

Addis Ababa
University

(Since 1950)



**DETERMINANTS OF COMMERCIAL BANK
DEPOSITS IN ETHIOPIA: A CASE OF COMMERCIAL
BANK OF ETHIOPIA**

Shemsu Bargicho Adem

**A Thesis Submitted to the Department of Accounting and Finance
Presented in Partial Fulfillment of the Requirements for the
Degree of Master of Science in Accounting and Finance**

**Addis Ababa University
Addis Ababa, Ethiopia
June, 2015**

Addis Ababa University

School of Graduate Studies

Declaration

I hereby declare that this thesis prepared by Shemsu Bargicho Adem, entitled: Determinants of Bank Deposits : A case of Commercial Bank of Ethiopia and submitted in partial fulfillment of the requirements for the degree of Master of Science in Accounting and Finance complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

Approved by:

Internal examiner: **Dr. Laxmikantham P.**

Signature _____

Date _____

External examiner: **Dr. Zenegnaw Abiy**

Signature _____

Date _____

Advisor: **Dr. Venkati P.**

Signature _____

Date _____

Chair of Department or Graduate Program Coordinator

Abstract

Determinants of commercial bank deposits: A case of study of commercial bank of Ethiopia

Shemsu Bargicho Adem

Addis Ababa University, 2015

The survival of every commercial bank highly depends on bank deposit because deposit mobilization is a major activity of all commercial banks. As the result, the issue of banks deposit and its determinants is crucial to the financial sector of developing country like Ethiopia. Therefore, this study aimed to identify and evaluate those factors affecting bank deposit in general by taking Commercial Bank of Ethiopia as evidence. Accordingly, the researcher adopts mixed research approach. The rationale of using such a mixed approach is to gather data that could not be obtained by adopting a single method. Regarding to the qualitative data; questionnaire is used to gather information from the employees of commercial bank of Ethiopia particularly for those employees who actively participated in deposit mobilization tasks in CBE city branches. Regarding to the secondary data; time series data covering 1998 - 2014 was analyzed. First, the time series data were assessed using descriptive statistics for the variables as well as the test for heteroskedasticity, autocorrelation and normality testing to know if the assumptions of CLRM violated or not. Second, estimated model was a single regression equation with deposit as the dependent variable and explanatory variables as deposit interest rate, overall inflation rate, number of branch opening, gross domestic product, individual foreign remittance and dummy variable. Estimation was done using Ordinary Least Squares technique by E-views7 statistical package. The results from economic analysis showed that all the explanatory variables were positively correlated with the explained variable. Among these variables, branch opening is an important strategy for deposit mobilization, it is highly significant than others. Individual remittances from diasporas is also next to branch opening is significantly affects CBE's deposit. The others are affects positively and can increase CBE's deposit. And finally, the study had recommended what should be done to encouraging deposits growth by Commercial bank of Ethiopia for the benefit of the domestic deposit mobilization.

Key words: Commercial Banks, Bank Deposits, Determinants of bank deposits

Acknowledgments

First of all “All praise and thanks be to Allah, the Lord of existence, the most Gracious, the most Merciful”. Always I wish and become successful, except to be your servant.

I also would like to express my deepest indebtedness to my wife, Hayat Bereka and my kids Moha and Hawdi, as always they were there, right beside me patiently especially at the night time , and may Allah reward them with his highest blessings.

Secondly, a heartfelt gratitude and appreciation goes to my advisor, Dr. Venkati Ponnala for his genuine approach, valuable guidance and in depth understanding that he extended to me during the entire work of this paper and enabled me to complete this research paper.

Finally, I wish to acknowledge the efforts and support of those individuals and their institutions that led to the success of this study especially commercial bank of Ethiopia employee.

Thank you all

Table of Contents

Declaration.....	i
Abstract.....	ii
Acknowledgments.....	iii
List of tables.....	vi
List of figures.....	vi
List of Abbreviations.....	vii
Chapter One Introduction.....	1
1.1 Back ground of the study.....	1
1.2 Back ground of the company.....	2
1.3 Statement of the problem.....	4
1.4 Objectives of the study.....	5
1.4.1 General objectives.....	5
1.4.2 Specific objectives.....	5
1.5 Research questions.....	5
1.6 Significance of the study.....	5
1.7 Scope of the research.....	6
1.8 Limitation of the study.....	6
1.9 Organization of the study.....	6
Chapter Two Review of Related Literature.....	7
2.1 Theoretical review.....	7
2.1.1 Purpose of deposit.....	8
2.1.2. The function of banks in financial systems.....	8
2.1.3 Commercial bank deposits.....	10
2.1.4 The determinants commercial banks deposits- theory.....	13
2.2 Empirical evidence from different studies.....	24
2.2.1 Determinants of Kenyan commercial banks deposit growth.....	24
2.2.2 Determinants of commercial bank deposits in a regional financial center in Lebanon.....	25
2.2.3 Deposit determinants of commercial banks in Malaysia.....	25
2.2.4 Determinants of Commercial Bank’s Liquidity in Slovakia.....	26
2.2.5 Factors Influencing deposit level of commercial banks in Kisumu City, Kenya.....	27
2.2.6 The key determinants of bank liquidity on commercial banks in Pakistan.....	27
2.2.7 Macroeconomic determinants of bank deposits in Nigeria.....	28
2.3 Summary and knowledge gap.....	28
Chapter Three Research Design and Methodology.....	30
3.1 Introduction.....	30

3.2 Research design	30
3.3 Target population, sampling and data collection	30
3.4 Method of data analysis	31
3.5 Model specification	31
3.6 Model variables and hypotheses.....	33
3.6.1 Model variables.....	33
3.6.2 Hypotheses.....	33
3.6.3 Validity and reliability of data	33
Chapter Four Data Presentation, Analysis and Discussion.....	34
Introduction.....	34
4.1. Descriptive data analysis	34
4.1.1 Dependent variable	34
4.1.2 Independent variables	35
4.2 Statistical analysis of the dependent and independent variables.....	39
4.3. Econometric analysis and results interpretation	40
4.3.1 Test for non-normality test	41
4.3.2 Test for Heteroskedasticity	42
4.3.3 Test for Multicollinearity.....	42
4.4 Summary of regression analysis and results interpretations	43
4.4.1 Results interpretations.....	44
4.4.2 Hypothesis test.....	46
4.5 Analysis of qualitative data.....	47
Chapter Five Summary of Research Findings, Conclusions and Recommendations.....	54
5.1 Summary of the findings	54
5.2 Conclusions.....	55
5.3 Recommendations.....	56
References.....	58
Appendices.....	62

List of tables

<i>Table 4.1: The statistical analysis of the variables.....</i>	<i>40</i>
<i>Table 4.2: Test for non-normality test.....</i>	<i>41</i>
<i>Table 4.3 : The Heteroskedasticity test of the multiple regression.....</i>	<i>42</i>
<i>Table 4.4 : Correlation matrixes.....</i>	<i>42</i>
<i>Table 4.5: Regression analysis result.....</i>	<i>44</i>
<i>Table 4.1: Regression analysis result.....</i>	<i>44</i>
<i>Table: 4.6 Hypothesis test.....</i>	<i>46</i>
<i>Table 4.7: The frequency distribution for educational level of the respondents.....</i>	<i>48</i>
<i>Table 4.8: The frequency distribution for work experience of the respondents in CBE.....</i>	<i>48</i>
<i>Table 4 9: The frequency distribution for job title of the respondents in CBE.....</i>	<i>49</i>
<i>Table 4.10: The frequency distribution about deposit is a matter of survival for CBE.....</i>	<i>49</i>
<i>Table 4.11: The frequency distribution respondents 'awareness about deposit in CBE.....</i>	<i>50</i>
<i>Table 4.12: The frequency distribution for CBE mobilizing reasonable deposits.....</i>	<i>50</i>
<i>Table 4.13: The frequency distribution about the sources deposit in CBE.....</i>	<i>50</i>
<i>Table 4.14: The frequency distribution of the reason for deposit volume growth.....</i>	<i>51</i>
<i>Table 4.15: The frequency distribution of factors that mostly affect CBE's deposit.....</i>	<i>51</i>
<i>Table 4.16: The frequency distribution of the most determining factors of CBE's deposit... </i>	<i>52</i>
<i>Table 4.17: The frequency distribution of deposit difference among CBE branches.....</i>	<i>52</i>
<i>Table 4.18: The frequency distribution of deposit difference among CBE branches.....</i>	<i>53</i>

List of figures

<i>Figure 4.1: The total deposit of CBE covering from years 1998GC to 2014GC.....</i>	<i>35</i>
<i>Figure 4.2 :The trends of each independent variables that affect bank deposit.....</i>	<i>36</i>
<i>Figure 4.3: The trends of total number of branches and ATM from year 1998 to 2014... </i>	<i>39</i>

List of Abbreviations

ADR	Average deposit rate of commercial banks of Ethiopia
CBE	Commercial Bank of Ethiopia
CLRM	Classical Linear Regression Model
CSA	Central Statistics Authority
DR	Deposit Rate
EViews7	Econometric Views Software version 7
IR	The overall inflation rate in Ethiopia
IFR	Individuals foreign remittance to Ethiopia
GDP	Gross Domestic Product
LNRGDP	Logarithm of Real Growth of Domestic Product
LNTBD	Logarithm of total deposits growth rate Commercial Bank of Ethiopia
LNBR	Commercial bank branches
NPL	Non-performing loan
NBE	National Bank of Ethiopia
NBO	Number of new branch opening in Commercial Bank of Ethiopia
NATMD	Number of ATM Deployed to the branches in Commercial Bank of Ethiopia
SMEs	Small micro enterprises
OLS	Ordinary Least Square
REALIR	Real Interest Rate
SPSS	Statistical Package for Social Science
TOA	Turn on Asset

Chapter One Introduction

1.1 Back ground of the study

The financial system in all economy is composed of the Bank-based system where provision and monitoring of investments funds are made through the banks on one hand and the stock market where investors (surplus units) enter directly through ownership of securities. Banks play an intermediary role of mobilizing funds from savers and subsequently lend them to investors- individual/corporations.

Banks play a key role in improving economic efficiency by channelling funds from resource surplus unit to those with better productive investment opportunities. Banks also play key role in trade and payment system by significantly reducing transaction costs and increasing convenience (NCA, 2006). In less monetized countries, like Ethiopia, whereas financial sector is dominated by banking industry, effective and efficient functioning of the latter has significant role in accelerating economic growth.

In Ethiopia commercial banks are the main controller of the financial system performing financial intermediation. They control greater portion of the investment funds from domestic deposits and are the main creditors of the corporate bodies, SMEs and individual investors. That is why the traditional banking business of supplying funds to the economy is still of importance. For example, most business organizations especially in Ethiopia are highly dependent on bank loans as a source of capital and the ability of banks in giving loan depend much on their ability to attract deposits. Even though, mobilizing deposit is the major activity of all commercial banks, managing and identifying the determining factors of deposit is a mandatory task for banks. Mobilizing deposits is not possible without knowing and controlling the factors affecting it.

Bank deposits represent the most significant components of the money supply used by the public, and changes in money growth are highly correlated with changes in the prices of goods and services in the economy (Sergeant, 2001). Bank deposits are made to deposit accounts at a banking institution, such as savings accounts, checking accounts, time deposit accounts and money market accounts. The account holder has the right to withdraw any deposited funds, as set forth in the terms and conditions of the account. The "deposit" itself is a liability owed by the bank to the depositor (the person or entity that made the deposit), and refers to this liability rather than to the actual funds that are deposited.

In literature there are several factors that are claimed to be determinants of deposits. Accordingly the Scholars had divide factors affecting commercial banks deposit into two, namely exogenous and endogenous factors. Exogenous factors further sub divided into two, i.e. country specific factors and bank specific factors. Country specific factors includes saving interest rate, inflation, real interest rate, population growth of the country, per capita income of the society, economic growth(as measured by real GDP), consumer price index and shocks. Bank specific factors include liquidity of the bank, profitability of the bank, security of the bank; number of commercial bank's branches, bank size, reserves and transaction cost. The endogenous factors include awareness of the society, convenience of bank's office and services in the bank (N. Desinga, 1975).

In this study these variables are studied theoretically and empirically and the relationship between these variables and total deposit of commercial banks is identified. To the knowledge of the researcher in Ethiopia specifically in Commercial Bank of Ethiopia ,there is little empirical study on how might the size of bank deposit buffer be influenced by bank specific factors and by macro-economic factors

Thus, the issue of banks deposits and its determinants is crucial to the financial sector of developing country like Ethiopia. This study enables banks and regulators to keep control to the issue of deposit which is very important to the security of their operation as well as the economy as a whole in the country. Therefore, this paper aimed to identify and evaluate those factors affecting deposit of Commercial Bank of Ethiopia.

1.2 Back ground of the company

Commercial Bank of Ethiopia was legally established as a share company in 1963 to take over the commercial bank activities of the State Bank of Ethiopia, which was founded in 1942 with twin objective of performing the duties of both commercial bank and central banking (www.deepethiopian.com, 2014). During the 1974 revolution Commercial Bank of Ethiopia got its strength by merging with the owned Addis Ababa Bank. Since then, it has been playing a significant role in the development endeavors of the country.

The bank has been playing a pivotal role in advancing economic development of the country for 70 years now. This role can be maintained only when it is able to keep-up its good image by providing service that are most demanded by customers in the way they like it. To attain this, it has to continue improving the way it does business i.e. the way it provides service to its customers and the image it creates in the eyes of stakeholders have to go on improving. This is

possible only when the bank is proactive and is able to perfect its strategies when surrounding dynamics change.

The commercial bank of Ethiopia still dominates the market in terms of asset, deposit, capital, and customer base and branch network. Despite the growing competition from private banks, CBE become powerful in all rounded banking business especially on deposit mobilization strategy. This makes it one of the most reliable and strong commercial banks in country and the region.

Its strong capital base , for the last seven decades of rich experience in the market and wide branch network throughout the country have enabled the bank to accommodate the large demand for its service and increase its overall revenue on sustainable basis. The bank with its employee and management has aspiration to promote sound liquidity management framework which enables the bank bring itself to standard of modern international business practice and be competent enough in the national and international market.

Today, more than ever before, CBE aggressively expanded its presence in all directions of the country. Despite the flourishing of private commercial banks in the country, CBE has remained potent and is in the lead in terms of assets, deposits, capital, and customer base.

The Commercial Bank of Ethiopia, which is striving to become a world class bank, is rendering state of art and reliable service to its millions of customers both at home and abroad. The business strategy of the bank focus on the interest of the public it serves. As of June 30th 2014 its deposit stood at birr 192.3 billion; while total asset and capital of the bank reached birr 242.72 billion and 10.7 billion, respectively (CBE, annual report 2014).The bank also has more 900 branches across the country and more than 20,000 employees whom as its key asset.

Accordingly, Commercial Bank of Ethiopia envisions ‘becoming world class commercial bank by the year 2025. In its strategic document too, it is clearly stated that the bank values both its customers and employees as not only important but also essential actors in all its endeavours of fulfilling public expectations.

1.3 Statement of the problem

Deposit mobilization is the major services of commercial banks. Deposits are of course mobilized to meet the required liquidity for credit customers of banks. But this too depends on the availability of credit facilities which in turn depends on the level of funds loaned.

In this regard currently in Ethiopia, the pace of the banking system to mobilize adequate resources would not be sufficient, given the large fund requirement of the economy that would certainly result in liquidity gap. The major reasons for liquidity gap are money may be kept in traditional way and majority of population is unbanked. This shows that the deposit mobilization practice among commercial banks in Ethiopia is not developed. So this type of traditional banking practices should be stopped and replaced by the new and relevant deposit mobilization strategy. The essential for knowing such new strategy and to scale up the current deposit mobilization effort forces this study to be undertaken.

Bank deposits come from the depositors who are investing their money in commercial banks. So as to undertake this process the money should be available first. Deposit is the most liquid money that is found in the treasury of commercial banks and which is ready to be borrowed by a body in need of the fund. A deposit of the commercial bank may be affected by different factors. Since a deposit is most useful asset of the bank it important to find out the factors affecting it and determining the relationship between them. This study will fill this gap by identifying the factors that can affect the deposit of the commercial banks and determined the extent they are affecting it.

The empirical study on the area of factors affecting deposit of Commercial Bank of Ethiopia is rarely available and was not done properly at all. Since the major determinants of bank deposit were not studied before in the case of commercial banks, there is a research gap and need to identify these important determinants of bank deposit in the case of Commercial Bank of Ethiopia. Therefore, this study intended to identify and evaluate external and internal factors that affect the deposit of Commercial Bank of Ethiopia by providing some proof on the factors that contributes to the deposit of commercial banks. Generally this study has been also conducted to address the broader research question of:

What are the significant determinants of CBE' S deposit?

Is there any relationship between total deposit and the identified factors and by what extent?

Is there any relationship or correlation among these determinants?

1.4 Objectives of the study

This research is intended to identify and evaluate those determining factors of bank deposits in the case of CBE.

1.4.1 General objectives

The general objective of this study is to identify the factors affecting commercial bank deposits and to evaluate the relationship between total deposit and the identified factors.

1.4.2 Specific objectives

More specifically the objectives of the study are:

- To identify and estimate a model that explains the factors, which determine bank deposit.
- To identify and evaluate each bank specific factors affecting deposit
- To evaluate the relationship between the CBE's total deposit against the most significant factors
- To see the effect of qualitative factors that affects total deposit of Commercial Bank of Ethiopia.

1.5 Research questions

The research will conduct on this title will try to answers the following questions:-

- What are the variables that can affect the amount of commercial bank deposit?
- How will relate these factors to commercial bank's total deposit?
- What is the effect of qualitative factors on deposit mobilization on the bank's total deposit?
- What should be done to manage total deposit of commercial banks?

1.6 Significance of the study

To put in place adequate bank deposit management tools, understanding factors that determine commercial bank's deposit play a crucial role. The study has great contribution to the existing knowledge in the area of factors determining Commercial Banks deposit in the case of Commercial Banks of Ethiopia. This in turn contributes to the well-being of the financial sector of the economy and the society as a whole. Therefore, the major beneficiaries from this study are: Commercial Bank of Ethiopia, regulatory bodies and the academic staff of the country. Furthermore, it will serve as stepping stone for further research in similar area. And lastly this study will give good idea to the researcher about this specific topic and general knowledge about any research.

1.7 Scope of the research

In Ethiopia there are more than eighteen commercial banks under operation. From the number of the banks under operation the study uses Commercial Bank of Ethiopia as case study. In order to make the scope of the study manageable, this research focus on some major factors that determine bank deposit and the study is restricted to identify some of the bank specific and macroeconomic factors affecting deposit of CBE. The research is also limited in its scope since it doesn't consider all primary data and information from external government organs, banking regulators, other banks and the public at large. The study uses both primary and secondary data but mostly focused on secondary data review for the period of 1998-2014 and the primary data is used as a supplementary to strengthen the finding drawn from secondary data. Accordingly the questionnaire is used to gather information from the employees of commercial bank of Ethiopia particularly for those employees who actively participated in deposit mobilization tasks in CBE city branches.

1.8 Limitation of the study

Although this study has been completed successfully, there were practical difficulties. In its best, this research work should have been extended to cover all the commercial banks in Ethiopia to collect facts however, the inadequacy of relevant data and material have compelled the researcher to limit the study to only one commercial banks CBE. It is selected because the larger proportion of bank deposit in Ethiopia is on the hands of CBE.

The study is conducted using the data for 17 years from the year 1998GC and 2014GC. The data are obtained directly from annual reports of CBE, NBE and World Bank it may have potential bias from the data source. The sample of the study is also shortened because of lack of sufficient data in the bank data base. The qualitative data is collected by using questionnaires, 50 questionnaires were distributed to the employees of CBE which were not as much of representative to the whole population.

1.9 Organization of the study

This research paper was organized in five chapters. Chapter one provides the general introduction about the whole study. Chapter two describes the review of related literatures. Chapter three provide detail description of the methodology. Chapter four contains data presentation, analysis and interpretation. Finally, the last chapter will concludes the total work of the research and gives relevant recommendations based on the findings.

Chapter Two Review of Related Literature

Literature review is prepared in two parts, i.e. the theoretical review and the empirical review part. In the theoretical review part the theories that states about the commercial banks deposits and the variables that is claimed to affect it are discussed. The empirical literature part discusses past studies that were conducted on the area of factors determining commercial banks deposits. In this part the variables that were included, the methodology that is used to undertake the study and the results of the study under review are discussed.

2.1 Theoretical review

There are articles, journals and different information on the issue of the commercial banks deposits and the factors which controls the commercial banks deposits. Some authors had classified the factors and explain their relationship with commercial banks deposits.

Commercial Banks deposits are dependent on depositor's money as a source of funds. According to the Keynesian theory of demand for money, there are three main motives why people hold money: transactions, precautionary and investment motives. In order to cater for these motives, commercial banks offer three categories of deposit facilities that are demand, savings and time deposits. Demand deposit facility is most commonly referred to as current account and is designed for those who need money for transaction purposes. This motive can be looked at from the point of view of consumers who want income to meet their household expenditure and from the viewpoint of businessmen who require money and want to hold it in order to carry out their business activities. Hence, the purpose of deposit facility is for convenience or for making daily commitments.

Bank deposits represent the most significant components of the money supply used by the public, and changes in money growth are highly correlated with changes in the prices of goods and services in the economy (Sergeant, 2001). Bank deposits are made to deposit accounts at a banking institution, such as savings accounts, checking accounts, time deposit accounts and money market accounts. The account holder has the right to withdraw any deposited funds, as set forth in the terms and conditions of the account. The "deposit" itself is a liability owed by the bank to the depositor (the person or entity that made the deposit), and refers to this liability rather than to the actual funds that are deposited.

2.1.1 Purpose of deposit

From depositors' point of view, the key purposes to use deposit in bank are safety of their money, easy access and a possible real return. In general depositors keep their money in banks for a motive to undertake some activities in the future. According the author (Bhatt, 1970), there are motives to save money, the followings are the example of some motives:-

- to own house
- to provide for children's education and marriage
- to provide for old age
- to bequeath property to children
- to provide for emergency expenditure

2.1.2. The function of banks in financial systems

Understanding the many roles that banks play in the financial system is one of the fundamental issues in theoretical economics and finance. The efficiency of the process through which savings are channeled into productive activities is crucial for growth and general welfare. Banks are one part of this process. Lenders of funds are primarily households and firms. These lenders can supply funds to the ultimate borrowers, who are mainly firms, governments and households, in two ways. The first is through financial markets, which consist of money markets, bond markets and equity markets. The second is through banks and other financial intermediaries such as money market funds, mutual funds, insurance companies and pension funds.

Financial sector is broad which consists of the banking sector and other financial institution (such as insurance corporations and pension funds, brokers, public exchange and securities markets etc.), however in the context of African continent the banking industry carries the greater share of the financial system (Sheku, 2005). Most of the business relies on banking sector as a source of financing (Medhat, 2004). Banks have historically been viewed as playing role in financial markets for two reasons. One is that they perform a critical role in facilitating payments. Commercial banks, as well as other intermediaries, provide services in screening and monitoring borrowers; and by developing expertise as well as diversifying across many borrowers, banks reduce the costs of supplying credit (Samolyk, 2004). Thus in their role as lenders, banks are often not merely buying someone's debt, rather they are providing significant financial services associated with extending credit to their customers and to the

extent that investors want to hold banks liabilities, banks can fund borrowers directly. The main providers of additional financing are domestic commercial banks (Herald & Heiko, 2008).

Banks perform various roles in the economy (Franklin & Elena, 2008) :-

- They improve the information problem between investors and borrowers by monitoring the latter and ensuring a proper use of the depositors' fund.
- They provide inter temporal smoothing of risk that cannot be diversified at a given point in time as well as insurance to depositors against unexpected consumption shocks. Because of the maturity mismatch between their assets and liabilities, however banks are subject to the possibility of runs and systematic risk.
- Banks contribute to the growth of the economy.

Commercial banks are institutions that engage in two distinct types of activities, one on each side of the balance sheet deposit-taking and lending. So that banks are playing mainly intermediation function, this is supported by (Russell & Bamindele, 2009). (Mahendra, 2005) Also states banks as the backbones of the trade and commerce playing the intermediary role of capital formation and supply. Even if other financial institutions are available banks play a major role in facilitating the way the financial sector operates. Therefore banks are important of all other financial institutions. Banks influence macroeconomic environment, as to (Adam, 2005), bank failures involve significant macroeconomic costs. (Adam, 2005), has developed evidence that bank failures have significant and apparently permanent effects on real economic activity. Therefore banks are also important influencers in macroeconomic environment.

Banks mobilize, allocate and invest much of society's savings. Households and businesses are mainly using banks to save their money to get loan for their project undertakings. (Kelvin, 2001), said that commercial banks are important financial intermediaries serving the general public in any society. In most cases commercial banks hold more assets than any other financial institutions. Apart from their many functions, commercial banks facilitate growth and development. Banks lend in many areas or sectors of the economy.

Moreover commercial banks will affect the overall economy of the specific country both in a good way or bad way. Commercial banks represent a vital link in the transmission of government economic policies (particularly monetary policy) to the rest of the economy. For example, when banks credit is scarce and expensive, spending in the economy tends to slow

and unemployment usually an increase as (Kelvin, 2001) explains. So the event in the commercial banks will affect the country's economy in general.

Bank deposits represent the most significant components of the money supply used by the public, and changes in money growth are highly correlated with changes in the prices of goods and services in the economy (Kelvin, 2001). Commercial banks are critical to the development process. By granting loans in areas such as agriculture, manufacturing, services, construction and energy sectors, banks contribute to the development of the country

Not only commercial banks are affecting the economy but also the economy affects the function of commercial banks. Bank loan portfolio including volume, tenor and structure may be generally influenced by their expectations of the performance of economy both in terms of stability and level of performance. As cited by banks make out more loans during periods of boom and reduced level of macroeconomic uncertainty and curtail lending when the economy is in recession.

2.1.3 Commercial bank deposits

Commercial Bank deposits are major liabilities for commercial banks. (Kelvin, 2001), said that deposits of commercial banks account for about 75% of commercial bank liabilities. Due to the fact that commercial banks are using this liability to lend it and gain return on it their deposits are using them do their business. Therefore, banks will be better if they are mobilizing more deposits. However, as (N. Desinga, 1975) indicates deposit mobilization is a very difficult task. The cost of intermediation for mobilizing deposits is also very important part of overall intermediation cost of the banking system.

Deposits provide limits to the working capital of the bank concerned. The higher the deposits, the higher will be the funds at the disposal of a bank to lend and earn profits (N. Desinga, 1975). Therefore to maximize its profit the bank should increase its deposit. (Mahendra, 2005) had also mentioned deposits as a foundations up on which banks thrive and grow and unique items on a bank's balance sheet that distinguish them from other type of business organizations.

Commercial banking is a service industry with a high degree of built in profit potential. The number one expense item for a bank is interest paid. Commercial banks mainly depend on the funds deposited with them by the public to lend it out to others in order to earn interest income (N. Desinga, 1975). (Hamid, 2011), said that if banks lose their deposit base they rely on non-deposit based funding which is expensive.

Deposits are of three kinds (N. Desinga, 1975), namely:

1. Current or demand deposits
2. Fixed or Time deposits / Term deposits.
3. Savings deposits

Hence, the competition for deposits is really a competition for profits. Commercial banks compete for deposits in order to become profitable and thus to be able to supply more funds to the public. However such financial growth is profitable only if the commercial bank does not incur additional expenses to obtain and retain cash (Devinaga, 2010).

Commercial banks earn a return on their deposits and capital by investing deposit funds and capital funds in assets (Richard, 1971). That is for commercial banks to attain profit deposits are one of the most important sources of capital. Moreover, according to (Richard, 1971), capital structure in commercial banks are made up of shareholders' funds, borrowing and deposits. Therefore, deposits are one of the sources of capital for commercial banks.

2.1.3.1 The importance of deposits for banks

Deposits are the foundation upon which Banks thrive and grow. They are a unique item on banks' balance sheet that distinguishes it from other types of business firms.

A. Deposits as a source of fund for loan

States deposits are the main source of banks to provide loan (Herald & Heiko, 2008). This deposit is mainly provided by people as (Salehi, 2010). However deposits can also be provided by business organizations, NGOs, government and so on. Therefore, whether deposits are from individuals, businesses and government they are important financial source of banks.

B. Focusing on deposit is cheaper than raising equity

Banks as any other business organizations can collect funds from debt and/or equity. In the banks context, raising equity is more expensive or costly than attracting deposits. (Lorenzo et al 2010) states that, if the lending channel plays a role, the deposit growth should lead to an increase in the supply of loans due to the additional source of financing for banks. As demand for loan increases because of the development work done by individuals, businesses and government, banks should extend their deposit base. When a commercial bank creates a deposit by lending to a business man, it is clearly performing a function for which it is entitled to a return in the form of interest payments (Harold, 1946).

C. Banks make profit using their deposits

Deposits provide most of the raw materials for bank loans and thus represent the ultimate source of the bank's profits and growth (Mahendra, 2005). Banks make profit by using their deposits, therefore it is said that depositors can discipline banks. (Maria & Sergio, 2001), found that depositors discipline banks by withdrawing deposits and by requiring higher interest rates. For depository corporations mainly deposit money banks, their principal objectives is undertaking financial intermediation to make profit and increase their shareholders value (Sheku, 2005). They achieve their objectives mainly by attracting deposits and investing the money on profitable investment portfolio.

D. Fund investment and/or development projects

Debt is largely held by domestic commercial banks which are funded mainly from deposits, the government demand for bank assets enabled banks to continue to expand their deposit base rapidly (Herald & Heiko, 2008). Individual investors and government are mainly depending on the deposits of banks to fund their investments and/or development projects.

Generally, the banking system can be viable only if it can mobilize deposits at the required rate. And this can be done only by making a bank deposit more attractive (Bhatt, 1970).

The ability of a bank's management and staff to attract checking and savings accounts from business and individuals is an important measure of the bank's acceptance by the public (Mahendra, 2005). Banks' management major concern is the variability of deposits for several reasons. (Kaufman, 1972), mentioned the reasons why the variability of banks' deposit is important as follows:-

- Deposit variability is frequently included as an important determinant of portfolio strategy. The more volatile a bank's deposits are the more liquid its mix of assets will be.
- To the extent deposit variability affects bank holdings of cash and excess reserves, variability affects the distribution of total member bank reserves within the banking system and thereby the path and speed of monetary policy actions.
- To the extent deposit variability affects the mix of banks assets; it affects the availability of funds for loans and consequently the loan rate.

- To the extent deposit variability affects both the mix of earnings assets and the frequency of engaging in costly reserve adjustments, variability affects the profitability of individual banks.
- Deposit variability is an important factor influencing bank use of the Federal Reserve discount window and thereby affects discount administration.

2.1.4 The determinants commercial banks deposits- theory

An important indicator of the success and efficiency of any credit agency, which is also a banking institution is, the extent to which it is able to mobilize the savings of the community in the form of deposit. But deposit mobilization is very difficult task. It depends up on various factors exogenous as well as endogenous, to the banking system (N. Desinga, 1975). Exogenous factors are the general economic environment of the region, the volume of business transaction of the region, the confidence of the people on the banking system, the banking habit of the people and the saving potential of the region. Even when exogenous factors are more conducive for deposit mobilization, banks may fail because of unfavorable endogenous factors such as location, type of building and window dressing (furniture, cheque books, vouchers, pay slips etc), which assure the customers about the physical fitness of a bank (N. Desinga, 1975).

As (N. Desinga, 1975), did the researcher classify the variables which are claimed to have effect on the commercial banks deposits into two, namely exogenous and endogenous factors? Exogenous has further divided into country specific and bank specific factors for clarification purpose. Endogenous factors can be controlled by the banking system; however the exogenous factors cannot be controlled by the banking system. The bank specific factors are factors that are specific to the banking system and the country specific factors are factors that are beyond the banking system.

2.1.4.1 External factors

These are factors that are from country and banks that can affect the growth of commercial banks deposits. There are discussed as follows:-

A) Country specific factors

The country's economic, social and political factors can affect the commercial banks deposit. According to (Herald & Heiko, 2008), country specific risks such as political, economic and financial risks may affect the propensity for depositors to place funds in the banking system.

Any single bank operates under the rule and regulation of the country where it belongs, also different problems and shocks that has happened in the country has its own concern in the banks operation. Generally, a bank success in their operation is mainly depends on the environment where the business is undertaken.

The researcher has identified ten country specific factors that have affected the commercial banks deposits from the literature. They are saving interest rate or deposit rate, inflation, real interest rate, number of commercial banks available in the country, population growth, per capita income of the society, economic growth, consumer price index, gross domestic product (GDP) and shocks.

1. Saving interest rate

One of the most effective factors for deciding to deposit in banking system is the interest rate (Mohammad & Mahdi, 2010). Moreover, this article shows the impact of interest rate on the performance of the banking system to achieve the goals that are expected from the banking system. (Herald & Heiko, 2008), also mentioned interest as one of the determining factor for commercial banks deposits. (Philip, 1968), also states that the offering of attractive interest rate on bank deposits may be considered to have had a beneficial effect. Moreover, (Mustafa & Sayera, 2009) said that low deposit rates are discouraging saving mobilization. (Bhatt, 1970), said that the banking system is unlikely to be in a position to meet the demand for bank credit unless concerted policy is pursued to raise the rate of saving generally and the rate of saving in the form of deposits in particular.

Interest rate in the banking system is held as investment cost from the investor's point of view and opportunity cost from the depositor's point of view (Mohammad & Mahdi, 2010). Thus, capital market forces balance interest rates. In other words, the just and correct interest rate should be determined through market mechanism, that is, interest rate is balanced in supply and demand conditions in proportion with the inflation rate. (Eustacius & David, 1995), states that deposits are more interest rate sensitive and banks may choose to increase investments in interest rate sensitive assets and to decrease investments in loans. That is commercial bank deposits are interest rate sensitive, therefore as the interest rate changes the deposit of the commercial banks will change.

It is known that depositors bring money to the bank which the banks in turn lend it to the borrowers. The gross earnings of the bank are determined by the volume and composition of loanable funds and the rates at which they are loaned. After losses and expenses of operation

are deducted, the net earnings provide a margin out of which interest on deposits can be paid. Because of the competition for these funds among bankers who desire to loan them at a profit, a bank must pay interest or lose deposits to a competitor. The payment of interest on deposits is explained in this wise, like any other interest rate. As to (Erna & Ekki, 2004), Economists, mainly conventional ones, believe that depositors are attracted to deposit their money in banks because of the opportunity cost of holding cash in hand is high when the interest rate is also high. This can easily be explained by the utility maximization (cost minimization) premise, as a depositor will choose an action that will maximize their welfare or satisfaction. As to (Richard, 1971), regulation of the commercial banking industry affects the returns which commercial banks realize on their deposits and capital. That is although deposits are the source for profit of banks it is influenced by regulation of the country. Accordingly, the higher profit rate on demand deposits is to a large extent the result of the prohibition against the payment of interest on these deposits. Therefore, depositors are motivated by returns.

Using an Adaptive Expectation Model (AEM), it is founded that depositors are indeed motivated by returns in Malaysia (Erna & Ekki, 2004). On the other hand, (Erna & Ekki, 2004) states that the rate of interest does not have influence on the volume of the deposits. However, (Rose, 2001), said that banks increase their deposits by offering higher deposit rate. These are the articles that contradict to each other in identifying the relationship between the commercial banks deposits and saving interest rates or deposit rate.

2. Inflation

As to (Herald & Heiko, 2008), inflation is one of the factors that determine commercial banks deposits. Fischer showed that in Latin America the effect of inflation on savings and time deposit to GDP was significantly negative (Mohammad & Mahdi, 2010).

The classical belief is that, because bank assets and liabilities are expressed in monetary terms and because these assets will normally grow in line with growth in money supply, banks are relatively immune from the effects of inflation (Devinaga, 2010). In brief, monetary policy works by controlling the cost and availability of credit. During inflation, the Central bank can raise the cost of borrowing and reduce the credit creating capacity of commercial banks. According to (Devinaga, 2010), this will make borrowing more costly than before and thereby the demand for funds will be reduced. Similarly with a reduction in their credit creating capacity, the banks will be more cautious in their lending policies. Since the banks demand for fund decreases obviously the deposits will decrease. Banking system was affected by inflation

in terms of deposit absorption and facilities grant (Mohammad & Mahdi, 2010). As to (Mohammad & Mahdi, 2010), in developed countries negative correlation between inflation and absorbed deposits and granted facilities has been documented. However, in developing countries the opposite is true.

Inflation is seen as an economic problem in developed countries in the second half of 20th century. Inflation with effect in economic growth, employment, income distribution and wealth as well as social and political conditions of a country can influence its entire dignity (Mohammad & Mahdi, 2010). Banking system as an important effective factor in economic performance has also been under the influence of inflation. As far as the effect of inflation on financial sector conceived the literature demonstrates that inflation affects the capacity of financial sector for optimal allocating of resources. That is as inflation rate increases, true yield rate of money and assets decreases; therefore deposits are no longer attractive. Also the increase of inflation rate has a negative effect on the performance of financial sector through the market credits and in turn, on the performances of banks and capital markets and finally on the long term economic growth (Mohammad & Mahdi, 2010).

With respect to the effect of inflation on savings, it can be mentioned that in general, all individuals who save a part of their incomes in banks are directly damaged by the inflation and their assets decrease in proportion with money value decrease (Mohammad & Mahdi, 2010). In that case as (Mohammad & Mahdi, 2010) describes people try to change their cashes and savings to more reliable and stable forms such as land, jewelry, antiques, art collections, foreign currencies that causes to definite decrease in commercial bank's total deposit. High inflation rates reduce the real value of deposits (M. A. Baqui & Richard L. Meyer, 1987). According to (M. A. Baqui & Richard L. Meyer, 1987), inflation technically did not decrease deposit; however it decreases the value of deposits.

3. Real interest rate

Real interest rate is nominal interest rate minus inflation rate. (Mohammad & Mahdi, 2010), said that in negative real interest rate condition, people withdraw their resources from banking system. According to this author some research supposed that decrease in real interest rate could decrease true demands for money (in its extensive definition including savings and time deposits). Therefore it states that the interest rate and deposit of the banks have positive relationship.

4. Population growth of the country

The twin objectives of commercial banks, i.e. acquiring deposits and advancing credit cannot be attained without good banking habits of the people (Mahendra, 2005). Moreover (Mahendra, 2005) states that, the number of deposit accounts is more important because it ensures that the probability of account holders withdrawing cash at a time decreases as the number of deposit account increase, thereby creating advantage for banks in terms of increasing the size of the loanable fund. So the higher number of deposit accounts the greater is the advantage to banks. The number of deposit accounts depends on the number of deposit account holders.

5. Per capita income of the society

According to (Jim, 2008), per capita is the level of GDP divided by the population of a country or region. Changes in real GDP per capita over time are often interpreted as a measure of changes in the average standard of living of a country. If households and firms desire to hold more money, deposits will increase. So the relationship between income and deposits is positive that is as the income of the society increases the same happens for the commercial bank' deposits. Income is expected to have a positive effect on deposits (M. A. Baqui & Richard L. Meyer, 1987). Therefore as society's per capita income increases the same will happen for commercial banks deposits. (Mahendra, 2005), also indicates that income of the society matters for banks' deposit growth.

6. Economic growth

Economic performance is generally being measured through GDP (Gross Domestic Product), a variable that has also become the de facto universal metric for 'standards of living. It is universally applied according to common standards, and has some undeniable benefits mainly due to its simplicity.

According to (Herald & Heiko, 2008), growth is one of the determining factors for commercial banks deposits. GDP is calculated by adding up the value-added at each stage of production (deducting the cost of produced inputs and materials purchased from an industry's suppliers. (Erna & Ekki, 2004), finds four variables, GDP, number of Islamic bank's branch offices, profit sharing rate, and interest rate that are thought to have influence on the volume of deposits. So, GDP can influence the growth of commercial banks deposits.

7. Shocks

Aggregate shocks affect deposits and interest rates during crises, regardless of bank fundamentals and investors' responsiveness to bank risk taking increases in the aftermath crises (Maria & Sergio, 2001). Therefore, given all other variables the shocks happened in the economy can affect the banks' deposits.

B) Bank specific factors

1. Liquidity of the banks

The concept of liquidity in finance principally lies in two areas:-

- a) Liquidity of financial instruments in the financial market
- b) The liquidity related to solvency.

The former related to liquid financial markets and financial instruments, smooth transactions and no barriers. As to (ISMAL, 2010), the latter discusses the obligation of banks to make payments to third parties. Some examples of this includes: setting up liquidity management policies, reserve liquidity, balancing assets and liabilities and preparing liquid financial instruments (ISMAL, 2010).

An important measure of liquidity is loan to deposit ratio. The loans to deposit ratio is inversely related to liquidity and consequently the higher the loans to deposit ratio the lower the liquidity and vice versa (Devinaga, 2010).

Key liquidity indicators such as central bank credit to financial institutions, deposits as a share of monetary aggregates, loans to deposits ratios, are important for open market operations and liquidity management (Sheku, 2005). The basic need for liquidity, asset, liability, capital adequacy, credit and interest rates risks management are now more challenging than before. The banks' liquidity management involves acquiring sufficient liquid asset to meet the bank's obligation to depositors. According to the theories of financial intermediation, the two most crucial reasons for the existence of financial institutions, especially banks, are their provision of liquidity and financial services (ISMAL, 2010). According to (ISMAL, 2010), Regarding the provision of liquidity, banks accept funds from depositors and extend such funds to the real sector while providing liquidity for any withdrawal of deposits, however the banks' role in transforming short term deposits into long term loans makes them inherently vulnerable to liquidity risk (Bank for International Settlements, 2008b:1). Individual, business and government will be willing to deposit their money in banks if they are certain that they are

save to withdraw the money whenever they want, this is the question of liquidity of banks. The more liquid banks can attract the deposits.

A higher degree of financial intermediation (proxied by the loan-to-assets ratios) may signal a bank's success in generating income as well as a need for it to attract more deposits to support its increased lending activities (Herald & Heiko, 2008). A higher liquidity buffers (measured by the ratio of liquid assets to deposits) tend factor favoring deposit demand (Herald & Heiko, 2008). Liquid banks as well as banks with a higher loan exposure are associated with higher deposit growth. (Herald & Heiko, 2008), states that the liquidity situation of the bank also plays a significant role in determining banks deposit growth. According to (Nada, 2010), Banks perceived as risky should have had more difficulty attracting deposits and making loans than banks perceived as safe. When banks fail to pay for its depositors then it faces liquidity risk that makes other depositors not to deposit in that particular bank.

2. Profitability of the bank

(Erna & Ekki, 2004), finds that the long run relationship between commercial banks deposits and the profitability of the banks. Higher bank profits would tend to signal increased bank soundness, which could make it easier for these banks to attract deposits (Herald & Heiko, 2008). However, the effect of bank profitability and bank size are found to be insignificant once controlling for the other variables. So, the effect of profitability and banks size on commercial bank deposit is lower as compared with other variables.

3. Security of the bank

Security of banks matters in mobilizing deposit. Riskier banks would be able to attract deposits only paying higher Interest rates. The security of banks has its own impact on its attractiveness for depositors. For example in the existence of deposit insurance the depositors no longer are concerned about the soundness of their banks because their deposits are insured in the event of bank failure. So the bank should secure its system so as to mobilize more deposit than before and to attract new depositors and maintain the exiting depositors.

4. Banking accessibility

There is a relationship between commercial banks deposits and commercial bank's branch expansion. Not only are deposits influenced by bank branches, but the expansion of bank branches is also influenced by the level of deposits in any area (M. A. Baqui & Richard L. Meyer, 1987). It is expected that banks make decisions on expanding their facilities by considering factors such as level of competition, deposit potential, regional income and

existence of road and vehicles. As deposit potential is one thing that banks consider in expanding its branches, the deposit can also be a reason for branch expansion strategy that the banking sector uses. According to (Erna & Ekki, 2004), there is a long run relationship between commercial bank branch and commercial banks deposits.

It is often argued that branching stabilizes banking system by facilitating diversification of bank portfolios. (Mark & Kris, 2006), found from theoretical literature on banking regulation that branch banking leads to more stable banking systems by enabling banks to better diversify their assets and widen their deposit base. An argument commonly articulated in the literature is that branch banking stabilizes banking systems by reducing their vulnerability to local economic shocks; branching enables banks to diversify their loans and deposits over a wider geographical area or customer base (Mark & Kris, 2006). Restrictions on branching have been linked to the instability of banking systems. (Daniel, 2005), suggest that the lack of widespread branching bank networks hindered the development of large-scale industrial firms. It is stated that unit banks become increasingly incapable of receiving deposits from a widespread geographic area. The single office bank is also not able to monitor geographically diffuse debtors as easily as could be done with multiple offices. Moreover, it can be concludes that under branch banking the mobility of capital is almost perfect.

5. Bank size

Among the factors prominently identified as affecting deposit variability one is bank size. Evidence indicates that the number and diversity of the ownership of individual deposit accounts as well as the distribution of deposits by type vary with bank size (Kaufman, 1972). (Herald & Heiko, 2008), finds that although insignificant once controlled by other variables bank size have an effect on deposits. Smaller banks have to generate fewer deposits in absolute terms to achieve the same deposit growth than large banks, thus possibly favoring smaller banks in achieving higher deposit growth. But a larger bank with economies of scale as well as larger branch network might be able to better attract deposits (Herald & Heiko, 2008).

6. Reserves

(Thorn & S., 1959), said that reserves that are fixed legally can influence the deposits that banks can hold. According to them reserve requirements determine the maximum amount of loans and investments that each commercial banks and the banking system as a whole may maintain in relation to deposits. Thus, if the reserve requirement is 20 percent of deposits, loans and investment (of the bank's own choosing) may not exceed 80 percent of deposits.

Therefore, reserve requirements limit the total expansion of bank deposits that can occur on the basis of any primary increase in deposits. Reserve requirements also have the effect of limiting the reduction in bank credit and deposits that is forced up on the banking system by a primary decrease in deposits. The commercial banks can obtain currency to pay out to customers only by drawing down their reserve deposits at the central bank or by using till money (Thorn & S., 1959). Till money, according to (Thorn & S., 1959) is the currency that banks keep on hand to satisfy day to day needs. They pointed out that bank deposits are a large part of the money supply in virtually all countries.

7. Transaction cost

Important indicator of management's effectiveness in any bank are whether or not deposited funds have been raised at the lowest possible cost and whether enough deposits are available to fund those loans the bank wishes to make (Mahendra, 2005).

This last point highlights the two key issues that every bank must deal with in managing its deposits (Mahendra, 2005):-

- Where can the bank raise funds at the lowest possible cost?
- How can management ensure that every bank always has enough deposits to support the volume of loans and other financial services demanded by the public?

8. Financial technologies

Financial technologies such as card banking enable customers' access to cash services 7-days-24 hours by making large cash carrying unnecessary (Mr Gunnar & Mr Zhao, 2013). It shifts out the traditional frontier of access to banks. Deposit per capita of countries had grown well after the introduction of card payment, ATM and mobile/internet banking technologies in their financial system. A study in Georgia indicated that these technologies have reduced public preference to holding cash in purse.

9. Foreign remittance

Remittance from Diasporas to families in home-country has become another significant determinant of household saving and domestic private savings (Athukorala & Sen, 2001). Remittance is part of the disposable income of recipient households, and as their combined income increases, saving is expected to do so. It is, however, alleged that remittance makes households rather loose in their spending and pressurize families to Western life-style. According to this pessimistic view, remittance is spent on conspicuous consumption, and unproductive investment when viewed in terms of the economy. On the optimistic side is that

remittances allow poor households to invest on durable goods and human capital – improving children’s education and health, and should therefore be encouraged and facilitated.

10. Awareness of the society

According to (M. A. Baqui & Richard L. Meyer, 1987), some analysts argue that demand for deposits is influenced by education level which in turn increases the awareness of the rural people about banking services. Since the study of (M. A. Baqui & Richard L. Meyer, 1987) conducted by taking rural area as its base it is obvious that it considers the awareness as a factor of deposit mobilization. It was also found that literacy as a proxy for awareness about banking, positively influence deposits.

11. Convenience of bank’s office

Road and vehicles directly influence interest bearing deposits because of the reduction in depositors’ transaction costs through reduced time spent in travelling to and from banks (M. A. Baqui & Richard L. Meyer, 1987). Banks can mobilize more deposit when they make themselves closer to their customers (depositors).

12. Services in the bank

Services can be defined as “any primary or complementary activity that does not directly produce a physical product that is the non-goods part of the transaction between customers and providers.

It is known that banks are service giving organizations and the service delivery can affect their business undertakings. (M. A. Baqui & Richard L. Meyer, 1987), stated that there is some empirical evidence demonstrating the positive influence of services rendered to depositor. Further suggested two innovations to be tested to provide incentives to depositors:-

- Additional benefit like prize bounds could be given to depositors for maintaining deposits for particular period.
- One category of deposits might be specifically tied to future loans. Bank customers might be encouraged to participate in a savings program that, for example, provides machinery or housing after a predetermined amount of savings has been accumulated.

Services in the bank should be attractive enough for the depositors so as to mobilize deposits. If the banks could offer these services, the savers would be inclined to keep a part of their saving in the form of deposits (Bhatt, 1970). The followings are services that (Bhatt, 1970) claims to use to mobilize deposits:-

- (1) Door-to-door collection of small saving in the form of deposits.

(2) Offering land revenue or insurance premium: If the banks offer to pay land revenue or insurance premium out of the interest earned on deposits, some persons may be inclined to put deposits of such amounts as would earn enough interest to meet their land revenue or insurance premium liability. To attract deposits these types of services are worth providing.

(3) An investment service: Some savers have neither the inclination nor the time to select an appropriate portfolio of financial investment. Banks can select the portfolio of investments on their behalf, keep the securities in safe custody, collect Interest/dividend income and even fill income-tax forms; with such services offered, some savers would be inclined to keep their liquid funds in the form of deposits.

(4) Some persons like farmers get their incomes say once or twice in a year, while their expenditure is spread over the whole year. If banks could collect deposits from them at the harvesting season, and assure them regular withdrawals during the year, farmers may be inclined to keep deposits with the banks. This scheme would ensure safety of their funds, prudence in their management and certainty of regular monthly means to meet their current liabilities. In addition they would earn some interest. With a sympathetic and persuasive approach, farmers could be attracted to such a scheme.

(5) While giving loans to farmers and small sector, the banks could provide them with facility of purchases from recognized dealers instead of giving those cash. In this case, the dealers could send the bills to the banks, which would debit the accounts of the loan receivers. Some banks have introduced agro-cards with such a purpose in mind. If such facilities are provided to others also, the customers would use bank money rather than currency for making payment and once they form this habit, they would be induced to keep their transaction balances in the form of deposits rather than in the form of currency.

According to (Bhatt, 1970), these are some of the new deposit schemes which, if introduced, could raise the rate of saving as well as the rate of growth of bank deposits. To the extent to which the rate of saving is raised, the growth rate of the economy would be higher. To the extent to which the deposit growth rate is raised, the community would have more effective control over the allocation of financial resources for plan purposes.

2.2 Empirical evidence from different studies

The empirical literature part discusses past studies that were conducted on the area of factors determining commercial banks deposits. In this part the variables that were included, the methodology that is used to undertake the study and the results of the study under review are discussed. These will help to see where the literature on this area is and how this study will add to the existing literature. Accordingly, the articles will be discussed below one by one.

2.2.1 Determinants of Kenyan commercial banks deposit growth

An empirical study made by (Lomuto, 2008), on commercial banks in Kenya with the aim of identifying and examine the key determinants of Kenyan Commercial Banks Deposit growth. Its main objective was to analyze the factors that influence Commercial banks deposit growth in Kenya. Time series data covering 1968 - 2006 was analyzed. First, the time series characteristics of the data were assessed using unit root tests to examine the stationarity of each variable. Secondly, the test for co integration was performed to determine the long run relationship of the non-stationary variables. Lastly, estimated model was a single regression equation with deposit as the dependent variable and explanatory variables as deposit rate, nominal exchange rate, investment income ratio, number of cheques cleared (used as proxy for innovations in the financial sector), real GDP, ratio of monetary GDP to total GDP and Structural Adjustment Programs (SAPs). Estimation was done using Ordinary Least Squares (OLS) technique and Econometric Views (E-views) statistical package.

Analyzed results showed that lagged Commercial bank deposits and all the other variables including Structural Adjustment Programs (SAPs) significantly affect Commercial bank deposit growth in Kenya. Based on these results, several policy implications were drawn that aim at encouraging deposits growth by Commercial banks for the benefit of the domestic deposit mobilization. First, growth enhancing policies promotes deposits growth. Second, the stability of macroeconomic system should be maintained. Lastly, financial sector innovations encourage deposit growth in Commercial banks in Kenya as people reduce their demand for carrying cash.

2.2.2 Determinants of commercial bank deposits in a regional financial center in Lebanon

(Herald & Heiko, 2008), had written a working paper which empirically examines the demand for commercial banks deposits in Lebanon, a regional financial center. They classified the variables into two, i.e. macro and micro level variables. At the macro level, they found that domestic factors such as economic activity, prices, and the interest differential between the Lebanese pound and the U.S. dollar are significant in explaining deposit demand, as are external factors such as advanced economic and financial conditions and variables proxying the availability of funds from the Gulf. At the micro level, they found that in addition, bank-specific variables, such as the perceived riskiness of individual banks, their liquidity buffers, loan exposure, and interest margins, bear a significant influence on the demand for deposits.

They have used quarterly data from 1993 to 2008. They have estimated a number of vector error correction model (VECMs) to take account of cointegration in the non-stationary time series. They have collected the data for their study from 50 Lebanon banks.

They found that both domestic and international factors help explain deposit demand. Among domestic variables, they found that the coincident indicator for real economic activity in Lebanon, consumer prices, and the interest differential between the local currency and the U.S. dollar matter. Among the external variables, advanced economy economic and financial conditions appear significant (especially advanced economy industrial production and the Goldman Sachs Risk Aversion Index), as do some variables proxying the availability of funds from the Gulf. While both domestic and external variables are significant in explaining deposit demand, impulse response functions and variance decomposition analyses underscore the relative importance of the external variables. Regarding bank specific variables they found that the banks' perceived riskiness (z-score), their liquidity buffers, loan exposures and interest margins all bear a significant influence on deposit growth at the bank level, controlling for domestic and external macroeconomic factors.

2.2.3 Deposit determinants of commercial banks in Malaysia

The article is written in 2006 by Professor Sudin Haron and Dr Wan Nursofiza which investigates the structural determinants of deposits level of commercial banks in Malaysia, using cointegration techniques. The results suggest that determinants such as rates of profit of Islamic bank, rates of interest on deposits, base lending rate, Kuala Lumpur composite index, consumer price index, money supply and gross domestic product have significant impact on

deposits. They also found that in most cases, customers of conventional system behave in conformity with the savings behavior theories.

The objective of the study was to examine the effect of selected economic and financial variables on deposits placed at the commercial banks in Malaysia. Both long- and short- run relationships between these variables are measured using cointegration techniques. The data for the study were taken from the monthly statistical bulletin of Bank Negara Malaysia (www.bnm.gov.my). The study uses monthly data covering the period January 1990 to December 2003. In examining the determinants of deposit levels of both Islamic and conventional banks, the paper employs recent advances in time series econometrics. These techniques are cointegration and error correction framework, which was conducted within the vector autoregression (VAR) framework. The first step of the analysis was to test for the presence of unit roots of the variables in the system using the Augmented Dickey-Fuller (ADF) test. Once the stationary condition is examined, the next step is to conduct a cointegration test.

And finally they concluded that in most cases, the behavioral patterns of Malaysian depositors are in conformity with the existing saving theories. However, there are also deviations from these theories. For example, both inflation and returns on deposit are supposed to have a positive relationship but the study found otherwise. Similarly, instead of an inverse relationship, both composite index and money supply have positive sign with savings account. For each of the deviation found, an explanation has been put forward. And also the study does not differentiate the behavioral pattern of different classes of depositors. It is interesting to examine whether different types of depositors have the same long-run influencing factors. In view of this, they proposed that future research agenda on this matter.

2.2.4 Determinants of Commercial Bank's Liquidity in Slovakia

This article is written by (PAVLA). It identifies the determinants of liquidity of Slovak commercial banks deposit growth and empirically analyzes them. Finally it describes the result of the study and recommends how states realize deposit growth.

By considering bank specific and macroeconomic data over the period from 2001 to 2010 and analyze them with panel data regression analysis. He has found that bank liquidity drops mainly as a result of the financial crisis. Bank liquid assets decreases also with higher bank profitability, higher capital adequacy and with the size of bank. Liquidity measured by lending activity of banks increases with the growth of gross domestic product and bank profitability and decreases with higher unemployment. Key interest rates, interest margin, rate of inflation

and the level of non-performing loans have no statistically significant effect on the liquidity of Slovak commercial banks

2.2.5 Factors Influencing deposit level of commercial banks in Kisumu City, Kenya

This article is written in 2013 by (Ndichu, Ooko, & James, 2013). The main objective of this study was to investigate the factors that influence liquidity level of commercial banks in Kisumu City.

According to the authors, Liquidity is an important determinant of financial distress, without liquidity a bank cannot meet the deposit withdrawals and satisfy customer loans and high liquidity level will mean a decline in returns to commercial banks, thus liquidity level becomes a challenge to commercial banks and investigating the factors influencing it comes in handy.

The researcher chose to study on commercial banks due to availability of needed data and convenience. All 27 commercial banks operating in Kisumu City were investigated. Out of the 27 questionnaires distributed to the heads of finance, 26 questionnaires were returned successfully filled giving a response rate of 96.29 %. Exploratory survey research design was used in the study. Data was analyzed using descriptive statistics; Pearson Correlation analysis and multiple regression analysis were used to determine the relationship between the factors and the liquidity level of banks. The study found that that 42.2 % the variations in liquidity level are explained by changes in the various factors notably; contingency planning, profitability, banks major obligations, management policies, credit rating, monetary policies, government expenditure and Balance of payment status with 57.8 % of the variation being explained by other factors external to the model.

From the study they concluded that there are other factors, other than Central Bank of Kenya regulations which influence liquidity level of commercial banks in Kisumu City. And finally the researcher recommends a further study to be conducted based on various geographical areas.

2.2.6 The key determinants of bank liquidity on commercial banks in Pakistan

An empirical study made by (Muhammad & Amir, 2013), on commercial banks in Pakistan with the aim of identifying the key determinants of banking liquidity. The study examines the bank specific and macroeconomic determinants of commercial bank's liquidity in Pakistan. The sample of the study consists of 26 Pakistani commercial banks. The study period consists

of 5 years from 2007 to 2011 which also covers the period of the Asian financial crisis 2008. Bank's liquidity is measured by two ways; one is cash and cash equivalents to total assets (L1) and second is advances net of provisions to total assets (L2). Two models are estimated based on these measures of liquidity. The results of model 1 (L1) indicate that the bank specific fundamentals (NPL and TOA) and monetary policy interest rate positively determine the bank liquidity whereas inflation has a negative impact. Bank liquidity measured by L1 is negatively and significantly affected by the financial crisis. The results of model 2 (L2) indicate that the bank size and monetary policy interest rate positively and significantly determine the bank liquidity.

2.2.7 Macroeconomic determinants of bank deposits in Nigeria

This article is written in 2014 by Nathanael O. Eriemo the main objective of this study was to analyze the effects of various macroeconomic indicators that influence bank deposits in Nigeria.

The paper empirically examines the macroeconomic determinants of bank deposits in Nigeria using data covering the period between 1980 and 2010. It tries to analyze the effects of various macroeconomic indicators, on the performance of banks within the context of deposit mobilization of banks and its determinants. The economic analysis result showed that in Nigeria, bank investment, bank branches, interest rate and the general price level are important determinant of bank deposit. The Vector Error Correction and Johansen cointegration test indicates a long run relationship among the variables and the economic analysis result showed a satisfactory speed of adjustment. It is thus recommended among others that both the banks and the monetary authorities should take these factors into serious consideration when attempting to improve the deposits of banks and this will go a long way in increasing aggregate investment.

2.3 Summary and knowledge gap

Based on the above theoretical as well as empirical review, deposit mobilization is the major activities for all banks especially for commercial banks since their function is mobilizing deposit to meet the required liquidity for credit customers of banks. But this too depends on the availability of credit facilities which in turn depends on the level of bank deposit. It also revealed that banks deposit can be affected by different factors such as bank specific and

macroeconomic factors. While this study focused on some of the bank specific and macroeconomic factors affecting bank deposits.

Theories on bank deposits are well available in various literatures. But the empirical studies on bank deposit are rarely available especially in Ethiopia. According to the review, most of the empirical studies done on the area of bank deposit and its determinants were done following uprising of privatized economy system introduced in developing countries. As the result of this, bank deposits become a challenge to commercial banks and investigating the factors influencing it comes in practical.

Based on socio economic factories of the individual countries, an important gap still exists in the empirical literature about deposits and its determinants. All studies cited above suggest that commercial banks deposit is determined both by bank specific factors and macroeconomic factors. Some of the studies given more attentions to the macro determinants rather than bank specific and the significance of the determinants identified by the studies are completely different. Thus the researcher concludes that there is no perfect and generally expected relationship between dependent in independent variables in all jurisdiction.

To the knowledge of the researcher there is no empirical studies done regarding to determinants of bank deposit in the case of CBE. Although the research made by (Wubitu Elias, 2012) focused on only branch expansion and deposit interest rate determinants by taking 10 years data to see the impact on bank deposit. Since CBE is in the growth stage with opening of new branches aggressively, using new technologies like e-banking, given attentions to public awareness creation and investing huge amount of money for promotional activities were not analyzed well. It is an essential of identifying the important determinants of bank deposits and its influence on the growth of deposit by making empirical investigation.

And finally, this study is different from previous works done by others; specifically it examines six determinants of bank deposit in CBE and then assesses the quantitative and qualitative data for these determinants based on the context Ethiopia. The focus is on bank deposits in CBE, and its determinants. The rationale for this selection CBE as evidence was the larger proportion of bank deposits are on the hands CBE.

Chapter Three Research Design and Methodology

3.1 Introduction

This chapter describes the sources of data, the research design, the characteristics of the study population, sample and sampling techniques, data collection schedule, and statistical tools used in the study. It explains the type of data used for the study and the techniques employed in identifying the factors that influence the bank deposit.

3.2 Research design

In order to see the determinants of bank deposit in case of Commercial Bank of Ethiopia, researcher adopts both quantitative and qualitative research approach. The essential goal of this mixed research approach is to tackle a given research question from any relevant angle, making use where appropriate of previous research and/or more than one type of investigative perspective. The rationale of using such a mixed approach in this study is to gather data that could not be obtained by adopting a single method. And also some of the qualitative data in this study cannot be described and manipulated numerically. That is why the researcher applied mixed research approach.

3.3 Target population, sampling and data collection

The study uses both primary and secondary data. The primary data needed for this study were collected from the randomly selected Addis Ababa city branches staff of CBE. The questionnaires are distributed to the employees of commercial bank of Ethiopia particularly for those employees who actively participated in deposit mobilization tasks in selected city branches. The rationale for this selection was the larger proportion of bank deposit and the number of staff on the hands of in those city branches. The numbers of questionnaires distributed were fifty and the returned fully answered questionnaires are forty four.

The target population under review of secondary data is bank-specific and macroeconomic determinants of bank deposit over the seventeen year period 1998 — 2014 using time series data. Regarding the sources, secondary data was acquired from internal and external. The internal sources of data for the bank-specific variables were collected from the annual audited reports, which are published and unpublished sources of materials. The external sources are National Bank of Ethiopia (NBE) which regulates the banking sector of the country, Ministry of Finance and Economic Development (MoFED) which regulates the macroeconomic issues of the country and Central Statistics Authority (CSA) annual reports and others.

3.4 Method of data analysis

The researcher had analyzed the qualitative and quantitative data. The study had used the frequency distribution output from SPSS software to analyze questionnaires and describe the result.

Regarding the qualitative data analysis the researcher had analyzed the information from the secondary data sources by using descriptive analysis techniques to describe the result. So as to show the trend of total deposit of commercial bank of Ethiopia and the value of each deposit determinants, the researcher also had analyzed the data using Microsoft excel and SPSS as a result the graph of total deposits and its determinants are displayed and interpreted.

The collected data was regressed by time series OLS regression method and interpret with the help of different financial relationship and statistical description including standard deviation, average, minimum, maximum and median (descriptive statistics) and multiple regression (significant test). To conduct this, the researcher supported by statistical tool eviews7 software. And finally the proposed hypotheses are tested statistically to arrive at the conclusion and policy implication.

3.5 Model specification

The nature of data used in this study enabled to use time series. Quantitative data received are described through multiple regression technique. It contains one dependent variable, many independent variables, the constant term and the error term. This regression analysis allows to explicitly controlling for many other factors that simultaneously affect the dependent variable. This is important both for testing economic theories and for evaluating policy effects when we rely on non-experimental data.

Moreover, multiple regression models may accommodate many explanatory variables that may be correlated. Naturally, if we add more factors to our model for explaining dependent variable(y), then more of the variation in y can be explained. Thus, multiple regression analysis can be used to build better models for predicting the dependent variable. An additional advantage of multiple regression analysis is that it can incorporate fairly general functional form relationship and the model allows for much more flexibility. Once we in the context of multiple regression, there is no need to stop with one or two independent variables.

Accordingly the econometric estimation technique that is used by this study is Ordinary Least Square (OLS). Different diagnostic tests are exercised to know whether the model is valid or

not, having the model is valid the regression analysis and hypothesis testing is performed using EViews7 software.

Following these theoretical views, the study estimated the linear regression equation by calculating the log values of the variables in the following equation:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_k X_k + u \dots \dots \dots (1)$$

Where Y is dependent variable, X are explanatory/independent/ variables, α is constant β_1 is intercept, and β is the parameter associated with X1, β_2 is the parameter associated with X2 and so on. Since there are k independent variables and an intercept, equation (1) contain k+ 1 (unknown) population parameter. The variable u is the error term or disturbance. It contains factors other than X1, X2 and Xk that affect dependent variable (y). No matter how many explanatory variables we include in our model, there will always be factors we cannot include, and these are collectively contained as error term.

Therefore the general models which incorporate all of the variables to test the hypotheses of this study are:

$$LNTBDGR = \alpha + \beta_1 ADR_t + \beta_2 IR_t + \beta_3 NBO_t + \beta_4 GDP_t + \beta_5 IFR_t + \varepsilon$$

Whereas;

LNTBD: is total amount deposits growth rate held by commercial bank of Ethiopia on year t`

ADR: is average deposit rate of commercial banks of Ethiopia on the year t`

NBO: is the number of new branch opening in CBE on the year t`

GDPt: is the real domestic product/GDP growth of Ethiopia on the year t`

IR: is the overall inflation rate in Ethiopia on the year t`

IFR: Individuals foreign remittance to Ethiopia on the year t`

DV1: Dummy variable in this case is some of the major policy adjustment in end of year 2010 especially aggressive branch opening rather, branch expansions, using new technology and introduction of core banking system.

ε : is representing the random error term of the linear regression model. It also represents all the relevant variables, which were omitted from the model as well as the random errors from the estimation process. This may include variables like investment income, population growth real interest rate, bank size, profitability and shocks which is likely to influence the study. This is because some of these error variables can be influential as well as correlated to the variables under study. β represent the estimated parameters or represent the slope co-efficient to the dependent variable.

3.6 Model variables and hypotheses

3.6.1 Model variables

The main variables in the analysis for which data collected are dependent, independent. Dependent variable in this case total bank deposit which is affected by independent variables. Independent Variables in this case are factors that mostly affect the commercial banks deposits. These are deposit rate, overall inflation rate, and branch expansion and opening, gross domestic product (GDP), individual foreign remittance and using financial technologies. But for the purpose simplicity we include only these six explanatory variables in this model and others are collectively contained in error term.

3.6.2 Hypotheses

The study had used the multiple regression technique to show the relationship between CBE total deposit and the factors that the literatures claims to affect total deposit of commercial banks particularly CBE.

The null and alternate hypotheses of the regression are explained as follows;

H₀: There is no any relationship between independent and dependent variables, i.e. deposit rate, inflation rate, real GDP, individuals foreign remittance and new branch opening have no effect on the dependent variable (CBE total deposit).

H₁: There is relationship between independent and dependent variables, i.e. Deposit rate, inflation rate, real GDP, individual foreign remittance and opening new branches have effect on the dependent variable (CBE total deposit). The null hypothesis is rejected at 5% significant level.

3.6.3 Validity and reliability of data

It is well known that secondary data are vulnerable to some errors by data collection process. This definitely affects the outcome of the study. But the methodology used for this study was selected because of its suitability in its dependence on certified information from recognized institutions other than subjective opinions only, which would have been associated with primary sources. The F-test and the coefficient of determination were used to test the validity and reliability of the relationship established by the regression analysis. In the preceding chapters, we are going to see the result of the analysis that is the effect of each independent variable on the dependent variable.

Chapter Four: Data Presentation, Analysis and Discussion

Introduction

This chapter consists of the analysis of quantitative and qualitative data identified in the previous chapter. It presents the descriptive and statistical data analysis for the variables as well as the test for heteroskedasticity, autocorrelation and normality testing to know if the assumptions of CLRM violated or not.

4.1. Descriptive data analysis

Descriptive analysis was conducted to observe the trend of the time series data to be used in economic analysis model of the dependent and independent variables.

4.1.1 Dependent variable

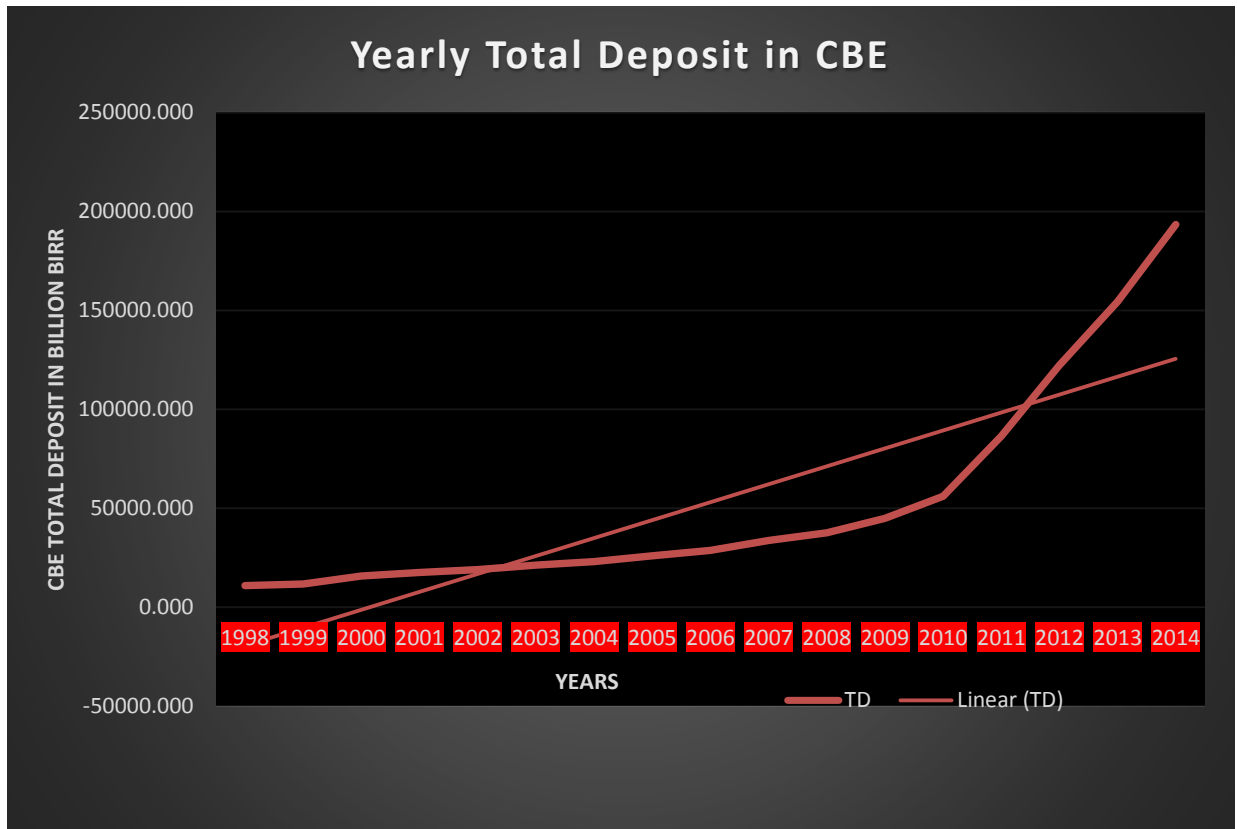
Total deposit of commercial banks is the dependent variable in this study. Since the study concludes by taking commercial bank of Ethiopia (CBE) as evidence, total deposit of the bank is analyzed.

Deposit mobilization is the major services of commercial banks. Deposits are of course mobilized to meet the required liquidity for credit customers of banks. But this too depends on the availability of credit facilities which in turn depends on the level of funds loaned.

In Ethiopia, deposits mobilized by commercial banks and other specialized banks have been continuously increasing through time, although the rate varies from year to year. Compared with the industry trend, CBE's total deposit has been growing with an average growth of 23% during the period (2007-2014). Correspondingly, the banking industry as a whole grew by an average growth rate of 26% during the same period, indicating that CBE's performance in deposit mobilization has large contributions to the industry level growth rate.

The diagram below (Figure 4.1) reveals that deposit increased over the years with 1998 having the lowest record while the value for 2011 is the highest deposit increment. Despite this consistent increase in deposits, it is realized that the year 1998 up to 2006 shows a slow growth. At that time there was less public awareness to savings, less branch accessibility to the society and little financial technologies such as E-banking.

Figure 4.1: The total deposit of CBE covering from years 1998GC to 2014GC.



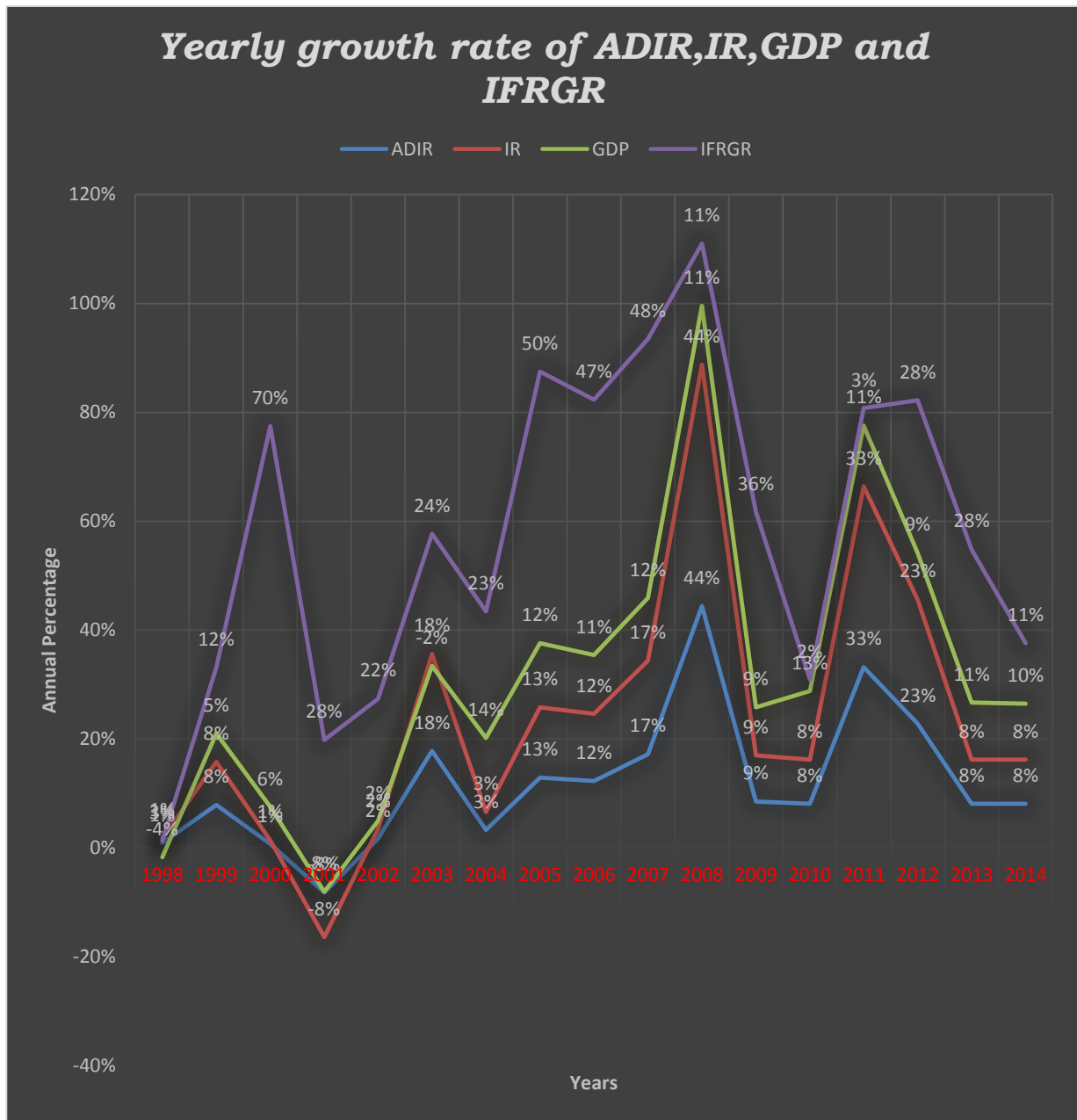
Source: CBE annual reports

4.1.2 Independent variables

Independent Variables in this study are factors that mostly affect the commercial banks deposits. These are deposit interest rate, overall inflation rate, and gross domestic product, number of branch opened, individual foreign remittance and dummy variable. But for the purpose of simplicity we include only these six explanatory variables. Since the study concludes by taking commercial bank of Ethiopia (CBE) as evidence, each of the independent variables in this study is analyzed as follow.

The below figure 4.2 shows the trend of each independent variables i.e. average deposit interest rate, overall inflation rate, growth domestic product and yearly individuals foreign remittance rate for the last 17 years period from 1998 to 2014.

Figure 4.2 the trends of each independent variables that affect bank deposit



Sources: NBE, CBE, CSA and World Bank annual report

4.1.2.1 Bank deposit interest rate

Deposit interest rate is the rate paid by commercial or similar banks for demand, time, or savings deposits. The level of inflation has influenced the rate of interest that banks give to their depositors. According to a NBE report, inflation and investment policy changes directly affect the bank deposit rate. This means the level of inflation influences that of deposit interest rate, while deposit interest rate in turn influences bank deposits.

The Deposit interest rate in Ethiopia is set by the governing body of banks, National Bank of Ethiopia. As for interest rate, the NBE continued to set the minimum interest rate on saving and time deposits while leaving lending rates to be freely determined by banks.

Based on this, the value for average deposit interest rate (saving and fixed time deposit interest rate) in Commercial Bank of Ethiopia was between 3% and 6% from 1998 to 2014. As the figure 4.2 above shows, over the past 17 years this indicator reached a maximum value of 6% between 1998 and 2001 and a minimum value of 3% between in 2002 and 2006. This trend indicate that the interest rate in CBE not adjusted on the bases of the market demand relative to the incremental deposit demand. This means the result of deposit incremental is not directly affected by deposit interest rate change.

4.1.2.2 Inflation rate

Based on various literatures, inflation is assumed to affect private or personal saving either positively or adversely that stems from its direct or indirect impact. One line of thinking is that inflation erodes the real value of money and particularly real interest rate. It causes relocation of income or wealth from depositors to borrowers. Inflation is believed to affect savings via the real interest rate. In addition, it causes re-allocation by influencing households' preference of holding their wealth in liquid, semi-liquid and illiquid assets. By shrinking the real value of households' assets deposited in bank, high inflation pushes households to switch to holding tangible and illiquid assets such as house, land, jewelry, etc.

The level of inflation has influenced the rate of interest that banks give to their depositors. This means the level of inflation influences that of deposit interest rate, while deposit interest rate in turn influences bank deposits. Again, inflation been higher than deposit interest rate is a recipe for not holding money especially in banks.

High rates inflation has hindered the attainment of positive real deposit rates. In Ethiopia in 2008 the highest inflation rate was recorded with 44.4% preceded by 33.6% in 2011. This could be explained by relating the inflation to the drought and famine, which hit the economy during these periods but deposit was not negatively affected by that time.

4.1.2.4 GDP

Income and wealth are the prime determinants of saving according to the conventional models. The effect of these variables on the level of saving and rate of saving are assumed to be positive and significant. In essence, as the disposable income of a household increases, saving

increases both marginally and on average. In addition, agents earning higher income have the propensity of saving more than the low income class at least in absolute terms.

Several empirical studies have confirmed the positive effect of income on private saving propensity regardless of nations' economic stage. It is indisputable that the distinction exists on the size, purpose and mode of saving. The data frequently used at macro level include per capita income and Gross Domestic Product (GDP) growth as prime determinants of gross and private domestic saving rates. In essence, saving rate is larger for high income countries, and the overwhelming empirical studies have witnessed the positive correlation between income and saving as well as with deposit.

The diagram above (Figure 4.2) reveals that GDP Ethiopia in 1998 and 2003 having the lowest record while the value for 2008 and 2011 was the highest GDP increment. As the result of in this inconsistent increase in GDP in those years, incremental bank deposit in Ethiopia has not significantly affected by this phenomenon.

4.1.2.5 Foreign remittances from Diasporas

Remittance from Diasporas to families in home-country has become another significant determinant of household saving and domestic private saving nowadays (Athukorala & Sen, 2001). Remittance is part of the disposable income of recipient household, and as their income increases so does their savings. It is however alleged that remittance makes households rather loose in their spending and pressurize families to Western life-style, thereby influencing adversely their saving habits and that of the domestic private savings. According to NBE report, in Ethiopia remittance from Diaspora is one of the most beneficial sources to offset foreign trade deficit of the foreign currency for the country. It has positive impact on individual's income and savings.

The diagram above (Figure 4.2) reveals that individual's foreign remittance growth rate in Ethiopia is increased over the 17 years with having consistent growth rate. This consistent increase in foreign remittances directly or indirectly affects the CBE's deposit. This indicate that the relationship between bank deposit and remittance in Ethiopia have positive relationship.

4.1.2.6 Branch expansion, new branch opening and using new technologies

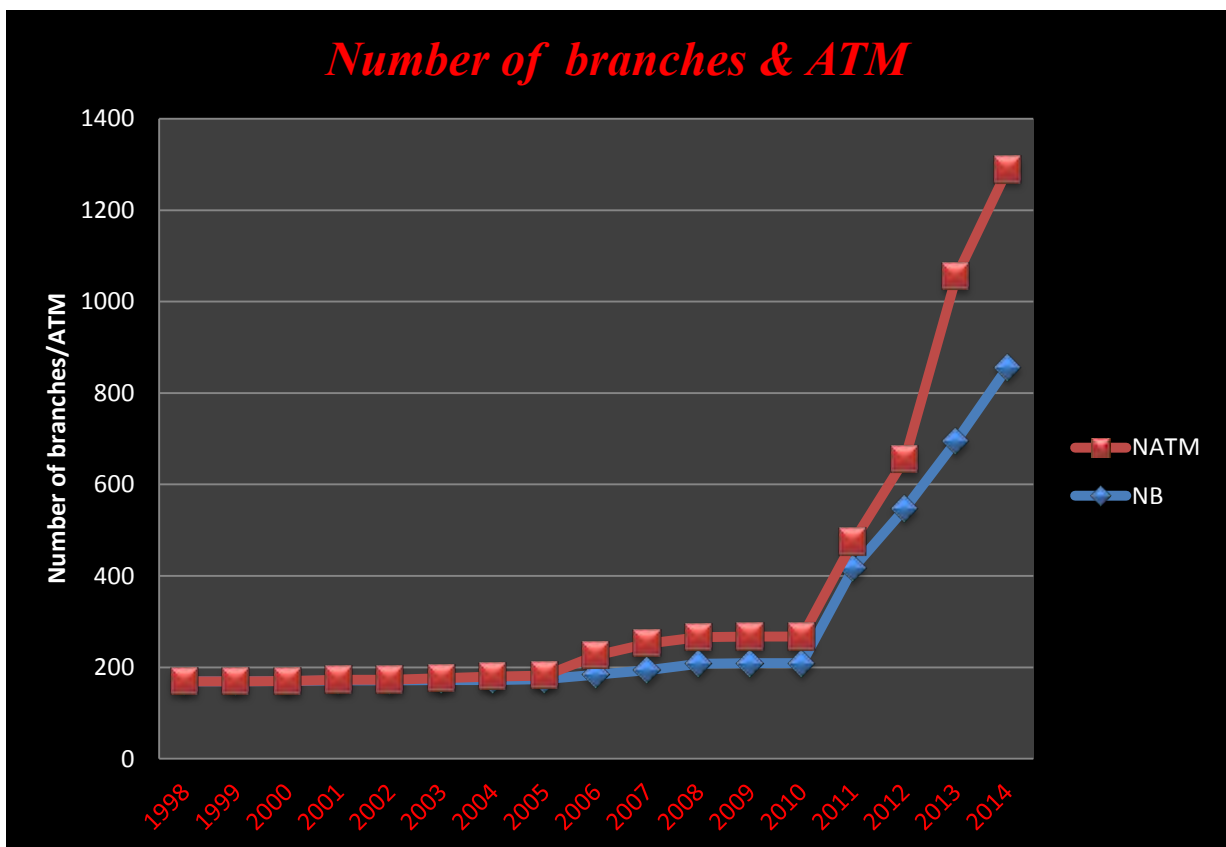
Bank branch expansion or opening and bank deposit had a positive and robust association in Ethiopia. In the same manner, using new technologies are believed to contribute a lot to the

growth of bank deposit, saving opportunities and increase in the volume of transactions both at household and national level.

The following empirical data in CBE shows us increase of branches from the 169 in 1998 to 856 in 2014 had significantly contributed to the growth of CBE’s deposit growth ratio from 6% during 1998-2002 to 25% 2006-2014. And also along with branch opening using E-banking by deploying a number of ATM machines CBE’s customers deposit have increased extraordinarily.

The below graph also shows that the trend of new branch opened and ATM machine deployed for the last 17 years period from 1998 to 2014 in CBE.

Figure 4.3: The trends of total number of branches and ATM from year 1998 to 2014



Source: CBE annual reports

4.2 Statistical analysis of the dependent and independent variables

The descriptive statistics gives a broader picture that the residuals from the regression using these variables were expected to follow a normal distribution for efficient and unbiased estimators. It includes mean, median, maximum, minimum, standard deviation and others

statistics value. The table below shows the descriptive statistics of the variables used in the model and its interpretations are presented as follows.

Table: 4. 2: The statistical analysis of the variables

Variables	TDGR	IR	GDP	DIR	IFRG	NB
Mean	0.1953	0.1174	0.0799	.0433	0.2630	5.4865
Minimum	0.0608	-0.0820	-0.0350	.0300	0.0211	5.1298
Maximum	0.5419	0.4440	0.1360	.0600	0.6996	6.7522
Std. Dev	0.1334	0.1272	0.0504	.0118	0.1902	0.5491
Skewness	1.2566	1.0628	-1.2030	.0852	0.06237	1.3812
Kurtosis	3.7870	3.9711	3.2926	1.486	2.7403	3.2674
Jarque-Bera	4.9128	3.8686	4.1613	1.643	1.1500	5.4561
Probability	0.0857	0.1445	0.1246	0.439	0.5626	0.0653
Observation	17	17	17	17	17	17

Source: Research Data from Eview7

The summary descriptive statistics of the variables used is presented in table 4.1 shows us over the study period, the average total CBE deposit grew by 19.53 percent whereas the average inflation rate, GDP, deposit interest rate, and individual foreign remittance rate and number of branches growth rate was 11.75, 8.00, 4.4, 26.52 and 5.48 percent respectively.

The skewness which measures the asymmetry of the distribution around its mean has values greater than 0 except in one occasion. This is an indication that the distribution has a long right tail. The kurtosis measures the flatness of the series. The result shows that all variables have values nearer to 3 and satisfies that condition except deposit interest rate. The result from the Jarque-bera test indicates an acceptance of the null hypothesis that the random variables are normally distributed because the JB statistics are greater than critical values at 5% level. The probability value of the model also conform that the null hypothesis of variables being normally distributed as the result there is no reject region.

4.3. Econometric analysis and results interpretation

This study focuses on the relationship between banks deposit and the determining factors of bank deposit. The researcher had used the econometric model of multiple regressions. The model contains one dependent variable, six independent variables, the constant term and the error term. The ordinary least square (OLS) method is used to come up with the econometric results. The model specified follows a log relationship, in order to show the elasticity of the dependent with respect to the explanatory variables.

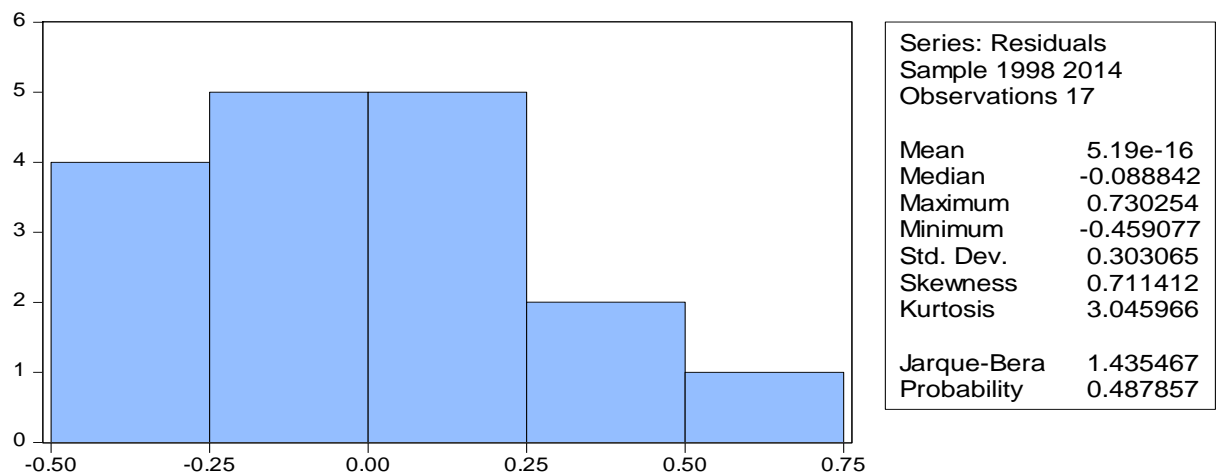
For the test statistics 5 % (0.05) significant level is used to reject or not to reject the null hypothesis. In view of that before running the regression equation the following tests were carried out; non-normality using Bera-Jarque normality tests, multicollinearity using the correlation matrix and Heteroskedasticity using Breusech-Pagan Godfrey. As these tests prove the validity of the model, the study had continued into regression analysis. Accordingly, the output of the tests which are displayed by EViews7 software are presented and interpreted as follow.

4.3.1 Test for non-normality test

Ho: The residuals are normally distributed

H1: The residuals are not normally distributed

Table 4. 3 Test for non-normality test



Source: EViews7 output for normality test

A Jarque-Bera normality test has been used for normality test. The non-normality test table 4.2 indicates that the kurtosis value is around 3.04 which are related to 3. Jarque-Bera's also indicates that the residuals are normally distributed having the value 1.43 which is greater than 0.05. The p-value given at the bottom of the normality test screen should be bigger than 0.05 to fail to reject the null hypothesis at the 5% level (Chris, 2008) In this case the p-value 0.48 which is greater than 0.05 had failed to reject the null hypothesis of normality presence.

4.3.2 Test for Heteroskedasticity

The test of heteroskedasticity is a test of the second assumption of OLS estimator that says the variance of errors term is constant. The researcher uses Breusch Godfrey test (BG test) to test for heteroskedasticity.

Ho: The assumption that there exists homoscedasticity

H1: There is no homoscedasticity (there is Heteroskedasticity)

Table 4.4 : The Heteroskedasticity test of the multiple regression

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	1.3797	Prob. F(6,10)	0.3108
Obs*R-squared	7.6992	Prob. Chi Square(6)	0.2609
Scaled explained SS	2.7253	Prob. Chi-Square(6)	0.8425

Source: EViews7 output

Based on the result displayed in the above table 4.3 the three different types of tests for heteroskedasticity and all fails to reject the null hypothesis of homoscedasticity presence. Therefore it can be concluded that the variance of error term is constant or the second assumption of CLRM is not violated.

4.3.3 Test for Multicollinearity

The results of correlation tests are depicted by a correlation matrix table:

Table 4.5 : Correlation matrixes

variables	LTDGR	IR	GDP	LADIR	DV1	IFRGR	LNB
LTDGR	1.00	0.33	0.38	0.45	0.49	0.09	0.65
IR	0.33	1.00	0.25	0.06	0.43	-0.22	0.24
GDP	0.38	0.25	1.00	-0.09	0.16	0.14	0.29
LADIR	0.45	0.06	-0.09	1.00	0.18	-0.26	0.40
DV1	0.49	0.43	0.16	0.18	1.00	-0.31	0.25
IFRGR	0.09	-0.22	0.14	-0.26	-0.31	1.00	-0.24
LNB	0.65	0.24	0.29	0.40	0.25	-0.24	1.00

Source: EViews7 output for normality test

The correlation matrix presented in Table 4.4 indicates a positive relationship between Total deposit growth (dependent) with explanatory variables (inflation, GDP, average deposit

interest rate, number of branches, individual foreign remittance and dummy). As expected, all explanatory variables are positively related or correlated to the explained variable. And also there is no higher correlation between independent variables. Therefore it can be concluded that there is no correlation between the explanatory variables.

4.4 Summary of regression analysis and results interpretations

The main variables in this analysis are dependent, independent and dummy variables. The relationship between one dependent variable and six independent variables is regressed using econometric software called EViews7. Dependent variable in this case annual bank deposit growth which is affected by independent variables. Independent variables in this case are factors that mostly affect the commercial banks deposits. These are deposit interest rate, overall inflation rate, number of branch opening, gross domestic product, individual foreign remittance and dummy variable. But for the purpose simplicity we include only these six explanatory variables in this model and others are collectively contained in error term.

Therefore the general models which incorporate all of the variables to regress are:

LNTBD: is total amount of annual deposits growth rate held by commercial bank of Ethiopia on year t

ADIR: is average deposit rate of commercial banks of Ethiopia on the year t

NB: is the number of branch in CBE on the year t

GDP: is the real domestic product/GDP growth of Ethiopia on the year t

IR: is the overall inflation rate in Ethiopia on the year t

IFRGR: Individuals foreign remittance growth rate in Ethiopia on the year t

DV: Dummy variable is policy change in the year 2011 regarding too aggressive branch opening rather, using new banking technology like core banking and deployments of ATM. As in the year major policy adjustments the value of dummy variable is 1 otherwise 0.

The regression by ordinary least square method with the data of successive 17 years from the 1998 GC to 2014 GC

Table 4. 6: Regression analysis result

Dependent Variable: LNTBDGR(Total bank deposit)

Method: Least Squares

Date: 05/09/15 Time: 08:36

Sample: 1998 2014

Included observations: 17

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.311341	1.974738	-1.676851	0.1245
LNADIR	0.671495	0.390946	1.717617	0.1166
GDP	1.466912	2.172543	0.675205	0.5149
IR	0.463257	0.867178	0.534212	0.6049
LNNB	0.551303	0.212841	2.590204	0.0269
IFRGR	1.378573	0.569883	2.419046	0.0361
DV	1.006113	0.460533	2.184671	0.0538
R-squared	0.766209	Mean dependent var		-1.825670
Adjusted R-squared	0.625935	S.D. dependent var		0.626790
S.E. of regression	0.383350	Akaike info criterion		1.213164
Sum squared resid.	1.469572	Schwarz criterion		1.556252
Log likelihood	-3.311896	Hannan-Quinn criter.		1.247268
F-statistic	5.462220	Durbin-Watson stat		1.624255
Prob(F-statistic)	0.009525			

Source: EViews7 output for normality test

4.4.1 Results interpretations

A) Coefficient of determination of the model

The above table (Table 4.5) shows the results of regression analysis. An F statistics of 5.4622 (with Probability >F= 0.009525) indicates the significance of the model in explaining the factors that influence the growth of total bank deposits from customers. The coefficient of determination of R² 0.766209 means that 76.6% of the variation in deposits is being explained by the independent variables in the model and there is a strong relationship between deposits and the independent variables. Based on the regression results also, the model proved to be consistent with the OLS assumption of no autocorrelation. But the D-W test of 1.624255 was obtained which is inconclusive to determine autocorrelation is exist or not.

B) Coefficient of determination of the constant term

The coefficient estimate of the constant of the regression is -3.3112 shows that the value of dependent variable if all independent variable becomes zero. This indicate that the total deposit of commercial banks will be decreased by the unit 3.3112 given all independent variable zero and this indicate that the dependent variables in the model is highly depends on the dependent variable. Then again the probability of 0.1245 showed that this variable was insignificant.

C) Coefficient of determination of average deposit interest rate

Deposit interest rate was found to have a positive relationship with bank deposit growth but the relationship is however insignificant according to the model in Table 4.6 above. This could be attributed to the fact that in CBE interest rates hardly reflect market conditions thus the effects of other macroeconomic indicators in determining CBE's deposits. The correlation coefficient for deposit rates is 0.671495 indicating that ceteris paribus a 1% increase in deposit interest rates leads to a 0.671495 increase in CBE deposits. And also probability value of 0.1166 is greater than 0.05 critical value showed that this variable was insignificant in assessing the research problem.

D) Coefficient of determination of GDP

Ceteris paribus, a regression coefficient of 1.466912 means that 1% increase in GDP per capita results in 1.466912 units increase in CBE deposits. However there is a positive relationship between deposits and level of economic activity, then again the probability value of 0.5149 indicated that this variable is insignificant for the deposit growth in case of CBE deposit growth.

E) Coefficient of determination of inflation rate

The regression coefficient for inflation is 0.463257. This indicates that ceteris paribus, an increase in Inflation by 1% leads to increase in deposits by 0.463257 units. Consistent with economic theory, as inflation soars households forego banking products. Households are expected to buy properties and other real assets to cushion themselves against loss in purchasing power of their monies. However, in many literatures the effect of inflation is not clearly defined but in this study the relationship between CBE deposit and inflation is positive but not as significant

F) Coefficient of determination of increasing number of branches

Based on the model in Table 4.6 above, The relationship between branch opening or addition and bank deposit had a positive and robust association in CBE deposit. The study ascertains that CBE's aggressive branch opening that has positive correlation with deposit mobilization with respect to widening customer base and increased financial inclusion through creating accessibilities to the unbanked rural and urban areas. This is therefore, the study exhibited us branch opening have positively correlated highly significant on CBE's deposit growth.

F) Coefficient of determination of foreign remittances from diasporas

Remittance from Diasporas to families in home-country has become another significant determinant of household saving and domestic private saving nowadays (Athukorala & Sen, 2001). According to NBE report, in Ethiopia remittance from Diaspora is one of the most beneficial sources to offset foreign trade deficit of the foreign currency for the country. It has positive impact on individual's income and savings. The table 4.4 above in this model also closely shows us the relationship between CBE's deposit and remittance from outside have positive and significant relationship against bank deposit growth.

G) Coefficient of determination of Dummy variable

The deposit market share of the CBE has been dropping for quite a long time with the entry of new banks although it maintained its dominant position in the market. This long term drop was somewhat reversed in 2011 because of some policy adjustment like opening new branches rather than only expansion of existing branch and using new banking technologies. Based on this policy adjustment in end of year 2010, CBE has opened 210 new branches in 2011. This CBE's aggressive branch opening that has positive correlation with deposit mobilization with respect to widening customer base and increased financial inclusion through creating accessibilities to the unbanked rural and urban areas. Furthermore extensive training of staff based on the HRD strategy that will be responsive enough to the demands of customers, which results in service excellence.

On the basis of this policy adjustment, the level of deposits by the CBE was reached 86,498 billion birr and 54.5% growth in the end of 2011 compared with other years which was exceptional in the history of CBE' total deposit .

4.4.2 Hypothesis test

Wald test have been used to test the multiple hypothesis. The null hypothesis is rejected with p-value of zero to four decimal places.

Table: 4.6 Hypothesis test

Test Statistic	Value	df	Probability
F-statistic	59.76328	(7, 10)	0.0000
Chi-square	418.3430	7	0.0000

Source: EViews7 output of the hypothesis test(Wald test)

The null hypothesis says that the coefficient of independent variables on the right hand side is zero that means the independent variables have no effect on the dependent variable, total deposit of commercial banks. The alternate hypothesis is therefore the coefficients of independent variables are different from zero that is the independent variables have effect on the dependent variable, total deposit of commercial banks. Therefore the rejection of the null hypothesis shows that the coefficients of variables on the right hand side are different from zero, i.e. independent variables have effect on the dependent variable. In this case all independent variables are positively affects the total deposit of commercial banks.

4.5 Analysis of qualitative data

The researcher thought that, some of the qualitative data in this study cannot be described and manipulated numerically. Based on this, the researcher had analyzed some of the most relevant data which were not covered by qualitative analysis.

The study uses questionnaires to collect qualitative data. The questionnaires are distributed to the employees of commercial bank of Ethiopia (CBE) in selected Addis Ababa city branches. The Questioners included two types of questions; multiple questions and open ended questions.

Based on the respondents reply from the open ended questions from the questioners, most of the respondents have good understanding of how banks generate their funds, which essentially has its roots in bank deposit creation. And also most of the respondents agree that the level of public awareness towards banking services and perception about banks in general and the CBE in particular are the most determining factors for bank deposit.

On the other hand the data collected from the rest close ended questionnaires are analyzed as follows .The study had used the frequency distribution output from SPSS software to analyze questionnaires. There are 44 questionnaires analyzed through SPSS software. Accordingly, the result of the frequency distribution as displayed by the software is mentioned and interpreted as follows.

A) General information of the respondents

In this section the researcher tries to include educational level, work experience and current job title of the respondents. The following table depicts about the information received from the respondents.

Table: 4.7 The frequency distribution for educational level of the respondents

Educational level	Frequency	Percent	Valid Percent
Diploma	3	6.8	6.8
Bachelor degree	35	79.5	79.5
Master's degree	5	11.4	11.4
PhD	1	2.3	2.3
Total	44	100.0	100.0

Source: SPSS output of frequency distribution of the respondents

The table 4.7 shows us 6.8 %(3) of the respondents have diploma, 79.5 %(35) of them bachelor degree, 11.4 %(5) of them have master's degree and 2.3 %(1) of them have PHD.

Table: 4.8 The frequency distribution for work experience of the respondents in CBE

Work Experience	Frequency	Percent	Valid Percent
Below five years	15	34.1	34.1
6-15 years	18	40.9	40.9
16-25 years	8	18.2	18.2
26 and above years	3	6.8	6.8
Total	44	100.0	100.0

Source: SPSS output of frequency distribution of the respondents

Based on the above table 34.1 %(15) of the respondents have below 5 years work experience on commercial bank of Ethiopia, 40.9%(18) of them have 6-15 years' work experience, 18.2%(8) of them have 16-25 years' work experience and the other 6.8%(3) of them have 26 and above work experience in the bank.

Table: 4. 9 The frequency distribution for job title of the respondents in CBE

Job title	Frequency	Percent	Valid Percent
Branch Manager	7	15.9	15.9
Customer Service Manager	12	27.3	27.3
Senior Customer service officer	5	11.4	11.4
Planning Officer	5	11.4	11.4
Customer relation officer	1	2.3	2.3
Customer service officer	5	11.4	11.4
others	9	20.5	20.5
Total	44	100.0	100.0

Source: SPSS output of frequency distribution of the respondents

Based on the above table 15.9%(7) of the respondents are on the position of branch manager in the bank, 27.3% of the respondents are on the position of customer service manager in the bank, 11.4%(5) of the respondents are Senior Customer service officer, 11.4%(5) of them are planning, 2.3%(1) of them is customer relation officer, 11.4%(5) of them are customer service officers and 20.5%(9) are others. Based on this frequency distribution we can see the normal distribution among each job titles in bank staff and we can say most the respondents are eligible to answer the questions raised by the researcher to grasp relevant information.

B) Bank specific information of the respondents

In order to see the information about bank deposit and its determinants of deposit, as it is presented in the methodology part, the researcher tries to collect data from the eligible bank staff. Before coming to the determinants of bank deposit let's see some facts about the bank deposit.

Table: 4.10 The frequency distribution about deposit is a matter of survival for CBE

deposit survival issue	Frequency	Percent	Valid Percent
Yes	40	90.9	90.9
No	4	9.1	9.1
Total	44	100.0	100.0

Source: SPSS output of frequency distribution of the respondents

90.9% of the respondents are agreed that without having deposit the bank can't survive and 9.1% of the respondents disagree that the bank can survive even without having deposit.

Table 4.11: The frequency distribution respondents awareness about deposit in CBE

Deposit information	Frequency	Percent	Valid Percent
Yes	43	97.7	97.7
No	1	2.3	2.3
Total	44	100.0	100.0

Source: SPSS output of frequency distribution of the respondents

Based on the above table 97.7 %(43) of the respondents agree that they have enough information about commercial bank of deposit and 2.3 %(1) of the respondents they have no any information in hand. This implies that the selected sample from the population is almost perfect and it gives relevant information for the study.

Table: 4. 12 The frequency distribution for CBE mobilizing reasonable deposits

Mobilized enough deposit	Frequency	Percent	Valid Percent
Yes	21	47.7	47.7
No	23	52.3	52.3
Total	44	100.0	100.0

Source: SPSS output of frequency distribution of the respondents

Based on the analysis on table 4.12, 47.7 %(21) of the respondents are agreed that CBE have mobilized enough about of deposit and 52.3 %(23) of the respondents are disagreed that CBE can mobilize more deposit than others.

Table: 4.13 The frequency distribution about the sources deposit in CBE

Source of deposit	Frequency	Percent	Valid Percent
Private Individuals	18	18.2	18.2
Business organizations	3	6.8	6.8
Government	1	2.3	2.3
All	32	72.7	72.7
Total	44	100.0	100.0

Source: SPSS output of frequency distribution of the respondents

Based on the analysis on table 4.13, 18.2%(8) of the respondents respond that commercial bank of Ethiopia collects its deposit from individual customers and they agreed individual

customers are the main sources of deposit, 6.8%(23) of them says it is mobilizing its deposit from business organizations, 2.3(1) % of the respondents says that deposit from the government and 72.7%(32) of the respondents says that the bank is mobilizing its deposits from all the private individuals, business organizations and government.

Table: 4.14 The frequency distribution of the reason for deposit volume growth

Major reason	Frequency	Percent	Valid Percent
Societies' preference for commercial bank deposit than other investment	2	4.5	4.5
Commercial Bank of Ethiopia have larger market share	9	20.5	20.5
The service given by the bank	2	4.5	4.5
Awareness creation	12	27.3	27.3
Wide branch network	18	40.9	40.9
others	1	2.3	2.3
Total	44	100.0	100.0

Source: SPSS output of frequency distribution of the respondents

Based on the analysis on table 4.14, 4.5% (2) of the respondents claim that society's preference for commercial bank deposit than other investment opportunity is the reason why the deposit of CBE is growing, 20.5%(9) of them says that growth of deposit is because of the larger market share of CBE,4.5 %(2) says that service given by the bank is a reason why the bank's deposit is growing,27.3% says that the cause for deposit is awareness creation for the society by the bank and the majority of the respondents agree that the main reasons for deposit growth is the growing branch network of a bank.

Table: 4.15 The frequency distribution of factors that mostly affect CBE's deposit

Macro factors for deposit	Frequency	Percent	Valid Percent
Economic environment of the country	15	34.1	34.1
The volume of business transactions of the country	3	6.8	6.8
The banking habit of the people	4	9.1	9.1
All	22	50.0	50.0
Total	44	100.0	100.0

Source: SPSS output of frequency distribution of the respondents

Based on the analysis on table 4.15, 34.1%(15) of the respondents ascertain that the economic environment of the country will affect the volume of deposit, 6.8%(3) of them says that the volume of business transaction in the country will affect it, 9.1%(4) of them responds agreed the awareness of the society to the banking and the other 50%(22) of them claim the determining factors are not one but it is a mishmash of many.

Table: 4.16 The frequency distribution of the most determining factors of CBE's deposit

Most determining factors of deposit	Frequency	Percent	Valid Percent
Interest rate of commercial banks of Ethiopia	3	6.8	6.8
Number of branch expansion	29	65.9	65.9
All	12	27.3	27.3
Total	44	100.0	100.0

Source: SPSS output of frequency distribution of the respondents

From the literature review part is mentioned that bank deposit can be affected by bank specific factors. Based on this fact, the respondents were asked to know whether these factors really have an impact on bank deposit. Their responses were presented in the table 4.16, indicates that 65.9%(29) of the respondents agree that branch expansion can be the main determinants for deposit growth in Commercial Bank of Ethiopia, 6.8%(3) of them claims that interest rate is the most determinants of bank deposit and the rest of the respondents says that the determining factors of deposit is not only but many for this case cumulative effects of two.

Table: 4.17 the frequency distribution of deposit difference among CBE branches

Deposit difference	Frequency	Percent	Valid Percent
Yes	41	93.2	93.2
No	3	6.8	6.8
Total	44	100.0	100.0

Source: SPSS output of frequency distribution of the respondents

Based on the Table 4.17 analysis, 93.6%(41) of the respondents agree that the deposit are different in volume among the branches of commercial bank and the other 6.8%(3) are not agreed with the difference in deposit among the commercial bank branches.

Table: 4.18 The frequency distribution of deposit difference among CBE branches

Causes for variation	Frequency	Percent	Valid Percent
Awareness of the society	2	4.5	4.5
Awareness of the staff	1	2.3	2.3
Accessibility of branch office	4	9.1	9.1
Service Excellency	7	15.9	15.9
All	30	68.2	68.2
Total	44	100.0	100.0

Source: SPSS output of frequency distribution of the respondents

Individual respondents were asked to tell their feeling about major causes for the differences in total deposit among the commercial bank of Ethiopia branches in their respective area. Though there were certain differences among the branches' respondents, overall, agree that there is no one exceptional reason for deposit differences among CBE branches that is why 68.25% the respondents selected all, followed by the service excellencies can be a reason (15.9%), 9.1%(4) of the respondents state that accessibility of branch office to the society as a reason for deposit volume variation, 6.8%(3) of the respondents claims that the main reasons for deposit variation among branches is awareness creation for the society and as well the staff of CBE.

Chapter Five

Summary of Research Findings, Conclusions and Recommendations

This chapter summarizes the findings, discusses the conclusions drawn from the study, and provides recommendations.

5.1 Summary of the findings

The main objective of this study was to investigate the determinants of deposit of Commercial Bank of Ethiopia. Specific objectives were to determine and evaluate the effects of bank-specific factors and macroeconomic factors. Accordingly the study reveals certain basic facts about CBE's deposit along with factors determining bank deposit. As a result of the analysis and interpretation, the following are the summary of the findings:

The study empirically ascertains that, managing deposits is not possible without knowing and controlling the factors affecting it. It is well known that deposit mobilization is the major services of commercial bank of Ethiopia. In view of that without having deposit CBE can't survive as a bank. For the reason that, the bank management, the staff and stakeholders of the bank has concerned about the deposit and the determining factors of deposit.

The study finds that CBE has capacity and willingness to contribute to economic growth of the country by mobilizing more deposit. Again the study finds the sources and types of CBE's deposit. Accordingly there are three types of deposits: demand, savings and time deposits, the sources of bank deposit are from all economic agents including individuals, private and public enterprises, financial institutions and the government. The study realize that the size of CBE's deposits has been continuously increasing through time with the rate varies from year to year. Additionally, the study find out that the key factors for deposit growth are service excellences, branch expansion, opening new branches, promotional effort, awareness creation and using new banking technology.

Results from the qualitative analysis ascertain that deposit mobilization is very difficult task because of many factors determine bank deposit. To verify this result the researcher used empirical data by applying economic analysis model, the followings are the relationship between bank deposit and the determining factors of deposit exhibited.

Based on economic analysis model result inflation, GDP and deposit interest rate was found to have a positive relationship with bank deposit growth but the effect on deposit growth is insignificant. While CBE's aggressive branch opening that has positive correlation with

deposit mobilization with respect to widening customer base and increased financial inclusion through creating accessibilities to the unbanked rural and urban areas. Accordingly, the study reveals that branch opening highly significant on CBE's deposit growth.

And also according to NBE annual report, remittance from Diaspora is one of the most beneficial sources to offset foreign trade deficit of the foreign currency for the country. It has positive impact on individual's income and savings. This study also shows us the relationship between CBE's deposit and remittance from outside have positive and significant relationship.

And finally the study finds out some policy adjustments on widening network of the bank by aggressively opening new branches and giving extensive training for the staff about deposit mobilization which results in service excellence have positive and almost significant relationship with deposit. On the basis of this policy adjustment in year 2011, the level of deposits by the CBE was reached 86,498 billion birr and 54.5% growth in the end of 2011 which was exceptional in the history of CBE.

5.2 Conclusions

This study examined the determining factors of bank deposit in the case of Commercial Bank of Ethiopia. Based on the result of descriptive and empirical analysis, the study had concluded the following:

The survival of every commercial bank in Ethiopia highly depends on deposit because mobilizing deposit for commercial banks is a matter of survival. Without having enough deposit for commercial banks business is nothing. The same is true for commercial Bank of Ethiopia. This study also assured us without having enough deposit CBE can't survive as a bank.

According to the study deposit mobilization is very difficult tasks because of having many factors determine bank deposit. Based on this empirical evidence from the analysis the key factors for CBE's deposit growth are service Excellency, branch expansion ,opening new branches, promotional effort, interest rate, awareness creation and using new banking technologies. Among these, interest rate is considered as less significant in deposit growth due to a little market based rate of adjustment are exercised in CBE.

The results from economic analysis showed that all the explanatory variables were positively correlated with the explained variable in the case of CBE. Among these variables, branch opening is an important strategy for deposit mobilization, it is highly significant than others. Individual remittances from diasporas is also next to branch opening is significantly affects CBE's deposit. The others (e.g. inflation, GDP and deposit rate) are affects positively and can increase CBE's deposit but these factors are not as such significant. Also, the 'p' value in the model shows as there was significantly high; hence the explanatory variables were able to account for the total variation of the dependent variable (deposits). The value of Durbin-Watson Statistic (DW) showed that there was no presence of autocorrelation; hence, the model produced a sound economical result.

5.3 Recommendations

Based on the research findings and conclusions above, the following are recommended for CBE to mobilize more deposits:

- It is well known that mobilizing deposit is a core activity of all commercial banks. By the same analogy CBE's major activity is mobilizing deposit. Therefore the bank should give due emphasis to its deposit mobilizing tasks by considering mobilizing deposit is a way to survival.
- Managing deposits is not possible without knowing and controlling the factors affecting it. Thus CBE should have identified the sources of deposit by considering the determining factors of bank deposit.
- It has been clearly noted that enhanced accessibility has a positive relationship with bank deposit growth. Thus, by addressing banking accessibility, CBE can resolve problems experienced in deposit mobilization and can channel the more resources in the hands of the community.
- The study found that CBE's aggressive branch opening has positive correlation with deposit mobilization with respect to widening customer base and increased financial inclusion through creating accessibilities to the unbanked rural and urban areas. Therefore CBE should expand their branches in order to increase their deposits and the bank should give priority for branch opening than other determinants. This will also educate the unbanked society on the essence of the banking system overall the country.

- Service excellence is one of the most useful qualitative determinants of bank deposit. In view of that CBE should provide excellent services for their customers by introducing new banking technologies such as applying CORE banking services and E-banking services that are suited for customer convenience, thereby adding value to its depositors to mobilize more deposits.
- This study shows us the relationship between CBE's deposits and remittances which is the major sources of CBE' deposit are from outside Ethiopia have positive and significant relationship. Accordingly CBE should give attention to those customers who have remittance from outside by creating full flagged access to the Diasporas to transfer their money through CBE.

References

- Adam, B. A. (2005). *Are Banks Really Special? New Evidence from the FDIC-Induced Failure on Healthy Banks*. *American Economic Review*, 1712-17.
- Athukorala, P.-c., & Sen, K. (2001). *The Determinants of Private Saving in India* <https://crawford.anu.edu.au/acde/publications/publish/papers/wp2001/Privat.pdf>.
- Bangura, S. A. (2005). *Statistical Information and the Banking Sector*” For Presentation at the Fourth meeting of the Committee on Development Information(CODI-IV)-Sub-Committee on Statistics, Plenary Session 1: Addis Ababa, Ethiopia.
- Begashaw D. Woldemichael (2010),”Deposit Mobilizations Performance of Ethiopian Microfinance Institutions: Challenges and Prospects, Degree of Master’s Thesis the State University of Bergamo.
- Bhatt, V. V. (1970). *Some Aspects of Deposit Mobilization*” *Economic and Political Weekly*, *Economic and Political Weekly*. Vol. 5, No. 36, pp. 1495-1497.
- Chris, B. (2008). *Introductory Econometrics for Finance*. 4th Cambridge University Press.
- Daniel, C. G. (2005). *Branch Banking Restriction and Finance Constraints in Early 65, No. Twentieth Century America*. Cambridge University Press . *The Journal of Economics History*, Vol. 1 , PP 129-151.
- Devinaga, R. (2010). *Theoretical Framework of Profitability as Applied to Commercial Bank in Malaysia*. *European Journal of Economics, Finance and Administrative Sciences*, Multimedia University, Faculty of Business and Law, Melaka, Malaysia.
- Erna, R., & Ekki, S. (2004). “*Factors Affecting Mudaraba Deposits in Indonesia*. Working Paper in Economics and Development Studies” Padjadjaran University, Indonesia.
- Eustacius, N. B., & David, J. L. (1995). “*Factors Affecting Commercial Bank Lending to Agriculture*” Southern Agricultural Economics Association.
- Evan, G. T., & Philip, E. S. (2006). “*Managing Bank Liquidity Risk: How Deposit-Loan Synergies Vary With Market Conditions*” Federal Reserve Bank of New York.
- Franklin, A., & Elena, C. (2008). “*The Roles of Banks in Financial Systems*” University of Pennsylvania, University of Frankfurt and CFS.
- Hamid, R. (2011). *Credit to Private Sector, Interest Spread and Volatility in Credit- Flows: Do Bank Ownership and Deposits Matter?* DESA Working Paper No. 105.
- Harold, L. S. (1946). *The Problem of Excessive Commercial Bank Earnings*. Oxford University Press. *The Quarterly Journal of Economics* , Vol. 60, No. 3, pp. 365 -389.
- Herald, F., & Heiko, H. (2008). “*Lebanon-Determinants of commercial banks Deposits in a Regional Financial Center*” IMF Working paper , WP/09/195.
- ISMAL, R. (2010). “*The Managment of Liquidity Risk in Islamic Banks: The Case of*

Indonesia” Doctoral Thesis, Durban University Available at Durban E-Theses Online: <http://etheses.dur.ac.uk/550/>.

Jim, S. (2008). “A “How-To” Guide: Finding and Interpreting GDP Statistics” Canadian Centre for Policy Alternatives.

Kaufman, G. G. (1972). *Deposit Variability and Bank Size. The journal of financial and pp quantitative analysis* , Vol. 7, No. 5, pp 2087-2096.

Kelvin, A. S. (2001). “The Role of Commercial Banks in Financing Growth and Economic Development in Trinidad and Tobago And The Caribbean: A Perspective From The Royal Bank of Trinidad and Tobago” Central Bank of Belize.

Lomuto, J. K. (2008). *Determinants of Kenyan Commercial Banks Deposit Growth*, Masters Thesis, University of - Nairobi, Nairobi.

M. A. Baqui, K., & Richard L. Meyer, L. J. (1987). *Deposit Mobilization in Bangladesh : Implications for Rural Financial Institutions and Financial Policies. The Bangladesh Development Studies* , Vol. 15, No. 4, pp 85-117.

Mahendra, V. P. (2005). “Impact of Self-Help Groups on Formal Banking Habits” , No. 17. *Economic and Political Weekly. Vol. 40* , 17, 1705-1713.

Maria, S. M., & Sergio, L. S. (2001). *Do Depositors Punish Banks for Bad Behavior? Market Discipline, Deposit Insurance, and Banking Crises. The Journal of Finance* , Vol. 56, No. 3, pp. 1029-1051.

Mark, C., & Kris, J. M. (2006). *Branch Credit Banking, Bank Banking Competition, and Financial Stability. Ohio State University, Journal of Money and Vol. 38, No. 5* , pp. 1293-1328.

Medhat, T. (2004). *A Comparison of Financial Performance in the Banking Sector: Some Evidence from Omani Commercial Banks. International Research Journals of Finance and Economics, Euro Journals Publishing.*

Mohsen ,Mohammadian Saravi & Reza Bozorg(2014),”Identifying Effective Factors in Absorbing Bank Deposits (Case Study: Branches of Tejarat Bank- North East Of Tehran)” *Switzerland Research Park Journal, Vol. 104, No. 1; March 2014*

Mohammad, N., & Mahdi, S. (2010). *The Role of Inflation in Financial Repression: Evidence from Iran World Applied Sciences Journal 11. pp 653-661.*

Mr Gunnar, C., & Mr Zhao, P. (2013). *The Mobile Money Revolution. ITU-T Technology Watch Report* .

Muhammad, F. M., & Amir, R. (2013). *Commercial Banks Liquidity in Pakistan: Firm Specific and Macroeconomic Factors. Romanian Economic Journal, 2013, vol. 16, issue 48, pages 139-154* .

Mustafa, K. M., & Sayera, Y. (2009). “An Analysis of Interest Rate Spread in Bangladesh” *The Bangladesh Development Studies.*

National Bank of Ethiopia, (2009). Monetary Policy Framework

N. Desinga, R. (1975). Deposit Mobilization by Co-operative Banks, A Comparison Economic and Political Weekly. 29, pp 1098-1100.

Nada, M. (2010). Can Banks Provide Liquidity in a Financial Crisis? Federal Reserve Bank Of Kansas City, Economic Revision.

NCA, (2006). "Competition in Nordic Retail Banking". Report No. 1/2006, Nordic Competition Authorities.

Ndichu, P. K., Ooko, M. E., & James, G. (2013). Factors Influencing Liquidity Level of Commercial Banks in Kisumu City. International Center for Business Research , Volume 2 – May 2013; Link: icbr.net/0205.66.

Nursofiza, S. H., & Wan. (2006). " the structural determinants of deposits level of commercial banks in Malaysia", Working paper 009 Vol. XX, No. 2 Series.

Ngula, Isaac Beligna(2012), "Determinants of Deposit Mobilization and Its Role in Economic Growth in Ghana" Degree of Master's Thesis Kwame Nkrumah University of Science and Technology

Olga, Kanj & Rim, El Khoury(2013), "Determinants of Non-Resident Deposits in Commercial Banks: Empirical Evidence from Lebanon", International Journal of Economics and Finance; Vol. 5, No. 12; 2013

PAVLA, V. Determinants of Commercial Banks' Liquidity in the Czech Republic. Silesian University in Opava, School of Business Administration in Karviná, ISBN: 978-1-61804-002-2

Professor Sudin, H., & Dr Wan, N. W. (2006). Deposit determinants of Commercial Banks in Malesia. Vol. XX, No. 2.

Richard, E. B. (1971). Deposit Composition and Commercial Bank Earnings American Finance Association, Blackwell Publishing, The Journal of Finance Vol. 26, No. 1, pp. 39-50.

Rose, W. N. (2001). An empirical analysis of interest rate spread in Kenya. African Economic Research Consortium, Nairobi.

Russell, O. C., & Bamindele, M. (2009). The impact of Macroeconomic Banking, Instability on the Banking Sector Lending Behavior in Nigeria. Journal of Money, Investment and Euro journals publishing.

Salehi, M. N. (2010). The Role of Inflation in Financial. World Applied Sciences , 653-661.

Samolyk, K. (2004). "The Evolving Roles of Commercial Banks in US Credit Markets" Federal Deposits Insurance Corporation, USA.

Sergeant, K. A. (2001). The Role of Commercial Banks in Financing Growth and Economic Development in Trinidad and Tobago And The Caribbean: A Perspective From The Royal Bank of Trinidad and Tobago" Central Bank of.

Sheku, A. B. (2005). "Statistical Information and the Banking Sector" For Presentation at the

Fourth meeting of the Committee on Development Information(CODI-IV)-Sub-Committee on Statistics, Plenary Session 1:Information in Key Economics Sector, United Nations Conference Centre.

Tesfaye, Boru Lelissa. (2001).The Determinants of Ethiopian Commercial Banks Performance. P.O.BOX 1212

Tarawneh, M. (2004). A Comparison of Financial Performance in the Banking Sector: Some Evidence from Omani Commercial Banks. International Research Journals of Finance and Economics, Euro Journals Publishing.

Thorn, R. G., & S., R. (1959).Variable Reserve Requirements against Commercial Bank Deposits . Staff Papers International Monetary Fund, Vol 7, No. 1 , pp. 9-45.

Thyagarajan, M. (1975). Expansion of Commercial Banking. Economic and Political Weekly , 10, No. 47, , PP 1819-1824.

Wubitu Elias (2012),” Factors Determining Commercial Bank Deposit: An Empirical Study on Commercial Bank of Ethiopia” Degree of Master’s Thesis Addis Ababa University.

Zerayehu, Sime and etl. (2001). Competition in Ethiopian Banking Industry.

Websites and others

- *Commercial Bank OF Ethiopia: www.combanketh.et*
- *Central Statistical Agency of Ethiopia: www.csa.gov.et*
- *International Monetary Fund, International Financial Statistics and data files. http://www.indexmundi.com/ghana/stock_of_broad_money.html.*
- *National Bank of Ethiopia: www.nbe.gov.et*
- *The World Bank: Key Development Data and Statistics: <http://www.worldbank.org>*
- *United Nations Statistics Division: <http://unstats.un.org/unsd/default.htm>,*
- *www.deepethiopian.com.(2014).<http://www.deepethiopian.com/2012/04/ethiopian-commercial-bank-that-was.html>.*

Appendices

Appendices 1: Data set from 1998 to 2014

Year	TBD GR	ADIR	NB	IR	GDP	IFRGR	D V 1	TD	TFR
1998	0.068	0.060	169	0.009	-0.035	0.030	0	10900	82.060
1999	0.078	0.060	169	0.079	0.052	0.121	0	11750	92.020
2000	0.336	0.060	170	0.007	0.061	0.700	0	15700	156.400
2001	.113	.030	171	-0.082	0.083	0.279	0	17471	200.100
2002	0.085	0.030	171	0.017	0.015	0.224	0	18950	245.010
2003	0.124	0.030	172	0.178	-0.022	0.243	0	21307	304.520
2004	0.078	0.030	172	0.033	0.136	0.232	0	22973	375.200
2005	0.126	0.030	174	0.129	0.118	0.499	0	25870	562.500
2006	0.108	0.030	184	0.123	0.108	0.470	0	28663	826.610
2007	0.173	0.040	194	0.172	0.115	0.476	0	33629	1220.010
2008	0.119	0.040	208	0.444	0.108	0.114	0	37634	1359.200
2009	0.191	0.040	209	0.085	0.088	0.359	0	44815	1847.300
2010	0.252	0.051	209	0.081	0.126	0.021	0	56096	1886.300
2011	0.542	0.051	417	0.332	0.112	0.032	1	86498	1945.900
2012	0.413	0.051	547	0.228	0.086	0.280	0	122185	2491.300
2013	0.264	0.051	695	0.081	0.105	0.281	0	154438	3191.400
2014	0.252	0.051	856	0.081	0.103	0.111	0	193320	3544.880

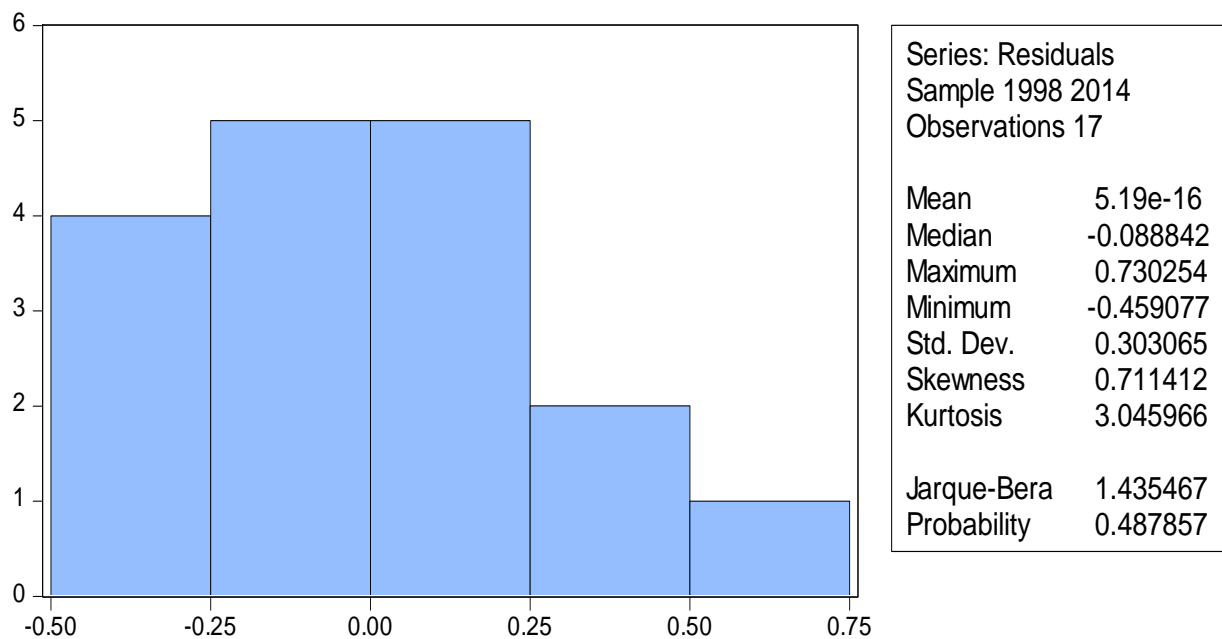
Source: NBE,CBE and World Bank

Appendices 2: the descriptive statistics

Variables	TDGR	IR	GDP	ADR	IFR	NBGR
Mean	0.1953	0.1174	0.0799	.0433	0.2630	5.4865
Minimum	0.0608	-0.082	-0.0350	.0300	0.0211	5.1298
Maximum	0.5419	0.4440	0.1360	.0600	0.6996	6.7522
Std. Dev	0.1334	0.1272	0.0504	.0118	0.1902	0.5491
Skewness	1.2566	1.0628	-1.2030	.0852	0.06237	1.3812
Kurtosis	3.7870	3.9711	3.2926	1.486	2.7403	3.2674
Jarque-Bera	4.9128	3.8686	4.1613	1.643	1.1500	5.4561
Probability	0.0857	0.1445	0.1246	0.439	0.5626	0.0653
Observation	17	17	17	17	17	17

Source: EViews7 output for normality test

Appendices 3: Test for non-normality test



Source: EViews7 output for normality test

Appendices 4 :Test for Autocorrelation

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.411047	Prob. F(2,8)	0.6762
Obs*R-squared	1.584158	Prob. Chi-Square(2)	0.4529
Test Equation:			
Dependent Variable: RESID			
Method: Least Squares			
Date: 05/17/15 Time: 14:34			
Sample: 1998 2014			
Included observations: 17			
Pre sample missing value lagged residuals set to zero.			
Variable	Coefficient	Std. Error	Prob.
C	1.368383	2.722328	0.6288
LNADIR	0.292398	0.528233	0.5950
GDP	-0.045631	2.496471	0.9859
IR	0.373373	1.037788	0.7283
LNNB	-0.106764	0.289069	0.7215
IFRGR	0.473638	0.807105	0.5735
DV1	-0.444661	0.698174	0.5420
RESID(-1)	0.586855	0.659781	0.3997
RESID(-2)	0.128892	0.442657	0.7783
R-squared	0.093186	Mean dependent var	3.30E-16
Adjusted R-squared	-0.813628	S.D. dependent var	0.303065
S.E. of regression	0.408140	Akaike info criterion	1.350641
Sum squared resid	1.332629	Schwarz criterion	1.791754
Log likelihood	-2.480446	Hannan-Quinn criter.	1.394488
F-statistic	0.102762	Durbin-Watson stat	1.806409
Prob(F-statistic)	0.997906		

Source: EViews7 output for normality test

Appendices 5: Heteroskedasticity test output

Heteroskedasticity Test:

Breusch-Pagan-Godfrey

F-statistic	1.379670	Prob. F(6,10)	0.3108
Obs*R-squared	7.699212	Prob. Chi-Square(6)	0.2610
Scaled explained SS	2.725316	Prob. Chi-Square(6)	0.8424

Test Equation:

Dependent Variable: RESID²

Method: Least Squares

Date: 05/17/15 Time: 14:37

Sample: 1998 2014

Included observations: 17

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.311842	0.614278	2.135583	0.0585
LNADIR	0.190090	0.121611	1.563105	0.1491
GDP	0.949411	0.675809	1.404851	0.1904
IR	-0.126177	0.269752	-0.467753	0.6500
LNNB	-0.105615	0.066208	-1.595193	0.1418
IFRGR	-0.356135	0.177272	-2.008969	0.0723
DV1	-0.163083	0.143257	-1.138394	0.2815
R-squared	0.452895	Mean dependent var	0.086445	
Adjusted R-squared	0.124632	S.D. dependent var	0.127455	
S.E. of regression	0.119248	Akaike info criterion	-1.122322	
Sum squared resid	0.142201	Schwarz criterion	-0.779234	
Log likelihood	16.53974	Hannan-Quinn criter.	-1.088218	
F-statistic	1.379670	Durbin-Watson stat	2.133960	
Prob(F-statistic)	0.310831			

Source: EViews7 output for normality test

Appendices 6: Correlations matrixes

variables	LTDGR	IR	GDP	LADIR	DV1	IFRGR	LNB
LTDGR	1.00000	0.33667	0.38462	0.456	0.49875	0.09231	0.659949
IR	0.33667	1.00000	0.25444	0.065	0.43437	-0.22148	0.241164
GDP	0.38462	0.25444	1.00000	-0.091	0.16365	0.14753	0.299659
LADIR	0.45640	0.06514	-0.09176	1.000	0.18776	-0.26575	0.409738
DV1	0.49875	0.43437	0.16365	0.187	1.00000	-0.31354	0.256443
IFRGR	0.09231	-0.22148	0.14753	-0.265	-0.31354	1.00000	-0.249666
LNB	0.65994	0.24116	0.29965	0.409	0.25644	-0.24966	1.000000

Source: EViews7 output for normality test

Appendices 7: Régressions result

Dependent Variable: LNTBDGR(Total bank deposit)

Method: Least Squares

Date: 05/09/15 Time: 08:36

Sample: 1998 2014

Included observations: 17

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.311341	1.974738	-1.676851	0.1245
LNADIR	0.671495	0.390946	1.717617	0.1166
GDP	1.466912	2.172543	0.675205	0.5149
IR	0.463257	0.867178	0.534212	0.6049
LNNB	0.551303	0.212841	2.590204	0.0269
IFRGR	1.378573	0.569883	2.419046	0.0361
DV1	1.006113	0.460533	2.184671	0.0538
R-squared	0.766209	Mean dependent var		-1.825670
Adjusted R-squared	0.625935	S.D. dependent var		0.626790
S.E. of regression	0.383350	Akaike info criterion		1.213164
Sum squared resid	1.469572	Schwarz criterion		1.556252
Log likelihood	-3.311896	Hannan-Quinn criter.		1.247268
F-statistic	5.462220	Durbin-Watson stat		1.624255
Prob(F-statistic)	0.009525			

Source: EViews7 output for normality test

Appendence 8: Wald Test

Equation: EQFINAL

Test Statistic	Value	df	Probability
F-statistic	59.76328	(7, 10)	0.0000
Chi-square	418.3430	7	0.0000

Restrictions are linear in coefficients.

Null Hypothesis: $C(1)=0, C(2)=0, C(3)=0, C(4)=0, C(5)=0, C(6)=0, C(7)=0$

Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
C(1)	-3.311341	1.974738
C(2)	0.671495	0.390946
C(3)	1.466912	2.172543
C(4)	0.463257	0.867178
C(5)	0.551303	0.212841
C(6)	1.378573	0.569883
C(7)	1.006113	0.460533

Restrictions are linear in coefficients

Source: EViews7 output for normality test

Appendence 9: Questionnaire

Addis Ababa University
College of Business and Economics
Department of Accounting and Finance
(Graduate Program)

Questionnaire on Determinants of Commercial Bank Deposits: A case of Commercial Bank of
Ethiopia

Dear Respondents,

This study is conducted in partial fulfillment of the requirements for the master's of science in accounting and finance at Addis Ababa University. Its main objective is to identify the factors affecting commercial bank deposit and to evaluate the relationship between total deposit and the identified factors. The research is going to be carried out on your responses and other relevant data that could support it.

The purpose of this questionnaire is to obtain your perceptions and views regarding various aspects of commercial banking business. It forms a major part of the research and the information you will give enable me to critically analyze why the determining factors of bank deposit. Your cooperation to respond is very important to this study because it represents thousands of others who are not included in the sample.

Please answer every question. The questionnaire seeks basic factual information and you can tick the option that you choose or write your answer on the blank space provided. Space is provided at the end of the questionnaire for you to add further comments or explanations. I would promise that all information you provide would be strictly confidential.

I thank you very much in advance for your cooperation.

Researcher's Name: Shemsu Bargicho Adem

E-mail: Shebaadem@gmail.com

Telephone: +251 911 107872

Questionnaire

I. Personale Information

1. Age

Below 25 years 26-35 years
36-45 years 46 and above

2. Sex

Female Male

3. Educational level

Diploma Bachelor degree Master's degree PhD Others

If others please specify _____

4. Are you employee of Commercial Bank of Ethiopia?

Yes No

5. Your work experience in commercial bank of Ethiopia

Below five years 6-15 years
16-25 years 26 and above years

6. What is your current job title in Commercial Bank of Ethiopia?

Branch Manager Customer Service Manager Senior Customer service officer

Planning Officer Customer relation officer Customer service officer others

If others please specify _____

II. General Information

1. When you think of Commercial Bank of Ethiopia, deposit comes first in your mind why? _____

2. Do you agree deposit is a matter of survival for commercial banks in Ethiopia?

Yes No

3. Do you have any information about commercial bank of Ethiopia deposit mobilization strategy?

Yes No

4. Is Commercial Bank of Ethiopia mobilizing enough deposits, currently?

Yes No

5. Mostly where does the commercial bank of Ethiopia collecting its deposits?

Individual customers Business organizations

Government All

6. From the information we identified that, the total deposit of Commercial Bank of Ethiopia is growing, what is the major reason?

Societies' preference for commercial bank deposit than other investment

Commercial Bank of Ethiopia have larger market share

The service given by the bank

Awareness creation

Wide branch network if others please specify _____

7. At macro level, which of the following is the major factors affects the volume of deposits in commercial bank of Ethiopia?

Economic environment of the country

The volume of business transactions of the country

The banking habit of the people All

8. Which of the following is the most determining factors of Commercial Bank of Ethiopia's total deposit?

Interest rate of commercial banks of Ethiopia

Number of branch expansion

Real domestic product/GDP growth of Ethiopia

Overall inflation rate in Ethiopia All

9. Is there volume of total deposit difference among Commercial Bank of Ethiopia branches? Yes No

10. If your answer for question number "6" yes, what are the major causes for the differences in total deposit among the commercial bank of Ethiopia branches?

Awareness of the society Awareness of the staff

Accessibility of branch office

Service Excellency All

Thank You for Your Cooperation to Fill the Questionnaire