

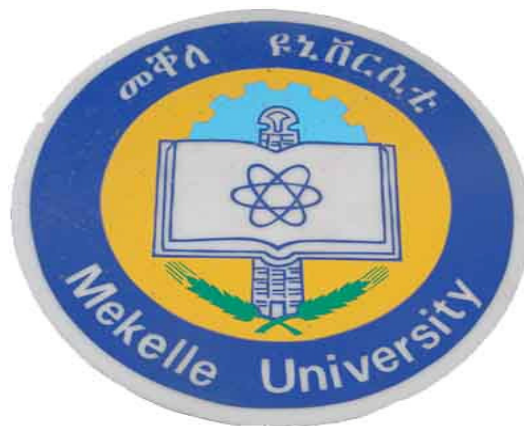
PERFORMANCE EVALUATION OF THE COMMERCIAL BANK OF ETHIOPIA:- PRE AND POST LIBERALIZATION

*A Research Project submitted to Department of Accounting & Finance,
College of Business and Economics, Mekelle University, for the partial
Fulfillment of the Degree of Master of Science in Finance & Investment*

By

YESUF LEGAS ABDU

Reg. No-- CBE/PRO-034/01



Advisor

Dr. FISSEHA GIRMAY, Ph.D.

*Assistant professor of accounting & finance
Department of Accounting and Finance
College of Business & Economics
Mekelle University
Tigray – Ethiopia.*

*June, 2010
Mekelle, Ethiopia*

Study On

**Performance Evaluation of the Commercial Bank of Ethiopia:
Pre and Post Liberalization**

By

Yesuf Legas Abdu

Reg. No-- CBE/PRO-034/01

DECLARATION

I, Yesuf Legas, hereby declare that the project work entitled “**Performance Evaluation of the Commercial Bank of Ethiopia: Pre and Post Liberalization**” submitted by me for the award of the degree of Masters of Finance and Investment of Mekelle University at Mekelle, is my original work and it has not been presented for the award of any other Degree, Diploma, Fellowship or other similar titles of any other University or institution.

Place: Mekelle

Signature: -----

Date: May, 2010

Name: Yesuf Lega

CERTIFICATION

This is to certify that this Project work titled “**performance Evaluation of the Commercial Bank of Ethiopia: pre and post Liberalization**” is the bonafide work of Mr Yesuf Legas who carried out the research under my guidance. Certified further, that to the best of my knowledge the work reported here in doesn’t form part of any other project report or dissertation on the bases of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Place: Mekelle

Signature: -----

Date: May, 2010

Advisor: Dr. Fisseha Girmay, Ph.D.
Asst. Professor of Accounting & Finance
Department of Accounting & Finance
College of Business & Economics
Mekelle University

ACKNOWLEDGMENTS

At the very beginning I thank my lord for his safeguarded and brightened direction of my personal and academic journey. Deserving special and heartfelt thanks is also my treasured advisor, Dr. Fisseha Girmay, for his unreserved guidance, invaluable assistance, constructive comments and relentless effort exerted in advising and teaching me throughout the job in writing this paper.

I also would like to thank the seven operations of CBE and NBE documentation center employees' and management member, who were very cooperative in providing the necessary data and sacrificing their valuable time in filling the questionnaire to carry out this project.

My appreciation also goes to Tewodros Abuhay, Kibrom Mehari and Ruith Gedion for wholehearted support in providing computer and motivating me in the entire period of this project work.

Special gratitude goes to my best friends, Samueal Melkie (NBE), Yohannes Negash and Antigen Birhan for editing the paper, motivating and supporting me to carry out this project work.

Finally, my special thanks and unreserved love goes to my fiancé Eyerusalem Hargewien, for her strong backing and overall assistance without her my entire study of the postgraduate program would have not been successful.

Yesuf Legas

ABSTRACT

Financial sector reform is so important to ensure well-organized and stable financial system to increase the contribution of the banking system towards economic development. An exemplary reform measures undertaken by the Ethiopian government start the year 1992 was “liberalizing” the financial sector. Thus, this study was conducted under the title “performance Evaluation of Commercial Bank of Ethiopia: pre and post Liberalization”. The rational of this study is let the CBE and NBE know the performance of the bank in the pre and post liberalization and hence, to comment and recommend them on what they have to do, for the banks’ prosperity. The main objective of the study is to evaluate the financial performance of the Commercial Bank of Ethiopia in the pre and post liberalization. The researcher employed before and after study design using case study approach to evaluate how the bank has been financially performing in the pre and post liberalization. Both primary and secondary data were used in the study. Primary data gathered through structurally designed questionnaire from the selected employees’ and management who are working in seven different operations of the bank and secondary data from the annual reports for CBE for the period covering the year 1976 to 2009 were used in the study. The researcher employed financial statement analysis and test the hypothesis using t-test statistical tools. The major findings of the study indicate that performance of the bank after the liberalization is better than before liberalization. However, further reform measures in the deposit market, in establishing strong legal ground for providing technology banking services, let the bank to do business with financial institutions of their own choice, improving the capacity and independence of the regulatory/supervisory organ and full liberalization of the foreign market needs to be areas that need further liberalization or reform measures. Finally, the study suggested that the bank should use its maximum effort to further improve its performance and reform measures should be initiated on lifting the minimum interest rate for deposit to be determined on market basis, modify the commercial code to incorporate new article to enhance IT, fully liberalizing the foreign market, and encouraging the bank to do business with a financial institutions of their own choice.

Key words: Liberalization, credit quality, Liquidity, Profitability

TABLE OF CONTENTS

CONTENTS		
		Pages
Title page		i
Declaration		ii
Certification		iii
Acknowledgment		iv
Abstract		v
Table of contents		vi
Index of table		ix
Acronyms		x
CHAPTER I	INTRODUCTION	
	1.1 Background of the Study	1
	1.2 Statement of the Problem	4
	1.3 Research Questions	5
	1.4 Research Hypothesis	6
	1.5 Justification of the Study	6
	1.6 Objectives of the Study	7
	1.7 Methodology of the Study	7
	1.7.1 Research Design	7
	1.7.2 Sapling Design	8
	1.7.3 Method of Data Collection	9
	1.7.4 Method of Data Analysis and Interpretation	9
	1.8 Significance of the Study	10
	1.9 Scope of the Study	11
	1.10 Limitation of the Study	11

	1.11 Organization of the Study	12
CHAPTER II	LITRATURE REVIEW	
	2.1 Theoretical Framework	14
	2.1.1 Financial Liberalization and Repression	14
	2.1.2 Measure of Financial Performance	18
	2.1.2.1 Financial Statement Analysis	19
	2.1.2.1.1 Types of Financial Statement Analysis	20
	2.1.2.1.2 Role of Financial Statement Analysis	21
	2.1.2.1.3 Limitations of ratio analysis	22
	2.1.3 Financial Analysis in Banking Industry	24
	2.1.4 Types of Financial Ratios Analysis	24
	2.1.4.1 Credit Quality	24
	2.1.4.2 Liquidity Performance	25
	2.1.4.3 Profitability Performance	27
	2.1.4.4 Growth in Capital, Deposit and Loans	28
	2.2 Empirical Evidence	28
CHAPTER III	ORGANIZATIONAL PROFILE	
	3.1 History of Banking in Ethiopia	34
	3.2 Financial Sector Reform	39
	3.3 Commercial Bank of Ethiopia	40
CHAPTER IV	DATA ANALYSIS AND INTERPRETATION	
	4.1 Data From Secondary Sources	42
	4.1.1 Credit Quality	43
	4.1.2 Liquidity Performance	47
	4.1.3 Profitability Performance	51
	4.1.4 Growth in Net Profit, Capital, Deposit and Loan	55
	4.1.5 Hypothesis Testing Using T-Test	56
	4.1.5.1 Test of Credit Quality Performance	58

	4.1.5.2 Test of Liquidity Performance	61
	4.1.5.3 Test of Profitability Performance	63
	4.2 Data From Primary Sources	66
	4.2.1 Respondents Background	67
	4.2.2 Performance of CBE in the Pre and Post period	70
	4.2.3 Involvement of Government	72
	4.2.4 profitability Performance	73
	4.2.5 Regulation of the Bank	74
	4.2.6 Further Liberalization or Reform Measures	74
CHAPTER V	CONCLUSIONS AND RECOMMENDATIONS	
	5.1 Conclusion	76
	5.2 Recommendation	79
BIBLIOGRAPHY		80
ANNEXES	Annex A: Balance Sheets	85
	Annex B: Income Statements	91
	Annex C: Questionnaire	97

INDEX OF TABLES

Table No.	Description	Page
Table 4.1	Equity to Total Asset Ratio	44
Table 4.2	Equity to loan Ratio	45
Table 4.3	Non Performing Loans to Total Loan Ratio	46
Table 4.4	Total Loans to Total Asset Ratio	47
Table 4.5	Liquid Asset to Deposit Ratio	48
Table 4.6	Total loan to Total Deposit Ratio	50
Table 4.7	Return on Asset	51
Table 4.8	Return on Equity	52
Table 4.9	Net Interest Margin	54
Table 4.10	Net Profit, Capital, Deposit and Loan	55
Table 4.11	Mean Score of Credit Quality pre and post Reform	58
Table 4.12	Paired Sampled T-Test for Credit Quality of the Bank	59
Table 4.13	Mean Score of Liquidity performance pre and post	61
Table 4.14	Paired Sampled T-Test for Liquidity of the Bank	62
Table 4.15	Mean Score of Profitability Performance Pre and Post	64
Table 4.16	Paired Sampled T-Test for Profitability of the bank	65
Table 4.17	Gender of the Respondents	67
Table 4.18	Age of the Respondents	68
Table 4.19	Educational Status of the Respondents	68
Table 4.20	Experience of the Respondents	69
Table 4.21	Positions of the Respondents	70
Table 4.22	Performance of the Bank in the pre and post	71
Table 4.23	Government Involvement	72
Table 4.24	Profitability Performance	73
Table 4.25	Regulation of the Bank	74

ACRONYMS

A	After the Reform Period
AIDB	Agricultural and Industrial Development Bank (
B	Before the Reform Period
CBE	Commercial Bank of Ethiopia
DEA	Data Envelopment Analysis
EQL	Equity to Loan Ratio
EQTA	Equity to Total Asset Ratio
EVA	Economic Valued Added
FP	Financial Performance
ISHOPA	Imperial Savings and Home Ownership public Association
LATD	Liquid Asset to Total Deposit Ratio
NBE	National Bank Of Ethiopia
NIM	Net Interest Margin
NPTL	Nonperforming Loans to Total Loan Ratio
ROA	Return On Asset
ROE	Return on Equity
TLTA	Total Loan to Total Asset Ratio
TLTD	Total Loans to Total Deposit Ratio

CHAPTER I

INTRODUCTION

This chapter presents the background of the study, statement of problem, justification of the study, objectives of the study, research questions, research hypothesis, and methodology of the study, significance of the study, scope of the study, limitation of the study, and organization of the study.

1.1 Background of the Study

The importance of restructuring and privatizing the financial sector has received renewed attention in the ongoing effort of revitalizing developing economies.¹ A growing research literature has underscored the importance of banking and the financial sector to economic growth. Several studies found positive relationship between financial sector development and levels of income and growth.²

various studies has shown that financial liberalization is expected to enhance the growth of the financial sector, narrowing of the intermediation margin, efficient allocation of savings and ultimately lead to economic growth and on the other hand, a financial market characterized by heavy regulations and restrictions is expected to exercise financial repression.³

The contribution of the financial system to economic growth and development can only be maximize if the total financial system is subjected to adequate financial regulations and reforms.⁴ Therefore, satisfactory reform measures and regulations are so important to ensure well-organized and stable financial system, which is vital for the successful implementation of the monetary and economic policies of a country. To achieve this objective it is essential to place financial reform measures that improve the contribution of the banking system towards economic development.

Over the past three decades, leading industrial nations and many developing countries have liberalized their financial markets by removing foreign exchange controls, deregulating interest rates paid on bank deposits, expanding the powers of domestic financial institutions, and creating greater opportunities for entry by foreign banks.⁵ Unquestionably, the deregulation of domestic and global financial markets has produced major benefits, including more efficient intermediation of financial resources, more rapid economic development, and faster growth in trade.

In many developing countries, financial sector reforms have been generally pursued as part of broader structural adjustment programs, bringing about significant economic benefits through a more effective mobilization of domestic savings and a more allocation of resources.⁶

Most African countries, particularly those in Sub-Saharan Africa, have recently undergone extensive financial sector reforms and the reform package includes restructuring and privatization of state owned banks, the introduction of private banking systems, along with bank supervisory and regulatory schemes, the introduction of a variety of measures to promote the development of financial markets; including money and stock markets.⁷

Ethiopia one of the oldest civilizations in Africa and the economy has been state controlled through a series of industrial development plans since the Imperial Government of Haile Selassie. It was managed as a Soviet-style centrally planned economy under a socialist government from 1976-1991 and the post-1991 government led a transition to a more market-based system, and subsequent governments have introduced further reforms.⁸ One of this reform measures undertaken by the Ethiopian government start the year 1992 was “liberalizing” the financial sector.

In Ethiopia, before 1992 (during the Derg period) the financial sector was highly repressed; differentiated by restricted entry, constrained banks’ role on interest rates, credit limits and others.

Moreover, the then existing government owned banks were under pressure by regulation from the central government as the country was governed by command economy. This institutional framework led to a situation of virtually no competition in the banking market, with total concentration of banking activities in government owned banks. In fact, the government position was to minimize the extent of competition between the commercial banks and existing specialized banks.

However, after the change of the government different reforms including in the financial sector were undertaken which enabled the banks to set lending interest rate by their own and allows the countryman to participate in the banking sector.

In undertaking this task the Ethiopian government adopted a strategy of (a) gradualism: gradual opening up of private banks and insurance companies alongside public ones, gradual liberalization of the foreign exchange market, and so on, and (b) strengthening domestic competitive capacity before full liberalization (that is, restricting the sector to domestic investors, strengthening the regulatory and supervision capacity of the NBE, giving the banks autonomy, and opening up the interbank money market).⁹ In line with this strategy various proclamations and regulations have been passed since 1992.

Currently, thirteen commercial banks and two publicly owned specialized banks are operating in Ethiopia as compared to one government owned commercial bank and two specialized banks before the reform measures took place. Of the, thirteen commercial banks, one is publicly owned and twelve (12) are privately owned banks.¹⁰ It clear that, the commercial bank of Ethiopia is one of the dominant commercial bank operating in the country before and after the reform period. Therefore, the aim of this study is to evaluate financial performance of the commercial bank of Ethiopia in the pre and post financial liberalization.

1.2 Statement of the problem

The Ethiopian economy has been state controlled through a series of industrial development plans since the Imperial Government of Haile Selassie. Under state socialism (1974-91), popularly referred to in Ethiopia as the 'Derg regime', financial institutions were basically executing the economic plans outlined by the national planning organ. In that period regulation and supervision were not critical because the national plan regulated and directed the activities of financial institutions.

Moreover, financial institutions were directed to finance some public projects that may not have passed proper financial appraisal but were simply based on either ideological grounds or 'merit wants' arguments.

Following the demise of the Derg regime in 1991, post-1991 economic policy witnessed marked departure from the previous Socialist system. The main difference lay in openly adopting a market-oriented economic policy. In fact many of the policies adopted by the new government in Addis in 1991 had already been proposed by the defunct Derg regime as it approached the end of its reign. This new change in policy brought about a significant change in the functioning of the banking sector. Not only as the financial sector going to serve the private sector, but new private financial were institutions also emerging. At the same time the role of the Ethiopia's central bank, the National Bank of Ethiopia (NBE), was also reformulated. Thus, financial sector reconstruction was at the top of the government's agenda.

In order to perform these activities the Ethiopian government adopted a strategy of gradualism and strengthening domestic competitive capacity before full liberalization and in line with this strategy various proclamations and regulations have been passed since 1992. But Ethiopia's financial sector remains closed and is much less developed than its neighbors and has no capital market with very limited informal investing in shares of private companies.

The fact that, the commercial bank of Ethiopia is one of the dominant commercial bank operating in the country in the pre and post liberalization or reform period. However, the commercial bank of Ethiopia have been re-organized to operate based on the market-oriented policy framework in the post reform period, the performance of the bank in terms of deposits, loans, capital, and profitability that was expected from liberalization has not yet been achieved. In addition, despite many reforms and financial liberalization measures on the banking industry, critical evaluation of the financial performance of the commercial bank of Ethiopia before and after the liberalization has not been investigated.

Generally, there is no study conducted pinpointing of the financial performance of the commercial bank of Ethiopian before and after the liberalization so as to suggest improvements in the future. Thus, this study attempted to fill this gap by performing the study in the way in which by evaluating the financial performance of the commercial bank of Ethiopian before and after the financial liberalization.

1.3 Research Questions

The following questions were answered by the researcher in the study:

1. How is the financial performance of CBE in the pre and post liberalization?
2. Is there a significance difference between the financial performance of the commercial bank of Ethiopia in the pre and post reform period based on three financial performance indicators: credit quality, liquidity and profitability?
3. What are the areas that need further liberalization or reform measures?
4. What are the relevant recommendations and future research directions that can be drawn from this study?

1.4 Research Hypothesis:

The following hypothesis were developed and tested in this study:

H₀1: There is no significant gap in the credit quality performance of CBE in the pre and post financial liberalization.

H₀2: There is no significant gap in the liquidity performance of CBE in the pre and post financial liberalization.

H₀3: There is no significant gap in profitability performance of CBE in the pre and post financial liberalization.

1.5. Justification of the Study

The motivation of the study is providing some light as a contribution to address the problem. Moreover, the findings of this research disseminated to the CBE and NBE officials to know the performance of the bank in the pre and post reform period and hence, to comment and recommend them on what they have to do, for the banks' prosperity.

In lucid terms the rationales for the study are:

1. Results from this research work was expected to compare the financial performance of Commercial Bank of Ethiopia in the pre and post and showing the direction for the bank as a lighting house for further improvement of the performance of the bank.
2. The results from this finding helped to create better link the Commercial Bank of Ethiopia with the National Bank of Ethiopia (NBE).
3. The findings from this research work helped to identify the area that needs further liberalization or reform measures of the banking industry so as to improve the bank performance.

1.6. Objective of the Study

The overall objective of this study is to evaluate the financial performance of commercial bank of Ethiopia in the pre and post financial liberalization.

The specific objectives of the study are:

1. To examine the credit quality performance of the commercial bank of Ethiopia in the pre and post liberalization.
2. To analyze the liquidity performance of the commercial bank of Ethiopia in the pre and post liberalization.
3. To measure the profitability performance of the commercial bank of Ethiopia in the pre and post the reform periods.
4. To identify the gap between the financial performance of the commercial bank of Ethiopia in the pre and post the reform periods under the three financial performance indicators: credit quality, liquidity and profitability.
5. To identify areas that needs further liberalization or reform measures
6. To provide relevant recommendations based on the findings of the study.

1.7 Methodology of the Study

1.7.1 Research Design

In any research undertaking, the methodology/research design to be followed is determined by the nature of the problem statement or more specifically by the research objectives. Here in this study, before and after study design using case study approach was used by the researcher because this design of research is the most appropriate for measuring the impact or effectiveness of a program (liberalization). The change has measured by comparing the differences in the phenomenon before and after the liberalization. As it fits to the purpose of the study, this research design was used to

evaluate the performance of the CBE in the pre and post financial liberalization by using the annual reports of the bank and by asking the management and employees about their attitude toward the financial performance of the bank and areas that need further liberalization or reform measures to improve the performance of the bank. Therefore, both qualitative and quantitative data was used under the study.

1.7.2 Sampling Design

The purpose of the present study is to evaluate the performance of the commercial bank of Ethiopia in the pre and post liberalization. Thus, Commercial Bank of Ethiopia is one of the dominant commercial bank operating in the country in the period of the two regimes i.e. in the pre and post liberalization period. Therefore, for the sake of uniformity and fair comparison the researcher selected CBE for evaluating the financial performance in the pre and post liberalization.

For the purpose of primary data sources the selection of respondents performed in a way to represent both the management and employees working in different seven operations of the bank which are credit, domestic banking, foreign banking, marketing and business development, human resource management, branch operation, and risk management. For the purpose of the study a non-probability sampling design - purposive sampling method- was adopted and considered to gather the primary data. The researcher used such sampling method because in his opinion he believed that management and employees' of the bank are the only that could provide sufficient and accurate information for the study.

Therefore, from each operation five respondents were selected for the study using purposive sampling method. Accordingly, a total number of 35 respondents were selected from commercial bank of Ethiopia head office who is working in seven different operations of the bank.

1.7.3 Method of Data Collection

Both primary and secondary data sources were used. Primary data were collected based on a structurally designed questionnaire from the selected employees' and management members who are working in seven different operations of the bank. The questionnaire was including both open ended and cloth ended questions.

The researcher also collected data from secondary sources. To this end, annual reports for Commercial Bank of Ethiopia for the period covering the year 1976 to 2009, Proclamation, websites, Journals, different literatures and publications on financial liberalization have been consulted to undertake both quantitative and qualitative evaluation of the performance of the Commercial Bank of Ethiopia in the pre and post reform period.

1.7.4 Method of Data Analysis and Interpretation

Both the qualitative and the quantitative data were analyzed using descriptive statistical tools.

The researcher used financial statement analysis in evaluating the financial performance of the bank by applying different financial ratios such as credit quality, profitability and liquidity and change in growth in net profit after tax, capital, deposits and loans. After that, it was presented in the table and analyzed using descriptive method in the form of mean and percentage.

Concerning the data on identifying the gap in financial performance of the CBE in the pre and post liberalization under the three financial performance indicators: credit quality, liquidity and profitability, which is the fourth objective of the study, the researcher has applied a comparative evaluation of the CBE financial ratios in the pre and post liberalization. To analyze the data, statistical package for social science (SPSS) software version 16 was employed. One sample T-Test was used to test the overall

financial performance of the bank in terms of the three financial performance indicators; Credit quality, Liquidity and Profitability and paired sample T-Test analysis was used to test the hypothesis for the significant difference between the financial performance indicator ratios in the pre and post financial liberalization. The interpretation of the results was done at 95 percent level of confidence.

Additional evaluation of the financial performance of the CBE and the areas that need further liberalization or reform measures so as to improve the bank performance, which is the fifth objective, the researcher has applied descriptive statistics based on the data obtained from the primary sources. Then, the collected data was presented in the tables and analyzed using descriptive statistical tools in the form of percentage, frequencies, and average. Finally, based on the information obtained from the analysis part, conclusions and recommendations were made.

1.8 Significance of the Study

As this research's main purpose is of education, the major significance relies on equipping the researcher with the necessary skills and technique to undertake research.

More specifically, the study:

1. Evaluate the financial performance of the commercial bank CBE in the pre and post liberalization and let the CBE and NBE know the performance of the bank in the pre and post period and hence, to comment and recommend them on what they have to do, for the banks' prosperity
2. Forward some suggestions for further liberalizing or taking reform measures in the banking sector in order to improve the performance of the CBE.
3. Give imminent to researchers and students about the problem and stimulate further investigation of the issue.

1.9 Scope of the Study

The study highly paying attention on evaluating any changes that observed and reflected in the financial performance of the commercial bank of Ethiopia before and after the financial liberalization. In addition the study attempted to identify areas, which needs further liberalization or reform measures so as to improve the bank performance.

Since the commercial bank of Ethiopia is the only bank operating in the country before and after the reform period, the researcher selected CBE for the study. Furthermore, only those data which can be publicly announced by the commercial bank of Ethiopia or annual reports for the commercial bank of Ethiopia for the period covering the year 1976 to 2009 was referenced under the study. In addition, the researcher used primary data collected from the management and employees working in different seven operations of the bank which are credit, domestic banking, foreign banking, marketing and business development, human resource management, branch operation, and risk management. To evaluate the bank performance, the researcher employed financial statement analysis and test the hypothesis using t-test statistical tools. Furthermore, the researcher used unadjusted financial statement of the CBE for inflation in computing the financial ratios.

1.10 Limitations of the Study

The study evaluated the financial performance of the commercial bank of Ethiopia in the pre and post reform period. Some problems were encountered during the research period. Shortage of time, finance, research document on commercial bank of Ethiopia to use as a bench mark especially using financial ratio; absence of both market index to use different financial performance measures indicators and recorded price index for adjusting the financial statement of the bank posed a hurdle on the successful completion of the study.

1.11 Organization of the Study

The study is organized into five chapters. The first chapter deals with introduction part of the study providing details related to the background of the study, statement of problem, justification of the study, objectives of the study, research questions, research hypothesis, and methodology of the study, significance of the study, scope of the study, limitation of the study, and organization of the study. Chapter two deals with the literature review, chapter three deals with the organization profile, chapter four is about data analysis and interpretation and finally, chapter five contains conclusions and recommendations.

Reference

¹See Scholtens, B. 2000. *Financial Regulations and Financial System Architecture in Central Europe*. *Journal of Banking and Finance*, 24 (4): 525-553.

²See Khan, M. & Senhadji, A. 2000 *Threshold effects in the relationship between inflation and growth*. *IMF Staff papers*. Washington. 48(1):1 -21

³See Chirwa (2001), *Market Structure, Liberalization and Performance in the Malawian Banking Industry*, AERC, RP 108

⁴See Tesfaye Boru (2007). *The Impact of Financial Liberalization on the Ownership, Market Structure and Performance of the Ethiopian banking Industry*. Retrieved on April 2, 2010 from <http://etd.aau.edu.et/dspace/handle/>.

⁵See Wilmarth (2003), *Dose Financial Liberalization Increase the Likelihood of a Systematic Banking Crisis? Evidence from the Past Three Decades and the Great Depression*.

⁶See Lee (2002), *Financial Liberalization and Foreign Bank Entry in MENA*, World Bank, May

⁷See Senbet and Otchere (2005), *Financial Sector Reforms in Africa Perspectives on Issues and Policies*, prepared for annual World Bank Conference on Development Economics, Dakar Senegal, and January 2005.

⁸See Kiyota K., Peitsch B., and Stern R.M. (2007), *the Case for Financial Sector Liberalization in Ethiopia*, Michigan: Research Seminar in International Economics, August.

⁹See Alemayhu Geda (2006), *The Structure and Performance of Ethiopia's Financial Sector in the Pre and Post Reform Period: With Special Focus on Banking*. Retrieved on April 7, 2010 from <http://www/socialscience.research.network.com>

¹⁰See National Bank of Ethiopia: www.nbe.gov.et/financial/banks.htm, retrieved February 2010.

CHAPTER II

REVIEW LITERATURE

Review of the theoretical foundation of the paper is composed of review of various literatures and studies that evaluate the performance of commercial bank in relation to financial liberalization. Therefore, the chapter is organized based on three main subsections. The first part reviews literatures on financial liberalization and repression. The second part is reviews literature on bank performance and finally, the last part of the chapter is present the empirical evidence that evaluate performance of the commercial bank.

2.1 Theoretical Framework

2.1.1 Financial Liberalization and Repression

Financial liberalization is the process of breaking away from a state of financial repression. As financial repression has been most commonly associated with government fixing of interest rates and its adverse consequences on the financial sector as well as on the economy, financial liberalization, in turn, has come to be most commonly associated with freeing of interest rates. It clear that financial liberalization as a process involving a much broader set of measures geared toward the elimination of various restrictions on the financial sector, such as the removal of portfolio restrictions on the banking sector, the reform of the external sector, as well as changes in the institutional framework of monetary policy.¹

Financial repression, by-now a classic phrase, originated in the works of Ronald I. McKinnon and Edward S. Shaw in the early 1970s, to describe a developing country environment whereby “the financial system...is repressed (kept small) by a series of

government interventions that have the effect of keeping very low (and often at negative levels) interest rates that domestic banks can offer to savers"¹; the most common forms that these interventions would take were interest rate regulations, directed credit schemes, and high reserve ratios.

Financial repression is a problem because, as McKinnon-Shaw hypothesized, repressing the monetary system fragments the domestic capital market with highly adverse consequences for the quality and quantity of real capital accumulation.² This would happen primarily through four channels: (a) The flow of loan able funds through the organized banking system is reduced, forcing potential investors to rely more on self-finance; (b) Interest rates on the truncated flow of bank lending vary from one class of favored or disfavored borrower to another; (c) the process of self finance is itself impaired; if the real yield on deposit is negative, firms cannot easily accumulate liquid assets in preparation for making discrete investments and socially costly inflation hedges look more attractive as a means of internal finance; and (d) Significant financial deepening outside of the repressed banking system becomes impossible when firms are dangerously illiquid and/or inflation is high and unstable; robust open markets in stocks and bonds, or intermediation by trust or insurance companies, require monetary stability.

The fix pretty much follows from the diagnosis detailed above: free interest rates rapidly, reduce reserve requirements, and eliminate directed credit schemes, while stabilizing the price level, say in the context of a strong disinflation program. This would help countries grow faster, because, following financial liberalization, investment and growth would pick up. Given the important role played by interest rates in all this, removal of controls over interest rates has become the centerpiece of the liberalization process.

What we understand from financial liberalization today is different. Other than interest rate liberalization and elimination of directed credits and high reserve requirements, it

involves a wide set of additional measures including the easing of portfolio restrictions on banks, changes in the ownership of banks, enhanced competition among banks, integration of domestic entities to international markets, as well as changes in the monetary policy environment. Of these, external sector reforms go hand in hand with financial sector reforms because removing restrictions on exchange and payments system and establishing a freely functioning foreign exchange market are central to removing distortions that limit portfolio behavior. Broadly, reforms involve two phases: removal of all restrictions on current payments and transfers, and capital account liberalization; the latter, by enhancing country's integration with the rest of the world, imposes perhaps the strictest limits on financial repression.

The reform of the institutional context of monetary policy implementation primarily involves increased independence for the central bank and a switch from direct instruments of monetary control (e.g., interest rate controls, bank-by-bank credit ceilings, statutory liquidity ratios, directed credits,) to indirect instruments (e.g. reserve requirements, public sector deposits, credit auctions, primary and secondary market sales of bills, and foreign exchange swaps). The main idea here is for central banks to stimulate the growth of money markets and instruments with a view to enhancing market-oriented of its policy environment.

According to the exponents of financial repression³, financial liberalization can foster economic growth. They argue that the financial sector of the economy matters in economic development as it assists in the breakaway from repetition of repressed economic performance to accelerated growth of the economy.⁴ The McKinnon-Shaw hypothesis postulates that government interventions in various forms in less developed countries lead to financial repression. The economies in these countries have been characterized by control of interest rates, imposition of credit ceilings, use of credit rationing, high levels of inflation and high public sector deficits. These policies have meant that finance in these countries has been shallow compared with national income or financial wealth. The interest rates on deposits have been low and negative and

savings have been confined to a narrow range of financial instruments. Government control of interest rates on loans and deposits tends to raise the demand for and curtail the supply of funds.

In addition ⁵ concluded that African countries stand to gain from financial liberalization because real deposit rates were found to have a positive impact on financial savings, this in turn affects the level of investment positively. However, the design of financial sector reforms is also important.

Furthermore, for financial liberalization to be successful there should be macroeconomic stability and adequate prudential supervision and regulation of banks. Besides ⁶ note that, the difficulties faced by many countries in liberalizing their financial markets go beyond simply problems of macroeconomic stability.

In addition ⁷ argue that liberalization can lead to instability and questions the ability of financial markets to allocate credit efficiently. Further ⁶ note that the experience with financial instability in many developing countries suggests that liberalization promotes instability and also argue that the concept of financial repression used in the literature appears too broad, encompassing both positive and negative aspects of government interventions in the financial markets that may mask the need for institutional development.

In any case, financial liberalization is expected to generate several benefits that build the impetus for economic growth and development in developing countries. First, financial sector reforms are expected to lead to financial deepening; hence the stock of financial assets relative to income is expected to increase with liberalization. Second, the intermediation margins of the banking sector are expected to diminish with liberalization. Furthermore ⁶ note that competitive pressure that results from conditions of free entry and competitive pricing will raise the functional efficiency of intermediation by decreasing the spread between deposit and lending rate. In addition ⁵ assert that financial liberalization may not help reduce interest spreads in African

countries if the reduction in reserve requirements and deregulation of the banking sector are not coupled with the increase in competition in the sector. Third, liberalization opens the way to superior allocation of savings by widening and diversifying the financial markets on which investment opportunities compete for savings flow. The market for savings is extended in terms of scale, maturity and risk, and information for comparisons of alternative facilities becomes available more cheaply.⁴ Fourth, local capital markets can be integrated into a common market, and new opportunities for pooling savings and specialization in investment are created in the economy. But ⁸ note that in this context, financial liberalization is expected to lead to the diminishing role of the informal financial sector.

Studies in Africa have shown that liberalization of the financial sector has proceeded with limited success. Finally ⁵ concluded that financial repression in African countries is likely to persist because governments have the incentive to perpetuate it given the incidence of high inflation, large budget deficits and limited access to foreign capital. Thus, African countries are likely to face problems in getting their economies out of the financial repression web because of high inflation rates that justify banks' high intermediation margins, implicit tax that the government extracts from the banking system through enforcement of below market rates, and high liquidity reserve requirements to help them finance often large deficits.

2.1.2 Measures of Financial Performance

In various studies different methods are applied to evaluate banks' performance. Commonly these methods can be classified in three ways: the traditional method of financial indices based on balance sheet and income statement analysis, parametric methods based on production function and non-parametric methods with out production function.⁹

However, if the financial market were efficient, market price for banks' stock price would be one of the most appropriate tools for measuring banks' performances. But, the

alternative to the market approach is the accounting-based financial ratio approach, which has commonly been used for measuring the financial performance of firms.¹⁰

Furthermore, Economic Valued Added (EVA) is another modern financial measurement tool that determines if a business is earning more than its true cost of capital. The EVA application in banks is relatively new and it was invented by Stern Stewart & Co. which launched EVA in 1989 (it started to be implemented in U.S. in 1994) and is not as well known as other measures of bank performance. It measures the difference between a firm's cost of capital and return on capital.¹¹

These methods can be independently applied by various researchers in evaluating the financial performance of the bank. But, no one of them is perfect to evaluate the financial performance. Researchers can only choose a method to evaluate performance that has the least amount of drawbacks for the study's particular situation. Since the stock price data and cost of capital for Ethiopia's commercial banks are not easily available, the accounting based financial ratios are used as a measure of financial performance in this study.

2.1.2.1 Financial Statement Analysis

Financial statement analysis is the process of examining relationships among financial statement elements and making comparisons with relevant information. It is a valuable tool used by investors and creditors, financial analysts, and others in their decision-making processes related to stocks, bonds, and other financial instruments.¹¹

Financial statement analysis begins with establishing the objective(s) of the analysis. For example, is the analysis undertaken to provide a basis for granting credit or making an investment? After the objective of the analysis is established, the data is accumulated from the financial statements and from other sources. The results of the analysis are summarized and interpreted. Conclusions are reached and a report is made to the person(s) for whom the analysis was undertaken.

The purpose of financial statement analysis is to examine past and current financial data so that a company's performance and financial position can be evaluated and future risks and potential can be estimated. Financial statement analysis can yield valuable information about trends and relationships, the quality of a company's earnings, and the strengths and weaknesses of its financial position.¹¹ Therefore, companies are highly required to publish their general annual audited financial statements

2.1.2.1.1 Types of financial statement analysis

Financial analysts can obtain useful information by comparing a company's audited financial statements of one company with other. There are three primary types of financial statement analysis. These are commonly known as horizontal analysis, vertical analysis, and ratio analysis.¹²

I. Horizontal Analysis

When two or more years for a single company are compared, the process is known as horizontal analysis. In this analysis, an analyst computes percentage changes from year to year for all balances. When comparing financial statements for a number of years, then variation of horizontal analysis called trend analysis may be preferred. Trend analysis involves calculating each year's financial statement balances as percentages of the first year, also known as the base year. When expressed as percentages, the base year figures are always 100 percent, and percentage changes from the base year can be determined.

II. Vertical Analysis

When using vertical analysis, the analyst calculates each item on a single financial statement as a percentage of a total. The term vertical analysis applies because each year's figures are listed vertically on a financial statement.

When using vertical analysis, an analyst reports each amount on income statement as a percentage of total revenues, and similarly each amount of balance sheet as a percentage of total assets. After the restated values, the balance sheet is known as common sized balance sheet, it allows comparing it with another company's statements or with industry averages.

III. Ratio Analysis

Ratio analysis enables the analyst to compare items on a single financial statement or to examine the relationships between items on two financial statements. After calculating ratios, an analyst can examine the trends for the company with its past performance or compare it with the industry benchmark.

2.1.2.1.2 Role of Financial Statement Analysis

Financial analysis today is performed by various users of financial statements. Investors and Management perform the financial analysis to understand how profitably or productively the assets of the company are used. Lenders and Suppliers of goods look for the ability of the firm to repay the dues on time. For instance, as a deposit holder of a Bank, you would be interested in liquidity of the Bank and would expect the Bank to pay you the amount when you need. Customers would like to know the long-term solvency of the Bank to get continued support. In addition, employees would be interested in the profitability as well as liquidity of the bank.¹²

Financial statement analysis involves careful selection of data from financial statements for the primary purpose of forecasting the financial health of the company. This is accomplished by examining trends in key financial data, comparing financial data across companies, and analyzing key financial ratios. The financial statements are historical documents that tell what has happened during a particular period of time. However most users of financial statements are concerned about what will happen in the future. Despite the fact that financial statements are historical documents, they can

still provide valuable and economical information bearing on all of this concerns.¹² Therefore, in this study the researcher applied ratio analysis to evaluate the financial performance of the bank.

2.1.2.1.3 Limitation of Ratio Analysis

Ratio analysis is useful, but analysts should be aware of these problems and make adjustments as necessary. Ratios analysis conducted in a mechanical, unthinking manner is dangerous, but if used intelligently and with good judgment, it can provide useful insights into the firm's operations and the following are some of the limitations of ratio analysis.¹²

A. Creative Accounting

The businesses apply creative accounting in trying to show the better financial performance or position which can be misleading to the users of financial accounting.

B. Ratios are not Definitive Measures

Ratios need to be interpreted carefully. They can provide clues to the company's performance or financial situation. But on their own, they cannot show whether performance is good or bad. Ratios require some quantitative information for an informed analysis to be made.

C. Financial Statement contain Summarized Information

Ratios are based on financial statements which are summaries of the accounting records. Through the summarization some important information may be left out which could have been of relevance to the users of accounts. The ratios are based on the summarized year end information which may not be a true reflection of the overall year's results.

D. Interpretation of Ratios

It is difficult to generalize about whether a particular ratio is 'good' or 'bad'. For example a high current ratio may indicate a strong liquidity position, which is good or excessive cash which is bad. Similarly non-current assets turnover ratio may denote either a firm that uses its assets efficiently or one that is undercapitalized and cannot afford to buy enough assets.

E. Price changes

Inflation renders comparisons of results over time misleading as financial figures will not be within the same levels of purchasing power. Changes in results over time may show as if the enterprise has improved its performance and position when in fact after adjusting for inflationary changes it will show the different picture.

F. Window Dressing

These are techniques applied by an entity in order to show a strong financial position. This can improve the current and quick ratios and make the balance sheet look good. However the improvement was strictly window dressing as a week later the balance sheet is at its old position. In general, an inexperienced analyst may assume that ratios are sufficient in themselves as a basis for judgment about the future. Conclusions based on ratio analysis must be regarded as tentative. Ratios should not be viewed as an end, but rather they should be viewed as a starting point, as indicators of what to pursue in greater depth. In addition to ratios, other sources of data should be analyzed in order to make judgments about the future of an organization. Few figures appearing on financial statements have much significance standing by themselves. It is the relationship of one figure to another and the amount and direction of change over time that are important in financial statement analysis.

2.1.3 Financial Analysis in Banking Industry

Unlike manufacturing industry, banks are trading on capital or funds. Hence some of the ratios developed for manufacturing industry are not relevant to banks. While some of the ratios are not relevant, there are ratios which require some modification. For example, Interest expenses are minor for a manufacturing industry whereas for banking industry, it is a major expense item.¹²

In addition, there are some items, which are difficult to measure. For instance, if you want to measure liquidity, normally we compute current ratio, which requires current assets and current liabilities. But this data is not apparently available in the financial statements and one has to collect from the internal sources. To give an example, we need to know the term structure of Term Deposit and similarly loans and advances to classify whether they are current or not. Considering the special nature of banking industry, the study uses the following financial ratios for measuring credit or loan, liquidity, profitability, and growth of the Commercial Bank of Ethiopia.¹²

2.1.4 Types of Financial Ratios Analysis

2.1.4.1 Credit Quality/Loan Performance

One of the most important sources of income for commercial bank is issuing of loans. However, when a commercial bank makes loans, it is exposed to risks, because banks operate in asymmetric information. The principal risk it faces is the risk of defaulting interest payment or the principal or both interest and loans. Thus, loan performance measures bank's risk associated with loans created by bank. In other words, it measures the quality of loans. Some loans default some do not. The greater is the amount of loan and interest in default, the higher is a risk for a bank, and the bank is rated poor. There are several financial measures for assessing the quality of loans (or credit risk) for commercial banks. However, in this study the researcher uses the following three indexes:

A. Equity to Asset Ratio (EQTA)

It measures equity capital as a percentage of total assets. EQTA provides percentage protection afforded by banks to its investment in asset. It measures the overall shock absorbing capacity of a bank for potential loan asset losses. The higher the ratio of EQTA, the greater is the capacity for a bank to sustain the assets losses.

This figure is determined as follows: **EQTA = Common Equity/Assets**

B. Equity to Loan Ratio (EQL)

It measures equity capital as a percentage of total loans. EQL provides equity as a cushion (protection) available to absorb loan losses. The higher the ratio of EQL, the higher is the capacity for a bank in absorbing loan losses.

This figure is determined as follows: **EQL = Total Equity/Total Loans**

C. Non- performing Loans to Total Loan Ratio (NPTL)

It is one of the most important criteria to assess the quality of loans or asset of a commercial bank. It measures the percentage of gross loans which are doubtful in banks' portfolio. The lower the ratio of NPTL, the better is the asset/credit/performance of the commercial banks.

This figure is determined as follows: **NPTL = Non-performing Loans/Total Loans**

2.1.4.2 Liquidity Performance

Liquidity ratios attempt to measure a company's ability to pay off its short-term debt obligations. This is done by comparing a company's most liquid assets to short-term liabilities. The higher liquidity ratios mean bank has larger margin of safety and ability to cover its short-term obligations

So, commercial banks must hold sufficient liquidity. Liquidity means cash, or how quickly a bank can convert its assets into cash at face value to meet the cash demand of the depositors and borrowers. There are various financial ratios for measuring liquidity performance. Thus, the researcher selects the following three financial ratios:

A. Total loans to Total Asset Ratio (TLTA)

The loan to assets ratio measures the total loans outstanding as a percentage of total assets. The higher this ratio indicates a bank is loaned up and its liquidity is low. The higher the ratio, the more risky a bank may be to higher defaults.

This figure is determined as follows: $TLTA = \text{Total Loans}/\text{Total Assets}$

B. Liquid Assets to Total Deposit Ratio (LATD)

It is a deposit run off ratio. It indicates the percentage of deposit and short term funds that are available to meet the sudden withdrawals. The higher the LATD, the more liquid is a commercial bank and less vulnerable it is to run the bank.

This figure is determined as follows: $LATD = \text{Liquid Asset}/\text{Customer Deposit}$

C. Total Loans to Deposit Ratio (TLTD)

This refers to the amount of a bank's loans divided by the amount of its deposits at any given time. The higher the ratio, the more the bank is relying on borrowed funds, which are generally more costly than most types of deposits. Bank with low LDR is considered to have excessive liquidity, potentially lower profits, and hence less risk as compared to the bank with high LDR.

It is calculated as: $TLTD = \text{Total Loans}/\text{Total Deposit}$

It indicates the percentage of the total deposit locked into non-liquid asset. The higher the TLTD, the higher is the liquidity risk.

2.1.4.3 Profitability Performance

One of the most frequently used tools of financial ratio analysis is profitability ratios which are used to determine the company's bottom line. Profitability ratios show a company's overall efficiency and performance. We can divide profitability ratios into two types: margins and returns. Ratios that show margins represent the firm's ability to translate sales dollars into profits at various stages of measurement. Ratios that show returns represent the firm's ability to measure the overall efficiency of the firm in generating returns for its shareholders. In general, profitability performance is also known as managerial performance. It indicates how the top management of a bank maximizes shareholders' profits by utilizing existing resources at their disposal. There are several indexes for measuring profitability performance of a firm. However, in this study the researcher uses the three most commonly used measures. They are:

A. Return on Assets (ROA)

The Return on Assets ratio is an important profitability ratio because it measures the efficiency with which the company is managing its investment in assets and using them to generate profit. It measures the amount of profit earned relative to the firm's level of investment in total assets. Net profit is taken from the income statement and total assets are taken from the balance sheet. The higher the percentage, the better it will be, because that means the company is doing a good job using its assets to generate sales.

The calculation for the return on assets ratio is: **ROA = Net Profit/Total Assets**

B. Return on Equity (ROE)

The Return on Equity ratio is perhaps the most important of all the financial ratios to investors in the company. It measures the return on the money the investors have put into the company. This is the ratio potential investors look at when deciding whether or not to invest in the company. Net income comes from the income statement and

stockholder's equity comes from the balance sheet. In general, the higher the percentage, the better it will be, with some exceptions, as it shows that the company is doing a good job using the investors' money. In general, it shows a rate of return on base capital, i.e. equity capital. The higher the ROE, the more efficient is the performance.

The calculation for the return on equity ratio is: **ROE = Net Profits/Equity**

C. Net Interest Margin (NIM)

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. Analysts focus on Net Interest Margin (NIM) ratio because small changes in a bank's lending margin can translate into large bottom line changes. The higher the ratio the cheaper the funding or the higher the margin the bank is obtaining. A bank's net interest margin is a key performance measure that drives ROA. 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.

It is calculated as: **NIM=interest income - interest expense**

2.1.4.4 Growth in Net Profit, Capital, Deposit and loans

It measures the change in net profit, capital, deposit and loans in consecutive years of commercial banks.

2.2 Empirical Evidence

There are a number of studies that evaluate the performance of commercial bank and financial liberalization. Therefore, reviews of these various studies were presented as follows.

The performance of 515 banks in 16 transition economies for the period 1994–1999 was conducted to know the effect of reform environment in the bank performance. Their

results indicate that banks' performance differs significantly depending on the reform environment, as well as the competitive conditions in which they operate. Their research also reveals that interest margins are declining over time but are substantially higher in low- reform environments. The results indicate that an appropriate policy and regulatory framework are the necessary conditions for achieving any significant progress.¹³

The estimation of Fourier-flexible frontier cost function using bank balance sheet data were conducted for the period covering the year of 1994-2000. Specification tests indicated that the stochastic frontier model with a Fourier-flexible form with a truncated normal distribution of the inefficiency term allowing for time varying technical efficiency was preferred. Privatization also didn't seem to have an immediate effect on improved efficiency. Finally, foreign banks had substantially better efficiency scores than all categories of domestic banks.¹⁴

Other study has made on a review of the performance of banking sector in India during post reform period. A comparative appraisal of banks have been undertaken on the basis of seven indicators of performance namely, Net profit , Credit to deposit ratio (C/D) , Market Share, Business per Employee, Return on Assets, Capital Adequacy Ratio and Non performing Asset to Net Advances. The paper reveals that public sector banks have improved considerably and their performance was comparable with other banks.¹⁵

The performance of Bahrain's commercial banks with respect to credit (loan), liquidity and profitability during the period 1994-2001 was conducted in Bahrain's. Nine financial ratios (Return on Asset, Return on Equity, Cost to Revenue, Net Loans to Total Asset, Net Loans to Deposit, Liquid Asset to Deposit, Equity to Asset, Equity to Loan and Nonperforming loans to Gross Loan) were selected for measuring credit, liquidity and profitability performances. Finally the study found that Commercial banks are relatively

less profitable and less liquid and, are exposed to risk as compared to banking industry.¹⁰

In recent research efforts the profitability determinants in six European banking sectors (Denmark, France, Germany, Italy, Spain and the UK) were conducted for the period 1992–1998. Their results suggest that despite intensifying competition it was possible to detect significant persistence of abnormal bank profits from year to year. Apart from that they discovered a positive relationship between the ROA and profitability and at same time ROE and profitability. Therefore, both the ROA and ROE are used for vital indicator for profitability performance of banking industry.¹⁶

A study on commercial banks of Oman was conducted to know the performance of the bank. The objective of this study was to classify the commercial banks in Oman in cohesive categories on the basis of their financial characteristics revealed by the financial ratios (Return on Asset, Return on Equity and Return on Deposit). A total of five Omani commercial banks with more than 260 branches were financially analyzed, and simple regression was used to estimate the impact of asset management, operational efficiency, and bank size on the financial performance of these banks. The study found that the bank with higher total capital, deposits, credits, or total assets does not always mean that it has better profitability performance.¹⁷

There is a substantial body of literature discussing different research methods applied to financial performance evaluation. These methods include: Multivariate Statistical Analysis¹⁸, Data Envelopment Analysis¹⁹, Balanced Scorecard²⁰, and Financial Statement Analysis²¹. These methods can be independently applied by various researchers in evaluating the financial performance of the bank. But, no one of them is perfect to evaluate the financial performance. Researchers can only choose a method to evaluate performance that has the least amount of drawbacks for the study's particular situation. Therefore, a viable method for effective evaluation of financial performance is aimed at providing solutions for issues with multiple variables and targets.

An analysis on performance of Poland banks was conducted to observe the efficiency of the bank under DEA. The main aim of his article was to present the results of efficiency analysis, computed by means of two methods, that is the classical index of balance sheet characteristics (financial analysis) and the non-parametric, the Data Envelopment Analysis (DEA) method. The analysis was carried out in the biggest banks operating in Poland in 2000–2007. The empirical results showed that the efficiency measures give a similar although not identical picture of Polish commercial banks' performance. These results (yielded by both methods) were complementary to each other and suggested that the non-parametric DEA method is really valuable and worth applying in bank practice.²²

Most of the above empirical studies were conducted to measure financial performance of various countries' banks using financial ratios. Regarding to studies in the Ethiopian banking sector, no formal studies evaluate the performance of commercial bank of Ethiopia before and after the financial liberalization. But, there is one study conducted in analyzing the Ethiopia's financial sector and its regulation and stated that the financial reform measures undertaken in Ethiopia have been gradual but nevertheless determined despite disagreement with the IMF over restrictions on the entry of foreign banks and the role of the largest state bank. Finally the study concludes that the creation of a sound financial system is crucial to reconstruction and transition to market based economy, and to raising the living standards of Ethiopia's people.²³

The researcher also observed in the review of literature that there are no studies conducted mainly to identify the problems related to profitability, liquidity, credit quality and change in growth of Commercial Bank of Ethiopia in the pre and post reform period. Thus , the researcher felt it appropriate to take up the present study entitled "Performance Evaluation of the Commercial Bank of Ethiopia - Pre and Post Liberalization" to assess the efficiency of the performance of financial management thereby to identify problems and thereby to recommend possible courses of actions to the identified problems.

Reference

¹See Agenor, P. and P. Montiel, *Development Macroeconomics, Chapters 5 and 14*, Princeton University Press, 1996.

²McKinnon, R. *The Order of Economic Liberalization: Financial Control in the Transition to a Market Economy*, 2nd edition, *The Johns Hopkins Studies in Economic Development*, 1993.

³McKinnon, R.I. *Money and Capital in Economic Development*, Washington, D.C., the Brookings Institution, 1973.

⁴Shaw, E. *Financial Deepening in Economic Development*, New York: Oxford University Press, 1973.

⁵See Seck, D., and Y. H. El Nil (1993) *Financial Liberalization in Africa*, *World Development*, Vol. 21, No. 11, pp. 1867–81.

⁶Gibson, H. D. and E. Tsakalotos. (1994) "The Scope and Limits of Financial Liberalization in Developing Countries: A Critical Survey," *Journal of Development Studies*, Vol. 30, No. 3, pp. 578–628.

⁷Diaz-Alejandro, C. "Goodbye Financial Repression, Hello Financial Crash." *Journal of Development Economics*, 19, 1985:1–24

⁸Aryeetey, E., H. Hettige, M. Nissanke and W. Steel. 1997. "Financial market fragmentation and reforms in Ghana, Malawi, Nigeria and Tanzania". *The World Bank Economic Review*, 11 (2): 195-218

⁹Wozniowska, G. (2008), *Methods of measuring the efficiency of commercial banks: an example of polish banks*. Retrieved on April 3, 2010 from [http://www. Leidykla.eu/fileadmin/Ekonomika](http://www.Leidykla.eu/fileadmin/Ekonomika).

¹⁰see Abdus, S. (2004). *Bahrain's Commercial Bank Performances during 1994-2001*. *Credit and financial Management Review*. Retrieved on April 9, 2010 from [www.encyclopedia. Com/doc/1p3-810427301.html](http://www.encyclopedia.Com/doc/1p3-810427301.html).

¹¹See Popa, G. & Mihailescu, L. (2009). *EVA-Advanced Method of Performance Evaluation in Banks*. Retrieve on November 02, 2009 from <http://www.management.ase.ro/reconomia/>

¹²Vance, D.I. (2003), *Financial Analysis and Decision Making: Tools and Techniques to Solve Financial Problems and Make Effective Business Decisions*. S.l: MacGraw-Hill.

- ¹³Levine, R. 2000. *A study of the performance of 515 banks in 16 transition economies for the period 1994–1999*. *Financial econometric*, 54,138.
- ¹⁴See Kraft, E. Hofler, R. & Payne, J. (2002). *Privatization, Foreign Bank Entry and Bank Efficiency in Croatia: A Fourier-Flexible Function Stochastic Cost Frontier Analysis*. Retrieved from <http://www.informaworld.com>
- ¹⁵Bateswar, S. & Ajay, D. (2007). *Banking sector reforms and performance of Indian Banking: A comparative analysis of public, private and foreign banks*. *Journal of Management practices*, 1(1).
- ¹⁶Goddard J., Molyneux P. and Wilson J. O. S. (2004) "The Profitability of European Banks: A Cross-Sectional and Dynamic Panel Analysis", *the Manchester School*, Vol. 72, No. 3. pp. 363-381
- ¹⁷See Tarawneh, M. (2006). *A Comparison of Financial Performance in the Banking Sector: Some Evidence from Omani Commercial Banks*. *International Research Journal of Finance and Economics*, ISSN. Retrieved on April 4, 2010 from <http://www.eurojournals.com/finance.htm>
- ¹⁸See Huang, M.C. (1986). *A Study of Domestic Bank's Performance*. Basic Finance Publication. Retrieved from <http://www.emeraldinsight.com/Insight>.
- ¹⁹Lin, C. (1998). *A study of efficiency evaluation in Taiwan's securities dealers*. *Securities Finance*, 58, 124
- ²⁰Maisel, L.S. (1992). *Performance measurement: the balanced scorecard approach*. *Journal of Cost Management*, 2(2), 47-52.
- ²¹Collins, R.A. (1980). *An empirical comparison of bankruptcy prediction model*, *Journal of Financial Management*, 9(2), 5-7.
- ²²See Wozniowska, G. (2008), *Methods of measuring the efficiency of commercial banks: an example of polish banks*. Retrieved on April 3, 2010 form <http://www.Leidykla.eu/fileadmin/Ekonomika>.
- ²³Tony Addison and Alemayehu Geda, (2001). *Ethiopia are New Financial Sector and Its Regulation*, *Discussion Paper No. 2001/55*. Retrieved on April 9, 2010 from <http://www.socialscience.research.network.com>

CHAPTER III

ORGANIZATIONAL PROFILE

This chapter presents the history of banking in Ethiopia, financial sector reform and profile of the commercial bank of Ethiopia.

3.1 History of Banking in Ethiopia

The history of the use of modern money in Ethiopia can be traced back more than 2000 years. It flourished in what is called the Axumite era which ran from 1000 BC to around AD 975. Leaving that long history aside, modern banking in Ethiopia started in 1905 with the establishment of Abyssinian Bank which was based on a fifty year agreement with the Anglo-Egyptian National Bank. The agreement that was reached in 1905 between Emperor Minilik II and Mr. Ma Gillivray, representative of the British owned National Bank of Egypt marked the introduction of modern banking in Ethiopia. Following the agreement, the first bank called Bank of Abyssinia was inaugurated in Feb. 16, 1906 by the Emperor. The Bank was totally managed by the Egyptian National Bank and the following rights and concessions were agreed upon the establishment of Bank of Abyssinia.

Within the first fifteen years of its operation, Bank of Abyssinia opened branches in different areas of the country. In 1906 a branch in Harar (Eastern Ethiopia) was opened at the same time of the inauguration of Bank of Abyssinia in Addis Ababa. Another at Dire Dawa was opened two years later and at Gore in 1912 and at Dessie and Djibouti in 1920. Mac Gillivray, the then representative and negotiator of Bank of Egypt, was appointed to be the governor of the new bank and he was succeeded by H Goldie, Miles Backhouse, and CS Collier were in charge from 1919 until the Bank's liquidation in 1931.

The society at that time being new for the banking service, Bank of Abyssinia had faced difficulty of familiarizing the public with it. It had also need to meet considerable cost of installation and the costly journeys by its administrative personnel. As a result, despite its monopolistic position, the Bank earned no profit until 1914. Profits were recorded in 1919, 1920 and from 1924 onwards.

Generally, in its short period of existence, Bank of Abyssinia had been carrying out limited business such as keeping government accounts, some export financing and undertaking various tasks for the government. Moreover, the Bank faced enormous pressure for being inefficient and purely profit motivated and reached an agreement to abandon its operation and be liquidated in order to disengage banking from foreign control and to make the institution responsible to Ethiopia's credit needs. Thus by 1931 Bank of Abyssinia was legally replaced by Bank of Ethiopia shortly after Emperor Haile Selassie came to power.

The new Bank, Bank of Ethiopia, was a purely Ethiopian institution and was the first indigenous bank in Africa and established by an official decree on August 29, 1931 with capital of £750,000. Bank of Egypt was willing to abandon its concessionary rights in return for a payment of Pound Sterling 40,000 and the transfer of ownership took place very smoothly and the offices and personnel of the Bank Of Abyssinia including its manager, Mr. Collier, being retained by the new Bank. Ethiopian government owned 60 percent of the total shares of the Bank and all transactions were subject to scrutiny by its Minister of Finance.

Bank of Ethiopia took over the commercial activities of the Bank of Abyssinia and was authorized to issue notes and coins. The Bank with branches in Dire Dawa, Gore, Dessie, Debre Tabor, Harar, agency in Gambella and a transit office in Djibouti continued successfully until the Italian invasion in 1935. During the invasion, the Italians established branches of their main Banks namely Banca d'Italia, Banco di Roma, Banco di Napoli and Banca Nazionale del lavoro and started operation in the main towns of

Ethiopia. However, they all ceased operation soon after liberation except Banco di Roma and Banco di Napoli which remained in Asmara. In 1941 another foreign bank, Barclays Bank, came to Ethiopia with the British troops and organized banking services in Addis Ababa, until its withdrawal in 1943. Then on 15th April 1943, the State Bank of Ethiopia commenced full operation after 8 months of preparatory activities. It acted as the central Bank of Ethiopia and had a power to issue bank notes and coins as the agent of the Ministry of Finance. In 1945 and 1949 the Bank was granted the sole right of issuing currency and deal in foreign currency. The Bank also functioned as the principal commercial bank in the country and engaged in all commercial banking activities.

The State Bank of Ethiopia had established 21 branches including a branch in Khartoum, Sudan and a transit office on Djibouti until it ceased to exist by bank proclamation issued on December, 1963. Then the Ethiopian Monetary and Banking law that came into force in 1963 separated the function of commercial and central banking creating National Bank of Ethiopia and commercial Bank of Ethiopia. Moreover it allowed foreign banks to operate in Ethiopia limiting their maximum ownership to be 49 percent while the remaining balance should be owned by Ethiopians.

The National Bank of Ethiopia with more power and duties started its operation in January 1964. Following the incorporation as a share company on December 16, 1963 as per proclamation No.207/1955 of October 1963, Commercial Bank of Ethiopia took over the commercial banking activities of the former State Bank of Ethiopia. It started operation on January 1, 1964 with a capital of Eth. Birr 20 million. In the new Commercial Bank of Ethiopia, in contrast with the former State Bank of Ethiopia, all employees were Ethiopians.

There were two other banks in operation namely Banco di Roma S. and Bank o di Napoli S.C. that later reapplied for license according to the new proclamation each having a paid up capital of Eth. Birr 2 million.

The first privately owned bank, Addis Ababa Bank Share Company, was established on Ethiopians initiative and started operation in 1964 with a capital of 2 million in association with National and Grindlay Bank, London which had 40 percent of the total share. In 1968, the original capital of the Bank rose to 5.0 million and until it ceased operation, it had 300 staff at 26 branches.

There were other financial institutions operating in the country like the Imperial Savings and Home Ownership public Association (ISHOPA) which specialized in providing loans for the construction of residential houses and to individuals under the guarantee of their savings. There was also the Saving and Mortgage Corporation of Ethiopia whose aims and duties were to accept savings and trust deposits account and provide loans for the construction, repair and improvement of residential houses, commercial and industrial buildings and carry out all activities related to mortgage operations. On the other hand, there was a bank called Agricultural Bank that provides loan for the agricultural and other relevant projects established in 1945. But in 1951 the Investment Bank of Ethiopia replaced it. In 1965, the name of the bank once again hanged to Ethiopian Investment Corporation Share Company and the capital rose to Eth. Birr 20 million, which was fully paid up. However, proclamation No.55 of 1970 established the Agricultural and Industrial Development Bank Share Company by taking over the asset and liability of the former Development Bank and Investment Corporation of Ethiopia.

Following the declaration of socialism in 1974 the government extended its control over the whole economy and nationalized all large corporations. Organizational setups were taken in order to create stronger institutions by merging those that perform similar functions. Accordingly, the three private owned banks, Addis Ababa Bank, Banco di Roma and Banco di Napoli Merged in 1976 to form the second largest Bank in Ethiopia called Addis Bank with a capital of Eth. birr 20 million and had a staff of 480 and 34 branches. Before the merger, the foreign participation of these banks was first nationalized in early 1975. Then Addis Bank and Commercial Bank of Ethiopia S.C. were merged by proclamation No.184 of August 2, 1980 to form the sole commercial

bank in the country till the establishment of private commercial banks in 1994. The Commercial Bank of Ethiopia commenced its operation with a capital of Birr 65 million, 128 branches and 3,633 employees. The Savings and Mortgage Corporation S. and Imperial Saving and Home Ownership Public Association were also merged to form the Housing and Saving Bank with working capital of Birr 6.0 million and all rights, privileges, assets and liabilities were transferred by proclamation No.60, 1975 to the new bank.

Proclamation No.99 of 1976 brought into existence the Agricultural and Industrial Bank, which was formed in 1970 as a 100 percent state ownership, was brought under the umbrella of the National Bank of Ethiopia. Then it was reestablished by proclamation No. 158 of 1979 as a public finance agency possessing judicial personality and named Agricultural and Industrial Development Bank (AIDB). It was entrusted with the financing of the economic development of the agricultural, industrial and other sectors of the national economy extending credits of medium and long-term nature as well as short-term agricultural production loans. The financial sector in the socialist oriented government left behind constituted only three banks and each enjoying monopoly in its respective market. The NBE, CBE and Agricultural and Industrial development Bank was the structure of the sector at the end of the era.

Following the demise of the Dergue regime in 1991 that ruled the country for 17 years under the rule of command economy, the EPRDF declared a liberal economy system. In line with this, Monetary and Banking proclamation of 1994 established the national bank of Ethiopia as a judicial entity, separated from the government and outlined its main function. Monetary and Banking proclamation No.83/1994 and the Licensing and Supervision of Banking Business No.84/1994 laid down the legal basis for investment in the banking sector.

Since economic reform of 1992 under the new government, the existing government banks have been re-organized so as to operate based on market-oriented policy

framework but with 100% ownership of the government. Moreover, new Ethiopian private-owned financial institutions are allowed to participate in the country's financial sector. However, from the time of nationalization onwards (or since 1974), no foreign bank has been allowed to operate in Ethiopia and participation of the private sector to the ownership of government banks has been prohibited. Shortly afterwards, privately owned banks such as Awash International Bank (1994), Dashen Bank (1995), Bank of Abyssinia (1995), Wegagen Bank (1997), United Bank (1998), Nib International Bank (1999), cooperative Bank of Oromia (2004), Lion International Bank (2007), Oromia International Bank (2008), Buna International Bank (2008), Birehan International Bank (2009), and Zement Bank (2009) were established and operating in the country. During the year 2009/10, six additional private banks, Enat Bank, Debub Global Bank, Zemzem Bank, Addis Cooperative Bank, Hawassa Bank and Abay Bank, have got its license. Therefore, with the establishment of the above six banks the number of the private bank in the country has reached eighteen.

3.2. Financial Sector Reform

Economic liberalization began just before the fall of the Derg regime. However, with the initiation of the economic reform program of the current government, two proclamations were issued in 1994, Monetary and Banking Proclamation (No. 83/1994), and the Licensing and Supervision of Banking Business (No. 84/1994) and one proclamation were issued in 2008, a proclamation to amend the national bank of Ethiopia establishment (No. 591/2008). The first proclamation in addition to increasing the role of the National Bank of Ethiopia made illegal any NBE lending other than the government while the second proclamation empowered the Central Bank to supervise the financial institutions. Besides, the third proclamation adds additional power to the NBE for controlling the financial institution and the sole agent for the government with regard to the foreign exchange reserve. Moreover, two further proclamations, 200/1994 and 203/1994 restructured and renamed the Agricultural and Industrial Bank, and Housing and Saving Bank into Development Bank of Ethiopia and Construction and

Saving Bank of Ethiopia, respectively. It was also noted in the proclamations that the two banks were recapitalized as public enterprises and hence, the financial sector reform did not invite private sector participation in the current government owned banks else entry of foreign banks in full share as well as with restricted share as partners with Ethiopian citizens.

After the 1994 financial liberalization measures, the authorities concentrated their efforts on building capacity in the financial sector as well as on other priority areas of economic transition, in particular further liberalization of the foreign exchange system and trade liberalization measures. In addition with such institutional arrangement of the financial sector, sequence of policy measures, which include interest rate and exchange rate reforms among others were undertaken. But financial liberalization accelerated again when the lending rate was decontrolled and left to be determined by the banks themselves as late as January 1998 as compared to October 1992 when the bias between public and private charging of deposit rate was abolished. In all the reform period a positive lending interest rate was recorded except in 2002/03, which was markedly known as severe draught year. However, the floor for saving deposit rate was set at 3.0 percent commencing the year 2002; this resulted in a negative real deposit interest rate to be recorded triggered by the increasing inflationary pressure. The financial sector liberalization was also strengthened by reform on financial instruments which includes devaluation of exchange rate, introduction of Treasury bills, inter-bank foreign exchange market and others. In addition, a framework for an interbank money market, in which banks and non-bank financial institutions can borrow and lend at market determined rates, has been laid down.

3.3. Commercial Bank of Ethiopia (CBE)

The state bank of Ethiopia was founded in 1942 with twin objectives; performing the duties of both commercial and central banking. In 1963, the commercial bank of Ethiopia was legally established as Share Company to take over the commercial banking

activities of the state bank of Ethiopia. In the 1974 revolution, commercial bank of Ethiopia got its strength by merging with privately owned Addis Ababa bank. Since then, it has been playing significant role in the development endeavor of the country.

The commercial Bank of Ethiopia which is striving to embark into a world class bank is rendering state of the art and reliable services to its millions of customers both locally and abroad. The business strategies of the bank focus on the stakeholder it serves. The state owned commercial bank of Ethiopia, still dominant's the market in terms of assets, deposits, and capital and customer base and branch network, despite the growing completion from private banks over the last 15 years. This makes it one of the most reliable and strong commercial bank, both in the country and region.

Its strong capital base, above 68 years of rich experience in the market and having 211 branch networks throughout the country enabled the bank to accommodate large demands for banking services, both from private and public companies, and to increase its overall revenue on a sustainable basis. In addition the bank had two branches in Djibouti and in Juba, Southern Sudan which ceased operation recently.



The first Commercial Bank of Ethiopia head office

CHAPTER IV

DATA ANALYSIS & INTERPRITATION

Unsurprisingly, the significance of evaluating the financial performance of the commercial bank has become a prominent issue for banks in today's competitive business arena. Many researchers have applied different financial performance measures to evaluate the performance of the commercial banks. By using this financial performance measures, the performance of the commercial banks can be computed and so that the financial performance of the bank can be determined and compared.

In this study, a different financial ratio was used by the researcher to evaluate the financial performance of the bank. In addition, the researcher applied structured designed questionnaire in the study together with the secondary data.

This study evaluates the performance of the commercial bank of Ethiopia in the pre and post liberalization. Hence, the chapter is organized based on two main subsections. The first part of the chapter is devoted to analyze and interpret data obtained from secondary sources while the second part of the chapter analyzed the data gathered through questionnaire.

4.1 Data from Secondary Sources

A bank's balance sheet and income statement are valuable information sources for identifying risk taking and assessing risk management effectiveness. Although the amounts found on these statements provide valuable insights into the performance and condition of a bank, financial analysts, bankers and bank supervisors typically use data from them to develop financial ratios to evaluate bank performance. This is done to provide perspective and facilitate making comparisons. There are literally hundreds of useful financial ratios can be applied to evaluate bank's performance. However, in most

instances, researchers only need a few basic ratios to identify fundamental performance issues and help them formulate questions regarding any underlying problems and asking management's plans for correcting them.

Thus, this section discussed some selected ratios from various perspectives study using tables. It gives an explanation on the major findings. Each financial performance indicator (financial ratio) and is presented independently in a table. The researcher computes and compares the average of the financial ratios of the bank in the pre and post liberalization within the study. Besides in this chapter the hypothesis test were performed to know the significance gap between the financial performance of the bank in the pre and post liberalization.

4.1.1 Credit quality Performance

It is clear that the major sources of income for commercial banks is issuing of loans. But, when the banks make loans, it is exposed to risks, because banks operate in asymmetric information. The prominent risk that the bank faces is the risk of defaulting interest payment or the principal or both interest and loans. Thus, loan performance measures bank's risk associated with loans created by bank. In other words, it measures the quality of loans. The greater is the amount of loan and interest in default, the higher is the risk for a bank, and the bank is going to be rated as poor. The following three financial measures are used in the study for measuring the credit quality performance of the CBE.

A. Equity to Total Asset Ratio (EQTA)

Table 4.1 Equity to Total Asset Ratio (%)

EQTA of CBE before the reform period(1976 to 1992)																Average		
Year	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1886	1987	1988	1989	1990		1991	1992
EQTA	5.10	4.91	4.24	3.74	3.56	3.63	3.56	3.53	3.29	3.01	2.49	2.37	2.20	2.12	2.02	1.94	1.71	3.125317
EQTA of CBE after the reform period(1993 to 2009)																Average		
Year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007		2008	2009
EQTA	1.15	2.07	2.56	3.99	5.69	5.89	5.96	6.11	5.56	3.72	5.54	5.18	4.31	4.21	9.71	9.04	8.48	5.2453

Source: researcher own computation from the financial statement

Table 4.1 shows the EQTA ratio of the CBE in the pre and post reform period. EQTA measures equity capital as a percentage of total assets. It provides percentage protection afforded by banks to their investment in asset. It measures the overall shock absorbing capacity of a bank for potential loan asset losses. The higher the ratio of EQTA, the greater is the capacity for a bank to sustain the assets losses. Besides (Abdus, 2004 and Bateswar and Ajay, 2007) have used this ratio for measuring the credit quality performance of a bank in their study.

As it can be seen from the above table the trends of EQTA have decreased from (5.10 percent) to 1.71 percent in the pre reform period and increased from (1.15 percent) to 8.48 percent in the post reform period. The reason for trends of the ratio increased during the post reform period is the effect of liberalization. In addition, the table shows that the average of EQTA ratio (5.2453) after the reform period exceeded the average of EQTA ratio (3.125317) before the reform period. This further shows that the liberalization has brought a significant change in the bank with regard to credit quality

performance. Thus, the bank has the greater capacity to sustain the assets losses in the post reform period than before.

B. Equity to Loan Ratio (EQL)

Table 4.2 Equity to Loan Ratio (%)

EQL of CBE before the reform period(1976 to 1992)																Average		
Year	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1886	1987	1988	1989	1990		1991	1992
EQL	16.25	12.68	9.98	7.27	9.76	9.22	9.76	11.49	12.56	13.71	13.88	12.44	9.66	10.20	11.22	12.37	10.63	11.3576
EQL of CBE after the reform period(1993 to 2009)																Average		
year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007		2008	2009
EQL	4.73	8.14	8.19	9.89	13.17	13.49	13.36	14.48	15.17	11.20	22.39	22.96	18.48	19.68	50.42	28.02	24.89	17.5682

Source: researcher own computation from the financial statement

Table 4.2 illustrates EQL ratio of the bank in the pre and post reform period. EQL measures equity capital as a percentage of total loans. It provides equity as a cushion (protection) available to absorb loan losses. The higher the ratio of EQL, the higher is the capacity for a bank in absorbing loan losses. Besides (Abdus, 2004 and Bateswar and Ajay, 2007) have used this ratio for measuring credit quality performance of a bank in their study.

The above table portrayed that, the trends of EQL ratio of the bank decreased from (16.25 percent) to 10.63 percent and increased from (4.73 percent) to 24.89 percent in the post reform period. In addition the average of EQL ratio (17.5682) after the reform period exceeded the average of EQL ratio (11.3576) before the reform period. This clearly shows that the liberalization and reform measures improved the credit quality

performance of the bank. This indicates that the bank developed better capacity after the reform period in absorbing loan losses.

C. Non-performing loans to Total loan Ratio (NPTL)

Table 4.3 Nonperforming loans to Total Loan ratio (%)

NPTL of CBE before the reform period(1976 to 1992)																Average		
Year	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1886	1987	1988	1989	1990		1991	1992
NPTL	15.85	14.65	11.09	10.29	20.80	19.80	16.80	20.60	21.70	17.80	21.80	22.90	27.62	27.80	25.60	29.80	28.30	20.4247
NPTL of CBE after the reform period(1993 to 2009)																Average		
year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007		2008	2009
NPTL	15.85	14.65	11.40	10.80	21.10	12.31	11.91	13.90	10.38	24.55	28.97	24.37	21.17	17.67	14.23	6.13	3.10	15.4406

Source: researcher own computation from the financial statement

Table 4.3 reveals that NPTL ratio of CBE in the pre and post liberalization. NPTL ratio is one of the most important criteria to assess the quality of loans or asset of commercial banks. It measures the percentage of gross loans which are doubtful in banks' portfolio. The lower the ratio of NPTL, the better is the asset/credit performance for the commercial bank. Besides Abdus, 2004 have used this ratio for measuring the credit quality performance of the bank.

As per the above table the trend of NPTL ratio of the bank increased from (15.58 percent) to 28.30 percent in the pre reform period and it's decreased from (15.85 percent) to 3.10 percent in the post reform period. At the same time the average of NPTL ratio (20.247) of CBE before the reform period exceeded the average of NPTL ratio (15.4406) of the bank after the reform period. Because, the lower the ratio of NPTL, the better is

the asset/credit performance. This signifies the liberalization help the bank in building a better asset/credit quality performance after the reform period.

4.1.2 Liquidity Performance

Liquidity means cash, or how quickly a bank can convert its assets into cash at face value to meet the cash demand of the depositors and borrowers. Liquidity is the life for a commercial bank. As a depository institution commercial bank must meet its depositor claims on demand. Failing to meet this demand, commercial banks are exposed to liquidity risk. So, commercial banks must hold sufficient liquidity. The following financial ratios are used for measuring the liquidity performance of the CBE in the study.

A. Total Loans to Total Asset Ratio (TLTA)

Table 4.4 Total Loans to Total Asset Ratio (%)

TLTA of CBE before the reform period(1976 to 1992)																average		
Year	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1886	1987	1988	1989	1990		1991	1992
TLTA	31.39	38.74	42.53	40.60	21.60	39.32	26.80	30.75	26.17	21.95	17.93	19.45	22.80	22.43	17.97	15.68	16.08	26.5971
TLTA of CBE the reform period(1993 to 2009)																average		
year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007		2008	2009
TLTA	24.27	25.46	31.30	40.32	43.17	43.65	44.62	42.22	40.48	47.60	40.60	22.51	36.80	21.35	19.26	32.28	34.10	34.7053

Source: researcher own computation from the financial statement

Table 4.4 clearly shows the TLTA ratio of the CBE before and after the reform period. The TLTA ratio measures the total loans outstanding as a percentage of total assets. The

higher this ratio indicates a bank is loaned up and its liquidity is low. In other word, the more risky a bank may be to higher defaults or the higher the ratio, the less liquid the bank will be. Besides (Abdus, 2004 and Bateswar and Ajay, 2007) have used this ratio for measuring liquidity of a bank in their study.

According to the above table the trend of TLTA ratio of the bank is decreased from (31.39 percent) to 16.08 percent in the pre reform period and increased from (24.27 percent) to 34.10 percent in the post reform period. In addition the average TLTA ratio of the CBE after the reform period (34.7053) exceeded the average ratio before the reform period (26.5971). This clearly indicates the liberalization and reform measures brought a significant change in maintaining sufficient liquidity position in the bank.

B. Liquid asset to Deposit ratio (LATD)

Table 4.5 Liquid Asset to Deposit Ratio (%)

LATD of CBE before the reform period(1976 to 1992)																	Average	
Year	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1886	1987	1988	1989	1990	1991		1992
LATD	74.13	45.05	59.31	51.43	58.61	62.72	67.43	56.60	63.99	70.60	61.15	65.61	61.20	63.87	58.60	51.80	39.73	59.8341
LATD of CBE after the reform period(1993 to 2009)																	Average	
year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		2009
LATD	46.78	36.80	34.80	39.94	27.82	37.57	54.00	49.60	38.60	43.00	71.00	73.80	68.87	74.97	78.00	47.40	35.91	50.5247

Source: researcher own computation from the financial statement

The above table depicts the commercial bank of Ethiopia LATD ratio in the pre and post liberalization. The liquid assets of commercial banks consist of cash on hand, cash at bank, statutory reserves (with National Bank of Ethiopia), balance with other banks, and

treasury bills. This composition of liquid assets is known as structural allocation of liquid assets. The LATD ratio used in this study is measured by taking the structural allocation of liquid assets. Abdus (2004) have used this ratio for measuring liquidity of a bank. It indicates the percentage of deposit and short term funds that are available to meet the sudden withdrawals. The higher the LATD, the more liquid is a commercial bank and less vulnerable it is to run the bank.

As it can be seen from the table 4.5 the trends of the LATD ratio decreased from (74.13 percent) to 39.73 percent and from (46.78 percent) to 35.92 percent in the pre and post reform period respectively. In both periods the trend of LATD ratio is decreased and indicates the less liquidity in the bank in both period but the average LATD ratio (59.8341) of the bank before the reform period is greater than the average LATD ratio (50.5247) of the bank after the reform period. But literally the higher the LATD, the more liquid is a commercial bank and less vulnerable it is to run the bank. From the analysis it can be concluded that, the liberalization enhance the bank to maintain sufficient liquidity position in the post reform period.

C. Total loans to Total Deposit ratio (TLTD)

Table 4.6 Total Loans to Deposit Ratio (%)

TLTD of CBE before the reform period(1976 to 1992)																average		
Year	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1886	1987	1988	1989	1990		1991	1992
TLTD	47.00	58.36	70.04	45.05	51.80	64.48	56.40	48.50	39.19	30.96	26.62	29.64	31.47	34.13	22.31	19.23	19.72	40.8765
TLTD of CBE after the reform period(1993 to 2009)																average		
year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007		2008	2009
TLTD	36.92	48.31	46.51	57.16	56.43	56.48	61.60	59.74	59.80	49.50	41.00	35.10	38.40	45.60	38.46	43.20	46.58	48.2818

Source: researcher own computation from the financial statement

Table 4.6 shows that the TLTD ratios of the CBE in the pre and post reform period. Loan to deposit (TLTD) ratio is the most commonly used liquidity ratio of a bank. (Abdus, 2004 and Bateswar and Ajay, 2007) have used this ratio for measuring liquidity of a bank. A low ratio of TLTD indicates excess liquidity, and potentially low profits, when we compared before and after the liberalization. At the same time when we compared the TLTD ratio of the bank in the pre and post liberalization, a high TLTD ratio presents the risk that some loans may have to be sold at a loss to meet depositors' claims. The TLTD ratio of commercial bank of Ethiopia in the pre and post liberalization is given below:

The table clearly shows the trend of the TLTD ratio of the bank Decreased from (47 percent) to 19.72 percent in the pre reform period and increased from (36.92 percent) to 46.58 percent in the post reform period. Besides the average of TLTD ratio of CBE (45.5024) after the reform period exceeded the average ratio (44.3835) of the bank after

the reform period. Thus, liberalization supports the bank in achieving better performance in terms of risk (the risk that some loans may have to be sold at a loss to meet depositors' claims.) and greater profits in the post reform period.

4.1.3 Profitability Performance

Profitability ratios show a company's overall efficiency and performance. It indicates how the top management of a bank maximizes shareholders' profits by utilizing existing resources at their disposal. Performance of a bank in terms of profitability reflects its ability to support present and future operations. More specifically, this determines the capacity to absorb losses by building an adequate capital base, finance its expansion and pay adequate dividends to its share holders. The following financial ratios are used for measuring profitability performance of commercial bank of Ethiopia.

A. Return on Asset (ROA)

Table 4.7 Return on Asset (%)

ROA of CBE the reform period(1976 to 1992)																	average	
Year	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1886	1987	1988	1989	1990	1991		1992
ROA	1.43	0.95	1.65	2.71	2.61	1.69	0.98	1.27	0.92	1.39	1.07	1.11	1.09	0.96	0.72	0.25	0.59	1.2582
ROA of CBE after the reform period(1993 to 2009)																	average	
year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		2009
ROA	1.40	2.40	2.37	2.59	2.56	1.73	2.68	2.33	3.10	-2.30	2.85	2.99	2.38	2.32	2.18	2.90	3.50	2.2341

Source: researcher own computation from the financial statement

Table 4.7 above depicts ROA of the CBE in the pre and post liberalization. ROA is the ratio of profit after tax to total asset. It reflects the efficiency with which banks deploy

their assets. Numerous researchers have used Return on Assets (ROA) ratio for measuring the profitability of a bank. (Bateswar and Ajay, 2007, Abdus, 2004, Tarawneh, 2006 and Goddard et al. 2004), and many more have extensively used ROA ratio. The greater the ROA ratio, the better for the bank or the higher the ROA, the most profitable is the bank. ROA ratios of commercial bank of Ethiopia are shown below.

According to above table, the trend of ratio of ROA decreased from (1.43 percent) to 0.59 percent in the pre reform period and increased from (1.40 percent) to 3.50 percent in the post reform period and also the average ROA of the bank after the reform period (2.2341) is exceeded the average ROA ratio of the bank pre reform period (1.2582). This clearly shows that even if the bank has been in loss in 2002/3 liberalization or reform measures enabled the bank to deploy their assets in a great efficiency after the reform period. Further indicates that, the liberalization or reform measures enhance the bank's profitability performance after the reform period.

B. Return on Equity (ROE)

Table 4.8 Return on Equity (%)

ROE of CBE before the reform period(1976 to 1992)														average				
Year	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1886	1987	1988		1989	1990	1991	1992
ROE	28.00	19.39	18.60	36.00	20.60	46.46	27.55	36.10	19.60	21.10	32.78	22.60	39.80	35.80	35.80	12.82	34.44	28.6729
ROE of CBE after the reform period(1993 to 2009)														average				
Year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005		2006	2007	2008	2009
ROE	49.58	72.08	67.63	66.42	45.11	29.44	44.92	48.60	50.71	-47.30	51.24	57.66	55.20	54.65	30.18	31.00	40.01	43.9488

Source: researcher own computation from the financial statement

ROE represents a ratio of financial results to a bank's own fund. It shows a rate of return on base capital, that is, equity capital. Numerous researchers have used Return on Equity (ROE) ratio for measuring the profitability of a bank. (Tarawneh, 2006, Abdus, 2004 and Goddard et al. 2004), and many more have extensively used ROE ratio. The greater the ROE ratio, the more efficient is the performance. Therefore, the ROE ratio of commercial bank of Ethiopia in the pre and post liberalization is shown below:

It is clear from table 4.8 the trend of the ROE ratio were increased from (28 percent) to 34.44 percent in the pre reform period and decreased from (49.585) to 40.01 in the post reform period. In the post reform periods the ROE ratio is negative in 2003/2004 because of the bank that has been in loss in 2002/3, which was markedly known as sever draught year but the average ROE ratio (43.9488) of the bank in post reform period exceeded the average ROE ratio (28.6729) of the bank in the pre reform period. It shows that even if the bank has been in loss in 2002/3 the liberalization or reform measures enabled the bank to record better profitability performance and greater efficiency after the reform period.

C.Net Interest Margin (NIM)

Table 4.9 Net Interest Margin (%)

NIM of CBE before the reform period(1976 to 1992)																average		
Year	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1886	1987	1988	1989	1990		1991	1992
NIM	2.52	1.64	2.47	4.35	3.52	3.02	2.67	2.62	2.21	2.10	1.76	1.55	1.69	1.58	1.27	1.14	0.99	2.1824
NIM of CBE after the reform period(1993 to 2009)																average		
Year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007		2008	2009
NIM	2.10	3.20	3.40	3.80	4.10	3.40	4.00	4.60	3.30	1.10	2.30	1.76	1.73	1.88	2.08	2.55	3.66	2.8800

Source: researcher own computation from the financial statement

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. Analysts focus on Net Interest Margin (NIM) ratio because small changes in a bank's lending margin can translate into large bottom line changes. The higher the ratio the cheaper the funding or the higher the margin the bank is obtaining. A bank's net interest margin is a key performance measure that drives ROA. (Bateswar and Ajay, 2007, Abdus, 2004 and Goddard et al. 2004), and many more have used this ratio. The following data shows NIM of the commercial bank of Ethiopia in the pre and post liberalization.

Table 4.9 reveals the NIM ratios of the commercial bank of Ethiopia in the pre and post reform period. The table clearly shows that the trend of NIM ratio were decreased from (2.52 percent) to 0.99 percent in the pre reform period and increased from (2.10 percent) to 3.66 percent in the post reform period and also the average NIM ratios (2.8800) of the bank in the post reform period exceeded the average NIM ratios (2.1824) of the bank before the reform period. This clearly indicates that, the liberalization or reform

measures enhance the bank in obtaining the higher margin for making lending and investment activities in the post reform period.

4.1.4 Trends of Net Profit, Capital, Deposit and Loans of CBE

Table 4.10 Net profit, Capital, Deposit and loan

CBE before the reform period(1976 to 1992)												Year	Loan	Deposi	Capi	NPA
Loan	Deposit	Capital	NPAT	Yea												
2786.5	5956.8	104.1	51.6	1993	14.4	51.5	674.1	316.9	1976							
2856.1	7455.3	232.6	167.7	1994	10.3	35.0	715.8	417.8	1977							
4467.6	9606.5	366.0	210.9	1995	21.4	55.1	787.9	551.9	1978							
6394.5	11186.5	632.6	356.9	1996	45.8	63.3	1015.3	870.6	1979							
7143.6	12658.8	940.9	33.8	1997	40.2	71.8	1214.5	871.8	1980							
8088.1	14385.1	1091.2	321.1	1998	37.5	80.6	1355.3	873.9	1981							
8430.1	13691.7	1126.3	65.5	1999	24.6	89.4	1541.9	916.1	1982							
8908.5	15639.7	1289.8	411.2	2000	36.1	100.2	1797.4	871.8	1983							
8556.9	17337.4	1301.0	19.4	2001	31.6	104.0	2113.6	828.3	1984							
7357.1	18530.0	829.0	471.0	2002	48.0	104.1	2452.2	759.2	1985							
6075.0	19762.0	1277.0	545.0	2003	44.5	104.1	2815.3	749.5	1886							
6296.0	22531.0	1496.0	334.0	2004	49.9	106.3	2946.1	873.2	1987							
7533.0	25367.0	1429.0	572.0	2005	52.8	106.3	3495.8	1082.6	1988							
7653.0	28286.0	1506.0	802.0	2006	48.0	106.3	3718.7	1042.6	1989							
8370.0	32873.0	4220.0	864.0	2007	37.5	104.8	4230.8	934.5	1990							
16275.0	37633.0	4560.0	1361.0	2008	13.3	104.1	4420.7	841.1	1991							
20257.0	43489.0	5041.0	1921.0	2009	35.8	104.1	5012.6	979.4	1992							
7732.24	19799.34	161.26	500.48	average	34.81	88.76	2371.04	810.66	average							

Source: researcher own computation from the financial statement

Table 4.10 clearly shows that the growth of the net profit after tax, capital, deposits and loan of the CBE in the pre and post liberalization. This clearly indicating that, the profitability, capital, deposit and loan of the commercial bank of Ethiopia have shown a tremendous improvement after the reform measures has been taken.

The above table clearly shows the trends of profit, capital, deposit and loan of the bank increased from Birr (14.4), (51.5), (674.1), (316.9) million to Birr 35.8, 104.1, 5012.6 979.4 Million and from Birr (51.6), (104.1), (5956.8), (2786.5) million to Birr 1921.0, 5041.0, 43489.0, 20257.0 million in the pre and post reform period respectively.

In addition the profit, capital, deposit and loan of the bank on average for the post reform period has reached to Birr 500.48, 1,614.26, 19,799.34, and 7,732 million as compared to Birr 34.81, 88.76, 2,371.04 and 810.66 million during the post reform period respectively.

Even the bank that has been in loss in 2002/3, which was markedly known as sever draught year and Loans and advances of the commercial bank of Ethiopia in the most recent post reform period is reduced because of the National Bank of Ethiopia set a maximum outstanding loan limit to all banks in the country to control inflation, in the post reform period, the bank recorded better performance after the reform measure has been taken.

This signified the bank has continued, of recent, posting a remarkable improvement in its net profit, capital, deposit, and loan which used to be stagnant at low level for more than two decades in the pre reform period.

4.1.5 Hypothesis Testing using T - Test

To substantiate the result obtained by using ratio analysis, hypothesis was tested using T test. The three hypotheses that were developed and tested under this study are:

H₀1: There is no significant gap in the credit quality performance of CBE in the pre and post financial liberalization.

H₁1: There is significant gap in the credit quality performance of CBE in the pre and post financial liberalization.

H₀2: There is no significant gap in the liquidity performance of CBE in the pre and post financial liberalization.

H₁2: There is significant gap in the liquidity performance of CBE in the pre and post financial liberalization

H₀3: There is no significant gap in profitability performance of CBE in the pre and post financial liberalization.

H₁3: There is significant gap in profitability performance of CBE in the pre and post financial liberalization.

CBE financial performance was determined by using different financial ratios by comparing its results before and after the reform period. It is useful to have understanding on both before and after the financial performance of the bank to monitor the financial items and adjust the financial performance accordingly. Consequently, the objective of this study was to measure the gap in the financial performances of the bank based on three financial performance measures indicators: credit quality, liquidity and profitability. The gap between the financial performances of the bank was computed for each of the financial performance measures indicators.

Based on data obtained as aforementioned, mean difference between after and before liberalization ($FP=A-B$) were computed for each of the financial performance indicator ratios. A positive difference of EQTA, EQLA, TLTA, TLTD, ROA, ROE, and NIM and negative difference of LATD & NPTL indicates that on average the performance of the bank in the post reform period exceeded the pre reform period; implying for better financial performance of the bank. On the contra, a negative difference of EQTA, EQLA,

TLTA, TLTD, ROA, ROE, and NIM and apposite difference of LATD & NPTL indicates that on average the bank financial performance after the liberalization is lower than before the liberalization, indirectly it indicates less financial performance of the bank. With this assumption, paired t-test was conducted to test if there is any statistically significant gap between financial performance of CBE before and after the financial liberalization.

With regard to the paired T-test decisions:- if the two tailed significance value(sig-t) is greater than α (error level) then H_0 will be accepted and if the two tailed significance value (sig-t) is less than α (error term) H_0 will be rejected. In what follows, the financial performance of the bank is analyzed based of the aforementioned results and regrouping in to the three financial performance measures indicators.

4.1.5.1 Test of Credit Quality Performance

Credit quality performance of the bank can be measured using the financial ratio of equity to total asset, Equity to loan and non performing loan to total asset of the bank. To gain a better evaluation of the credit quality of the bank in the pre and post reform period, the financial ratios results in the study shown in the table below are analyzed. The three credit quality ratios mean scores, after liberalization, before liberalization and gap score for the credit quality are presented in the next table (table 4.11)

Table 4.11 Mean scores of credit quality before, after and gap score of the bank

RATIOS	AFTER	BEFORE	GAP SCORE
$EQT_{A}-EQT_{B}$	5.2453	3.125317	2.12000
$EQL_{A} - EQL_{B}$	17.5682	11.3576	6.21059
$NPTL_{A}-NPTL_{B}$	15.4406	20.4247	-4.98421

Source: researcher computation

Looking at Table 4.11 the credit quality financial ratios elements' mean differences, the gap scores for the two ratios (EQTA & EQLA) and NPTL ratios are positive and negative respectively, indicating that on average the credit quality performance of the bank after the reform period exceeded the credit quality performance of before the reform period. Following this, it can be said that the financial performance with regard to credit quality of the bank after the reform period is better than before the reform period.

Table 4.12 Paired Samples T-test for Credit Quality of the Bank

	Paired Differences				T	df	Sig. (2-tailed)
	Mean	Std. Deviation	95% Confidence Interval of the Difference				
			Lower	Upper			
EQTA _A -EQTA _B	2.12000	3.16884	.49073	3.74927	2.758	16	.014
EQL _A - EQL _B	6.21059	10.92078	.59564	11.82553	2.345	16	.032
NPTL _A -NPTL _B	-4.98412	9.01072	-9.61700	-.35123	-2.281	16	.037

$\alpha=0.05$

Source: researcher computation

Table 4.12 shows the mean difference between credit quality performance before and after the financial liberalization and further sets out the results of the paired t-test for each of the credit quality financial ratios.

In EQTA the mean gap score of positive (2.12000) suggests that the overall shock absorbing capacity of a bank for potential loan asset losses of the bank after the reform period exceeded before the reform period. Therefore, the bank has the capacity to

sustain the assets losses after the reform period than before. But, to evaluate the extent of the difference of the EQTA of the bank pre and post, it's necessary to look at the significance values. As the two tailed sig-t (.014) is lower than α (0.05), it shows statistically there is significant gap between the EQTA of the bank in the pre and post reform period. That is, the EQTA of the bank after the reform period is better than before the reform period.

In QLA the mean gap score of positive (6.21059) shows that a safety capacity to absorb loan losses of the bank after the reform period exceeded before the reform period. Thus, the bank has better safety capacity to absorbing loan losses after the reform period than before. In addition, to evaluate the extent of the difference of the QLA of the bank in the pre and post liberalization, the two tailed sig-t (.032) is lower than α (0.05), it shows statistically there is significant gap between the QLA of the bank in the pre and post liberalization. Therefore, the capacity of the bank to absorb loan losses after the reform period is better than before the reform period.

In NPTL the mean gap score of negative (-4.98412) suggests that the overall credit performance of a bank after the reform period exceeded before the reform period. Because, the lower the ratio of NPTL, the better is the asset/credit performance. Therefore, the bank has the better asset/credit performance after the reform period than before the reform period. But, to evaluate the extent of the difference of the NPTL of the bank pre and post, as the two tailed sig-t (.037) is lower than α (0.05), it shows statistically there is significant gap between the NPTL of the bank in the pre and post reform period. That is, the NPTL of the bank after the reform period is better than before the reform period.

In all three of the credit quality performance measures (EQTA, QLA, and NPTL) after liberalization the two tailed sig-t is lower than α . In this regarded H_0 is rejected. Therefore, there is significant gap in the credit quality performance of CBE in the pre and post financial liberalization. The higher mean values of after the reform period

further suggest that the bank has exerted much effort on creating higher level of credit quality services to its customers which help it to develop better performance in credit/loan management. This could be one reason for the significant mean differences between credit quality performance of the bank in the pre and post liberalization.

4.1.5.2 Test of Liquidity Performance

Here the test is the overall liquidity performance of the bank in the pre and post liberalization. To gain a better evaluation of the liquidity performance of the bank in the pre and post reform period, the TLTA, LATD and TLTD ratios results in the study shown in the table below are analyzed. The three liquidity ratios mean scores of after liberalization and before liberalization and gap score for the credit quality are presented in the next table (table 4.13)

Table 4.13 Mean scores of liquidity performance before, after and gap score of the bank

RATIOS	AFTER	BEFORE	GAP SCORE
TLTA _A -TLTA _B	34.7053	26.5971	8.10824
LATD _A -LATD _B	50.5247	59.8341	-9.30941
TLTD _A -TLTD _B	48.2818	40.8765	7.40529

Source: researcher computation

Table 4.13 illustrates the overall average difference between liquidity performance of the bank in the pre and post and gap score for each of the liquidity performance measures financial ratios.

For TLTA and TLTD ratios the mean gap scores were positive and for LATD the gap scores are negative indicating that, liquidity performance of the bank after the reform

period exceeded the liquidity performance of the bank before the reform period. Thus, the bank has better liquidity performance in the post reform period than before.

Table 4.14 Paired Samples T-test for liquidity performance of the bank

	Paired Differences				t	df	Sig. (2-tailed)
	Mean	Std. Deviation	95% Confidence Interval of the Difference				
			Lower	Upper			
TLTA _A - TLTA _B	8.10824	2.12935	1.87190	14.34457	2.756	16	.014
LATD _A - LATD _B	-9.30941	16.13921	-17.60738	-1.01144	-2.378	16	.030
TLTD _A - TLTD _B	7.40529	13.58081	.42269	14.38790	2.248	16	.039

$\alpha=0.05$

Source: researcher computation

Table 4.14 depicts the mean differences between liquidity performance of the bank in the pre and post liberalization and further shows the results of the paired t-test for each of the liquidity performance measures financial ratios.

The mean difference for TLTA ratio was positive (8.10824) indicating that the bank liquidity is performance after the reform period is better than before the reform period. As the two tailed sig-t (.014) is lower than α (0.05), it shows statistically there is significant gap between the TLTA of the bank in the pre and post reform period. That is, the TLTA of the bank after the reform period is better than before the reform period.

In LATD the mean gap score of negative (-9.30941) suggests that the liquidity performance of a bank after the reform period exceeded before the reform period. Because the higher the LATD, the more liquid is a commercial bank and less vulnerable it is to run the bank. However, in the post reform period the ratio is lower than before.

Besides, to evaluate the extent of the difference of the LATD of the bank pre and post, as the two tailed sig-t (.030) is lower than α (0.05), it shows statistically there is significant gap between the LATD of the bank in the pre and post reform period. That is, the LATD ratio of the bank after the reform period is better than before.

In TLTD the mean gap score of positive (7.40529) shows that the bank has sufficient liquidity and better profitability in the post reform period than in the pre reform period. In addition, to evaluate the extent of the difference of the TLTD of the bank in the pre and post liberalization, the two tailed sig-t (.039) is lower than α (0.05), it shows statistically there is significant gap between the TLTD of the bank in the pre and post liberalization. Therefore, the TLTD of the bank after the reform period is better than before the reform period.

In all three of the liquidity performance measures (TLTA, LATD, and TLTD) after liberalization the two tailed sig-t is lower than α . In this regard H_0 is rejected. Therefore, there is significant gap in the liquidity performance of CBE in the pre and post financial liberalization. The higher mean values of after the reform period further suggest that the bank has good performance to convert its assets into cash to meet the cash demand of the depositors and borrowers in the post reform period. This could be one reason for the significant mean differences between liquidity performance of the bank in the pre and post liberalization.

4.1.5.3 Test of Profitability Performance

Profitability performance of the bank is measured by using the financial ratios of return on asset, return on equity, and net interest margin. To gain a better evaluation of the

profitability performance of the bank in the pre and post reform period, the financial ratios results in the study shown in the table below are analyzed. The three profitability financial ratios mean scores, after liberalization, before liberalization and gap score for the credit quality are presented in the next table (table 15)

Table 4.15 Mean scores of profitability before, after and gap score of the bank

RATIOS	AFTER	BEFORE	GAP SCORE
$ROA_A - ROA_B$	2.2341	1.2582	.97588
$ROE_A - ROE_B$	43.9488	28.6729	15.2759
$NIM_A - NIM_B$	2.8800	2.1824	.69765

Source: researcher computation

Table 4.15 illustrates the average difference between the profitability performance of the bank mean differences, the gap scores for the three financial ratios is positive, indicating that on the average the profitability performance of the bank after the reform period exceeded the profitability performance of before the reform period.

Table 4.16 Paired Samples T-test for profitability performance of the bank

	Paired Differences				t	df	Sig. (2-tailed)
	Mean	Std. Deviation	95% Confidence Interval of the Difference				
			Lower	Upper			
ROAA - RoAB	.97588	1.51392	.19750	1.75427	2.658	16	.017
ROEA - ROEB	15.2759	27.56199	1.10481	29.44695	2.285	16	.036
NIMA - NIMB	.69765	.93748	.21564	1.17965	3.068	16	.007

$\alpha=0.05$

Source: researcher computation

Table 4.16 shows the mean difference between profitability performance of the bank before and after the financial liberalization and further sets out the results of the paired t-test for each of the profitability performance financial ratios.

In ROA the mean gap score of positive (.97588) suggests that the efficiency of the bank in managing its investment in assets and using them to generate profit in the post reform period is better than before. But, to evaluate the extent of the difference of the ROA of the bank pre and post, it's necessary to look at the significance values. As the two tailed sig-t (.017) is lower than α (0.05), it shows statistically there is significant gap between the ROA of the bank in the pre and post reform period. That is, the ROA of the bank after the reform period is better than before the reform period.

In ROE the mean gap score of positive (15.2759) shows that the profitability performance of the bank after the reform period exceeded before the reform period. In

addition, to evaluate the extent of the difference of the ROE of the bank in the pre and post liberalization, the two tailed sig-t (.036) is lower than α (0.05), it shows statistically there is significant gap between the ROE of the bank in the pre and post liberalization.

In NIM the mean gap score of positive (.69765) shows that the bank has better performance in lending and investment activities in the post reform period than in the pre reform period. In addition, to evaluate the extent of the difference of the NIM of the bank in the pre and post liberalization, the two tailed sig-t (.007) is lower than α (0.05), it shows statistically there is significant gap between the NIM of the bank in the pre and post liberalization. Therefore, the NIM of the bank after the reform period is better than before the reform period.

In all three of the profitability performance measures (ROA, ROE, and NIM) after liberalization the two tailed sig-t is lower than α . In this regard H_0 is rejected. Therefore, there is significant gap in profitability performance of CBE in the pre and post financial liberalization. The higher mean values of after the reform period further suggest that the bank has creating higher level of efficiency and profitability performance. This could be one reason for the significant mean differences between profitability performance of the bank in the pre and post liberalization.

4.2. Data from Primary Sources

In addition to data gathered from secondary sources, a structured questionnaire was developed to know the attitude of respondents towards the financial performance of the commercial bank of Ethiopia in the pre and post liberalization. In this section, the data collected through questionnaires presented and analyzed using statistical tables. The findings from the respondents on different aspects of the financial performance of the commercial bank of Ethiopia and possible reasons for any forthcoming problems are also presented.

Furthermore, in each part attempt has been also made to seek information on the areas that need further liberalization or reform measures. The questionnaire has been distributed to 35 selected employees and management members of the commercial bank of Ethiopia.

The selection of respondents was made in a way to represent both the management and employees working in different seven operation of the bank. All 35 questionnaires have been fully filled and returned for use in the study. The responses have been analyzed in the following pages:

4.2.1. Respondents Background

All respondents who participated in this study were management and employees' from seven different operation of the commercial bank of Ethiopia, head office. Presented here is general background information about the respondents. Respondents were studied for their gender, age, highest level of education, experience and position in the bank. The tables that follow present the results for each of these variables.

A. Gender Respondents

Table 4.17 Gender of the respondents

Gender	Frequency	Percent	Cumulative Percent
Male	24	68.6	68.6
Female	11	31.4	100.0
Total	35	100.0	

Source: survey 2010

The above table 4.17 shows the respondents' gender in this study. It suggests that more than half of bank respondents were male.

B. Age of the Respondents

Table 4.18 Ages of the Respondents

Age range	Frequency	Percent	Cumulative Percent
Less than 25	3	8.6	8.6
26 to 35	8	22.9	31.5
36 to 55	20	57.1	88.6
56 an above	4	11.4	100.0
Total	35	100.0	

Source: survey 2010

As table 4.18 indicates, the majority of the respondents (57.1%) were aged between “36-55” of age, (8.6%) of respondents were less than 25 years old, (22.9%) of the respondents were within the age range of “26-35”, and only (11.4%) of respondents were above 56 years old.

C. Educational Status of the Respondents

Table 4.19 Educational status of the Respondents

Educational status	Frequency	Percent	Cumulative Percent
College diploma	5	14.3	14.3
First degree	19	54.3	68.6
Second degree and above	11	31.4	100.0
Total	35	100.0	

Source: survey 2010

Regarding to the educational background, table 4.19 shows that the highest frequency, (54.3%) of respondents possessed first degree, (14.3%) of the respondents were college diploma holders, and (31.4%) of the respondents' having educational qualification of second degree and above. This implies that, the researcher has got an input for well educated respondents in the study.

D. Experience of the Respondents

Table 4.20 Experiences of the Respondents

Experience	Frequency	Percent	Cumulative Percent
1 to 5 year	7	20.0	20.0
6 to 10 year	17	48.6	68.6
Above 10 years	11	31.4	100.0
Total	35	100.0	

Source: survey 2010

In terms of experience, table 4.20 shows that the major portion (48.6%) has served in the bank between 6 to 10 years, and the rest 20% and 31.1% have served in the bank between 1 to 5 years and above 10 years respectively. This implies that the researcher reliance on well experienced respondents in the study.

E. Positions of the Respondents

Table 4.21 positions of the Respondents

Position	Frequency	Percent	Cumulative Percent
Employee	5	14.3	14.3
Middle level manager	7	20.0	34.3
Officer	14	40.0	74.3
Senior manager	9	25.7	100.0
Total	35	100.0	

Source: survey 2010

Table 4.21 shows that the majority of the respondents (40%) serving the bank as officer, (25.7%) of respondents serving the bank as senior manager and the remaining 20% and 14.3% of the respondents working in the bank as middle level manager and employee respectively. This indicates the respondents in the study have good knowledge and information about the effect of financial liberalization on bank performance.

4.2.2 Performance of CBE in the Pre and Post reform Period

One question has been asked so as to find out the attitude of management and employees toward the change and take their ideas for further improvement of the performance of the bank. Summary of the responses are summarized in the table below:

Table 4.22 Performance of the Bank in the Pre and Post Reform Period

Responses	Frequency	Percent	Cumulative Percent
Yes	24	70.3	68.6
No	11	29.7	100.0
Total	35	100.0	

Source: survey 2010

As displayed in table 4.22, more than half, 24 or 70.3% of the respondents are agreed that the financial liberalization brought a significant change on the performance of the bank. The respondents who agreed the reform brought the performance of the bank stated their reasons that financial liberalization has enabled the bank to led the banking industry both in profitability and market concentration, to serve the society through branch expansion in the rural area, injecting funds to the private sector in the form of loans and creating job opportunities to skilled Ethiopian nationals.

On the other hand 11 or 29.3% of the respondents are of the opinion that the financial liberalization dose not brought a significant change on the performance of the bank. They claim that the liberalization allowed the bank to accumulate excess fund in the industry and enabled the bank to dominate the industry. Therefore, these situations create unfair computation in the industry. From the analysis it can be conclude that there was much remarkable change brought to the bank as a result of the liberalization or reform measures as compared with the pre reform period but the regulatory body lacked the capacity to creating a level playing field, equal opportunity to play in the field competitively with private banks.

4.2.3 Involvement of Government

Table 4.23 Government Involvement

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	14	40	40.0	40.0
no	21	60	60.0	100.0
Total	35	100.0		

Source: survey 2010

Respondents' views towards the current involvement of the government in the banking industry (table 4.23) displayed that most (60%) of the respondent agreed that the government involvement in the industry does not makes the bank beneficial. They explain their reason that the current involvement of the government in the banking industry limited the bank infrastructure development.

On the other side of the continuum, (table 4.23) 14 or 40% of the respondents agreed that the current involvement of the government makes the bank beneficial. They explain their reason that the current involvement of the government in the industry enabled the bank became financially stable, helped the bank to build a good banking culture in the industry and make it to delivered better socially responsible banking services to the society. The above opinion indicates that there is a need to work for minimizing the current existing involvement of the government in the banking industry so as to improve the performance of the bank.

4.2.4. Profitability Performance

Table 4.24 Profitability Performance

Responses	Frequency	Percent	Cumulative Percent
Yes	27	77.14	77.1
no	8	22.86	100.0
Total	37	100.0	

Source: survey 2010

Relaying on the trend of the bank profitability in both period both open ended and choice questions were designed and forwarded to the respondents. The responses to the questions are presented in table 4.24 as follows:

(Table 4.24) the majority (77.14) of the respondents believe that the financial liberalization brought a significant change on the profitability performance of the bank. Further, respondents also believe that the reform measures positively impacted the profitability of the bank by creating intense competition in the sector. Then, the bank enjoys the competition and led the industry in terms of branch expansion and profitability. On the other side, 8 or 22.86% of the respondents believe that the financial liberalization dose not brought a significant change on the profitability performance of the bank.

4.2.5 Regulation of the Bank

Table 4.25 Regulation of the Bank

Responses	Frequency	Percent	Cumulative Percent
Yes	20	57.14	57.14
no	8	22.86	80.0
don't know	7	20.0	100.0
Total	37	100.0	

Source: survey 2010

Respondents' views towards the regulation or the supervision of the bank (table 4.25) displayed that most (57.14%) of the respondent agreed that the financial liberalization strengthened the regulation or supervision of the bank. On the other side, 8 or 22.86% of the respondents responded that the financial liberalization dose not strengthened the regulation of the bank. However, 7 or 20% of the respondents responded that they do not have any information about the effect of liberalization on the bank regulation. Form this it can be concluded that financial liberalization strengthening the regulation or supervision of the bank.

4.2.6 Further Liberalization or Reform Measures

Open ended question were forwarded to the management and employees who are working in seven different operation of the CBE to find out the area that need further liberalization or reform measures so as to enhance the overall performance of the bank. Based on this a large number of respondents indicates that liberalization in the deposit market through lifting the minimum deposit rate sanctioned by the supervisory organ,

let the bank to do business with financial institutions of their own choice, eliminating entry barriers on foreign bank, and full liberalization of the foreign market are identified as area which needs further liberalization in the banking industry. In addition most of the respondents claim that the capacity as well as the independence of the regulatory body (NBE) has to be improved so as to improve the contribution of the bank in the growth of the banking industry and there is no a good legal ground and/or the commercial code to include any article regarding to the technology supported banking activities like e- banking are identified as area which needs further reform measures in the industry.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the conclusions and recommendations that were drawn from the previous chapter of this study.

5.1 Conclusion

This study aims to evaluate the financial performance of the commercial bank of Ethiopia in the pre and post financial liberalization. The comparison of the pre and post liberalization of the bank financial performance was made using financial ratios (credit quality, profitability and liquidity) and change in growth (net profit after tax, capital, deposits and loans). Those ratios and changes in net profit after tax, capital, deposit and loans are extracted from the audited financial statements of the bank and the mean value is computed for both before and after the reform period. In addition the computed mean of the ratios, gap scores of ratios significance level and formulated hypothesis of the financial performance of the bank before and after the reform period was tested using t-test statistical tools.

The researcher has also tried to collect opinions from the banks' community regarding to the financial performance of the bank and to identify area that need further liberalization. In addition, various theoretical aspects and related studies made on the performance evaluation of banks in various countries were also reviewed. Thus, based on such analysis on the primary and secondary data, the following conclusions are drawn:

With regard to asset quality or credit quality performance, this paper found that EQTA ratio, NPTL ratio and EQL ratio indicating that the bank were performing better in the post reform period than before. In addition, in all three of the credit quality performance

measures (EQTA, QLA, and NPTL) after liberalization the two tailed sig-t is lower than α . Therefore, there is significant gap in the credit quality performance of CBE in the pre and post financial liberalization. From this it can be concluded that the financial liberalization or reform measures brought a significant change in the bank to exert much effort on creating higher level of credit quality services to its customers which help it to develop better performance in credit/ loan management.

The study also found that the liquidity performance indicator in the study i.e. TLTA ratio, LATD ratio, and TLTD ratio shows that the CBE has better liquidity performance in the post reform period than before. Furthermore, in all three of the liquidity performance measures (TLTA, LATD, and TLTD) after liberalization the two tailed sig-t is lower than α . Therefore, there is significant gap in the liquidity performance of CBE in the pre and post financial liberalization. From this it can be concluded that the liberalization or reform measures make the banks' to maintain sufficient liquidity position after the reform period.

With regard to profitability performance, the study found that ROA ratio, ROE ratio, and NIM ratio reveals that CBE has better profitability performance in the post reform period than before the reform period. Besides, in all three of the profitability performance measures (ROA, ROE, and NIM) after liberalization the two tailed sig-t is lower than α . Therefore, there is significant gap in the profitability performance of CBE in the pre and post financial liberalization. From this it can be concluded that liberalization or reform measures enabled the bank to record better profitability performance, greater efficiency in deploy their assets and enhance the bank in obtaining the higher margin for making lending and investment activities in the post reform period.

The study further found that the change in growth of net profit after tax, capital, deposit and loan of the CBE have shown a tremendous improvement after the reform measures has been taken. The profit, capital, deposit and loan of the bank on average the post

reform period is recorded better performance than before. From this one can possibly concluded that bank has continued, of recent, posting a remarkable improvement in its net income, capital, deposit, and loan which used to be stagnant at low level for more than two decades in the pre reform period.

With regard to the general performance of the bank, financial liberalization has brought a significant change to the bank by enabled the bank to led the industry in terms of profitability and market concentration, to serve the society through branch expansion in rural area, injecting funds to the private sector in the form of loans and creating job opportunities to skilled Ethiopian nationals. However, liberalization allowed the bank to accumulate excess fund in the industry and enabled the bank to dominate the industry. Therefore, these situations create unfair computation in the industry. In addition, the current involvement of the government in the banking industry limited the bank infrastructure development. From this it can be concluded that there was much remarkable change brought to the bank as a result of the liberalization or reform measures as compared with the pre reform period but the regulatory body lacked the capacity to creating a level playing field, equal opportunity to play in the field competitively with private banks and a need to work for minimizing the current existing involvement of the government in the banking industry so as to improve the performance of the bank.

Finally, the area that need further liberalization or reform measures to further strengthen the performance of the bank, the study found that further liberalization in the deposit market through lifting the minimum deposit rate sanctioned by the supervisory organ, let the bank to do business with financial institutions of their own choice, and full liberalization of the foreign market are identified as area which needs further liberalization in the banking industry and improving the capacity and independence of the regulatory/supervisory organ and establishing strong legal ground for providing technological supported banking services like e- banking are identified as area which needs further reform measures in the industry.

5.2 Recommendation

This study attempted to evaluate the financial performance of the commercial bank of Ethiopia in the pre and post liberalization by using financial ratios. On the basis of the findings and conclusions reached, the following recommendations were forwarded in order to improve the performance of the CBE.

- ❖ Even though the CBE is doing well in the post reform period, the bank should use its maximum effort to further improve the deposits, loans, capital, and profitability performance in the future.
- ❖ Further reform measures should be taken to improve the capacity of the regulatory body so as to increase the contribution of the CBE in the growth of the banking industry, provide legal framework or modify the commercial code to incorporate new article regarding to the technology supported banking activities like e- banking and the government should undertake the regulatory role rather than fighting to maintain its dominance in the banking sector.
- ❖ Further liberalization should be initiated on lifting the minimum interest rate for deposit to be determined on market basis, fully liberalizing the foreign market, and encouraging bank to do business with financial institutions of their own choice rather than the current implicit sanction not to do business with private banks.
- ❖ Finally, the financial performance indicators, i.e. financial ratios, independently are not enough to measure the performance of commercial banks and also the researcher has not adjusted the financial statement of the Commercial bank of Ethiopia in the study. Thus, alternative financial measures such as Data Envelopment Analysis (DEA) and adjustment of the financial statement of the bank shall be considered by further researchers.

BIBLIOGRAPHY

1. Abdus, S. (2004). Bahrain's Commercial Bank Performances during 1994-2001. *Credit & Financial Management Review*. Retrieved on April 9, 2010 from www.encyclopedia.com/doc/1P3-810427301.html.
2. Agenor, P. and P. Montiel, Development Macroeconomics, Chapters 5 and 14, Princeton University Press, 1996.
3. Alemayhu Geda (2006). The Structure and Performance of Ethiopia's Financial Sector in the Pre and Post Reform Period: With Special Focus on Banking. Retrieved on April 2, 2010 from <http://www.Socialscience.research.network.com>
4. Aryeetey, E., H. Hettige, M. Nissanke and W. Steel. 1997. "Financial market fragmentation and reforms in Ghana, Malawi, Nigeria and Tanzania". The World Bank Economic Review, 11 (2): 195-218
5. Bateswar, S. & Ajay, D. (2007). Banking sector reforms and performance of Indian Banking: A comparative analysis of public, private and foreign banks. *Journal of Management practices*, 1(1).
6. Chirwa (2001), Market Structure, Liberalization and Performance in the Malawian Banking Industry, AERC, RP 108.
7. Collins, R.A. (1980). An empirical comparison of bankruptcy prediction model, *Journal of Financial Management*, 9(2), 5-7.
8. Commercial Bank of Ethiopia, Annual Reports, Various Publications.
9. Diaz-Alejandro, C. "Goodbye Financial Repression, Hello Financial Crash." *Journal of Development Economics*, 19, 1985:1-24
10. Gibson, H. D., and E. Tsakalotos. (1994) "The Scope and Limits of Financial Liberalization in Developing Countries: A Critical Survey," *Journal of Development Studies*, Vol. 30, No. 3, pp. 578-628.

11. Goddard J., Molyneux P. and Wilson J. O. S. (2004) *"The Profitability of European Banks: A Cross-Sectional and Dynamic Panel Analysis"*, the Manchester School, Vol. 72, No. 3. pp. 363-381
12. Huang, M.C. (1986). *A Study of Domestic Bank's Performance*. Basic Finance Publication. Retrieved from <http://www.emeraldinsight.com/Insight>.
13. Khan, M. & Senhadji, A. (2000). *Threshold effects in the relationship between inflation and growth*. IMF Staff papers. Washington. 48(1):1 -21
14. Kiyota K., Peitsch B., and Stern R.M. (2007) *"The Case for Financial Sector Liberalization in Ethiopia"* Michigan: Research Seminar in International Economics, August.
15. Kraft, E. Hofler, R. & Payne, J. (2002). *Privatization, Foreign Bank Entry and Bank Efficiency in Croatia: A Fourier-Flexible Function Stochastic Cost Frontier Analysis*. Retrieved from <http://www.informaworld.com>
16. Lee (2002), *Financial Liberalization and Foreign Bank Entry in MENA*, World Bank, May
17. Levine, R. 2000. *A study of the performance of 515 banks in 16 transition economies for the period 1994-1999*. Financial econometric, 54,138.
18. Lin, C. (1998). *A study of efficiency evaluation in Taiwan's securities dealers*. Securities Finance, 58, 124
19. Maisel, L.S. (1992). *Performance measurement: the balanced scorecard approach*. *Journal of Cost Management*, 2(2), 47-52.
20. McKinnon, R.I. *Money and Capital in Economic Development*, Washington, D.C., the Brookings Institution, 1973
21. McKinnon, R. *The Order of Economic Liberalization: Financial Control in the Transition to a Market Economy*, 2nd edition, The Johns Hopkins Studies in Economic Development, 1993.
22. National Bank Of Ethiopia: www.nbe.gov.et/financial/banks.htm), retrieved February 2010.
23. Negarit Gazeta *Proclamation 83/1994.1994, Monetary and Banking Proclamation*, BSPP, Addis Abeba.

24. Negarit Gazeta Proclamation 84/1994.1994, Licensing and Supervision of Banking Businesses, BSPP, Addis Abeba.
25. Popa, G. & Mihailescu, L. (2009). EVA-Advanced Method of Performance Evaluation in Banks. Retrieve on November 02, 2009 from <http://www.management.ase.ro/revconomia/>
26. Scholtens, B. 2000. Financial Regulations and Financial System Architecture in Central Europe. *Journal of Banking and Finance*, 24 (4): 525-553.
27. Seck, D., and Y. H. El Nil (1993) Financial Liberalization in Africa, World Development, Vol. 21, No. 11, pp. 1867-81.
28. Senbet and Otchere (2005), Financial Sector Reforms in Africa Perspectives on Issues and Policies, prepared for annual World Bank Conference on Development Economics, Dakar Senegal, and January 2005.
29. Shaw, E. Financial Deepening in Economic Development, New York: Oxford University Press, 1973.
30. Tarawneh, M. (2006). A Comparison of Financial Performance in the Banking Sector some Evidence from Omani Commercial Banks. *International Research Journal of finance and Economics*, ISSN. Retrieved on April 4, 2010 from [http://www. Euro journals. Com/finance.htm](http://www.Eurojournals.Com/finance.htm).
31. Tesfaye Boru (2007). The Impact of Financial Liberalization on the Ownership, Market Structure and Performance of the Ethiopian banking Industry. Retrieved on April 2, 2010 from <http://etd.aau.edu.et/dspace/handle/>.
32. Tony Addison and Alemayehu Geda, (2001). Ethiopia are New Financial Sector and Its Regulation, Discussion Paper No. 2001/55. Retrieved on April 9, 2010 from [http://www.social science research network.com](http://www.socialscienceresearchnetwork.com)
33. Vance, D.I. (2003), Financial Analysis and Decision Making: Tools and Techniques to Solve Financial Problems and Make Effective Business Decisions. S.I: MacGraw-Hill.
34. Wilmarth (2003), Dose Financial Liberalization Increase The Likelihood of a Systematic Banking Crisis? Evidence from the Past Three Decades and the Great Depression

35. Wozniowska, G. (2008), *Methods of measuring the efficiency of commercial banks: an example of polish banks.* Retrieved on April 3, 2010 form <http://www.Leidykla.eu/fileadmin/Ekonomika>.

ANNEXES

Annex A: Balance sheet

Commercial bank of Ethiopia

Balance sheet

At Year ending June (in million of Birr)

Assets	1976	1977	1978	1979	1980	1981
cash on hand	62	61	77	100	79	82
cash at bank	0	0	0	0	0	0
reserve account with NBE	369	183	131	70	923	340
Deposit with foreign banks	45	65	60	139	284	165
Treasury Bills	23	132	199	212	435	262
other investment/bonds	19	49	28	49	1,016	92
trust funds	0	0	0	0	0	0
Sundry Debtors & other debit balances	17	22	20	13	67	30
Net loan & Advance	317	418	552	871	749	874
customers' liability for L/C	112	111	198	203	282	350
Net fixed assets	40	38	32	35	43	26
Total	1,009	1,078	1,298	1,693	4,180	2,223
Liabilities						
demand deposits	311	331	405	589	1,660	793
saving deposits	240	240	267	328	938	473
fixed deposits	123	145	116	98	217	89
foreign bank their A/C	87	12	31	122	231	169
Trust funds	0	0	0	0	0	0
short term loans	0	0	0	0	0	0
other credit balance	0	0	121	142	256	138
Margin held on L/C	29	43	64	82	108	61
Long term loans	0	0	20	17	50	17
provision for taxation	109	121	14	32	8	31
state dividend payable	0	0	0	0	0	0
other provisions	25	23	6	6	24	19
bank's liability to L/C	112	111	198	203	583	350
capital & reserves	51	53	55	63	104	81
authorized & paid	35	35	35	35	65	65
legal reserves	0	0	0	0	0	0
general reserves	16	18	20	21	39	16
retimed earning	0	0	0	0	0	0
profit & loss A/C	0.5	0.064	0.347	7	0	0
Total	1,009	1,078	1,298	1,693	4,180	2,223

Commercial bank of Ethiopia
Balance sheet
At Year ending June (in million of Birr)

Assets	1982	1983	1984	1985	1986	1987
cash on hand	68	71	84	89	79	87
cash at bank	0	0	0	0	0	0
reserve account with NBE	479	344	596	494	923	1,119
Deposit with foreign banks	168	16	281	230	284	261
Treasury Bills	330	361	391	435	435	464
other investment/bonds	102	603	525	1,029	1,016	1,005
trust funds	0	0	0	0	0	0
Sundry Debtors & other debit balances	29	59	52	70	67	72
Net loan & Advance	916	872	828	759	749	855
customers' liability for L/C	387	332	375	311	282	538
Net fixed assets	29	31	32	44	43	85
Total	2,509	2,835	3,164	3,458	4,180	4,489
Liabilities						
demand deposits	879	1,043	1,220	1,424	1,660	1,789
saving deposits	530	608	716	810	938	1,054
fixed deposits	136	147	178	217	217	102
foreign bank their A/C	177	232	207	225	231	316
Trust funds	0	0	0	0	0	0
short term loans	0	0	0	0	0	0
other credit balance	164	215	203	220	256	324
Margin held on L/C	75	82	79	60	108	117
Long term loans	24	30	33	53	50	111
provision for taxation	31	31	35	9	8	11
state dividend payable	0	0	0	0	0	0
other provisions	21	16	14	22	24	19
bank's liability to L/C	387	332	375	311	583	538
capital & reserves	89	100	104	104	104	106
authorized & paid	65	65	65	65	65	65
legal reserves	0	0	0	0	0	0
general reserves	24	35	39	39	39	41
retimed earning	0	0	0	0	0	0
profit & loss A/C	0	0	0	0	0	0
Total	2509	2,833	3,164	3,458	4,180	4,489

Commercial bank of Ethiopia
Balance sheet
At Year ending June (in million of Birr)

Assets	1988	1989	1990	1991	1992
cash on hand	99	86	77	76	168
cash at bank	0	0	0	0	0
reserve account with NBE	1,093	966	1,118	921	1,268
Deposit with foreign banks	294	345	266	368	479
Treasury Bills	540	540	540	540	540
other investment/bonds	957	1,328	1,699	2	2
trust funds	0	0	0	0	0
Sundry Debtors & other debit balances	73	76	66	81	73
Net loan & Advance	1,100	1,043	935	841	976
customers' liability for L/C	582	496	360	307	353
Net fixed assets	86	141	137	139	139
Total	4,826	5,020	5,200	5,364	6,090
Liabilities					
demand deposits	2,168	2,188	2,470	2,547	2,802
saving deposits	1,210	1,369	1,577	1,679	2,002
fixed deposits	118	162	141	148	164
foreign bank their A/C	61	45	43	47	45
Trust funds	0	0	0	0	0
short term loans	0	0	0	21	10
other credit balance	288	342	266	259	272
Margin held on L/C	155	139	81	104	170
Long term loans	113	158	145	120	144
provision for taxation	13	11	0.192	2	0.252
state dividend payable	0	0	0	0	0
other provisions	12	4	11	24	25
bank's liability to L/C	582	496	360	307	353
capital & reserves	106	106	104	104	104
authorized & paid	65	65	65	65	65
legal reserves	0	0	0	0	0
general reserves	41	41	40	39	39
retimed earning	0	0	0	0	0
profit & loss A/C	0	0	0	0	0
Total	4,826	5,020	5,200	5,564	6,090

Commercial bank of Ethiopia
Balance sheet
At Year ending June (in million of Birr)

Asset	1993	1994	1995	1996	1997
cash on hand	174	199	288	324	369
cash at bank	0	0	0	0	0
reserve account with NBE	1,613	1,909	1,501	1,920	1,236
Deposit with foreign banks	999	2,085	3,444	2,223	1,850
Treasury Bills	528	527	484	757	0
other investment/bonds	2,090	2,090	2,093	2,093	2,092
trust funds	0	0	0	53	67
Sundry Debtors & other debit balances	126	187	279	353	2,642
Net loan & Advance	2,199	2,856	4,468	6,395	7,144
customers' liability for L/C	1,163	1,191	1,563	1,569	895
Net fixed assets	659	161	180	222	254
Total	9,061	11,217	14,273	15,858	16,549
Liabilities					
demand deposits	3,133	3,811	4,832	5,107	5,578
saving deposits	2,255	2,856	3,660	4,596	5,106
fixed deposits	344	425	469	593	562
foreign bank their A/C	225	362	646	840	1,361
Trust funds	0	0	0	49	51
short term loans	0	0	0	0	0
other credit balance	1,093	1,447	1,712	1,515	1,282
Margin held on L/C	500	599	741	533	462
Long term loans	174	155	59	77	47
provision for taxation	5	72	145	167	183
state dividend payable	0	0	43	115	18
other provisions	65	65	63	62	62
bank's liability to L/C	1,163	1,191	1,536	1,569	895
capital & reserves	104	182	366	633	940
authorized & paid	65	0	182	217	620
legal reserves	0	0	41	140	198
general reserves	39	50	65	65	65
retained earning	0	0	35	35	0
profit & loss A/C	0	0	43	175	58
Total	9,061	11,217	14,273	15,858	16,549

Commercial bank of Ethiopia
Balance sheet
At Year ending June (in million of Birr)

Asset	1999	2000	2001	2002	2003
cash on hand	391	316	440	430	409
cash at bank	0	0	0	0	0
reserve account with NBE	2,193	4,080	2,142	2,262	3,196
Deposit with foreign banks	2,170	1,873	1,719	2,157	2,291
Treasury Bills	240	586	1,800	3,081	7,558
other investment/bonds	2,093	2,099	5,121	5,125	2,481
trust funds	24	41	0	0	0
Sundry Debtors & other debit balances	1,665	1,683	1,335	1,507	1,782
Net loan & Advance	8,430	8,909	8,699	7,357	6,075
customers' liability for L/C	1,461			0	0
Net fixed assets	226	241	233	227	208
Total	18,893	19,828	21,489	22,146	24,200
Liabilities					
demand deposits	6,896	7,867	8,954	9,223	10,907
saving deposits	5,994	6,672	7,494	8,138	7,845
fixed deposits	436	449	504	492	383
foreign bank their A/C	339	686	519	677	627
Trust funds	26	41	0	0	0
short term loans	0		0	0	
other credit balance	1,457	1,505	2,511	2,757	2,990
Margin held on L/C	784	813	0	0	0
Long term loans	81	3	0	0	0
provision for taxation	167	204	194	30	171
state dividend payable	43	237	12	0	0
other provisions	62	62	0	0	0
bank's liability to L/C	1,461		0	0	0
capital & reserves	1,127	1,289	1,301	929	1,277
authorized & paid	620	620	620	620	520
legal reserves	299	402	407	407	227
general reserves	65	65	65	64	0
retained earning	0	202	209	262	0
profit & loss A/C	143	0	0	0	
Total	18,893	19,828	21,489	22,146	24,200

Commercial bank of Ethiopia

Balance sheet

At Year ending June (in million of Birr)

Asset	2004	2005	2006	2007	2008	2009
cash on hand	406	669	573	665	991	1,011
cash at bank	0	50	0	580	226	0
reserve account with NBE	3,934	11,304	6,656	9,204	8,872	7,748
Deposit with foreign banks	2,090	837	1,392	1,056	1,236	1,450
Treasury Bills	10,189	4,610	12,586	14,155	6,512	5,410
other investment/bonds	2,828	5,488	4,566	7,979	14,403	19,830
trust funds		22			19	
Sundry Debtors & other debit balances	2,004	2,428	2,194	1,206	1,577	3,315
Net loan & Advance	6,296	7,533	7,653	8,370	16,275	20,257
customers' liability for L/C						
Net fixed assets	228	228	229	241	299	391
Total	27,975	33,169	35,849	43,456	50,416	59,411
Liabilities						
demand deposits	12,707	13,896	14,908	19,654	22,167	25,207
saving deposits	9,326	10,631	11,814	12,840	15,139	17,761
fixed deposits	373	407	1,405	301	328	521
foreign bank their A/C	125	433	159	72		
Trust funds						
short term loans						
other credit balance	2,408	3,692	3,996	4,670	6,564	5,513
Margin held on L/C	1,387	2,465	1,743	1,323	1,610	2,618
Long term loans						
provision for taxation	153	216	318	306	48	785
state dividend payable						1,966
other provisions				64		
bank's liability to L/C						
capital & reserves	1,496	1,429	1,506	4,220	4,560	5,041
authorized & paid	620	620	620	4,000	4,000	4,000
legal reserves	624	677	886	220	556	1,036
general reserves	55	65				
retained earning	187	67			4	4
profit & loss A/C						
Total	27,975	33,169	35,849	43,456	50,416	59,411

Annex B: Income Statement

Commercial Bank of Ethiopia

Income statement

Year-ending June (millions of Birr)

description	1976	1977	1978	1979	1980	1981
interest income	47	37	53	108	140	102
interest Expense	22	20	21	34	67	35
Net interest income	25	18	32	74	72	671
Service charge % commission income	20	16	20	44	17	17
other income	6	5	49	9	41	30
Total Non interest income	25	21	25	53	58	47
Net interest income & non interest income	51	39	57	126	130	114
employees salary & benefits	18	13	14	23	27	22
provision for doubtful loans	3	2	2	4	27	2
general expenses	9	5	6	14	24	22
total noninterest expenses	31	21	22	40	78	47
prior year adjustment	0	0	0	0	0	0
operating income before tax	20	18	35	87	53	67
Tax	5	7	14	41	8	30
net income after taxes & provision	14	10	21	46	45	37

Commercial Bank of Ethiopia

Income statement

Year-ending June (millions of Birr)

	1982	1983	1984	1985	1986	1987
description						
interest income	105	117	132	131	140	127
interest Expense	38	43	58	59	67	57
Net interest income	671	74	74	72	72	70
Service charge % commission income	19	17	17	18	17	22
other income	29	32	32	33	41	44
Total Non interest income	49	50	49	51	58	66
Net interest income & non interest income	116	124	123	123	130	136
employees salary & benefits	23	24	25	26	27	27
provision for doubtful loans	2	9	16	17	27	27
general expenses	21	24	22	22	24	18
total non interest expenses	46	57	63	65	78	72
prior year adjustment	0	0	0	0	0	0
operating income before tax	70	67	67	57	53	61
Tax	31	31	35	9	8	11
net income after taxes & provision	39	36	31	48	45	50

Commercial Bank of Ethiopia

Income statement

Year-ending June (millions of Birr)

description	1988	1989	1990	1991	1992
interest income	148	155	153	158	156
interest Expense	67	76	87	97	96
Net interest income	81	79	66	61	60
Service charge % commission income	24	23	20	17	17
other income	40	36	40	24	43
Total Non interest income	66	59	60	41	60
Net interest income & non interest income	147	138	126	101	120
employees salary & benefits	29	29	30	31	32
provision for doubtful loans	30	28	36	35	31
general expenses	21	21	22	20	21
total non interest expenses	80	78	88	86	84
prior year adjustment	0	0	0	0	0
operating income before tax	66	60	38	16	36
Tax	13	12	0.192	2	0.252
net income after taxes & provision	53	48	38	13	36

Commercial Bank of Ethiopia

Income statement

Year-ending June (millions of Birr)

	1993	1994	1995	1996	1997	1998
description						
interest income	274	475	682	924	836	813
interest Expense	172	267	336	440	379	380
Net interest income	102	208	346	484	457	433
Service charge % commission income	38	56	70	93	74	77
other income	59	100	157	127	202	109
Total Non interest income	97	156	227	220	276	186
Net interest income & non interest income	199	364	573	704	733	619
employees salary & benefits	38	47	54	61	65	75
provision for doubtful loans	72	42	128	54	392	0
general expenses	31	78	36	63	57	90
total non interest expenses	141	167	218	178	514	165
prior year adjustment	0	0	0	0	0	0
operating income before tax	57	243	356	525	219	454
Tax	5	75	145	168	185	133
net income after taxes & provision	52	168	211	357	34	321

Commercial Bank of Ethiopia

Income statement

Year-ending June (millions of Birr)

description	1999	2000	2001	2002	2003	2004
interest income	876	1,000	987	586	670	680
interest Expense	358	382	428	395	251	268
Net interest income	518	618	559	191	419	412
Service charge % commission income	78	76	95	216	97	126
other income	276	244	259	202	531	462
Total Non interest income	354	320	354	418	628	588
Net interest income & non interest income	872	938	913	609	1,047	1,000
employees salary & benefits	90	95	113	129	133	162
provision for doubtful loans	370	106	488	627	80	212
general expenses	80	117	99	360	118	139
total non interest expenses	540	318	700	1,116	331	513
prior year adjustment	70					
operating income before tax	263	620	213	507	716	487
Tax	197	208	194	36	171	153
net income after taxes & provision	66	412	19	471	545	334

Commercial Bank of Ethiopia

Income statement

Year-ending June (millions of Birr)

description	2005	2006	2007	2008	2009
interest income	646	853	1,036	1,541	2,353
interest Expense	291	330	351	534	614
Net interest income	355	523	685	1,007	1,744
Service charge % commission income	397	181	200	279	974
other income	343	790	1,017	1,152	516
Total Non-interest income	740	971	1,217	1,431	1,490
Net interest income & non interest income	1,095	1,494	1,902	2,438	3,234
employees salary & benefits	175	187	218	285	325
provision for doubtful loans					
general expenses	131	187	514	285	193
total non-interest expenses	306	374	732	570	518
prior year adjustment					
operating income before tax	789	1,120	1,170	1,868	2,716
Tax	217	318	306	502	795
net income after taxes & provision	572	802	864	1,361	1,921

Annex C: Questionnaire

**Mekelle University
College of Business and Economics
Department of Accounting and Finance
Master of Finance and Investment**

Questionnaire on “Financial Performance evaluation of the commercial bank of Ethiopia
in the pre and post liberalization”.

Dear Sir/Madam

This survey is conducted as partial fulfillment for the completion of Master of Finance and Investment at Mekelle University. The general purpose of this study is to evaluate the performance of commercial bank of Ethiopia in the pre and post financial liberalization. I would like to invite your participation in this survey by filling up this questionnaire. All information will be treated with the strict confidentiality. In other word, individuals who respond to this questionnaire will not be identified.

General Guideline:

- Please put a tick “√” mark for those questions that you think right.
- Give your short and precise answers for those followed by blank spaces.
- Your frank response is vital for the success of the study.
- This research is designed to collect information only for academic purpose.

Part I - GENERAL INFORMATION

1. Gender 1. Male 2. Female

2. In which age group is you belong?

1. Less than 25 2. 25 to 35 3. 36 to 55 4. 55 and above

3. What is your highest and recent educational status?

1. 12 grades complete 3. First degree
2. College diploma 4. Second degree and above

5. What is your experience in the work?

1. Below one year 2. 1-5 year 3. 6-10 years 4. Above 10 years

6. Your position in the bank

1. Employee 3. Middle level Manager 2. Officer 4. Senior manager

PART II: BANK PERFORMANCE QUESTIONNAIRE

This section of the questionnaire deals with your opinions on the performance of the commercial bank of Ethiopia regarding to the liberalization. The interest here is to evaluate the performance of the commercial bank of Ethiopia in the pre and post liberalization and to take your ideas for further improvement of the performance of commercial bank of Ethiopia. Please give your response based on questions presented below.

1. Do you believe the liberalization reform measures undertaken by the government brought a significant change in the performance of bank? 1. Yes 2. No

2. Your response in question one is "No" could you suggest the reasons for this

3. Your response in question one is "Yes" could you suggest the reasons for this

4. Do you believe the current involvement of the government in the banking industry makes the bank beneficial? 1. Yes 2. No

5. Your response in question seven is "Yes" could you suggest your reasons

6. Your response in question seven is "No" could you suggest your reasons

7. Do you believe financial liberalization brought significant change on the profitability performance of the bank? 1. Yes 2. No

8. If your answer is "Yes" for question three what type of change is observed in the industry -----

9. If your answer is "No" for question three please state your reasons

10. Dose the financial liberalization strengthened the regulation or the supervision of the bank? 1. Yes 2. No 3. Don't know

11. In your opinion could you suggest the areas that need further liberalization or reform measures in the banking industry?

You're Suggestion

Thank You!!!