by mobilizing deposit and providing fund for creditors, so the bank needs to be conscious to meet the payment when depositors demands for. The inability of the bank to meet the demand of depositor leads to the liquidity risk. Therefore, the fund management practices should ensure an institution is able to maintain a level of liquidity sufficient to meet its financial obligations in a timely manner; and capable of quickly liquidating assets with minimal loss (Mulalem, 2015).Banks makes money by mobilizing short-term deposits at lower interest rate, and lending or investing these funds in long-term at higher rates, so it is hazardous for banks mismatching their lending interest rate.

The liquidity ratio expresses the degree to which a bank is capable of fulfilling its respective obligations. Banks makes money by mobilizing short-term deposits at lower interest rate, and lending or investing these funds in long-term at higher rates, so it is hazardous for banks mismatching their lending interest rate. The liquidity requirements are taken into Bank Analysis as below:

- Majority of the funding is coming from customer's deposits, and no concentration of funding sources.
- Is there a maturity or interest rate mismatch?
- Does the central bank impose reserve requirements?

#### **2.2.5.1 Liquidity Ratio Analysis**

Customer deposits to total assets =Total Customer Deposit/Total Asset

Total loan to customer deposits (LTD) = Total Loan/Total Customer Deposit

### **2.3 Review of Empirical Evidences**

Saminathan (2016) evaluated financial performance of 18 private banks, 25 public banks and 8 foreign Indian banks for the purpose of ranking one against the other. The result shows that there

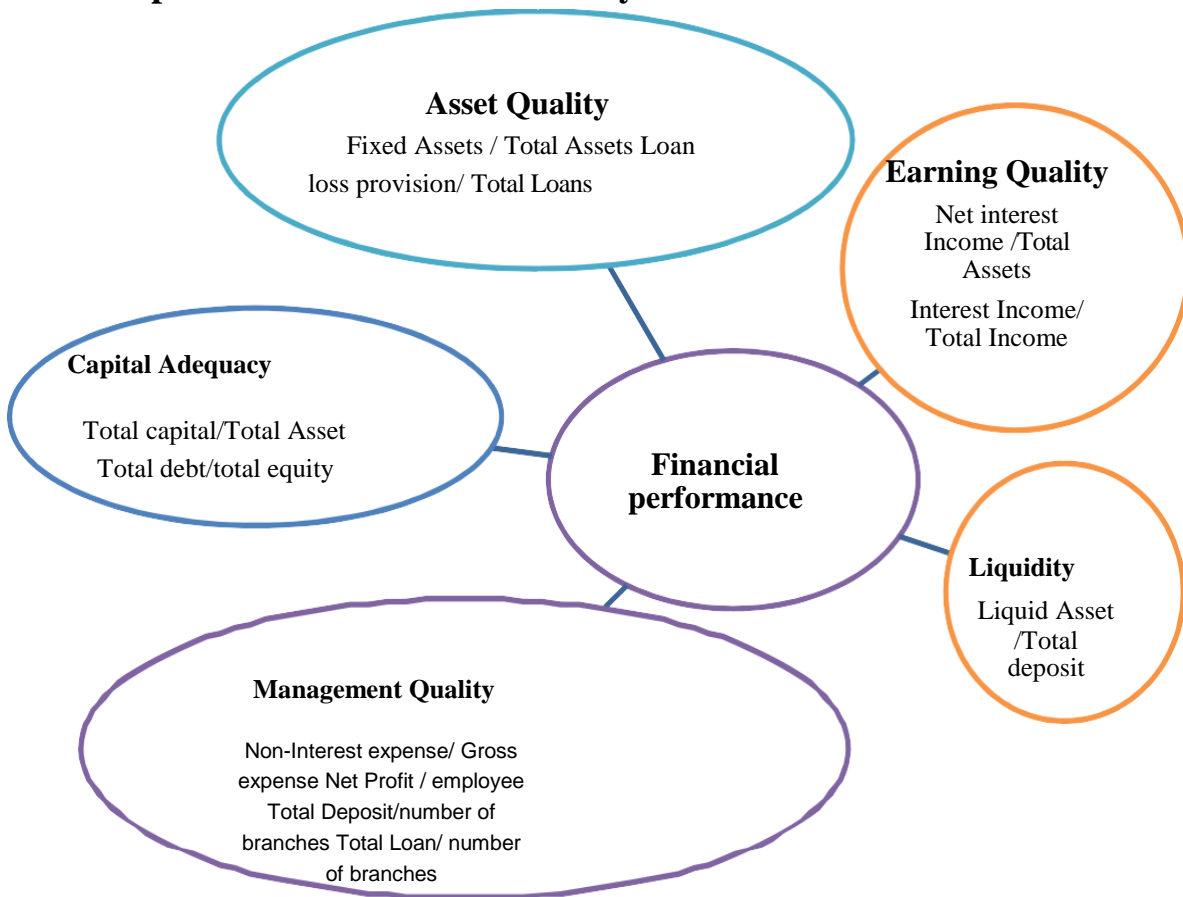
is a statistically significant difference between the CAMEL ratios of the selected Public Sector Banks, Private Sector Banks and Foreign Banks in India.

Dakito (2015) investigated the performance of 8 commercial banks for the period of 2000-13 using CAMEL approach by descriptive and econometric analyses. The finding showed that NIB's overall performance was good. Furthermore, he has measured the relationship between capital adequacy and financial performance using GLS regression model. The regression results exhibited the existence of positive relationship between capital adequacy and bank performance. Ermias (2016) evaluated the financial Performance of six senior Private Commercial Banks over the period 2000-2014 using CAMEL model. The study found out that UNB, NIB, and BOA have held from 1st to 3rd rank based on the CAMEL model composite rating system. The findings also indicated that bank specific factors incorporated in the CAMEL model affect to the extent of 67.5% of the changes in profitability of the private commercial banks in Ethiopia.

Anteneh et al (2013), on their study entitled health Check-up of Commercial Banks in Ethiopia, assessed the health of 8 private and public commercial banks using the 10 years annual report of each commercial banks (2000-2010) which were selected based on three criteria i.e., capital size of the banks, year of establishment and rank of banks in 2010 African banks rating. The study finding showed that the independent variables in CAMEL framework have highly explained the performance variables i.e., return on assets and return on equity. The private banks were in a better position than the public banks in terms of asset quality, management quality, and earning ability, while public banks were better in capital adequacy. However, liquidity position was high for both private and public commercial banks.

Rizwan Jan 2014 analyzed financial performance of top ten Private commercial private banks in Pakistan. The study used Regression analysis and correlation technique in order to address the issue. Returns on asset and interest income were taken as dependent variables while bank size, asset management and operational efficiency were taken as independent variables. The results showed that, ROA of the banks were strongly and negatively influenced by the bank size. Operational efficiency is negatively related with the ROA. Other dependent variable interest income of the banks was strongly and positively influenced by the bank size and is statistically significant. Interest income showed negative relation with the operational efficiency and results were also statistically significant.

## 2.4 Conceptual Frame work of the study



## 2.5 Summary of Literature review

Banking sector, being the backbone of economy has to be regulated and monitored properly. The failure of bank adversely impact on public confidence. Regulations on the banking sector to monitor its performance are necessary because the performances of banks are associated with the interest of general public. The CAMEL model can measure the overall performance of the banks. This paper attempts to make a financial and operational performance analysis of commercial banks based on the CAMEL model. The CAMEL analysis is the ratio based model to evaluate the performance of the banks based on the parameters such as capital adequacy, asset quality, management efficiency, earning ability and liquidity. These ratios have been calculated using the secondary data extracted from the annual reports of the respective banks

## **CHAPTER THREE**

### **3 Methodology of The Study**

#### **3.1 Research Design**

Descriptive design is a technique would use to organize and summarize a set of data in concise way helps to identify the general features and trends in a set of data and extracting useful information and also it is very important in conveying the final results of a study.

#### **3.2 Data Sources**

Since the study would conduct to measure the performances of Commercial Bank of Ethiopia uses the CAMEL approach, which is highly depend on the data from audited financial reports. The study relies on secondary source. Those data have collect from the published and audited annual report of Commercial Bank of Ethiopia. In addition to annual report, different documents and literatures records are reviewed in order to realize the objective of the study.

#### **3.3 Data Collection Methods**

The study focuses on performances over past period (2014-2016). To this end it would be used financial statements and other related documents (such as website, journals, annual and quarterly bulletins, newspapers, publications, magazines...)

#### **3.4 Methods of Data Analysis**

The data would use audit financial statement are coded and arranged in a way that is simple for analysis. Secondly, the arrange data would have analyzed using different statistical tools of data processing such as tables and percentages. Besides, the researcher is using panel data for descriptive statics for CAMEL ratios techniques of financial analysis, such as ratio analysis have been used to address the scientific evidence in the evaluation of performance of Commercial Bank of Ethiopia. The data that collects organize in using percentage and tables to make it easy to analyze and interpret it. In this section of the research is mainly focuses in data analysis and interpretation from the data will collect using the audit annual financial reports of Commercial Bank of Ethiopia from year 2014 to 2016.

### 3.5 Data Analysis Tools

This study would have been covering the period of three years from 2014- 2016. To measure the financial performance of Commercial Bank of Ethiopia, CAMEL analysis have been used , this is a standard analysis for measuring performance of financial institutions and the latest tool nowadays. CAMEL test consists of Capital Adequacy, Asset Quality, Management Quality, Earning Ability and Liquidity. To achieve the desired results, the researcher would like to utilize six ratios that define their respective parameters of CAMEL. These are mention in the following.

**Table 3.1 Parameter of CAMELs**

<b>CAMEL Parameters</b>	<b>Ratios</b>
Capital Adequacy	<ul style="list-style-type: none"> <li>• Capital Adequacy Ratio,</li> <li>• Debt-Equity Ratio</li> <li>• Advances to Assets</li> <li>• Govt. Securities to Total investment</li> </ul>
Asset Quality	3.5 Allowance for doubtful account to Total Assets ratio 3.6 Allowance for doubtful account to net Advance ratio 3.7 Investments to total asset ratio
Management Quality	<ul style="list-style-type: none"> <li>• Total Advances to Total Deposits</li> <li>• Business per Employee</li> <li>• Profit per Employee</li> </ul>
Earnings	<ul style="list-style-type: none"> <li>• Operating Profits to Average Working Funds.</li> <li>• Spread to Total Assets</li> <li>• Net Profit to Average Assets</li> <li>• Interest Income to Total Income.</li> <li>• Non-Interest Income to Total Income</li> </ul>
Liquidity	<ul style="list-style-type: none"> <li>• Liquid Assets to Total Assets</li> <li>• Govt. Securities to Total Assets</li> <li>• Liquid Assets to Demand Deposits</li> <li>• Liquid Assets to Total Deposits</li> </ul>

Source: (Y. Piyu, 2004)

## CHAPTER FOUR

### 4. Analysis and Discussion

CAMEL is a standardized financial rating system and short form for five measures such as Capital adequacy, Asset quality, Management ability, Earnings and Liquidity to market risk. For this study, the five indicators of framework showing the soundness of the financial institution are considered to analyze the performance of Commercial Bank of Ethiopia.

#### 4.1 Capital Adequacy

Capital adequacy refers to the inner strength of banks, which would stand it in good stead during the times of crisis. Capital adequacy is the capital to maintain the balance with the risk exposure of the financial institution such as credit risk, market risk and operational risk, in order to absorb the potential loss and protect the financial institution's debt holder in addition to this meeting a minimum level of statutory requirement is also a key factor. National Bank of Ethiopia (NBE) issued directive whereby each banks in Ethiopia is required to meet the capital adequacy standard of 12% since October 1<sup>st</sup> 2013. The higher the Capital Adequacy Ratio (CAR), indicates stronger the bank and the more the protection of investors. The following ratios: (a) Capital Adequacy Ratio (CAR), (b) Debt Equity Ratio, (c) Advance to Assets and (d) Government Security to Total Investment were taken into consideration to judge the capital adequacy of Commercial Bank of Ethiopia.

**Table4. 1 Descriptive Statistics for Capital Adequacy**

Year	CAR (%)	D/E	Advances/Asset	Gov. Sec/Inv (%)
2014	4.41	21.68	36.94	99.69
2015	4.23	22.62	38.38	99.97
2016	12.63	22.89	38.22	99.97

**Source:** Own computation based on financial statements of CBE

#### **4.1.1 Capital Adequacy Ratio**

From the above table 4.1 the capital adequacy ratio of commercial bank of Ethiopia by the year 2014 and 2015 was below the requirement set by National Bank of Ethiopia (NBE) which is 12% and a minimum of 8% set by the Bank for International Settlement (BIS) but in the year 2016 its capital adequacy ratio was 12.63% which means that above the directive of NBE. The average score also shows a declining trend from year to year except for year 2016. From the above table we can conclude that Commercial Bank of Ethiopia increases its capital adequacy ratio by lending in a profitable area, investing in diversified economic sectors.

#### **4.1.2 Debt to Equity Ratio**

Debt-Equity Ratio indicates that a high debt/equity ratio is often associated with high risk; it means that a company has been aggressive in financing its growth with debt. As shown that from the above table 4.1 of debt equity ratios increases from year to year throughout the study period. The highest increase rate scored in 2016 which is 22.89 this data shows that Commercial Bank of Ethiopia creditors has contributed more funds. Therefore, Commercial Bank of Ethiopia has more of this product on hand and deposit mobilization remained the primary focus with special emphasis on low cost and sustainable sources of funding.

#### **4.1.3 Advance to Asset ratio**

Advances to total asset ratio indicates a bank's aggressiveness in lending which ultimately results in better profitability. As shown from the above table 4.1 of total advances to total ratio by the year 2014 was 36.94 in the meantime by the year 2015 38.38 which means that Commercial Bank of Ethiopia has better profitability than the previous years. But during the study period of 2016 total advances to total ratio was 38.22 this indicates that profitability of the bank was decrease. Therefore, commercial bank of Ethiopia had converted its deposits into loans and advances.

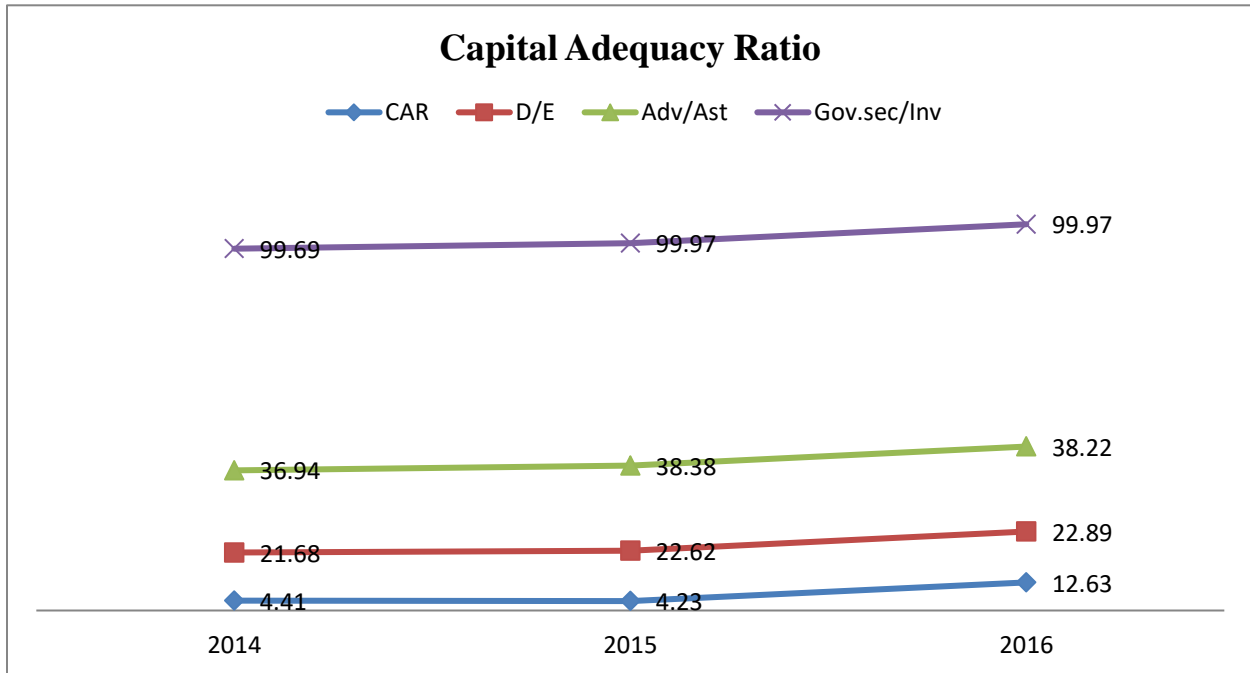
#### **4.1.4 Government securities to total investment ratio**

Government securities measure the amount of risk free assets invested by a bank in government securities as a percentage of the total investment held by the bank. As shown from the above table 4.1 Commercial Bank of Ethiopia its Government Securities to Total Investments Ratio was



increase from year to year which is from 99.69% to 99.97% by the year 2014 and 2015 respectively which means that Commercial Bank of Ethiopia investing much amount of investment in government securities.

**Figure 4.1: Trend Analysis of Capital Adequacy of CBE (2014-2016)**



Source: Own computation based on financial statements of CBE

The above figure 4.1 indicates that the achievement of capital adequacy of Commercial Bank of Ethiopia continuously improved as per the result of CAR ratio, D/E ratio, Adv/Ast ratio and G-Sec/Inv ratio.

## 4.2 Asset quality

The quality of assets is an important parameter to gauge the strength of a bank. Banks make loans to households and businesses like farms and a whole heap of others – these are considered assets for the banks. A common way to measure the quality of assets the following ratios

- i. Allowance for doubtful account to Total Assets ratio
- ii. Allowance for doubtful account to net Advance ratio
- iii. Investments to total asset ratio

**Table 4.2: Descriptive Statistics for Asset Quality**

<b>Year</b>	<b>Allowance for doubtful acc. To total asset ratio</b>	<b>Allowance for doubtful acc. To net advice ratio</b>	<b>Inv. To total asset ratio</b>
<b>2014</b>	0.99	2.83	46
<b>2015</b>	0.97	2.72	51
<b>2016</b>	0.98	1.77	49

#### **4.5.1 Allowance for doubtful account to Total Assets ratio**

As shown from the above table 4.2 of allowance for doubtful account to total assets ratio indicates that the performance is better in its lending is the lower the ratio. As indicated in the table above during the study period of 2015 was a better performance than the other study period. The highest ratio was registered by 2014 due to its highest allowance record.

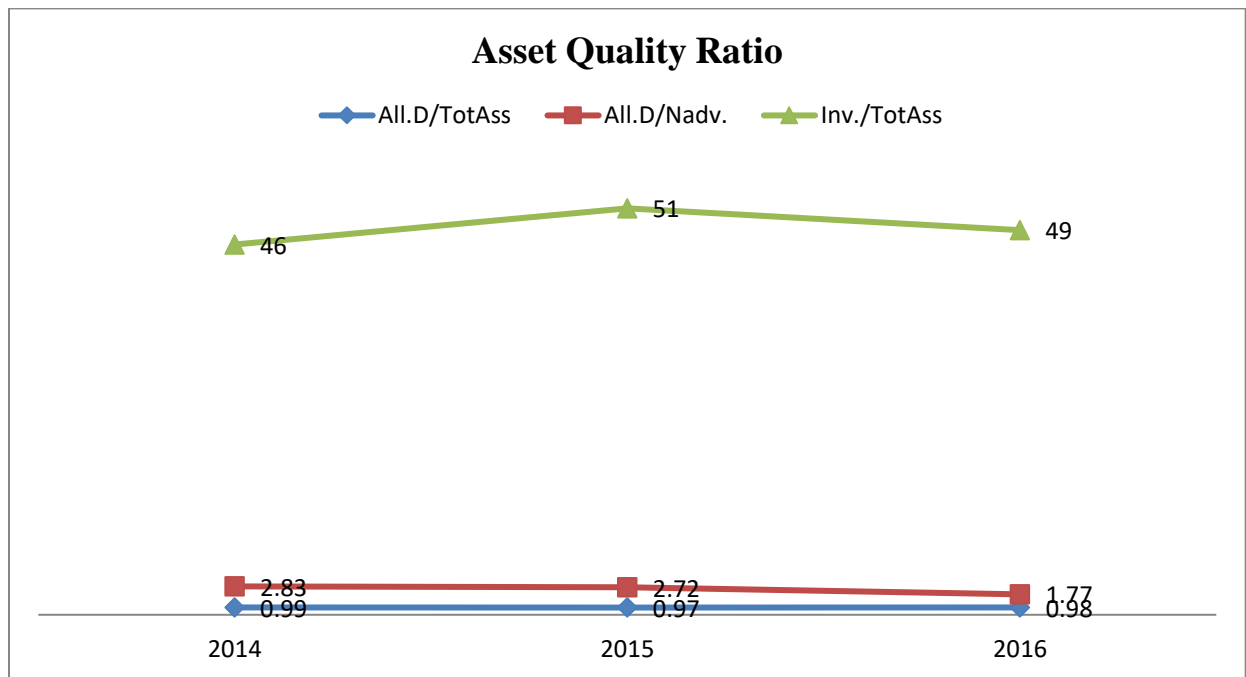
#### **4.5.2 Allowance for doubtful account to net Advance ratio**

This is the most widely used standard measure of asset quality in relation to loan given by banks. The lower ratio denotes better quality of the asset i.e. loan, and higher ratio stands for lower quality of the loan. Table 4.2 presents efficiency of the bank in this regard. Therefore, during the study period of 2016 (1.77) were registered the lowest ratio. The highest percentage or weak performance was recorded by the year of 2014 which was 2.83.

#### **4.5.3 Investments to total asset ratio**

This ratio is an indication of the growth of investment by banks beside their lending activities. A higher ratio means conservative policy of a bank to provide safeguard to the investments against non-performance assets Table 4.2 tells us that, during the specific period of 2015 commercial bank of Ethiopia invest more and the lower the ratio was recorded by the study period of 2014. This means from their total asset commercial bank of Ethiopia investment accounts on government securities and other investment sectors

**Figure 4.2: Trend Analysis of Assets Quality of CBE (2014-2016)**



**Source:** Own computation based on financial statements of CBE

High nonperforming loan affects the profitability of the bank. Thus, low nonperforming loans to total loans shows that the good health of the portfolio a bank. The lower the ratio the better the bank performing (Sangmi and Nazir, 2010).

## 4.6 Management Ability

Management ability is a key to judge the decision making capacity of managing board, as ingredients of the CAMEL Model. The ratio is to capture the possible subjective dynamics of the effectiveness of management. The ratios to assess the management efficiency banking sector used for this study are return on equity and asset turnover. Return on the Net worth/equity shows the percentage of return on the total net worth of the bank and interpreted as the return that the owners have generated on their single birr invested. To analyze the possible dynamics of management efficiency affecting the financial performance of Commercial Bank of Ethiopia

- i. Total advances to Total deposits,
- ii. Business per Employee and

- iii. Profits per Employee were taken to judge the management ability of Commercial Bank of Ethiopia.

**Table 4.3: Descriptive Statistics for Management Ability**

Year	TAdv/TDe (%)	BPE (Birr)	PPE (Birr)
2014	46	15,270,244	360,829
2015	46	15,992,069	397,863
2016	48	15,578,554	340,741

**Source:** Own computation based on financial statements of CBE

#### **4.6.1 Total Advances to Total deposits**

The ratio is an implication of Management ability or commercial Bank of Ethiopia towards converting customer deposits to loans. As indicated from the above table 4.3 the ratio increases from the study period of 2015 to 2016. The average total advances to total deposit ratio was 46%.

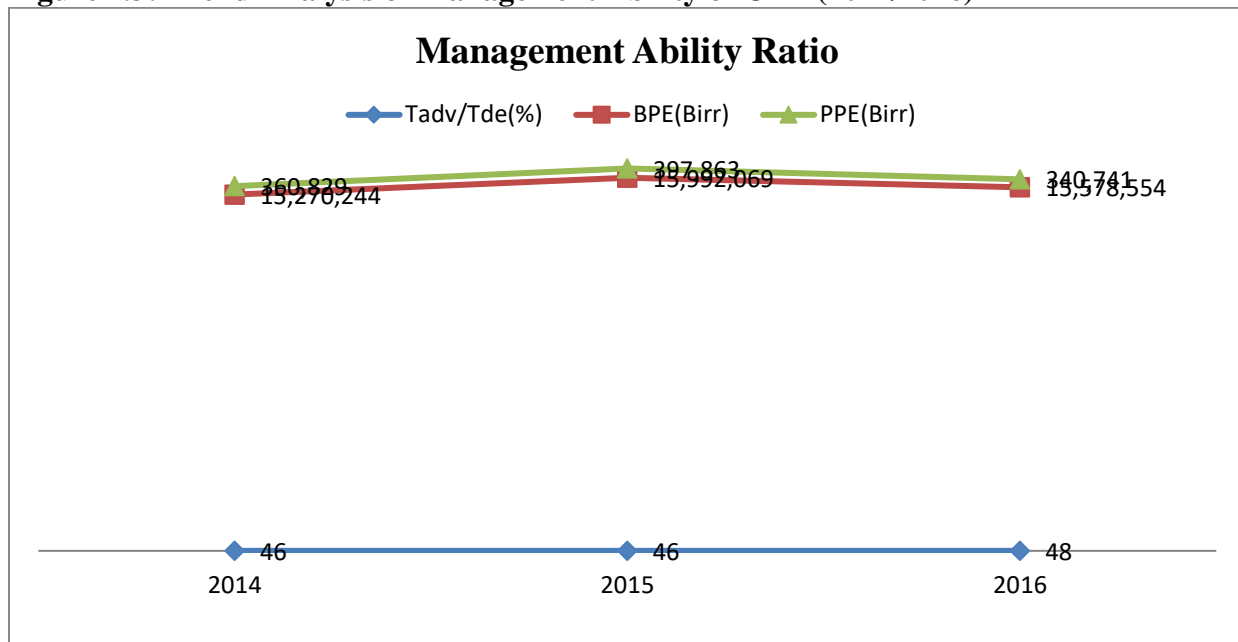
#### **4.6.2 Business Per Employee**

Business per employee is an important indicator of productivity of Commercial Bank of Ethiopia since employees are generally considered as input and business as output of a bank. As shown from the above table 4.3 there is an increasing trend from the specific period 2014 to 2015 which is 15,270,244 to 15,992,069 respectively but during the specific period 2016 it decreased from 15,992,069 to 15,578,554.

#### **4.6.3 Profit Per Employee**

Profit Per Employee ratio indicates the average profit generated per person employed by Commercial Bank of Ethiopia reveals increasing trend for the entire study period except the year 2016 in which it decreased from Birr 397,863 in 2015 to Birr 340,741 in 2016. Therefore, the analysis in table 4.3 implies that Commercial Bank of Ethiopia managers is efficient throughout the study period and it continuously improved. Similar with previous management opinion, here also the opinion starts with accepting the findings of the study. As per management opinion Commercial Bank of Ethiopia motivate its staffs to be efficient and effective in their jobs and also supervised strongly to be loyal to organization policies and procedures like customers handling, organization resource utilization, etc.

**Figure 4.3: Trend Analysis of Management Ability of CBE (2014/2016)**



Source: Own computation based on financial statements of CBE

In the above figure 4.3 we can understand that in terms of total advance to total deposit, business per employee and profit per employee trend analysis of Commercial Bank of Ethiopia are still in good position.

#### 4.7 Earning Quality

Earning quality mainly measures the profitability and productivity of the bank, explains the growth and sustainability of future earnings capacity (Ahsan, 2016). In the same way, bank depends on its earning to perform the activities like funding dividends, maintaining adequate capital levels, providing for opportunities for investment for bank to grow, strategies for engaging in new activities and maintaining the competitive outlook mainly derived from its earnings. The following earning quality parameter

- i. Operating Profits to Average Working Funds Ratio
- ii. Spread or Net Interest Margin (NIM) to Total Assets
- iii. Net Profit to Average Assets
- iv. Interest Income to Total Income and
- v. Non-Interest Income to Total Income was calculated for evaluating the earning quality of Commercial Bank of Ethiopia.

**Table 4.4: Descriptive Statistics for Earning Quality**

Year	OP/WF (%)	NIM (%)	NP/AAst	II/TI(%)	NII/TI(%)
2014	3.99	3.53	2.75	70	30
2015	4.18	3.91	2.89	72	28
2016	3.57	3.91	2.43	77	23

Source: Own computation based on financial statements of CBE

#### **4.4.1 Operating Profit to Average Working Funds Ratio**

This ratio indicates how much Commercial Bank of Ethiopia can earn from its operation after meeting its operating expenses for every birr investment in working fund. As indicated from the above table 4.4 operating profit to average working funds ratio was vary from year to year during the study period. In 2014 its scored was 3.99% but it increases by the year of 2015 which is 4.18% and in the last studying period of 2016 the operating profit to average working funds ratio are decline that is 3.57%. Therefore, from the idea of operating profit to average working funds ratio in Commercial Bank of Ethiopia fluctuating from year to year which means that ups and downs in the ratio this may be a decline in the future.

#### **4.4.2 Spread or Net Interest Margin (NIM) to Total Assets**

It is an important measure of the banks income from their lending activities Net interest income is the difference between interest income and interest expense. It is the gross margin on a bank's lending and investment activities. A higher net interest margin shows the better earning given the total assets. As indicated from the above table 4.4 the spread of Commercial Bank of Ethiopia in increase ratio rate during the study period in 2014 scored 3.53 in the remaining study period CBE scored more which is 3.91 and 3.91 in 2015 and 2016 respectively. From this data we can concluded that Commercial Bank of Ethiopia is in a better position.

#### **4.4.3 Net Profit to Average Assets**

Net Profit to Average Assets measures the profitability of Commercial Bank of Ethiopia by using its assets to generate net income. As shown from the above table 4.4 of net profit to average assets during the study period was ups and downs from the first period of 2014 the ratio was 2.75 in the next study period of Commercial Bank of Ethiopia was an increase in the ratio which is 2.89 but

the last study period CBE was decrease in the ratio of 2.43. Therefore, Commercial Bank of Ethiopia has recorded a good ratio performance on average in the future the bank is stable in net profit to average assets.

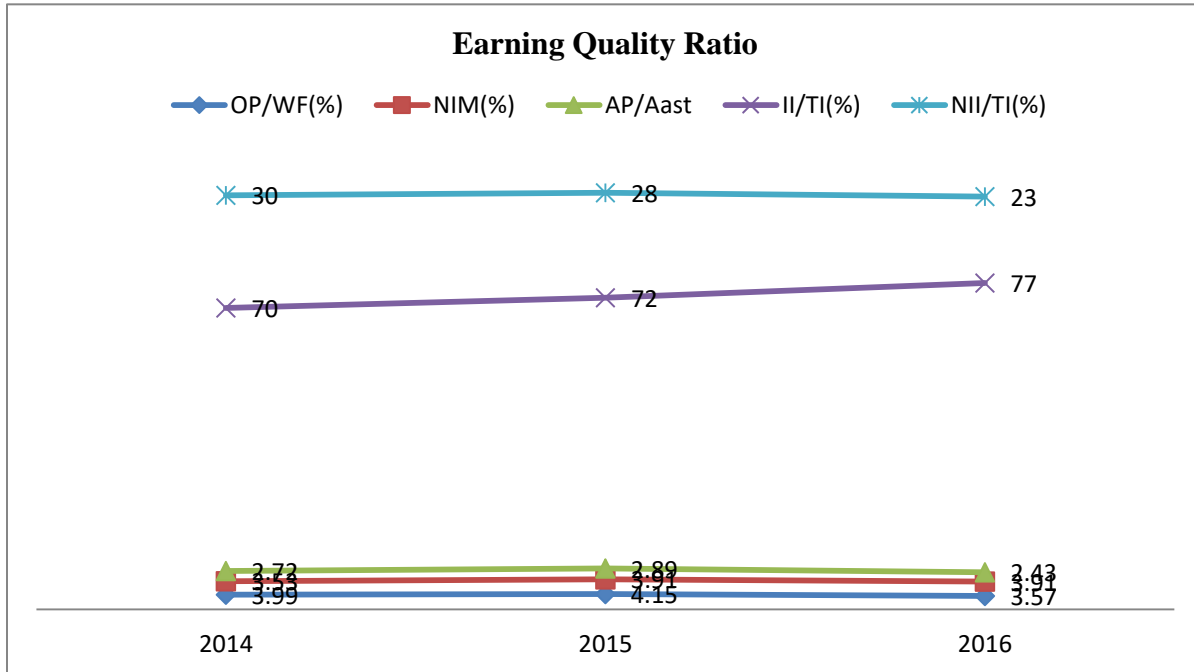
#### **4.4.4 Interest Income to Total Income**

Interest Income to Total Assets ratio indicates the performance of Commercial Bank of Ethiopia in income generated from lending activities and interest earned on deposit made from other banks to total income generated by banks. The higher ratio indicates the greater dependence of the bank on interest income. During all the study period Commercial Bank of Ethiopia interest income to total income was increased which is 70%, 72% and 77% in 2014, 2015 and 2016 respectively. As indicated in the data above Commercial Bank of Ethiopia interest income to total income is better but the higher the ratio indicates the greater dependence on interest income

#### **4.4.5 Non Interest Income to Total Income**

Non-Interest Income to Total Income indicates the proportion of fees and other income in respect of total assets of Commercial Bank of Ethiopia. This ratio is used as a measure of profitability indicator. During all the study period of Commercial Bank of Ethiopia decreases from time to time in non-interest income to total income which is 30%, 28% and 23% in 2014, 2015 and 2016 respectively so, Commercial Bank of Ethiopia strongly working to increase fee based income from charges and commissions and foreign exchange activities.

**Figure 4.4: Trend Analysis of Earning Quality of CBE (2014-2016)**



Source: Own computation based on financial statements of CBE

Earning quality is essential to measure the quality of bank’s profitability and its capability to maintain quality and earn consistently. As shown from the above figure 4.4 Commercial Bank of Ethiopia has a good position in the future in earning quality.

## 4.8 Liquidity

Liquidity ratio measures the bank’s ability to meet its current obligation. Banks make money by mobilizing deposit and providing fund for creditors, so the bank needs to be conscious to meet the payment when depositors demands for. The inability of the bank to meet the demand of depositor leads to the liquidity risk. As the directive of National Bank of Ethiopia (NBE) the liquidity requirement was raised from 15% to 25% in April 2008. The following liquidity ratios

- i. Liquid Assets to Total Assets
- ii. Liquid Assets to Demand Deposits
- iii. Liquid Assets to Total Deposits were calculated for evaluating the Liquidity status of Commercial Bank of Ethiopia.



**Table 4.5: Descriptive Statistics for Liquidity**

Year	LA/TA (%)	LA/DD (%)	LA/TD (%)
2014	13	30.74	16
2015	8	20.28	10
2016	8	24.12	11

Source: Own computation based on financial statements of CBE

#### 4.5.1 Liquid Assets to Total Assets

Liquid Assets to Total assets is used to measure of liquidity which indicates the percentage of a Commercial Bank of Ethiopia to total assets in liquid form. Table 4.5 shows that the liquid asset to total assets in the first study period of 2014 was 13% but the remaining two years in 2015 and 2016 the ratio was decreased which is 8%. Therefore, Commercial Bank of Ethiopia their liquidity position is poor during the study period because of the directive of National Bank of Ethiopia said that the minimum liquidity positions of banks are 25%.

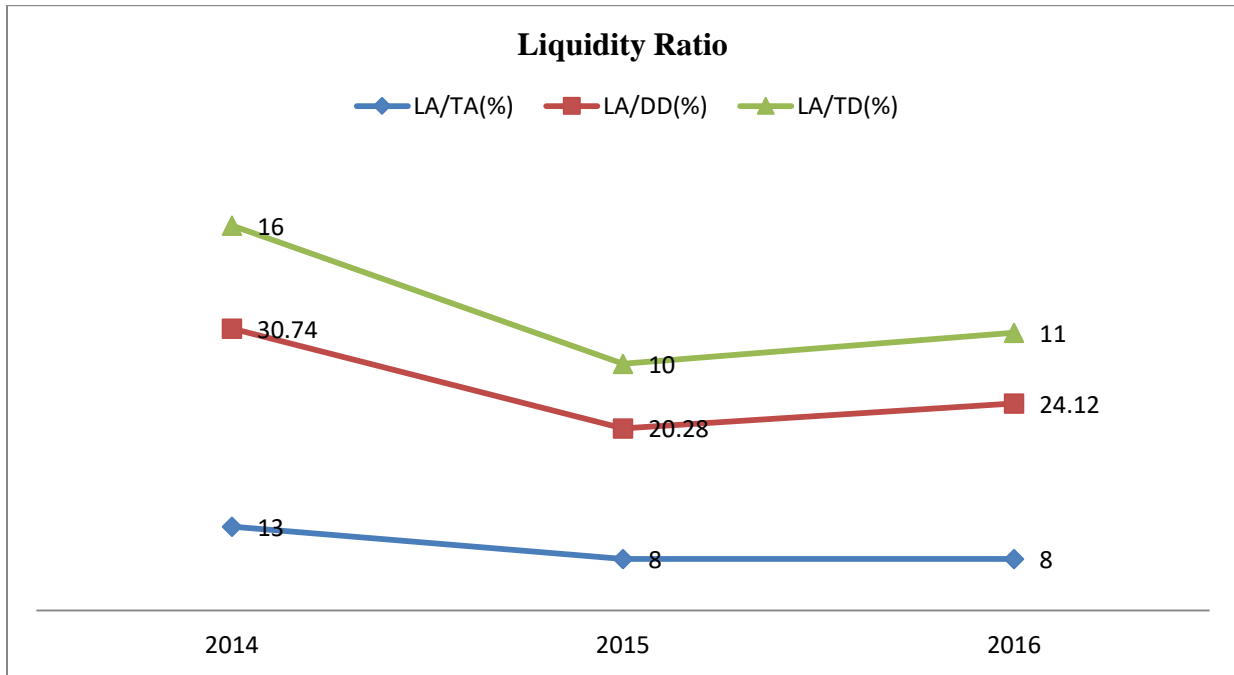
#### 4.5.3 Liquid Assets to Demand Deposits

Liquid Assets to Demand Deposits ratio measures Commercial Bank of Ethiopia judge themselves whether they have sufficient amount of liquidity to meet the withdrawal demand of their demand account depositors. As indicated from the above table 4.5 liquid asset to demand deposit was vary from year to year during the study period in 2014 Commercial Bank of Ethiopia scored 30.74 % but in the remaining study period CBE, decreases its liquidity asset to demand deposit which is 20.28% and 24.12% in 2015 and 2016 respectively. Therefore, Commercial Bank of Ethiopia recorded poor performance in the study period of liquid assets to demand deposit due to this performance the bank strongly working in the future.

#### 4.5.3 Liquid Assets to Total Deposits

Liquid Assets to Total Deposits ratio measures the liquidity position of Commercial Bank of Ethiopia, by showing the capacity of banks to meet the withdrawal demand of all of their customers from liquid assets. The high ratio indicates the conserving investment policy of Commercial Bank of Ethiopia and getting low risk and low return. The liquid assets to total deposit of Commercial Bank of Ethiopia was 16% in 2014 and in 2015 and 2016 the position was 10% and 11% from this result Commercial Bank of Ethiopia liquidity position to total deposit is below the requirement of National Bank of Ethiopia. Unexpected deposit withdrawal was not treating in this study period.

**Figure 4.5: Trend Analysis of Liquidity Performance of CBE (2014-2016)**



Source: Own computation based on financial statements of CBE

Liquidity measures the capacity to meet its short term obligations as well as loan commitments. The liquidity performance measures that is liquid asset to total asset, liquid asset to demand deposit and liquid asset to total deposit ratio in the above figure 4.5 shows that Commercial Bank of Ethiopia's ability to pay immediate its short-term obligations by using the most liquid assets.

## CHAPTER FIVE

### 5 Summary of the Findings, Conclusion and Recommendation

This chapter presents the findings, conclusion and recommendations of the results. It has three parts: the first part presents summary of major findings of the study, the second part presents the conclusion and the last part presents the recommendation part of the study.

#### 5.1 Summary of the Findings

This paper has examined the financial and operational performance of Commercial Bank of Ethiopia over a period of three years (2014 – 2016) by using CAMEL model. CAMEL model measures the financial and operational performances of banks specifically in our case study Commercial Bank of Ethiopia in all parameters like Capital Adequacy, Asset Quality, Management Ability, Earning Quality and Liquidity performance. To conduct the study, secondary data particularly audited financial statements were collected from Commercial Bank of Ethiopia. Besides, descriptive statistics were used to analyze the data. This research was also tried to answer research questions of does the CAMEL variables effect on banks performance.

- In the case of Capital adequacy ratio Commercial Bank of Ethiopia was scored 4.41% and 4.23% below the requirement of National Bank of Ethiopia but the last study period the bank meets at least the standard of NBE.
- Asset quality ratio includes allowance for doubtful account to total asset ratio, allowance for doubtful account to net advice ratio and Investment to total asset ratio in all these parameters Commercial Bank of Ethiopia scored in 2015 0.97 in allowance for doubtful account to total asset ratio, 2.83 was scored in 2014 in allowance for doubtful account to net advice ratio and finally 51% scored in 2015 Investment to total asset ratio.
- When we come to Management Ability a number of parameters were used to evaluate the financial and operational performance of commercial bank of Ethiopia. The total advances to total deposit increases from first study period to last study period which it is increases from 46% to 48%.

- With regard to earning quality five criteria were used such as operating profit to average working funds ratio, net interest margin to total assets, net profit to average assets, interest income to total income and non-interest income to total income. In all the study period from 2014-2016 Commercial Bank of Ethiopia scored different results.
- Liquidity measures the bank's ability to meet its current obligation. Generally, the liquidity position of Commercial bank of Ethiopia was not good.

## 5.2 Conclusion

Based on the analysis and the findings the following conclusions are drawn

- Capital adequacy ratio of Commercial bank of Ethiopia in the first consecutive two years (2014 and 2015) of the study period of the results scored was poor which is below the standard of National bank of Ethiopia but in the last study period (2016) CBE meet 12.63% the requirement of national Bank of Ethiopia. The debt to equity ratio of Commercial bank of Ethiopia was increase from year to year of the study period. The highest ratio 22.89 was recorded by the year of 2016. In advances to total asset ratio of Commercial Bank of Ethiopia was recorded good performance in the first two consecutive years 36.94 and 38.38 (2014-2015) but in the last study period CBE scored less with compared to the previous period but overall condition of the bank advance to asset ratio was satisfactory. In government securities to total investment ratio Commercial Bank of Ethiopia was investing much amount of money.
- Asset quality is a good indicator of financial and operational performance of Commercial Bank of Ethiopia. Allowance for doubtful account to total assets ratio indicates that the performance is better in its lending is the lower the ratio in 2015 the performance was good but in 2014 and 2016 was low as compared to 2015. In allowance for doubtful account to net advance ratio was good in 2016 which is 1.77 that means the lower ratio denotes better quality of the asset i.e. loan.
- Earning quality measures the profitability and productivity of Commercial bank of Ethiopia with different parameters like operating profit, net interest margin, net profit, interest income and non-interest income. In operating profit of Commercial Bank of

Ethiopia vary from year to year but in the last study period (2016) was decreased that is 3.57% but in net interest margin of CBE scored better than the previous first two years. Net profit measures the profitability of Commercial Bank of Ethiopia by using its assets to generate net income so in this regard the bank recorded a good ratio of net profit.

- Liquidity position of Commercial Bank of Ethiopia was not good or unsatisfactory which means that the liquidity position was below the requirements of national Bank of Ethiopia in the first two consecutive periods (2014-2015).

### **5.3 Recommendation**

Based on the findings of the study and the conclusion the following recommendations are made by the researcher:

- The study revealed that capital adequacy ratio, asset quality ratios, Management efficiency, Earning ability and Liquidity were the key drivers on profitability of commercial bank of Ethiopia. Therefore, CBE managers are advised to give due attention to those variables such as, Capital adequacy, Asset quality, Efficiency, Earnings quality and Liquidity to improve profitability.
- Commercial Bank of Ethiopia has not managed its capital adequacy ratio well above the minimum requirement of National Bank of Ethiopia which is 12% as well as 8% set by Basel II; Therefore, Commercial Bank of Ethiopia should increase its capital adequacy ratio (CAR) to enhance the safety of its banking system, and the safety to depositors.
- Commercial Bank of Ethiopia does not appear to fully utilize their assets to generate income. The low level of loan to deposit ratio shows a potential to increase more loans to generate more revenue. The banks are recommended to invest in interest bearing assets, mainly loans, to fully utilize their revenue generating capacity.
- Liquidity is a bank's capacity to fund increase in assets and meet both expected and unexpected cash and collateral obligations at reasonable cost and without incurring unacceptable losses. To improve liquidity performance, Commercial Bank of Ethiopia should have to hold high quality liquid assets and convert them in the event of liquidity shortage. Even if liquid assets offer lower returns, holding more liquid assets and better matching cash-flows of assets and liabilities will reduce the liquidity risk of the bank and

protect it from insolvency. Effective liquidity risk management helps ensure a bank's ability to meet its obligations as they fall due and reduces the probability of an adverse situation developing. Therefore, the researchers recommend the management of Commercial Bank of Ethiopia to hold liquid asset at optimum level between liquidity risk and profitability.

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## Appendix

### Financial Ratios

#### Capital Adequacy

Year	CAR (%)	D/E	Advances/Asset	Gov. Sec/Inv (%)
2014	4.41	21.68	36.94	99.69
2015	4.23	22.62	38.38	99.97
2016	12.63	22.89	38.22	99.97

#### Asset Quality

Year	Allowance for doubtful acc. To total asset ratio	Allowance for doubtful acc. To net advice ratio	Inv. To total asset ratio
2014	0.99	2.83	46
2015	0.97	2.72	51
2016	0.98	1.77	49

#### Management Ability

Year	TAdv/TDe (%)	BPE (Birr)	PPE (Birr)
2014	46	15,270,244	360,829
2015	46	15,992,069	397,863
2016	48	15,578,554	340,741

#### Earning Quality

Year	OP/WF (%)	NIM (%)	NP/AAst	II/TI(%)	NI/II(%)
2014	3.99	3.53	2.75	70	30
2015	4.18	3.91	2.89	72	28
2016	3.57	3.91	2.43	77	23

#### Liquidity

Year	LA/TA (%)	LA/DD (%)	LA/TD (%)
2014	13	30.74	16
2015	8	20.28	10
2016	8	24.12	11