

Determinants of Deposit Mobilization and Related Costs of Commercial Banks in Ethiopia

By

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DECLARATION

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which has been accepted for the award of any other degree or diploma of this university or other institute of higher learning, except where due acknowledgment has been made in the text.

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Statement of Certification

This is to certify that I, Giragn Garo Dadi, have carried out this research work on the topic entitled '*Determinants of Deposit Mobilization an Related costs of Commercial Banks in Ethiopia*' and that the work is original in nature and is suitable for submission for the reward of the Degree in Executive Masters in Business Administration from Addis Ababa University.

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List of acronyms and abbreviations

AIB ----------Awash International Bank S.C.
BBR---------- bank branches of commercial banks
BOA----------Bank of Abysinia S.C.
CBE----------Commercial Bank of Ethiopia
CGAP----------Consultative Group to Assist the Poorest(a group supported by GTZ)
CSA----------Central Statistics Authority
DB –----------Dashen Bank S.C.
DEP---------- Deposit value of all commercial banks
DWRD----------Deposit rate weighted against saving and fixed deposits
ETB----------Ethiopian Currency (Birr)
EXBRUSD----------Average annual rate of exchange of Birr to US Dollars
GDP---------- Gross Domestic Product
GINF---------- General Annual Inflation
GTP---------- Growth and Transformation Plan
IMF----------International Monetary Fund
MOFED----------Ministry of Finance and Economic Development
M1---------- Money Supply in terms of Narrow Money
NBE----------National Bank of Ethiopia
NIB---------- Nib International Bank S.C.
RPGDP----------Real per capital Gross Domestic Product Growth Rate
SPSS----------Statistical Program for Social Science
CAP----------Total Capital of banks
TD----------Volume of Total Deposit
UB----------United Bank S.C.
USD----------United States Dollar
VIF----------Variance Inflation Factor
WB----------Wegagan Bank S.C.
YOYPC----------Year on Year percentage change

Abstract

The objective of commercial banks in Ethiopia is to make profits and thus satisfy the needs of their respective owners. The making of profits and even staying on board of these conventional banks depend on the strategies adopted by each bank to mobilize deposits from the public that is an input to earn income for most conventional banks. In order to make good strategies, however, the banks should know what factors determine the deposit mobilization activity in the real world.

This paper then explores the theoretical as well as empirical analysis of those factors having an impact on deposit volume in banks and even assesses which ones are more significant or less significant. To do the practical investigation in terms of commercial banks in Ethiopia, the researcher collected the relevant data from annual reports of twelve years (2001/2-2012/13) and from questionnaires and interviews made to senior bank officers of seven banks. The data is analyzed through the econometric analysis using SPSS software.

The study reveals that the branch expansion, the money supply, the exchange rate of Birr to USD and general inflation are the most significant factors of deposit mobilization activity. The other variables-deposit rate and real per capita GDP growth rate have insignificant power to influence the dependent variable. In this research, as opposed to the conventional economic theory, the deposit rate is found to have negative relation against the deposit volume for the period under study. The study also exposes that the deposit mobilization activity is becoming challenging, its associated costs are escalating and the competition is also becoming stiff-the outcome of the competition favoring the big size state banks. Beyond that the government policies are also favourng the latter in an effort to mobilize huge fund for a national development activities. The research recommends that banks have to do much in branch expansion studying potential deposit areas.

Key Words: deposits mobilization, customers, banks, financial institutions

Note: The word Savings and deposits are interchangeably used in this research.

Chapter One

INTRODUCTION

1.1 Background of the study

Strong ,well developed and diversified financial systems have a positive impact on the development and economic growth of countries. The financial system in every economy is composed of the bank-based system where provision and monitoring of investments funds are made through the banks on one hand and/or the stock market on the other where investors (surplus units) enter directly through ownership of securities. Traditionally, banks play an intermediary role of mobilizing funds from savers and subsequently lending them to investors.

Mobilizing deposits is one of the essential issues in developing countries as domestic funds provide cheap and reliable source of funds for development, which is of great value to these countries, especially when the economy has difficulty raising capital from international donors, financiers and markets. Yet, in many developing countries, there is a considerable amount of savings that are not intermediated through the formal sector particularly there exist significant savings potential in the rural (and/or semi-urban) sector of many developing countries.

In a modern economy, the important activity of the commercial banks is to mobilize deposits from the public. The people with surplus income and savings find it convenient and safe to deposit the amounts with banks. Thus, deposits with the bank grow along with the interest earned. Granting of loans and advance and channeling households' savings to corporate sector is mostly possible if the banks have accumulated sufficient deposit from the available market.

Recently the government of Ethiopia has devised strategies that enable it to mobilized private funds through the state banks by way of increasing accessibility to the far remote areas, increasing operational efficiency of the existing banks, designing forms of mobilization such as through issuance of bonds and aggressive promotional campaigning. These measures are taken by the state in order to mobilize funds that would be used for huge development projects such as in Great Renaisance Dam, Condominium housing projects and sugar industries etc.

The deposit mobilization activity is the focus area for both the state and private banks in Ethiopia, there is increasingly stiff competition among the domestic banks to snatch deposits from the public. Most crucially the infant private banks have to compete with the huge Commercial Bank of Ethiopia which is holding the lion share of the total market for deposits.

This research work will thus make critical assessment of the determinant factors impacting deposit attraction activity of commercial banks in Ethiopia and analyze the costs related to the deposit mobilization activity.

1.2 Statement of the problem

The total investment required for implementation of Ethiopian Growth and Transformation Plan is estimated at ETB1.26 trillion (US$77 billion). About 54.8% of this will be funded directly from the budget, out of which 11% is expected from development partners while 45.1% will be contributed by state enterprises. Given the financing challenge, the government of Ethiopia plans to expand tax revenues and domestic savings mobilization, to reach 15% of GDP, respectively. In order to increase domestic sources of capital, the Ethiopian government is in dire need of savings from the public to effectively implement GTP plans (African Development Bank Group, Country Strategy Paper 2011-15,pp 18-24).

The state banks are the main instruments that facilitate the mobilization effort of such deposits escalating the competition among banks in attracting deposits. Hence, the state banks are currently under pressure to collect deposits on behalf of the state to finance the huge developmental activities of the country. Likewise the private Commercial Banks of Ethiopia have to compete with the state banks to get enough loanable funds to stay competitive, become profitable and generally fulfill the business objectives of their respective shareholders by increasing their deposit base.

Thus the banking sector in Ethiopia must increase their deposits by overcoming the existing challenges; hence they need to know the factors that determine deposit or financial savings. This study empirically investigates determinants of mobilizing financial savings for banks in Ethiopia and which of those factors are influential and what are the related costs of mobilizing deposits.

1.3 Objectives of the Study

The main objective of the study is to investigate the factors that determine deposit mobilization activity and identify and analyze associated costs.

The specific objectives of the study therefore achieve the following:

- To identify and analyze factors that significantly affecting deposits collection activities of commercial banks
- To identify the significant costs that are incurred by commercial banks in Ethiopia associated with mobilizing deposits.
- To analyze the trend of deposit market for public versus private banks and identify the current challenges in sourcing deposits?

1.4 Research questions

The research raises and provides answer to the following research questions regarding the topic.

- What factors are significantly affecting the deposit mobilization activities of commercial banks of Ethiopia?
- What are the costs dominantly influencing the deposit mobilization activity of commercial banks and the level of their significance?
- What does the trend of deposit market look like for public versus private banks including the current challenges in sourcing deposits?

1.5 Research Methodology

The study used both primary and secondary data sources. For primary data collection method, sample of seven oldest Commercial Banks –six of which is owned by private individuals and organizations and one is CBE that is state-owned commercial bank established mainly for making profits to their owners. Questionnaires are distributed to selected staff of branch management of each bank branch. The questionnaires are both open-ended and close-ended.

For secondary sources, twelve years of Annual Reports from 2001/2-2012/13G.C. of all commercial banks in Ethiopia are collected and the data reports issued by National Bank of Ethiopia, articles, journals, books and previous research works relevant to this topic.

1.6 Limitations of the study

The deposit mobilization activity in Ethiopia is made by the entire nineteen commercial banks and other financial institutions such as microfinance institutions. However, the study used data of only seven oldest commercial banks with respect to gathering qualitative data. This is because one can acquire long periods of data for research that can be used to analyze trends and make reasonable comparison. Further, these banks are presumed to have been able to mobilize largest volume or share of deposit. For instance, in the year 2012/3, these sampled banks held 89.7% of the total deposit volume of all commercial banks in Ethiopia (NBE annual report, 2012/3).

With respect to the quantitative method of investigation, the scope of the study is limited to twelve years of financial and macro-economic data as well due to unavailability of sufficient data.

1.7 Significance of the study

Banks play an important role in economic development through mobilization of funds from within and outside the country and channeling such funds to various needy and viable sectors of the economy.

Corollary to the above fact, the availability of deposits ensures the provision of the ever demanding loans and facilities for investment thereby enhancing profits for commercial banks.

Hence, most of the banks in Ethiopia are in dire need of these resources (deposits) to satisfy these demands more than ever and they are engaged in stiff competition to acquire these resources.

However, there are factors which have an impact on deposit mobilization and knowing these factors and their level of significance help banks to design and implement effective deposit attraction strategies. Further, the banks pay attention to the increasing costs of deposit mobilization.

1.8 Organization of the study

The study was organized into five chapters. Chapter one dealt with the Introduction of the study. Chapter two reviews literature on both theoretical and empirical studies regarding the bank deposits and the factors that determine deposit mobilization activity. It contains an assessment of researches done on savings and the variables that influence its mobilization. The methodology employed for the study involving both the quantitative and qualitative approaches for assessing the significant factors of savings mobilization is presented in Chapter three. Chapter four presents the results of analysis done and discusses findings made. Chapter five, finally, draws some summary and conclusions from the empirical findings of Chapter four and suggests recommendations for policy consideration.

Chapter Two

Literature Review

2.1 Introduction

This chapter discusses about the theoretical as well as empirical review. In this topic the researcher has reviewed related literature regarding the role of financial sector for economic development of a country and included certain explanations as to what deposits are and the types of deposits. The researcher also picked out the major factors identified by other researchers that have an impact on deposit mobilization activity and associated costs.

2.2 The Role of financial sector for Economic Development of a country: Theoretical View

Financial sector mainly constitute financial markets and financial institutions. A financial market is a market in which financial assets (securities) such as stocks and bonds can be purchased or sold. Financial markets, thus, facilitate the flow of funds and thereby allow financing and investing by households, firms and government agencies (Madura, 2011). Examples include commodity markets, money markets and capital markets. Financial institutions (intermediaries) are institutions that provide financial services for their customers. They play an important role in the economy because they provide liquidity services, promote risk sharing and also solve information problems thereby allowing small savers and borrowers to benefit from the existence of financial markets.

Financial institutions can be divided into:

1. Depository institutions (e.g. commercial banks, savings institutions, credit unions) that obtain funds mainly through deposits from the public; and,
2. Non-depository institutions (e.g. finance companies, mutual funds, securities firms, insurance companies, pension funds) that finance their investment activities from the sale of securities or insurances.

Commercial banks are the most dominant depository institution. They serve investors by offering a wide variety of deposit accounts, and they transfer deposited funds to deficit units by providing direct loans or purchasing debt securities. Commercial banks serve both the private

and public sectors, as their deposit and lending services are utilized by households, businesses, and government agencies.

In the context of African continent, financial institutions in particular the banking industry carries the greater share of the financial system (Sheku, 2005). Most of the businesses rely on banking sector as a source of financing (Medhat, 2004). It is no exception to Ethiopia where the others like insurance companies and microfinance institutions (MFI) are led by banks in terms of capital size, total assets ,employment capacity and profits(NBE Report,2011/12).

There has been a debate in the academic world as to whether the efficiency of financial sector really plays a role in economic development in the country. A great number of authors such as (Baghehot, 1873: Schumpeter, 1912: Hicks, 1969 and Miller, 1998) have concluded that finance is the strong contributor to growth. Arrests et al. (2001) use both bank and stock market to assess the finance and growth relationship using quarterly data on a sample of developing countries. They find a positive and significant association between finance and growth, with the larger impact from banking sector measures. However, for few such as Robinson (1952) suggest that growth leads to financial development and Lucas (1988) show that finance is overstressed in explaining growth.

It is being forwarded by (Llewellyn, 1995) that the capital market has become a more formidable competitor to banks in many developed countries and this is likely to develop further in an increasing number of countries. Even though in some developed countries banks are losing their predominant role as deposit-takers and lenders ,the traditional banking business of supplying funds to the economy is still of importance(Haron et al., 2006). For example, most business organizations especially in developing countries are highly dependent on bank loans as a source of capital and the ability of banks in giving loans depend much on their ability to attract deposits.

Ethiopia's rate of domestic saving has been very low even by sub-Saharan African standards. (IMF 2009a:72 and 2009b:216). From 1997 to 2010, the average saving rate in low-income countries of the region was about 9 per cent, while it was about 19 per cent for middle – income countries. In the same period, the average saving rate of "fragile" sub-Saharan African

states was 11.5 per cent, still significantly higher than Ethiopia's rate of 4 per cent (IMF 2009a:72 and 2009b:216). According to the International Monetary Fund (IMF 2009b), savings as a percentage of GDP was 34 per cent for 1987-97, 32 per cent for 1995-2008 and both are higher than 29 per cent in 2009-10.

The fact that Ethiopia is low income country has been the reason for reliance on foreign debt and aids from international community. In view of the severe development deficits in the country, in general, the rate of investment in Ethiopia has remained very low.

Recently, the government has recognized the importance of mobilizing domestic savings for the huge investments like Renaissance Dam that is thought to pursue development efforts. The measures taken to mobilize deposits by the state include issuance of the new type of financial instrument i.e. bonds to the public and also by taking strategic moves in revitalizing the efficiency and increasing the outreach of the state banks. However; the implementation of public sector-led growth policy (of Ethiopia) requires large public sector borrowing and domestic resource mobilization and at the current negative real interest rates, mobilizing additional resources through the financial sector to facilitate GTP financing will be difficult to achieve (IMF Country Report, 2012).

2.3 Commercial Bank Deposit Forms and costs of deposits

According to Keynes's Liquidity Preference Theory of demand for money, there are three main motives as to why people save or deposit their money i.e. transactional, precautionary and speculative motives.

1. Transactional 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.
2. Precautionary motive for holding money refers to the desire of people to hold cash balances for unforeseen contingencies.
3. Keynes took the view that money is a store of wealth and called this reason for holding money the speculative motive. The speculative motive relates to the desire to hold one's resources in liquid form in order to take advantage of market movements regarding the future changes in the rate of interest (Mishkin, 2004)

In order to cater for the above three motives of depositors -transactional, precautionary and speculative needs, commercial banks offer three categories of deposit facilities that are demand, savings and time deposits respectively.

The three types of deposits, namely saving, demand deposit and term or fixed time deposits accounts services, are provided by all the commercial banks in Ethiopia. Although the forms of the three deposits and how they are being opened and used differ, they are all installed to mobilize deposits to the banks. The definitions of the three deposit typos are mentioned as follows.

- **Saving accounts**: These accounts are opened by many people who need to save their wealth usually beyond current consumption and in anticipation of future investment such as building own house, buy car and to self sponsor education etc. In doing so the account holder earns interest on the saving balance. Saving accounts are the most favored deposit account for commercial banks as they are cheap and are usually stable in nature. They are the services with which banks reach out the broad mass of people.
- **Demand or current accounts**: These deposits are generally used by business persons to settle debts usually through use of cheques. They are most often ready for payment upon demand anytime and usually no interest are paid on these accounts.
- **Time or Term Deposits:** These deposits are kept by the bank for specified period of time per the agreement between the bank and depositor. Higher interest rate are paid by the banks for such kinds of deposits depending upon the amount of deposits and the length of period for keeping the deposits provided there is no breach of the agreement.

According to the Interest Rate Directive No.NBE/11/2010 issued on December 1, 2010, banks are allowed to freely determine the interest rate on demand deposits but for saving and time deposits it set the minimum interest rate to be used by banks as 5% per annum. For the later types each bank can have the option of paying interest rate beyond the required minimum if it wants to. Practically, however, most banks pay the minimum 5 per cent per annum on saving accounts and set no interest for current accounts.

The majority of microfinance institutions interviewed perceived deposits as the cheapest form of funding available, as well as stable, plentiful, and a valuable service to clients (CGAP Brief, August 2007).

Research works on costs of deposit mobilization by banks are not sufficiently available to refer and explore the case at hand. However; the Consultative Group to Assist the Poorest (CGAP) of the microfinance institutions on its December 2010 has reviewed and published a report on the true cost of deposit mobilization revealing that a significant contributor to total deposit cost was financial cost, or the interest paid to depositors. Other costs included in the survey are administrative costs such as account opening related one, account service costs, handling costs of cash transaction and account sustaining costs that are indirect costs related to audit or risk management issues. However, the study do not say about the office rent, promotional and advertising costs usually incurred for attracting deposits at the time that there deposit shortages in banks.

2.4 The necessity of Deposits for Banks

Banks get their funds from two sources .i.e. from capital contribution and from debt/deposit liabilities. Depositors' money is the core funding source for many commercial banks. Kelvin (2001) said that deposits of commercial banks account for about 75% of commercial bank liabilities. The banks are using the deposits so collected with costs to channel them to those demanding loans at a profit margin. In the process of being used as intermediaries between depositors and loanees, the banks are facing risks of default in doing so. Deposits are crucial for commercial bank's profitability and sustainability.

Through financial intermediation, deposit is far more convenient and efficient for a bank, which has ongoing relations with thousands of depositors, to raise the funds from them, and then lend the money to the company (Brealey, 2007). Funds acquired from deposit sources are cheaper than those from capital sources.

In a study made by Harvey and Spong (2001) on bank funding sources and their effects on community banks in the Tenth District of Kansas City, it is learnt the deposit is shifting away from community banks and maintaining and attracting retail deposits would be a significant problem.

A bank's success in finding depositors consequently plays a critical role in its ability to satisfy customer credit demands and perform other banking functions. Moreover, much of a bank's profitability is derived from gathering deposits at one set of interest rates and then lending or investing these funds at higher rates. These key roles that deposits play in overall bank performance have thus drawn much attention to bank funding practices and the ability of individual banks to maintain or expand their deposit base.

2.5 Determinants of Deposits and related costs-An Empirical Review

The process of financial liberalization has intensified competition among financial institutions, thus forcing commercial banks to compete for deposits in various forms (Sudin et al, 2006).This is because deposits are the major raw materials for provision of loans on which banks make the intended profits to the owners. Besides, the deposit volume of commercial banks in Ethiopia totals Br.136.3 billion which constitutes about 75.5 % of total assets of the banks for the year ended 2010/11. This indicates the significance of deposits liabilities to the Ethiopian banks and factors that affect deposit mobilization have a huge impact on the performance of commercial banks.

Therefore, banks should make an all out effort to mobilize deposits. However, as N. Desinga (1975) indicates deposit mobilization is a very difficult task.

Though deposits have great significance to the banks in developing world, few have been studied as the factors that have an impact on it. Study made by Kose et al (1999) indicates that developing economies are characterized by unstable macroeconomic environments such as inflation, inappropriate fiscal and monetary policies, interest rate controls. The net effect is the change in liquidity which affects savings and capital formation. Where the macroeconomic environment is favourable to savings then the commercial banks are in a better position to increase savings. On the contrary, where macroeconomic policies erode liquidity from the hands of the people then deposits reduce and may negatively impact on capital growth and investment in the country.

In order to increase the quantity of deposits in the banking industry (Schmidt et al, 1999) recommends the dissemination of a banking habit. From the works of Finger et al, 2009 it is

found out that there are macro-level and micro-level factors that have significant influence on deposits. Domestic factor such as economic activity, prices, and the interest differential between the Lebanese pound and the U.S. Dollar are found to have significant impact in explaining deposit demand at macro level. 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 deposit (Finger et al., 2009).

Based on the research (Venkatesan,2012) made on the overall deposit mobilization performances of all the scheduled commercial banks of India during the period 1985-98 and concluded that the GDP and Branch expansion were among the significant factors of time deposits mobilization during the period under consideration.

Another study Siyanbola et al. (2012) found that there is a positive relationship between the interest rate (the dependent) has a major influence on deposit mobilization (the independent).

In Caribbean and Sub-Saharan African public banks tend to have a much larger share of demand deposits than private and foreign banks (Alejadro et al, 2004). Ethiopian commercial banks have 33.3% of their branches located in the capital city.46.7% of the total branches of private commercial banks in Ethiopia are located in Addis Ababa whereas the per cent is 21.2 % for public banks (NBE Annual Report 2011/12). Increasing accessibility to rural areas is thought to be the solutions for attracting stable deposits for private banks.

From the findings of the research work (Wubitu, 2012) on Factors determining commercial bank deposit on Commercial Bank of Ethiopia, it is learnt that branch expansion, inflation rate and deposit rate have significant effects on the total deposits of Commercial Bank of Ethiopia for the years under review covering 12 years from 2000GC to 2011GC. Whether these factors identified for the state bank i.e. Commercial Bank of Ethiopia are the only factors for the private banks here in Ethiopia is the aim to be found out in this work.

In general, various research works are reviewed and the following factors are identified to influence deposit mobilization activity of commercial banks in general and private banks in particular. For ease of understanding they are classified in to two-bank specific factors and non-bank specific factors.

2.5.1 Bank Specific Factors for Deposit Mobilization

Deposit Rate or Interest rate on deposits

Banks usually pay interest on money collected from depositors. Particularly, saving deposits commonly earn interest for savors at a rate determined by individual banks whereas it must be above the minimum per the directive issued by the regulatory body of the country. Savings or deposit, according to classical economists, is a function of the rate of interest. The higher the rate of interest, the more money will be saved, since at higher interest rates people will be more willing to forgo present consumption.

The study by Siyanbola et al, 2012 on Effect of Interest Rate Deregulation on Bank Deposit Mobilization in Nigeria found that there is a positive relationship between the deposit interest rate and the volume of deposits and that interest rate has a major influence on deposit mobilization. The study recommends that Nigerian Banks should increase the interest rate on savings so as to encourage people to save more and to spread their investment rather than to keep money under their pillows.

Low interest rates on savings forced depositors to take their money out of banks and seek out higher-yielding investments. At the same time, attempts to get around deposit rate ceilings and reserve requirements led to the financial innovation of money market mutual funds, which put the banks at an even further disadvantage because depositors could now obtain checking account–like services while earning high interest on their money market mutual fund accounts (Mishkin, 2004)

Liquidity of the Bank

Liquidity can be defined as the ability of a financial institution to meet all legitimate demands for funds (Yeager and Seitz 1989). It is also defined as the ability of bank to fund increases in assets and meet obligations as they come due, without incurring unacceptable losses (Bank for International Settlement 2008).It follows that depositors has to make sure that they get their money back when they have demand for it.

Therefore; bankers are always sensitive to the issue of liquidity and liquidity risk and the central bank is also there to monitor that banks are liquid enough to meet their respective obligations when the public demands. The more liquid the banks are, the better they attract deposits.

Higher liquidity buffers tend to signal greater bank soundness, which could be a factor favoring deposit demand (Herald and Hesse, 2009).

Service provision and convenience of bank's office

As banks are service providers- the bank that has the best service quality to its customers attract many more depositors. As Mols defined service quality is a measure of how well the service level delivered matches customer expectations (Mols et al. 1997). Understanding the inspirations, expectations and requirements of both provide a foundation in how to provide best services to the customers. It may even provide information on making improvements in the nature of business (Haque et al, 2009).

Service quality for a bank could be efficiency and speed, friendliness of bank personnel, value adding technology of the bank to the customer, proximity and convenience of the bank to customer and extra services provided for minimal costs.

Competition among the banks and transaction costs

Prior to 1994, the Ethiopian financial sector was owned, controlled and monopolized by the state mainly meant for fulfilling the objective of the state. There was minimal or insignificant competition among the three state-owned banks i.e. Commercial Bank of Ethiopia, Construction and Business Bank and Development Bank of Ethiopia as the purposes of their establishment were somewhat different. However, consequent to the issuance of a proclamation (No. 84/94) (currently proclamation no. 592 /2008) that allowed for introduction of privately owned domestic banks, the number of privately owned banks flourished and stood at 16 as at June 30, 2014.

The addition of private banks to the banking sector of Ethiopia coupled with their presence to serve most dominantly the retail commercial banking function and the bank branches are concentrated in major cities and towns, it is clearly noticeable that commercial banks in Ethiopia are nowadays operating under stiffer competition to each other than before for resource mobilization. The huge technological investments they are making on core banking softwares supplied from internationally known vendors, on purchases of Automatic Teller Machines and the rapid branch expansion by many commercial banks in the country to capture customers are few of the evidences.

In an effort to fulfill the government's development agenda, the biggest and strongest bank of Ethiopia- CBE is making aggressive promotional campaign to attract customers aiming deposits and foreign currency resources. The campaign comprises coupon prizes for depositors, providing a condominium housing loans through periodic savings and increasing accessibility to customers.

In addition to the promotional costs that are ever increasing by each of the banks in Ethiopia to catch the eyes and ears of public, costs associated with renting branch offices for expansion are also skyrocketing. Salary expenses are also increasing to acquire bank professionals with only little experience. Different banks are reducing commission charges associated with administering deposit accounts from time to time and they are providing favorable interest rates to customers with stable and huge deposits.

Bank profitability, size, and security and number of bank branches

Herald and Heiko (2009) state that higher bank profits would tend to signal increased bank soundness, which could make it easier for these banks to attract deposits. Erna and Ekki (2004) find that there is a long run relationship between commercial banks deposits and the profitability of the banks. One of the reason as to why people deposit in banks is to ensure a feeling of security of their money. Larger banks in terms of total assets or capital attract better deposit amounts than smaller ones in absolute terms (Herald and Heiko, 2009). This is largely because of the bigger banks have many branches, huge capital and or assets and provide a better sense of security to savers apart from their low transaction costs due to economies of scale.

According to the study made by CGAP, 2010, Financial Access 2010, Ethiopia has low geographic and demographic penetration of bank branches in the sub-Saharan Africa. The population is hugely unbanked and there is only 1.39 branches open for every 100,000 adults whereas 5.11, 4.38 and 2.25 for Ghana, Kenya and Uganda respectively. Most banks are head quartered in Addis Ababa and their branches too are concentrated in the capital (Muluneh, 2012).

Degree of Financial Intermediation (Proxied by the loans-to-asset ratio)

Rodrik and Subramanian (2008) argue that an improvement in financial intermediation, which raises domestic saving and enhances access of firms to domestic finance in an investment-

constrained economy. A higher degree of intermediation 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.

2.5.2 Non-Bank Specific Factors for Deposit Mobilization

Non-bank specific factors are defined for this research as factors that have an impact on deposit mobilization that are beyond the control of the banks themselves.

Cardenas and Ecsobar (1998) studied the savings behaviour in Colombia and found that higher government expenditure led to the decreasing national savings and saving and investment were perfectly correlated and savings caused growth. This study also indicated that higher taxation; urbanization and age dependency had negative effect on savings. Loayza and Shankar (2000) used co-integration approach in measuring the relationship between savings in India and factors such as real interest rate, per capita income, the dependency ratio, financial development, the government saving rate, and the share of agriculture in gross domestic product (GDP). They found that real interest rate, per capita income and the share of agriculture in GDP had a positive relationship with savings, whereas, inverse relationship were found for variables such as financial development, inflation and dependency ratio.

Another study which used India as a case study was conducted by Athukorala and Sen (2003) and they found that with the exception of the changes in the external trade, factors such as rate of growth, real interest rate on bank deposits, spread of banking facilities and inflation had significant positive relationship with savings. Kiiza and Pederson (2001) presented evidence to show that factors such as the availability of information, the accessibility of the saving facilities, level of education of the head of the household and the density of financial institution could influence customers to start savings with the financial institution in Uganda.

Loayza et al. (2000a) examined the effects of policy and non-policy variables on savings and reported several interesting findings: (1) private saving rates are highly serially correlated, (2) positive saving rates with the level and growth rate of real per capita income and the influence of income is larger in developing than in developed countries, (3) life cycle hypothesis is supported by the negative relationship between dependency ratio and saving rate, (4) inflation was found to have a positive impact on saving thus supporting the precautionary motive for

saving, (5) fiscal policy is a moderately effective tool to raise national saving, and (6) financial liberalization is detrimental to private saving rates because greater credit availability reduces saving rate and similarly larger financial debt and higher real interest rate do not increase saving.

From the above, we can see that macroeconomic policy of a country, inflation, per-capita income, economic growth (as measured by GDP) are among the many other factors influencing deposit mobilization.

2.6 Empirical Review

From among the articles written on the subject, the researcher has selected the study made by Wubitu(2012) on the title 'Factors Determining Commercial Bank Deposit: An Empirical Study on Commercial Bank of Ethiopia' .

The article used data from Commercial Bank of Ethiopia in doing the research through mixed methodologies of the investigation. The data of total deposit of CBE for 12 years regressed against three independent variables namely deposit rate, number of branches and inflation rates.

- Deposit rate (DR) had positive insignificant effect on the commercial bank deposits.
- Inflation rate (INFRATE) had positive insignificant effect on the commercial banks deposit.
- The branches of commercial bank (LNBR) had positive coefficient estimates and significant at 5% significant level, therefore branch expansion has positive significant effect on commercial banks deposit.

The R2 and the Adjusted R2 values are 84% and 70% respectively, that shows 84% of the variation of the dependent variable is explained by the variation of the independent variable. Given the summary result of descriptive and empirical analysis, the study had concluded the following to commercial banks by taking CBE as evidence of the study. The major ones are adopted here:

- The main source of capital for commercial banks is deposit and saving deposit is the most used kind of deposit in banks

- Deposit rate improvement, service excellence, good will of the bank, branch expansion, promotional effort, awareness creation and coupon prize can be an opportunities for deposit attraction and mobilize more deposits.

However, this study needs to explore more by fairly taking more samples from both the state and private banks i.e. seven banks as samples for the study including CBE, AIB, DB, NIB, BOA, WB and UB. The questionnaires distributed and responded are about double of what is previously taken. Further; more than three independent variables are also included beyond what was used by Wubitu(2012) in the quantitative part. The researcher also needs further focus on the costs of deposit mobilization and its impact on commercial banks of Ethiopia.
The main objective of the research is to fill these gaps and their impacts on the results of the study and to add more about the current situation of the subject.

Another study by Sudin et al. (2006) on 'Deposit Determinants of Commercial Banks in Malaysia' investigates the structural determinants of deposits level of commercial banks in Malaysia, using co-integration techniques. This study classified the variables for saving mobilization into two, namely financial and economic variables. Financial variables consist of interest rates on savings account (RSCV) and fixed deposit accounts (ARFDCV), rates of profit for Islamic savings account (RSIS), and Islamic investment accounts (ARIIS) (fixed deposit accounts are normally known as investment account at Islamic banks). Whereas, based lending rate (BLR), composite index of Malaysian Bourse (KLCI), consumer price index (CPI), money supply (M3), and gross domestic product (GDP) are economic variables.

The data for this study are taken from the monthly statistical bulletin of Bank Negara Malaysia (www.bnm.gov.my). The study used 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 employed recent advances in time series econometrics. These techniques are cointegration and error correction framework, which are conducted within the vector autoregression (VAR) framework.

The results of the study suggested 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. It is also found out that in most cases, customers of conventional system behave in conformity with the savings behavior theories.

2.7 The conceptual framework of the study

The research is going to reveal that there are independent factors impacting on the total deposit value of the commercial banks in Ethiopia (the dependent variable). The factors are drawn from the environmental players such as the actions and policies drawn by the government regarding the general macro-economic situations of the country. Specifically, it is related with monetary policies and inflation control mechanisms, the performance of the economy as a whole in the country as reflected on GDP, inflation and exchange rate and the society and its awareness on deposits at large. There are also banks' own policy factors and their strategies and capacities on issues like branch expansion, excellence in service, bank size, deposit rate and security having an impact on deposit collection.

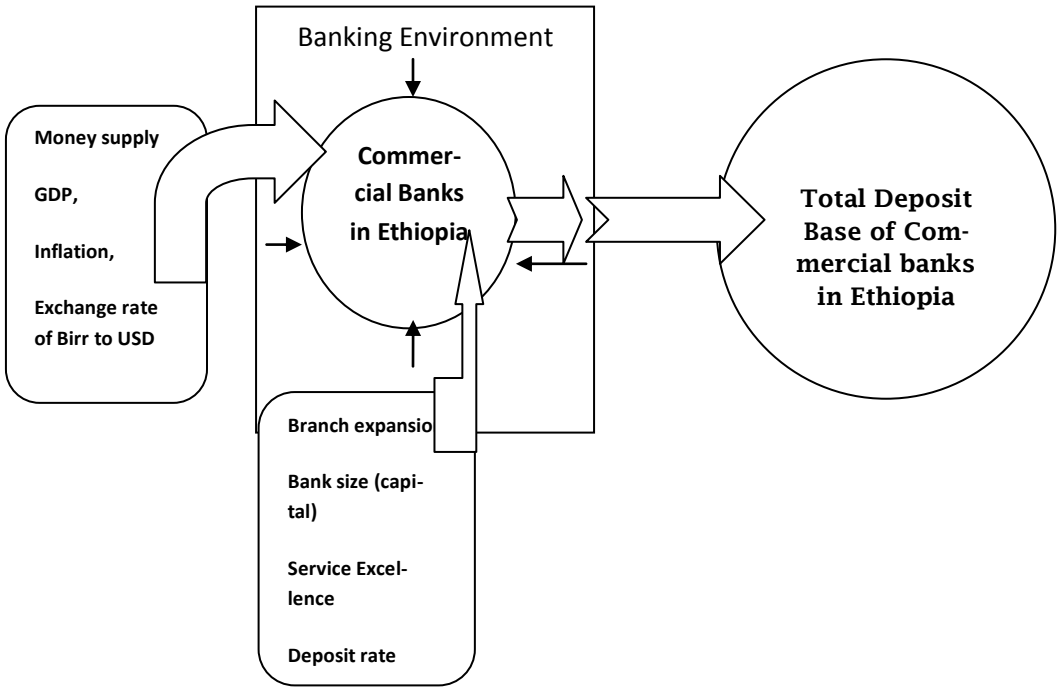


Fig. 1 Conceptual framework of the study

Source: Developed by the researcher

Chapter Three

Research Methodology

The main objective of the study as pointed out in chapter one is to identify the factors that determine deposit mobilization activity and identify and analyze associated costs. In order to fulfill this objective and thus answer the research questions, the researcher utilized a mixed method (quantitative and qualitative) of investigation.

3.1 Data Types

3.1.1 Quantitative Data

The researcher used annual reports of all commercial banks of Ethiopia as the secondary data sources, data from the regulatory body of banks in Ethiopia-National Bank of Ethiopia (NBE) and from Central Statistical Authority (CSA). Data of thirteen years was gathered including the year from 2001/2 to 2012/3(both inclusive) of the commercial banks and used here for the study. The data includes the following:

a) Year-end total volume of deposits in all commercial banks in Ethiopia,
b) Average annual year on year general inflation rates,
c) Average annual exchange rate of Ethiopian Birr to USD,
d) Real per capita GDP growth rate,
e) Weighted annual deposit rate (saving and time deposit volume and their deposit rates are taken in to account)
f) Money supply(Narrow money)
g) Year-end total number of branches of all banks

Then the above data is computed to find the percentage change of the values of the variables year on year basis from 2001/2 to 2012/3.The average annual year on year general inflation and the real per capita GDP growth rates are excluded from this computation as they initially have a nature year on year change data.

The narrow money is taken as a factor and it indicates the money in circulation and demand deposit balances each year of the country as a whole.

3.1.2 Qualitative Data

Questionnaires allocated to the bankers will tell the bankers' view of the existing reality about the current deposit collection activity of banks and also show us list of significant factors that attract deposit customers to banks or not at all.

3.2 Data Sources

The researcher used the annual reports of the banks, the reports from the regulatory body of banks in Ethiopia i.e. the National Bank of Ethiopia (NBE), the reports of the Central Statistical Authority and from Ministry of Finance and Economic Development were obtained as secondary data sources and used in quantitative analysis. The responses from the questionnaires and interview questions were also included as primary data source used for qualitative aspects.

3.3 Data Collection Instruments

Twelve years of annual data were collected to explore the significance of the quantitative factors through time series analysis.

The questionnaires were also distributed to senior bankers to know what factors determine the deposit mobilization activity, the significance of the factors and related costs as primary data sources. Further, interviews were made to senior branch managers of banks to understand the reality in depth.

3.4 Population and sampling strategy

Population of the study

The study population/participants were all commercial banks in Ethiopia including private as well as public that exist in the fiscal year 2012/13. According to NBE (2012/13), there are eighteen commercial banks(excluding the specialized Development bank of Ethiopia) in the year 2012/13 such as Commercial Bank of Ethiopia (CBE), Construction and Business Bank (CBB), Dashen Bank S.C (DB), Awash International Bank S.C (AIB), Wegagen Bank S.C (WB), United Bank S.C (UB), Nib International Bank S.C (NIB), Bank of Abyssinia S.C (BOA), Lion International Bank S.C (LIB), Cooperative Bank of Oromia S.C (CBO), Berhan International Bank S.C (BIB), Buna International Bank S.C (BUIB), Oromia International Bank S.C (OIB), Zemen Bank S.C (ZB), Enat Bank S.C(EB),Addis International Bank and

ebub Global Bank S.C.. The first two are publicly owned and the remaining twelve are privately owned commercial banks.

Sampling frame

The frame for drawing sample included those commercial banks having at least twelve years working experience in Ethiopia (i.e. from 2001/2 to 2012/13). The researcher selected six private banks and one state bank as a sample to distribute the questionnaires and make interview questions The banks included in the survey are Commercial Bank of Ethiopia, Awash International Bank, Dashen Bank, Bank of Abyssinia, Nib International Bank, Wegagan Bank and United Bank.. The banks are selected based on the purposive sampling methodology taking the criterion of seniority of establishment from among the existing population. Therefore, the matrix for the frame is 12*7 that includes 84 observations.

Sample

Seven banks are selected to circularize the questionnaires and interview questions. The samples are made as it is not feasible to cover all banks cost wise or convenience to the researcher.

With respect to the quantitative data collection and analysis, the researcher has collected data for all total banks and the population as a whole that existed within the years covered by this study. Simply, the researcher did not take sample from the frame and rather used the data of the population as a whole. Therefore, the sampling frame and the sample was the same. According to Brooks (2008, p 105), while there is no definitive answer for an appropriate sample size for model specification, it should be noted that most testing procedures in econometrics rely on asymptotic theory. This theory says that as the sample size approaches to the population, the results from the sample estimates are more appropriate for generalizing to the general population. Thus in this case the sample size is equal to the population which could enable the researcher to make appropriate generalization to the overall population.

The researcher distributed 84 questionnaires to the bank staffs distributing 12 questionnaires to one branch of each of the banks stated. The branches were selected based on convenient sampling methods based on proximity and personal convenience to the researcher.

3.5 Validity and Reliability of the Data

The validity is concerned with the accuracy or truthfulness of the data. That is, the validity refers to the extent to which the data obtained is accurate for the purpose. The researcher exercised validity by soliciting published annual reports of National Bank of Ethiopia and from each of the banks for the years under review. This has helped the researcher to get relevant information for the purpose of the study.

Reliability of data is related to its consistency and it refers to the extent to which the data is the same irrespective of their source. That is, the data for the study is specifically taken from the annual reports of the banks and were found in agreement with some of the data found on publications of National Bank of Ethiopia and therefore were reliable.

3.6 Determinants of Deposit Mobilization and Variables Descriptions

Few studies made on the determinants or factors of deposit mobilization activity of commercial banks show that the factors revealed are categorized differently. For instance, the study made by Wubitu(2012) divides the factors in to two namely-the country specific factors and the bank specific factors whereas the study by Sudin et al (2006) on the deposit determinants of the commercial banks in Malaysia categorizes the factors as financial factors and economic factors. Another study by Ozcan et al. (2003) outlined six groups of potential saving determinants, namely government policy variables, financial variables, income and growth variables, demographic variables, uncertainty variables and external variables. Yet again the other study by N. Desinga(1975) groups the factors under exogenous and endogenous factors to the banking system.

This study categorizes the variables in to two, namely bank specific and non-bank specific variables. The bank specific factors are those factors that are manipulated and controlled by the Ethiopian commercial banks themselves where as the non-bank specific factors are factors operating beyond the control of banks, macro-economic and policy issues. The bank specific variables for this study include deposit rates, bank size, and branch expansion and service excellence whereas the non-bank specific factors are factors such as inflation, GDP, monetary supply and exchange rate of Birr to USD. Some of the factors may have both the bank specific

and the non-bank specific nature in which case the researcher categorizes those factors based on subjective judgment as to where they incline in the Ethiopian context.

The expected relation of the independent variables against the dependent variable (total deposit of commercial banks) is summarized below from the past empirical studies done on the subject.

Though many factors can be raised under this category that have influence on deposit mobilization activity of banks as illustrated in the literature review part, the researcher has focused on the following major bank specific and non-bank specific factors for analysis.

3.6.1 Bank Specific Factors

Deposit Rate

The increase in deposit rate on deposits is expected to improve the deposit volume in commercial banks as people are better attracted to get the advantage of higher interest payments on the deposits they held in banks. Herald and Heiko(2009) stated interest rate 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. Wubitu(2012) stated that there is a positive insignificant relationship between the two taking Commercial Bank of Ethiopia's deposit trend on her study. Hence, the deposit rate and deposit volume at banks have a positive relationship

Branch expansion

The increase in the number of bank branches will have an effect on getting many customers particularly those in far remote areas who are unbanked society. According to the article on NBE's magazine (Birritu No.113, February 2012), Ethiopia has low geographic and demographic penetration of bank branches. Although the expansion of banks in terms of branching since 1994 is significant, most rural people have to travel very long distance to access bank branches. Many of the bank branches in Ethiopia are concentrated in the capital city. The number of bank branches went up from 215 in 1995 to 970 as at June 30, 2011 and as at December 31, 2011, grew to 1129. As a result the ratio of bank branch to total population stood at 82,474. This compares with 63000 and 26000 for Kenya and Egypt, respectively. Out of the

total of branches, 36% are located in Addis Ababa, making mainstream branches hardly accessible to the rural area.

More recently the branch expansion by the existing banks is fast increasing to reach out remote locations too to seize the resources available particularly deposits. This practice shows that branch expansion has positive and significant relation with deposit volume. Wubitu's(2012) study shows that the number of branches available has positive and significant effect on total deposit of CBE.

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 (George, 1972). Herald and Heiko(2009) founds that although insignificant once controlled by other variables bank size have an effect on deposits.

Bank size usually denotes the bank's total asset volume and its total capital. This study took the total capital of private banks to study its relation with the total deposit volume expecting they have positive relation. Bank size for this study is proxied with the total capital of the banks.

Service Excellence

Banks are service giving institutions and thus the way the service is provided is expected to highly affect the overall activity of the bank including the deposit mobilization activity. M. A. Baqui et al.(1987) stated that there is some empirical evidence demonstrating the positive influence of services rendered to depositor. The study by Goiteom(2011), on the Bank selection decision-factors influencing the choice of banking services, indicates that customers place more emphasis on factors like convenience, service provision, employers influence and bank image. Therefore, such factors should be considered seriously by the commercial banks in designing their marketing strategies by widening their branches and providing good customers services to customers. The data collection and analysis of the commercial banks with this factor is done through qualitative aspect.

3.6.2 Non-Bank Specific Factors

These are macroeconomic conditions or sometimes policy factors that are not under the control of the commercial banks categorized for the purpose of the study.

Inflation

Inflation may influence saving through several reasons. Theory postulates that greater uncertainty should raise saving since risk-averse consumers set resources aside as a precaution against possible adverse changes in income and other factor. Hence, when inflation raises uncertainty regarding future income growth, risk-adverse consumers may increase their precautionary saving (Sandmo, 1970). Secondly, savings may rise in inflationary environment if consumers mistake an increase in the general price level for an increase in some relative prices and refrain from buying (Deaton, 1991). Inflation could also influence saving through its impact on real wealth. If consumers attempt to maintain target level of wealth or liquid assets relative to income, saving will rise with inflation.

During inflation, central banks employ monetary policy that would increase the cost of debt and decrease the availability of funds in banks. When the cost of borrowing increases and borrowing slows, the banks demand for fund decreases obviously the deposits will decrease. Hence, the direction of the relation between inflation and deposit volume is situational.

Different studies show varying results regarding the directional relationship between inflation and deposit volumes. For instance, inflation is found to have negative relation with deposit in a study made in India by Sudin et al. (2006) whereas another case study in the same country by Athukorala et al.(2003) has shown the reverse direction.

Gross Domestic Product (GDP)

GDP is one of the explanatory variables commonly used as determinants of economic growth. According to Jim(2008), the level of GDP divided by the population of a country or region is what is known as per capita income. 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. Thus the relation between income of the society and deposit volume is expected to be positive and significant. Studies by Mahendra (2005) and M. A. Baqui et al, (1987) both reveal that growth in income have a positive effect on deposits.

Money Supply

Money supply is one of the tools used by the government in the conduct of its monetary policy. Hence, any changes in money supply can have a major impact on economic conditions. An increase in money supply makes loanable funds cheaper, thus reducing cost of borrowing for corporate and individual customers. In this case, it is expected that people will increase consumption and reduce savings and thus money supply will have an inverse relationship with deposits. On the other hand, it could also be argued as well that as more money is supplied to the economy, more deposits could put in banks accumulating the fund for transactional and investment purposes.

Exchange rate of Ethiopian Birr to USD

For the major net importing country like Ethiopia, variability of the exchange rate of the local Ethiopia money (Birr) to foreign currency values is enormous. As the exchange rate of Birr to USD ratio grows, local deposits will deplete in the process of importing goods and services. This means as the country does by far more imports than exports and the exchange rate of Birr to USD grows, then local deposits in banks will reduce showing that there is inverse relationship. There are also cases where it shows the opposite trend by increasing the foreign direct inflows. However, the study by Ngula(2012) on the 'Determinants of deposit mobilization and its role in economic growth in Ghana has demonstrated that a deterioration in the Ghanaian currency with respect to the US currency resulting in a higher deposit mobilization.

3.7 Dependent and independent variables

The total deposit volume of commercial banks in Ethiopia is the dependent variable and the rest of the factors outlined above are the explanatory or independent variables as used for this research.

3.8 Data Analyzing Instruments and Descriptive Analysis

The researcher utilized multiple regressions to analyze the quantitative data which are collected from annual reports of the National Bank of Ethiopia for twelve years (from the year 2001/2-2012/3). Multiple regression analysis is conducted using SPSS data analysis software to determine the exact nature of the relationship that exist between deposits, real per capita GDP, inflation, exchange rates, money supply (M1) and deposit rates in Ethiopia over the pe-

riod under study. There is one dependent variable, total deposit volume of private banks, regressed with the independent variables (explanatory variables) such as branch expansion, inflation rate, real per capita GDP, deposit rate, exchange rate and money supply. This shows that the research is more of descriptive and explanatory in nature.

The qualitative data from the questionnaires and interview are also described and summarized. The researc*h*er summarized the information gained through questionnaires and interview responded from the bank staffs in the manner that gives the necessary information. The questionnaires are also analyzed using descriptive analysis techniques. The researcher had used SPSS software to analyze the questionnaires and describe the result.

Multiple Regression Model

The type of the data for this study is time series including the 12 years of data in the regression analysis from 2001/2-2012/13. The model is multiple regression models with one dependent variable and seven independent variables:

$$\mathbf{DEP} = \alpha + \beta 2\ \mathbf{DRWD} + \beta 3\ \mathbf{GINF} + \beta 4\ \mathbf{RPGDP} + \beta 5\ \mathbf{MI} + \beta 6\ \mathbf{BBR} + \beta 7\ \mathbf{CAP} + \beta 8\mathbf{EXBRUSD} + \varepsilon$$

The dependent variable of this multiple regression is the year on year percentage change (YOYPC) total deposit value of banks that is indicated by the symbol DEP. whereas the independent variables are symbolized and enumerated here below:

- ✓ **DRWD** – YOYPC weighted average deposit rate
- ✓ **GINF--** year on year annual average general inflation rate,
- ✓ **RPGDP--** real per capita GDP growth rate,
- ✓ **M1**------ YOYPC Money supply in terms of narrow money
- ✓ **BBR**------ YOYPC of the number of branches of local banks
- ✓ **CAP** –------ YOYPC of the amount of capital of the banks in Ethiopia.
- ✓ **EXBRUSD-** YOYPC on average annual exchange rate of Birr to USD

The symbol alpha (α) represents the constant term and betas (β1, β2, β3, β4, β5, β6, β7, β8, β9) represent the coefficient of the independent variables. The null hypothesis is rejected at

5% significant level. The relevant data is collected regarding each single variable and analyzed.

For multiple regression models, the following basic assumptions are held:

3.9 Diagnostic Testing Methods

The econometric estimation technique that is used by this study is ordinary least square (OLS). There are five assumptions made in relation to the classical linear regression model (CLRM). The researcher has tested if there are violations of these assumptions. The method used to test these assumptions by the researcher is described as follows:-

The average value of the error is zero (Non-zero variance)

This assumption is not violated if the regression line does not intercept through the origin. This assumption is violated if the model does not have constant term since the line intercepts through the origin; however in our case the model have constant term which will prove that the line did not pass through the origin and the first assumption of CLRM is not violated. Therefore the variation in the dependent variable, total deposit of commercial banks, is explained by the independent variables.

No perfect multicollinearity

There should be no any perfect linear relationship between two or more of the predictors. So, the predictor variables should not correlate too highly. If there is perfect collinearity between predictors it becomes impossible to obtain unique estimates of the regression coefficients because there are an infinite number of combinations of coefficients that would work equally well.

To test this researcher has used VIF values. SPSS produces various collinearity diagnostics, one of which is the **variance inflation factor (VIF)**. The VIF indicates whether a predictor has a strong linear relationship with the other predictor(s). Although there are no hard and fast rules about what value of the VIF should cause concern, Myers (1990) suggests that a value more than 10 is a good value at which to worry seriously.

- ✓ **Homoscedasticity Test**

At each level of the predictor variable(s), the variance of the residual terms should be constant. This just means that the residuals at each level of the predictor(s) should have the same variance (homoscedasticity); when the variances are very unequal there is said to be heteroscedasticity and it can lead to the distortion of the findings and overall conclusion.

Homoscedasticity can be checked by visual examination of a plot the standardized residuals by the regression standardized predicted value (Osborne & Waters, 2002), specifically, statistical software scatter plots of residuals with independent variables are the method for examining this assumption (Keith, 2006). Thus the researcher uses same plots to investigate this assumption.

The Assumption of Autocorrelation

For any two observations the residual terms should be uncorrelated (or independent). This eventuality is sometimes described as a lack of autocorrelation. The researcher used and tested this with the Durbin–Watson test, which tests for serial correlations among errors. Specifically, it tests whether adjacent residuals are correlated. The test statistic can vary between 0 and 4 with a value of 2 meaning that the residuals are uncorrelated.

Linearity:

Linearity defines the dependent variable as a linear function of the predictors or the independent variables (Darlington, 1968). The mean values of the outcome variable for each increment of the predictor(s) lie along a straight line.. If we model a non-linear relationship using a linear model then this obviously limits the generalizability of the findings.

The study uses histogram, P-P plots and scatter diagrams to test homoscedasticity, linearity and normality problems if they exist in the model.

In the preceding chapters, we are going to see the result of this quantitative analysis that is the effect of each independent variable on the dependent variable.

Chapter Four

Data Analysis and Presentation

4.1 Descriptive Data Analysis

The researcher presented the analysis quantitative and qualitative analysis in the following pages. Firstly, the quantitative data obtained from the National Bank of Ethiopia for twelve years is analyzed through the ordinary excel sheet form and then multiple regression is conducted using data on the year on year percentage change in total deposit (the dependent variable) is regressed against the seven independent variables identified .Testing of the regression assumptions are included. Secondly, the qualitative analysis and presentation follows from the responses obtained from the questionnaires and interview questions. Thirdly, the summary of both are included at the end of the chapter.

4.1.1 Analysis of quantitative Data

Ordinary Excel Sheet Analysis and its outputs

Total Deposit of local banks in Ethiopia

Total deposit volume data of twelve years (from fiscal year 2001/2 to 2012/3) were taken for all private versus all public banks and is graphically presented as figure 2 below.

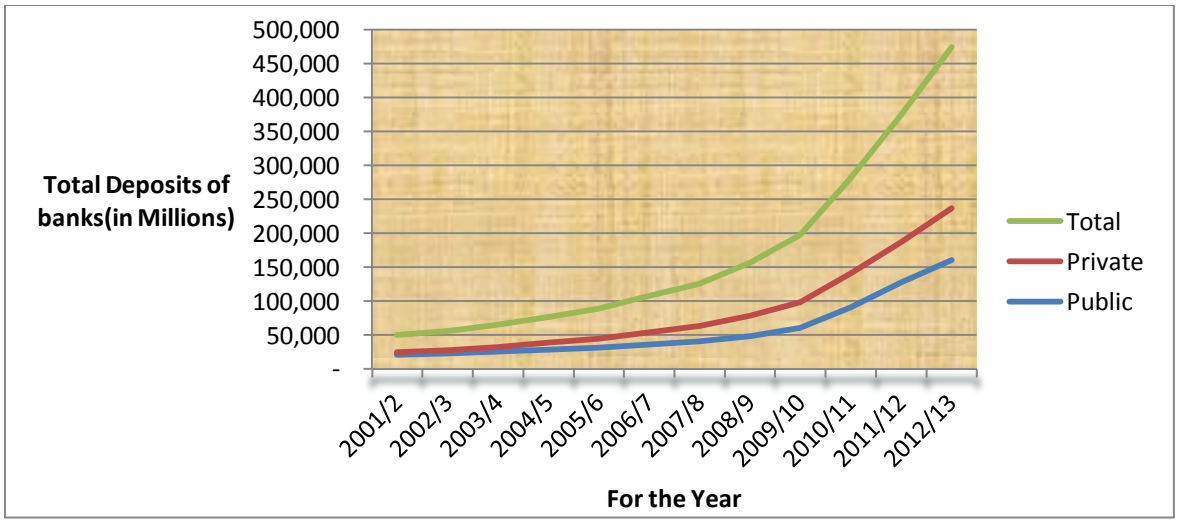


Fig. 2 Total Deposit of Private versus public banks (in millions of Birr)

Source: Researcher's computation

Figure 2 shows that the deposit balances of both the private banks and the state banks are growing every year which coincides with the opinion received from the responses of the questionnaires as detailed in the qualitative part. From the year 2009/10 onwards; however, it seems that the gap between the total volume of deposit collected by public banks and that of private banks is widening. The reason for the widening of the gap has something to do with the researcher's findings from the interviews that the government policy changes and there is intense competition from the huge size of public banks have made an impact on deposit collection of private banks.

The following graph is presented to show the clearer view of the performance private banks versus the public banks in deposit market.

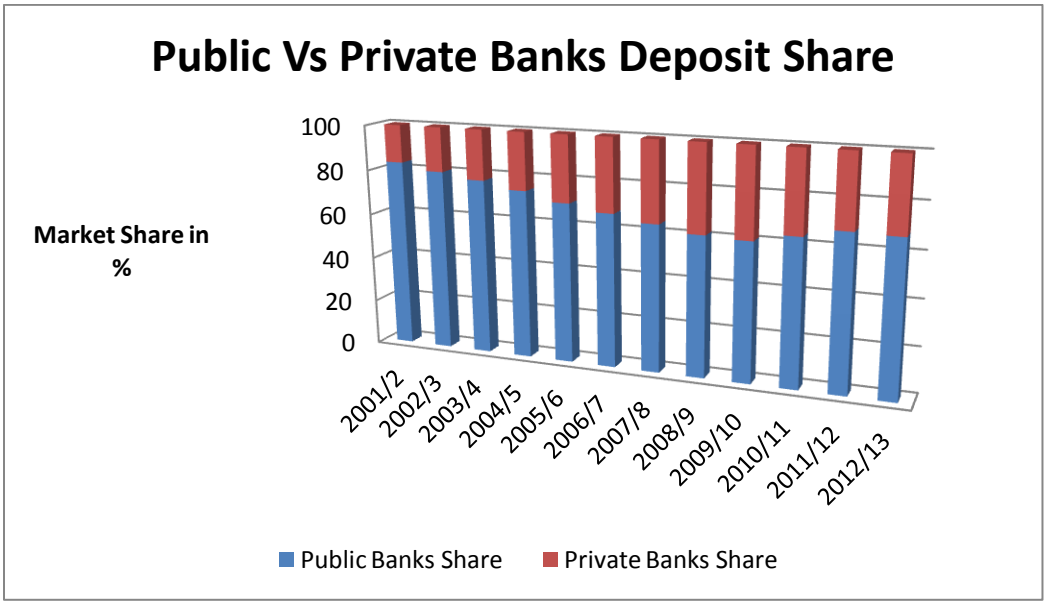


Fig. 3 Market share of deposits for private versus public banks in Ethiopia

Source: Researcher's computation

Over the initial seven years, it is visible that the private banks were gaining increasing share of the deposit market from public banks but after 2009/10 the later is regaining its position.

Only the few public banks has been enjoying the lion share of the deposit market in the country for many years even though the numbers of private banks has been increasing and reached sixteen during the fiscal year ended 2012/2013.

The following figure shows the direction of the deposit volume in all commercial banks in Ethiopia for the period under study.

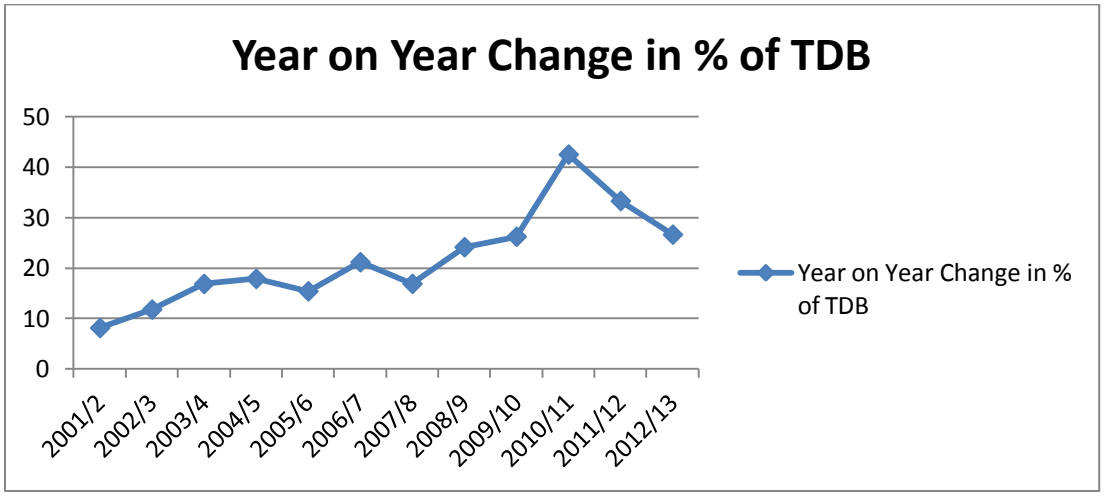


Fig. 4 The year on year percentage change of total deposit volume of commercial banks in Ethiopia

Source: Researcher's computation

Figure 4 shows the year-on-year percentage change of total deposit in banks is declining in the final years of the study revealing even though there is a growth in absolute value of deposit across banks the rate of increase is showing a decline slope from the middle of the year 2010/11. Paradoxically, the timing of the downward decrease of the graph coincides with the time when the supervising authority of banks, NBE, raised the minimum saving deposit rate from 3 per cent per annum to 5 per cent(September 2011).

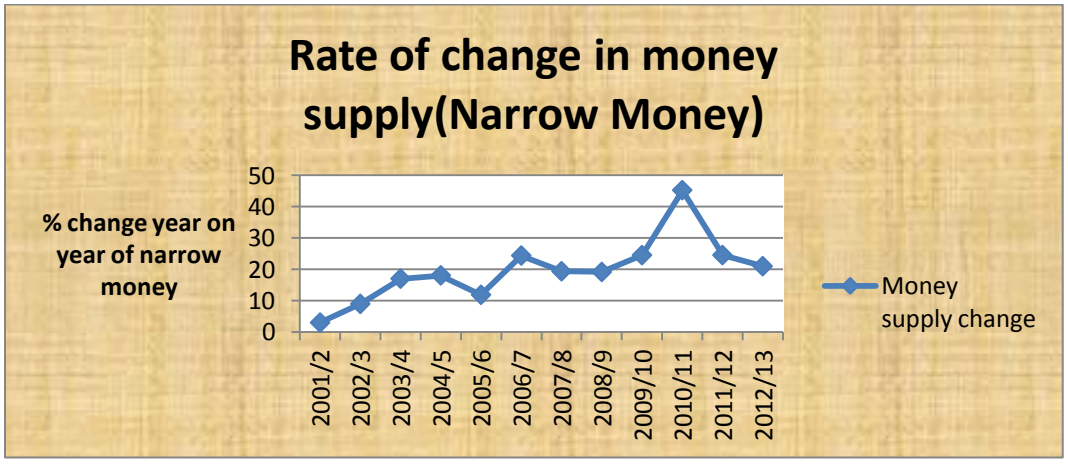


Figure 5 **Rate of change in money supply (broad Money)**

Source: Researcher's computation

The money supply in terms of broad money constitute both narrow money (currency outside banks and demand deposits) and quasi-money (saving and time deposits available in banks).The above figure shows the trend in total aggregate money supply of the country for twelve years. This trend is similar to the rate of change of deposits at banks for similar period indicating that the monetary policy has attributes to the deposit trend.

Costs Related to deposit mobilization

From the responses obtained through the interviews made, it has been demonstrated that costs of making deposit is growing year after year. The researcher has tried to support this fact with the figure showing the growth of ratio of cost to deposit amounts for six private banks including AIB, DB, BOA, NIB, WB and UB over the years from 2008/9 to 2012/13. CBE is excluded from this analysis as its major deposits are obtained from government offices whose costs are assumed to be minimal.

The costs most related to the deposit mobilization activity are interest payments, salary and benefits, rental costs and advertisement costs. The deposit balances include the sum of saving, demand and time deposit balances of each bank at the year end. These costs are collected from each bank and ratio of their total to the respective deposit figures as at each year end is computed.

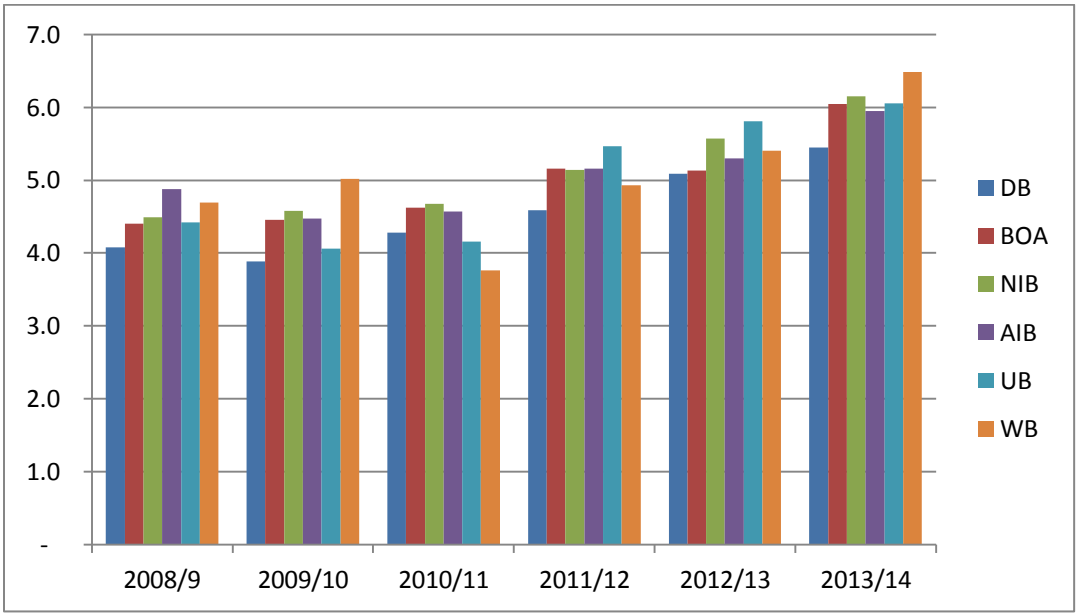


Fig. 6 Ratio of Deposit Related Costs to total deposit volume of six private banks

Source: Researcher's computation

Thus it can be drawn that the costs of deposit mobilization is increasing from year to year and making the activity successful is becoming very expensive.

The significant cost of deposit mobilization as the finding of the qualitative approach reveals later in this study is the deposit interest payment and most banks hold the major share of their deposit in the form of saving that earns interests to their customers but costs them much. The following figure shows the trend of weighted (saving and fixed deposits) deposit rates over the years of the study.

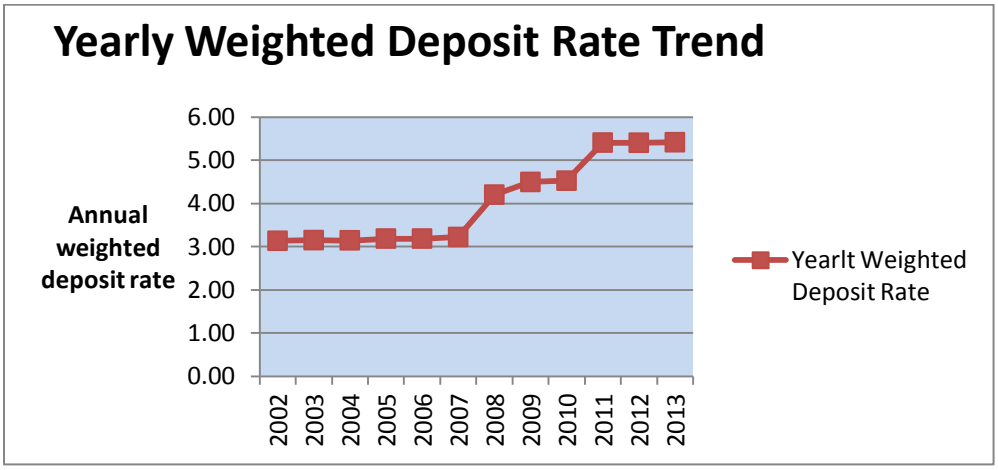


Fig.7 The yearly weighted deposit rate trend of banks in Ethiopia

Source: Researcher's computation

Descriptive analysis of the dependent and independent variables

The SPSS software is used for the purpose to view the minimum, maximum, mean and standard deviation of the included variables that depicted the following. The average deposit value of all commercial banks in Ethiopia that existed within the twelve years period is Br.85.6 billion. During the same period, the weighted average of deposit rate is 4.04 slightly lower than the current minimum of 5 percent per annum. See table 1 for the other values.

Table 1. Descriptive Statistics

	Minimum	Maximum	Mean	Std. Deviation
DEP	25030.90	237146.20	85605.2833	68600.44184
DRWD	3.144	5.415	4.03937	.982217
GINF	-7.20	36.40	14.4750	12.62898
RPGDP	136.00	359.00	215.8333	76.47796
M1	27322.00	235313.60	88291.0500	68062.66993
BBR	320.00	1724.00	682.0000	436.54449
CAP	2529.00	23070.00	9901.4083	6641.61771
EXBRUSD	8.57	18.74	11.6742	4.00331
Valid N (listwise)				

Source: SPSS output

Multiple Regressions, testing assumptions, analysis and results

To make the regression analysis, the researcher computed the year on year percentage changes of each variable to simplify the numbers. Then year on year change of percentage (YOYPC) in deposit value of all commercial banks in Ethiopia which is the dependent variable is regressed against six independent variables that are YOYPC deposit rate, real GDP per capita growth rate, annual average general inflation growth rate, YOYPC money supply, YOYPC the number of private bank branches, YOYPC total capital and YOYPC exchange rate of Ethiopian Birr to USD.

The regression analysis is used to test if an independent variable influences a dependent variable and whether this effect is positive or negative. For that to be applied and workable, diagnostic testing has to be done. The model chosen has taken the common classical regression model (CLRM) as depicted below:

$$Y = \alpha + \beta 1X1 + \beta 2X2 + \beta 3X3 \ldots + \varepsilon$$

Where' y' is the dependent variable

α is the constant term

β are coefficients of each of the independent variables

X1,X2 and X3 are the independent variables.

ε - the error term

Our model for this study can simply be put as follows

$$DEP = \alpha + \beta 2\ DRWD + \beta 3\ GINF + \beta 4\ RPGDP + \beta 5\ M1 + \beta 6\ BBR + \beta 7\ CAP + \beta 8\ EXBRUSD + \varepsilon$$

- ✓ DRWD – YOYPC weighted average deposit(interest) rate
- ✓ GINF-- year on year annual average general inflation rate,
- ✓ RPGDP-- real GDP per capita growth rate(proxy to income growth per person),
- ✓ M1------ YOYPC Money supply in terms of narrow money(currency outside circulation and demand deposits)
- ✓ BBR------ YOYPC of the number branches each local bank
- ✓ CAP –------ YOYPC total capital values of the banks in Ethiopia(proxy for bank size.
- ✓ EXBRUSD- YOYPC on average annual exchange rate of Birr to USD

***Note**: YOYPC (Year on year percentage change) of the variables is used in the regression computation.*

The SPSS software is an instrument selected to provide the results of the regression and other testing issues.

Table 2. Variables Entered/Removed (b)

Model	Variables Entered	Variables Removed	Method
1	EXBRUSD, CAP, GINF, RPGDP, BBR, DRWD, M1(*)	.	Enter

a All requested variables entered.
b Dependent Variable: DEP

Source: SPSS regression out put

Table 2 displays the variables entered or variables removed from the study at any point in time from the beginning till the end of the work. As it is indicated in variables entered column there are seven independent variables entered for the study, those are year on year percentage changes of the weighted annual exchange rate of Birr to USD, the mean number of branches of banks, the real per capita GDP growth rate, weighted annual general inflation rate, the mean value of total capital of banks, the weighted average deposit rate of banks, and the money supply (narrow money).

Does the Model Fit?

Table 3 ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	938.187	7	134.027	8.613	.027(a)
	Residual	62.241	4	15.560		
	Total	1000.428	11			

a Predictors: (Constant), EXBRUSD, CAP, GINF, RPGDP, BBR, DRWD, M1
b Dependent Variable: DEP

Source: SPSS regression out put

The ANOVA table summarizes the output of the analysis of variance. In regression row, the output for regression displays information about the variation accounted for by the existing model. Residual displays information about the variation that is not accounted for by the model. And total in the table shows the sum of regression and residual. Mean square is the sum of

squares divided by the degrees of freedom. And F statistics is the regression mean square divided by the residual mean square. If the significance value of the F statistics is small then the independent variable does a good job in explaining the variation in the dependent variables

Hypothesis

Ho = the fit is NOT good

H1 = the fit is good

The model is not fit if the sig value is higher that p value (0.05) favouring the null hypothesis. As the sig value then is 0.027 which is not higher that p value the researcher rejects the null hypothesis and fail to reject the alternate hypothesis H1 meaning the model is fit.

How good is the model in explaining the relation?

Table 4. Model Summary (b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	R Square Change	F Change	df1	df2	Sig. F Change
1	.968(a)	.938	.829	3.9446422	.938	8.613	7	4	.027	1.936

a Predictors: (Constant), EXBRUSD, CAP, GINF, RPGDP, BBR, DRWD, M1

b Dependent Variable: DEP

Source: SPSS regression out put

Table 4 demonstrates about large R, which shows the multiple correlation coefficients and the correlation between the observed and predicted values of the dependent variables. And the value of R for models produced by the regression procedure range from 0 to 1. The larger the value of R and R^2 display that there is strong relationship among observed and predicted value. In our case R is 0.9680 and R^2 is 0.938 indicating there is strong relation of the dependent variable and the independent variables.

Adjusted R^2 attempts to correct R square to more closely reflect the goodness of fit of the model in the population. It can be seen from the table that the adjusted R^2 is 0.829 indicating that the model is 82.9 % fit for the purpose.

Table 5. Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta	Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF	B	Std. Error
1	(Constant)	7.685	4.348		1.768	.152	-4.386	19.757					
	DRWD	-.033	.117	-.064	-.285	.790	-.359	.292	.484	-.141	-.036	.310	3.231
	GINF	.046	.148	.063	.309	.773	-.365	.456	.515	.153	.039	.372	2.689
	RPGDP	.373	.342	.175	1.090	.337	-.576	1.321	.458	.479	.136	.602	1.661
	M1	.051	.253	.056	.200	.851	-.652	.753	.811	.100	.025	.197	5.086
	BBR	.437	.165	.607	2.651	.057	-.021	.895	.878	.798	.331	.297	3.368
	CAP	.002	.073	.003	.021	.984	-.201	.204	.086	.010	.003	.706	1.416
	EXBRUSD	.423	.191	.380	2.218	.091	-.107	.953	.729	.743	.277	.530	1.888

a Dependent Variable: DEP

Source: SPSS regression out put

The **average** value of the error is zero (Non-zero variance)

The predictors should have some variation in value different from zero (i.e. they should not have variances of 0). In the model the independent variables(the predictors) have constant terms which will prove that the line did not pass through the origin and the first assumption of CLRM is not violated.

No perfect multicollinearity

There should not be any perfect linear relationship between two or more of the predictors. So, the predictor variables should not correlate too highly as it becomes impossible to obtain unique estimates of the regression coefficients because there are an infinite number of combinations of coefficients that would work equally well.

To test this researcher has used VIF (**variance inflation factor)** values from the output of SPSS indicated above. Large VIF values are an indicator of multicollinearity.In our case,, all the VIF value results are less than 10 and multi-collinearity is not a concern as suggested by Myers(1990)..

Homoscedasticity, linearity and *normality tests*

At each level of the predictor variable(s), the variance of the residual terms should be constant. This just means that the residuals at each level of the predictor(s) should have the same

variance (homoscedasticity); when the variances are very unequal there is said to be heteroscedasticity and it can lead to the distortion of the findings and overall conclusion.

The researcher used SPSS statistical software scatter plots of residuals with independent variables are the method for examining this assumption (Keith, 2006).

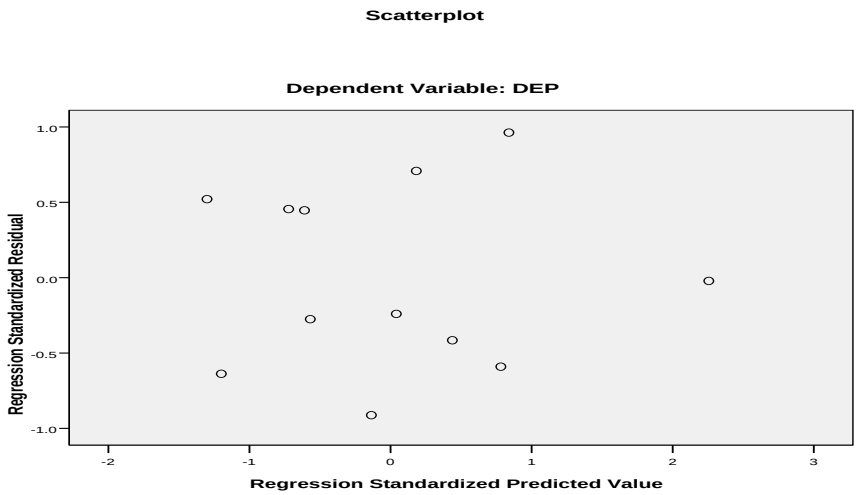


Fig.8 Scatter plots of the residuals

Source: SPSS output

The scatter plot sub command to plot standard residuals by the predicted values show that residuals are saturated initially in a linear shape showing that they are relatively homogeneous. One can also recheck same results with a histogram depicted below.

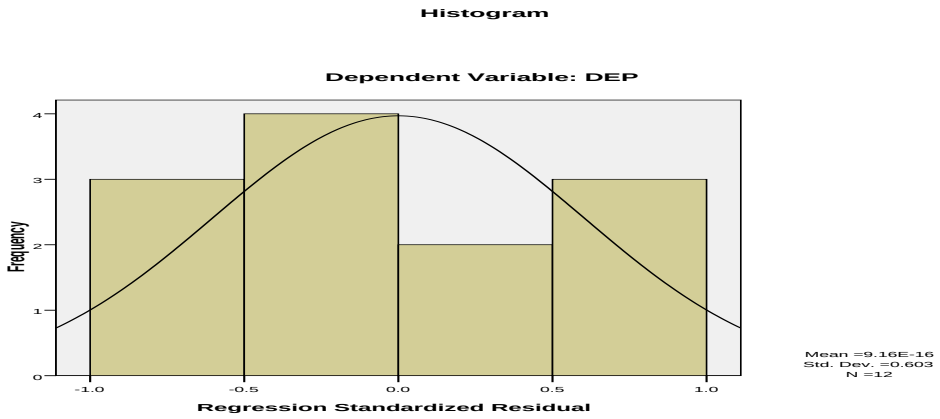


Fig.9 Histogram to show normality test

Source: SPSS output

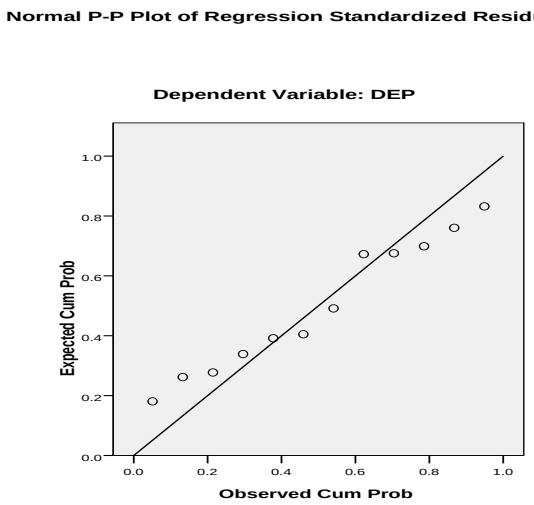


Fig.10 P-P plot of normal distribution.

Source: SPSS output

The straight line in the above plot represents a normal distribution of the residuals, and the points represent the observed residuals. Therefore, in a perfectly normally distributed data set, all points will lie on the line. The above figures tell us that the three assumptions are well met.

The Assumption of Autocorrelation

For any two observations the residual terms should be uncorrelated (or independent). This eventuality is sometimes described as a lack of autocorrelation. The researcher used and tested this with **the Durbin–Watson(DW) test,** which tests for serial correlations among errors.

Thus the DW test shows Sig. F Change 1.936 which virtually means the observations are un-correlated.

Correlation results

Correlation is a way to index the degree to which two or more variables are associated with or related to each other. The most widely used bi-variant correlation statistics is the Pearson product-movement coefficient, commonly called the Pearson correlation which was used in this study. Correlation coefficient between two variables ranges from +1 (i.e. perfect positive relationship) to -1 (i.e. perfect negative relationship).

Table 6. Correlations

		DEP	DRWD	GINF	RPGDP	M1	BBR	CAP	EXBRUSD
Pearson Correlation	DEP	1.000	.484	.515	.458	.811	.878	.086	.729
	DRWD		1.000	.659	.497	.600	.416	-.005	.348
	GINF			1.000	.283	.358	.516	-.130	.294
	RPGDP				1.000	.454	.289	.352	.248
	M1					1.000	.750	.169	.619
	BBR						1.000	.125	.453
	CAP							1.000	-.148
	EXBRUSD								1.000

Source: SPSS output adjusted to show only the correlation part.

From the correlation table we see that the most significant factors for deposit volume growth is the branch expansion, the money supply, the exchange rate of Birr to USD and general inflation. Deposit rate and real per capita GDP growth rate have also their influences at a lesser magnitude.

All factors are found to have positive relations with the deposit volume except the deposit rate having a negative relation with deposit volume.

Finding of the regression and correlation analysis

- ✓ It is found out that the seven explanatory variables, inflation, deposit rate, real per capita growth rate, money supply, number of branches, total capital of each bank (a proxy for bank size in the study),exchange rate of Birr to USD, are factors that would influence the deposit volume at 93%(R^2) of the time. Hence, the factors are found to be influential with this study. Similar study by Wubitu (2012) taking three factors only in an analysis found out that inflation, bank branches and deposit rate are the factors influencing deposit volume at 83.9 %(R^2).

- ✓ This study has shown that the branch expansion, the money supply, the exchange rate of Birr to USD and general inflation are the most significant factors of deposit volume. Besides, the other variables-deposit rate and real per capita GDP growth rate have insignificant power to influence the dependent variable. In study by Wubitu(2012) the branch expansion is the most significant factor which this result has also assured.

- ✓ The deposit rate is having a negative relation with deposit volume per this study result however, the result of Wubitu(2012) disagree with this fact showing that it has a positive insignificant relation. The negative relation of the deposit rate and deposit volume is unexpected but can also be evidenced from the excel analysis as the deposit rate is increasing the rate of increase for the deposit volume in the country has been showing decline in the previous topic.

4.1.2 Analysis of qualitative Data

The researcher has used questionnaires and interview to collect data regarding the qualitative aspect of deposit mobilization activity. In total 84 questionnaires were distributed and 14 senior bank staffs were interviewed. The response rate was 80.9% for the questionnaires. In the process seven branches of the seven banks namely, Commercial Bank of Ethiopia, Awash International Bank, Dashen Bank, Bank of Abysinia, Wegagan Bank, United Bank, Nib International Bank were involved. Accordingly, the written responses from both the questionnaires and the open ended interview questions are analyzed as follows using SPSS software.

A. Respondents' personal information

Table 7. Age of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 25	2	2.9	2.9	2.9
	26-35 years	39	57.4	57.4	60.3
	36-45 years	26	38.2	38.2	98.5
	Greater than 46	1	1.5	1.5	100.0
	Total	68	100.0	100.0	

From respondents who responded in the research, 57.4% of them were aged from 26-35 years. Cumulatively 87.1% of the respondents are aged 26 years and above.

Table 8. Work experience of the respondents in the bank

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 5 years	19	27.9	27.9	27.9
	6-15 years	38	55.9	55.9	83.8
	16-25 years	10	14.7	14.7	98.5
	Greater than 26	1	1.5	1.5	100.0
	Total	68	100.0	100.0	

The majority of the respondents (72.1%) have worked in the bank for over 6 years which the researcher believes that the experience would earn them sufficient knowledge in the area of this study.

Table 9. Position of the respondents in the bank

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Branch Manager	8	11.8	11.8	11.8
	Accountant	3	4.4	4.4	16.2
	Auditor	6	8.8	8.8	25.0
	Customer Service officer	23	33.8	33.8	58.8
	Others	28	41.2	41.2	100.0
	Total	68	100.0	100.0	

The position of the respondents included 11.8% branch managers, 4.4%accountants, 8.8% auditors and 33.8% customer service officers/supervisors and the rest 41.2% held other positions currently.

Table 10. Besides being employee, are you the customer of a bank?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	64	94.1	94.1	94.1
	NO	4	5.9	5.9	100.0
	Total	68	100.0	100.0	

The respondents were asked whether they are also deposit account holders in any bank in order for them to look ideas from outside-in perspective as customers. Thus, the lion share of respondents i.e. 94.1% of them are found to be account holders of a bank enabling this study to get wider view of the bank staffs and only 5.9% are not.

Table 11. Level of income of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 3,000	1	1.5	1.5	1.5
	3,001-6000	9	13.2	13.2	14.7
	6001-9000	15	22.1	22.1	36.8
	Greater than 9,000	43	63.2	63.2	100.0
	Total	68	100.0	100.0	

The level of income of the respondents was also asked as income is usually taken as a dominant factor for deposit mobilization. Thus 63.2 % of the respondents are paid a salary greater that Br.9, 000 whereas 22.1% of them are paid between Br.6,000 to Br.9,000.

Table 12. What is the ownership status of your bank?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	PRIVATE	56	82.4	82.4	82.4
	STATE	12	17.6	17.6	100.0
	Total	68	100.0	100.0	

82.4% of the respondents of this survey were working in the privately owned banks where as the remaining 17.6% were from state-owned bank which is Commercial Bank of Ethiopia.

B. Respondents Views on Deposit mobilization

Table 13. Who are the most significant depositors of your bank?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	INDIVIDUALS	27	39.7	39.7	39.7
	BUS ORGANIZATION	27	39.7	39.7	79.4
	GOV'T	14	20.6	20.6	100.0
	Total	68	100.0	100.0	

From the views of the respondents it is learnt that individuals and business organizations are the major depositors of the selected bank branches with equal percentages 39.7% each whereas government depositors hold only 20.6%.

Table 14. Which deposit types is with the significant volume in your bank?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SAVING	42	61.8	61.8	61.8
	CURRENT	25	36.8	36.8	98.5
	FIXED TIME DE	1	1.5	1.5	100.0
	Total	68	100.0	100.0	

From among the three common type deposits namely saving, current and time deposit accounts, saving account is found to have the significant volume of deposits as viewed by 61.8% of the respondents. On the other hand, 36.8% of the respondents answered that current accounts hold the significant volume of deposits in their branches.

The next three questions were raised to know the status of the selected banks about the branch expansion and solicited the respondents about the main reasons why the branch expansion is done by the banks.

Table 15. How many branches does your bank possess?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	51-100 BRANCHES	23	33.8	33.8	33.8
	101-150 BRANCHES	24	35.3	35.3	69.1
	151-200	1	1.5	1.5	70.6
	>200 BRANCHES	20	29.4	29.4	100.0
	Total	68	100.0	100.0	

35.3% of the respondents' work in banks that possess 101-150 branches whereas 33.8 % of the respondents operate with banks having 51-100 number of branches range. 29.4% respondents' claim that their bank or banks have more than 200 branches in the country.

Table 16. Is the number of branches increasing every year?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	67	98.5	98.5	98.5
	NO	1	1.5	1.5	100.0
	Total	68	100.0	100.0	

98.5% of the respondents believe that their banks have been increasing the number of branches year after year and only 1.5% of the respondents believe otherwise.

Table 17. What is the main cause branch expansion?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Deposit mobilization	54	79.4	79.4	79.4
	Loan availing	1	1.5	1.5	80.9
	Market share	3	4.4	4.4	85.3
	all the above are the main causes	9	13.2	13.2	98.5
	Others	1	1.5	1.5	100.0
	Total	68	100.0	100.0	

This research has found out that the main cause for the branch expansion by the selected banks is for the purpose of deposit mobilization as shared by the views of 79.4% of the re-

spondents. The combinations of the listed reasons i.e. deposit mobilization, loan availing and market share expansion are claimed to be the main reasons by 13..2% of the respondents who participated in the survey.

From the above results one can infer local banks are engaged in branch expansion as venue for sourcing deposits and even competing with each other.

Table 18. Is the volume of deposit mobilized by your bank growing year after year?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	68	100.0	100.0	100.0

Table 19. Does the volume of deposit mobilized by each of your branches differ?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Yes**	**64**	**94.1**	**94.1**	**94.1**
	No	**1**	**1.5**	**1.5**	**95.6**
	I do not know	**3**	**4.4**	**4.4**	**100.0**
	Total	**68**	**100.0**	**100.0**	

The above two tables show us that all the respondents perceived that the volume of deposit by their individual banks are increasing from year to year and the great majority i.e. 94.1% of them also believed the deposit level at each of their branches differ.

Table 20. Is cost of mobilizing deposits increasing year after year?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Yes**	**67**	**98.5**	**98.5**	**98.5**
	No	**1**	**1.5**	**1.5**	**100.0**
	Total	**68**	**100.0**	**100.0**	

A significant number of respondents (98.5%) feel that the cost of mobilizing deposits is growing from year to year. They also responded that the main costs spent by banks go to interest payments for depositors, costs of renting offices for branches and other purposes , system modernization costs and advertisement and publicity costs.

Table 21. Do you think that there is stiff competition among banks for deposits mobilization?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Yes**	**63**	**92.6**	**92.6**	**92.6**
	No	**5**	**7.4**	**7.4**	**100.0**
	Total	**68**	**100.0**	**100.0**	

The majority of respondents (92.6%) believe that the competition over deposit mobilization is becoming stiff and some of the reasons cited for that are:

- Achieving the required profitability these days is a challenge for many banks due to shortage fund to disburse loans,
- the branch outlets are densely populated in the capital city,
- the risk averse strategies pursued by most banks by not trying to stretch to potential remote areas,
- the increase in the request of huge loans by business organizations and the increasing number of investments in the country.

Table 22. Do you believe that awareness creation increases deposit volume?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Yes**	**66**	**97.1**	**97.1**	**97.1**
	No	**1**	**1.5**	**1.5**	**98.5**
	I do not know	**1**	**1.5**	**1.5**	**100.0**
	Total	**68**	**100.0**	**100.0**	

97.1% of the respondents perceive that commercial banks should engage in the area of awareness creation as doing so boosts the deposit volume in banks. The current intensive promotional campaign by many local banks seems to go along with the responses of the participants.

Table 23. What special services does your bank give for its depositors?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Prize/award**	**9**	**13.2**	**13.2**	**13.2**
	Priority for other bank facilities as foreign currency	**7**	**10.3**	**10.3**	**23.5**
	Loan facility	**7**	**10.3**	**10.3**	**33.8**
	All	**43**	**63.2**	**63.2**	**97.1**
	Others	**2**	**2.9**	**2.9**	**100.0**
	Total	**68**	**100.0**	**100.0**	

The majority of the respondents' (97.1%) banks are giving one or a combination of the special services to attract deposits such as prize, priority for other bank facilities like foreign currency allocation(if the customers are importers) and for loan facilities for depositors.

C. Views summarized from interview

The researcher has made interview with senior branch officials of the selected banks as well and summarized the main findings as follows.

1 All the interviewees agree that deposit is the most preferred source of fund to their banks from other types of debts and/or raising of capital through issuance of shares in the country. For this same reason, the ratio of deposit in most private banks is higher than that of other fund sources. With regard to the question as to which source of fund (deposit or capital source) is expensive, the interviewees were equally divided.

2 The NBE directive, policy of the bank, attractiveness of the source of the fund in terms of cost, availability, simplicity and shareholders' need and capacity are mentioned by the interviewees as basic criteria to develop a strategy on which sources of fund has to be selected and searched.

3 With regard to whether the task of deposit mobilization is becoming easing or challenging, all interviewees have agreed on the latter year over year. This goes with the stiffness of the competition for deposits by local banks as responded in the questionnaire part.

4 All interviewees have the same opinion that the banks they represent are not having sufficient deposit that could satisfy the level of loans demanded by their borrowers. In other words, though local banks are making an all out effort in raising their deposit balances, they are still far away in narrowing the gap between the demand for loans from increasing number of businesses and the deficit of supply side-the volume of deposits in their respective coffers.

5 A significant number of the interviewees (70.6%) believe that there are no equal opportunities and challenges to private banks versus state banks with searching and obtaining deposits where as the rest believe otherwise. The reason mentioned by the former group is summarized as follows:

6 Government offices are implicitly or explicitly urged to use state banks for placing their deposits. This also extends to certain international non-governmental organizations.

7 Various government policies are designed in a way that could benefit the state banks to collect much deposits from the public on the presumption to undergo developmental activities such as condominium projects,

8 The imposition by the government on private banks to purchase government bonds (for Renaissance Dam) i.e.27% of the loan they avail at lower interest rate (3%) below the minimum saving rate is challenging their liquidity.

9 The huge bank size, significant number of branch outlet and capital would make the state bank-CBE almost a monopoly over the deposit market by playing with pricing such as setting charges, giving gifts, advertising and expending relatively huge costs to modernize its services. Following a counter marketing on these issues would not be a disadvantage to many small private banks in this regard.

10 The interviewees all agree that their respective banks did not face any financial, economic, political and social shocks that could have affected the deposit volume at any time in their working experience.

11 The growth per capita income is claimed to be the most significant factor in affecting the bank deposits followed by inflation, fiscal policy, investment, external trade and global economy and growth in population per the interview responses obtained. Further, proximity and convenience of the bank branches, service provision, the branch size of the bank and security were also mentioned as important factors in attracting many customers to the bank to make deposits.

12 The interviewees further pointed out that the current deposit rates are not attractive to depositors and depositors have better opportunities to invest the money elsewhere than making deposits in the bank if they think about it.

13 All interviewees agreed that the costs incurred for mobilizing deposit has been increasing year after year with the following order of significance i.e. interest on deposits, rent, system related costs, advertising and publicity and staff costs from high to low order.

4.2 Summary of the findings from both methods of investigation

The following are presented as the summary of the research findings entitled' Determinants of Deposit Mobilization and Related costs of commercial banks in Ethiopia:

- Though deposit volume is seemingly increasing every year, the rate of deposit growth for Ethiopian commercial banks is declining recently whereas the cost of deposits is escalating.
- The branch expansion, the money supply, the exchange rate of Birr to USD and general inflation are the most significant factors of deposit volume. Besides, the other variables-deposit rate and real per capita GDP growth rate have insignificant power to influence the dependent variable
- It is surprising that the quantitative study reveals the deposit rate as having a negative relation with the deposit volume unlike the qualitative responses summarized later in next section. Savings, according to classical economists, is a function of the rate of interest. The higher the rate of interest, the more money will be saved, since at higher interest rates people will be more willing to forgo present consumption. Studies results by Syanbola T. et al (2012) on the 'Effect of interest rate deregulations on banks deposit mobilization in Nigeria' and Wubitu's(2012) here in our country agree with the economic theory. However, practically both the researcher's excel computation and the regression results in this research show the opposite relation of the two.

- The major sources of deposits for the commercial banks are individuals and business organizations. As compared to other sources such as capital contribution and plough back of earnings, deposit is the most preferred source of fund for the banks in Ethiopia.

- In order to grant loans demanded by the public and thus stay profitable to the share holders, commercial banks prefer deposit as sources of fund. From three common types of deposits namely saving, current and fixed deposit accounts, saving account balance constitutes significance balance in many accounts of the banks studied.

- Branch expansion is found out to be the major strategy of many banks to secure better sources of deposit base. However, dense population of bank branches in the capital city is creating stiff competition among them.

- As securing comfortable deposit base is the question for survival of the banks, many banks are also engaged in modernizing their services to excel the others.

- It is also learnt that the deposit volume of the commercial banks are growing year after year, however, recently the share of private banks' deposit market is declining after the year 2009/10 and that of the public banks is surging up to regain the lost market share in the prior years. Contrary to what the bankers feel about the trend of deposit year after year, the quantitative analysis shows that deposit is not increasing at an increasing rate from year to year

- Corollary to the increasing volume of deposits at commercial banks, the costs of obtaining such deposits is also increasing by way of interest costs, office rental costs, and system related costs and advertizing and publicity costs.

- Saving and fixed time deposit accounts are the only accounts on which interest is paid in most of the banks but the interest rate on saving accounts is considered to be low as agreed by the interviewees compared to the earning from the fixed asset value appreciation with the same magnitude of money. In spite of the privilege given to the individual banks to determine their own higher interest on saving and time deposits beyond

the minimum limit set by NBE i.e. 5 per cent per annum, many banks are not happy to pay more than that. Current accounts do not bear interest on many banks though the banks are free to pay any rate without the limit.

- The major factors contributing to the growth of deposits are branch expansion, growth in per capita income of the population, the impact of changing of awareness of the society and the money supplied to the economy. Further, proximity and convenience of the bank branches for the public and the growing competition among banks and its effect on service modernization were also mentioned as causes.
- Number of branches, real per capita GDP, total capital and money supply are the significant factors explaining the total deposits whereas deposit rate and general inflation has insignificant relation.
- Government policies are also impacting the competitiveness of private banks on deposit mobilization activity favoring the public banks. Besides, the latter ones have also the size advantage to risk themselves to utilize potential deposit areas.

Chapter Five

Summary, Conclusion and Recommendations

5.1 Summary and Conclusion

The study revealed that deposit mobilization is the main focus of many banks. However, finding deposit is becoming a challenging job for the banks in Ethiopia compatible with the growing need of loans. Owing to the growing need for finances from new and existing businesses of the country coupled the banks own desire to make profits from those finances, deposit mobilization is becoming the critical success factor for banks. The fast increasing number of branches, the service modernization activities and the growing competition among banks all justify this fact.

There are limited types of deposit products mainly three namely saving, current and fixed time deposits services commonly sold to the customers by the local banks. The great majority of customers are saving account holders.

The total deposit volume of banks is growing year after year whereas their deposit market share is declining beyond the fiscal year 2009/10.

The cost of deposit mobilization is increasing year after year with the deposit growth. The study shows that the annual ratio of costs to deposit volume has been increasing over the past six years.

The main factors for deposit growth are the changing awareness of the people for savings, growth in the number of branches of banks, in per capita income, in money supply and in the exchange rate to USD. Service excellence and proximity and convenience of bank branches to the public were also mentioned.

Most banks pay the minimum interest rate on saving accounts set aside by the regulatory body. The rates are not attractive to the public particularly for those who are saving aiming the interest income.

The deposit volumes of private commercial banks are also found to be impacted by the policies of the government. The competition over the deposit marker favors the public banks due to their size.

5.2 Recommendations

Based on the findings and conclusion of the study, the researcher is going to recommend the following to the commercial banks:

- As deposits are the critical resource for the banks to stay profitable, the banks have to give more emphasis than ever to the activity.

- To increase their deposit base banks have to intensify branch expansion to areas where there are potential deposit sources even to remote locations even cross border branches where potential deposits in form of foreign currencies is obtained.

- The commercial banks should also provide competitive deposit interest rates on selected stable deposits keeping sufficient margin of profitability. The issue of paying fair interest rates to selected demand deposit customers could also be considered.
- The banks should also try to introduce new deposit product types that are appealing to the public to increase market share. There are areas that have to be looked at like online account opening and account maintenance to attract foreign depositors and in the process the legal requirements for account opening has to be comfortable.

- The banks have to also search for other alternative fund sources such as sale of their shares, bonds and loan securitization and sales during the severe liquidity problems. Inter-bank lending could be other sources if the market warrants.

- The government has to give equal playing ground for all banks and its policies should be impartial to all banks operating in the country. The existing institution of the banks, Ethiopian Bankers Association, has to broaden its authorities and responsibilities and instigate fair practices among individual banks.

- Banks should use cost effective use of mobilizing deposit as much as possible such as agent and mobile banking service to reach out potential resource areas. These cost sav-

ing strategies could include systematic sharing of infrastructure costs among banks such as ATMS and POS terminals.

- Collective awareness creation strategies about the advantages of savings have to be intensified to reach the unbanked society by all banks. The Bankers Association still has to do much in this regard as saving plays great role not only for the individual banks but also for the economic development of the country as a whole.

5.3 For Further Research

This study has covered come of the factors that determine deposit mobilization activity of banks and identified related costs in mobilizing deposits and some recommendations are made based on the findings and conclusions. Yet there are factors such as the level of education and the dependency ratio of the population identified by some literatures to have impact on saving mobilization. Thus a study has to be further strengthened on the significance of these factors on deposit mobilization of commercial banks.

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Regression

Notes

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Descriptive Statistics

	Mean	Std. Deviation	N
DEP	21.729417	9.5366671	12
DRWD	1.001250	18.2239366	12
GINF	14.191667	13.1853540	12
RPGDP	6.283333	4.4861065	12
M1	20.274583	10.6018373	12
BBR	15.870083	13.2338977	12
CAP	22.781083	19.4227194	12
EXBRUSD	7.290250	8.5608995	12

Correlations

		DEP	DRWD	GINF	RPGDP	M1	BBR
Pearson Correlation	DEP	1.000	.484	.515	.458	.811	.878
	DRWD	.484	1.000	.659	.497	.600	.416
	GINF	.515	.659	1.000	.283	.358	.516
	RPGDP	.458	.497	.283	1.000	.454	.289
	M1	.811	.600	.358	.454	1.000	.750
	BBR	.878	.416	.516	.289	.750	1.000
	CAP	.086	-.005	-.130	.352	.169	.125
	EXBRUSD	.729	.348	.294	.248	.619	.453
Sig. (1-tailed)	DEP	.	.056	.043	.067	.001	.000
	DRWD	.056	.	.010	.050	.020	.089
	GINF	.043	.010	.	.186	.127	.043
	RPGDP	.067	.050	.186	.	.069	.181
	M1	.001	.020	.127	.069	.	.002
	BBR	.000	.089	.043	.181	.002	.
	CAP	.395	.494	.343	.131	.300	.349
	EXBRUSD	.004	.134	.177	.219	.016	.070
N	DEP	12	12	12	12	12	12
	DRWD	12	12	12	12	12	12
	GINF	12	12	12	12	12	12
	RPGDP	12	12	12	12	12	12
	M1	12	12	12	12	12	12
	BBR	12	12	12	12	12	12
	CAP	12	12	12	12	12	12
	EXBRUSD	12	12	12	12	12	12

Correlations

		CAP	EXBRUSD
Pearson Correlation	DEP	.086	.729
	DRWD	-.005	.348
	GINF	-.130	.294
	RPGDP	.352	.248
	M1	.169	.619
	BBR	.125	.453
	CAP	1.000	-.148
	EXBRUSD	-.148	1.000
Sig. (1-tailed)	DEP	.395	.004
	DRWD	.494	.134
	GINF	.343	.177
	RPGDP	.131	.219
	M1	.300	.016
	BBR	.349	.070
	CAP	.	.323
	EXBRUSD	.323	.
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	DRWD	12	12
	GINF	12	12
	RPGDP	12	12
	M1	12	12
	BBR	12	12
	CAP	12	12
	EXBRUSD	12	12

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	EXBRUSD, CAP, GINF, RPGDP, BBR, DRWD, M1[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: DEP

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.968[a]	.938	.829	3.9446422

Model Summary[b]

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	.938	8.613	7	4	.027	1.936

a. Predictors: (Constant), EXBRUSD, CAP, GINF, RPGDP, BBR, DRWD, M1

b. Dependent Variable: DEP

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	938.187	7	134.027	8.613	.027[a]
	Residual	62.241	4	15.560		
	Total	1000.428	11			

a. Predictors: (Constant), EXBRUSD, CAP, GINF, RPGDP, BBR, DRWD, M1

b. Dependent Variable: DEP

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.685	4.348		1.768	.152
	DRWD	-.033	.117	-.064	-.285	.790
	GINF	.046	.148	.063	.309	.773
	RPGDP	.373	.342	.175	1.090	.337
	M1	.051	.253	.056	.200	.851
	BBR	.437	.165	.607	2.651	.057
	CAP	.002	.073	.003	.021	.984
	EXBRUSD	.423	.191	.380	2.218	.091

Coefficients[a]

Model		95% Confidence Interval for B	
		Lower Bound	Upper Bound
1	(Constant)	-4.386	19.757
	DRWD	-.359	.292
	GINF	-.365	.456
	RPGDP	-.576	1.321
	M1	-.652	.753
	BBR	-.021	.895
	CAP	-.201	.204
	EXBRUSD	-.107	.953

Coefficients[a]

Model		Correlations			Collinearity Statistics	
		Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)					
	DRWD	.484	-.141	-.036	.310	3.231
	GINF	.515	.153	.039	.372	2.689
	RPGDP	.458	.479	.136	.602	1.661
	M1	.811	.100	.025	.197	5.086
	BBR	.878	.798	.331	.297	3.368
	CAP	.086	.010	.003	.706	1.416
	EXBRUSD	.729	.743	.277	.530	1.888

a. Dependent Variable: DEP

Coefficient Correlations[a]

Model			EXBRUSD	CAP	GINF	RPGDP	BBR
1	Correlations	EXBRUSD	1.000	.321	-.142	-.093	.099
		CAP	.321	1.000	.132	-.390	-.080
		GINF	-.142	.132	1.000	-.040	-.561
		RPGDP	-.093	-.390	-.040	1.000	.080
		BBR	.099	-.080	-.561	.080	1.000
		DRWD	.183	.130	-.644	-.268	.383
		M1	-.493	-.157	.443	-.100	-.699
	Covariances	EXBRUSD	.036	.004	-.004	-.006	.003
		CAP	.004	.005	.001	-.010	-.001
		GINF	-.004	.001	.022	-.002	-.014
		RPGDP	-.006	-.010	-.002	.117	.005
		BBR	.003	-.001	-.014	.005	.027
		DRWD	.004	.001	-.011	-.011	.007
		M1	-.024	-.003	.017	-.009	-.029

Coefficient Correlations[a]

Model			DRWD	M1
1	Correlations	EXBRUSD	.183	-.493
		CAP	.130	-.157
		GINF	-.644	.443
		RPGDP	-.268	-.100
		BBR	.383	-.699
		DRWD	1.000	-.556
		M1	-.556	1.000
	Covariances	EXBRUSD	.004	-.024
		CAP	.001	-.003
		GINF	-.011	.017
		RPGDP	-.011	-.009
		BBR	.007	-.029
		DRWD	.014	-.017
		M1	-.017	.064

a. Dependent Variable: DEP

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index
1	1	5.546	1.000
	2	1.122	2.224
	3	.522	3.259
	4	.321	4.158
	5	.220	5.022
	6	.137	6.370
	7	.109	7.138
	8	.023	15.429

Collinearity Diagnostics[a]

Model	Dimension	Variance Proportions				
		(Constant)	DRWD	GINF	RPGDP	M1
1	1	.00	.00	.00	.01	.00
	2	.00	.19	.01	.00	.00
	3	.00	.07	.00	.03	.00
	4	.01	.04	.24	.04	.00
	5	.04	.01	.04	.20	.01
	6	.00	.01	.17	.36	.01
	7	.23	.19	.12	.35	.07
	8	.71	.49	.42	.00	.91

Collinearity Diagnostics[a]

Model	Dimension	Variance Proportions		
		BBR	CAP	EXBRUSD
1	1	.00	.01	.01
	2	.00	.04	.00
	3	.01	.15	.27
	4	.02	.06	.20
	5	.24	.12	.02
	6	.11	.59	.27
	7	.06	.03	.07
	8	.56	.00	.16

a. Dependent Variable: DEP

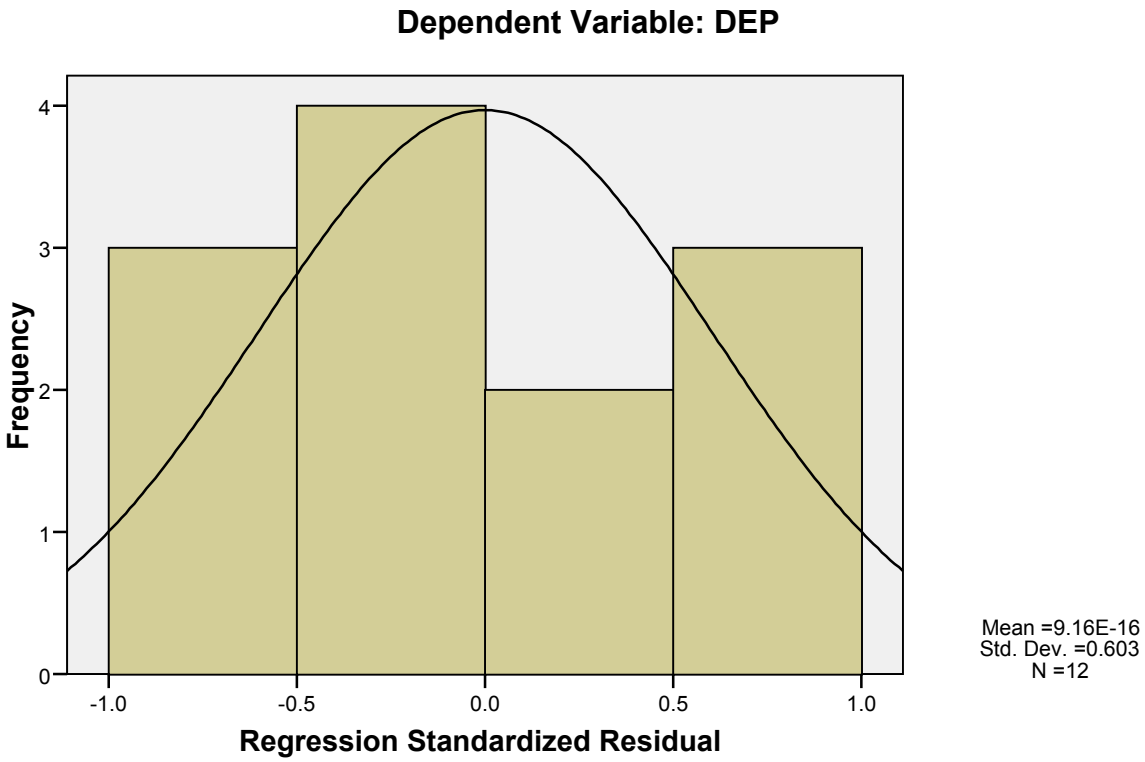
Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	9.715448	42.564743	21.729417	9.2352458	12
Residual	-3.598620	3.7963903	.0000000	2.3787087	12
Std. Predicted Value	-1.301	2.256	.000	1.000	12
Std. Residual	-.912	.962	.000	.603	12

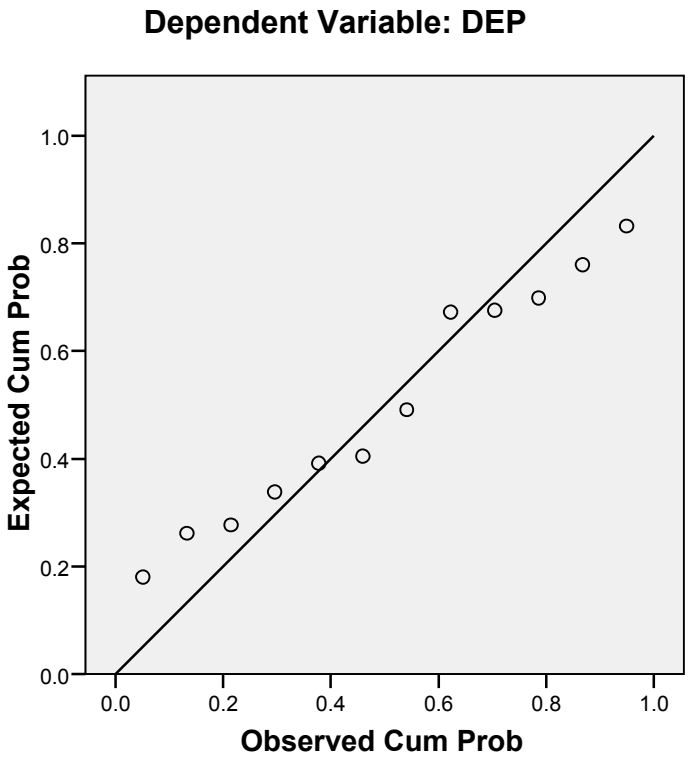
a. Dependent Variable: DEP

Charts

Histogram

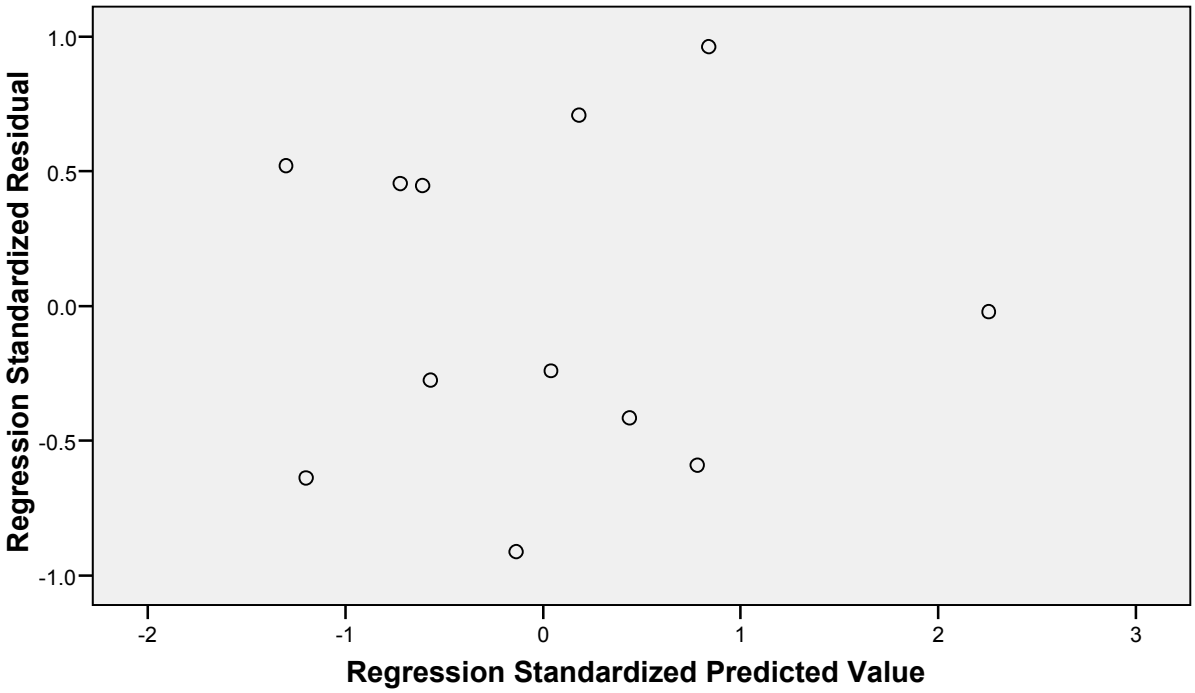

Dependent Variable: DEP
Frequency
4
3
2
1
0
-1.0
-0.5
0.0
0.5
1.0
Regression Standardized Residual
Mean =9.16E-16
Std. Dev. =0.603
N =12

Normal P-P Plot of Regression Standardized Residual



Scatterplot

Dependent Variable: DEP



```
DESCRIPTIVES
  VARIABLES=TDB DRWD GINF RPGDP MSM2 BBR TCB EXBRUSD
  /STATISTICS=MEAN STDDEV MIN MAX .
```

Descriptives

Notes

Output Created		21-JAN-2015 23:43:13
Comments		
Input	Data	C:\Program Files\SPSS Evaluation\13 years data qua.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	12
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=TDB DRWD GINF RPGDP MSM2 BBR TCB EXBRUSD /STATISTICS=MEAN STDDEV MIN MAX .
Resources	Elapsed Time	0:00:00.02
	Processor Time	0:00:00.03

[DataSet1] C:\Program Files\SPSS Evaluation\13 years data qua.sav

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
TDB	12	25030.900	237146.20	85605.283	68600.441843
DRWD	12	3.14391	5.41462	4.0393742	.98221687
GINF	12	-7.20000	36.40000	14.475000	12.62898002
RPGDP	12	136.00000	359.00000	215.83333	76.47796276
MSM2	12	27322.000	235313.60	88291.050	68062.669933
BBR	12	320.00000	1724.0000	682.00000	436.54448904
TCB	12	2529.0000	23070.000	9901.4083	6641.6177124
EXBRUSD	12	8.57000	18.74000	11.674167	4.00331103
Valid N (listwise)	12				

Addis Ababa University
College of Business and Economics
Executive Master of Business Administration

This questionnaire is prepared to gather data from the employees of commercial banks of Ethiopia to be used as an input for the accomplishment of EMBA Master's Thesis on the title 'The determinants of deposit mobilization and related costs by commercial banks in Ethiopia: The case of private banks in Ethiopia'. The aim of the thesis paper is to explore the factors that have significant influence on the deposit mobilization activity by the banks. Your genuine and well thought response to this questionnaire will greatly help foster the aim. Any information provided will only be used for academic purpose and it will be kept confidential and utmost anonymity.

Thank you so much for giving me your valuable time in responding the issues raised below.

I. Personal Information

1. Sex **(optional)** ☐ Female ☐ Male
2. Marital status **(optional)** ☐ Married ☐ Single ☐ Divorced ☐ Other
3. Age ☐ Below 25 years ☐ 26-35 years ☐ 36-45 years ☐ 46 and above
4. Level of your monthly income ☐ Less than Br.3,000 ☐ From Br.3,001-6,000 ☐ From Br.6,001-9,000 ☐ Beyond Br.9,000
5. Position in the bank ☐ Branch manager ☐ Accountant ☐ Auditor ☐ Customer service officer ☐ Other positions, please specify----------
6. Work experience in the bank: ☐ Below five years ☐ 6-15 years ☐ 16-25 years ☐ 26 and above years
7. Besides your position as employee of the bank, are you the customer of the bank or do you deposit your money in the bank. ☐ Yes ☐ No

II. General Information

8. What is the ownership status of the bank you are employed at?
   ☐ Privately owned ☐ Government owned
9. Which group of customers are the most significant depositors of your bank in terms of magnitude of deposits?
   ☐ Individual customers ☐ Business organizations ☐ Government entity ☐ NGOs* ☐ If others specify ----------
10. Which deposit type has the most significant deposit volume?
    ☐ Savings account deposits
    ☐ Current account deposits
    ☐ Fixed time deposits
    ☐ If others, specify ----------

*Non-government organizations

11. How many branches does your bank have as of the year ended June 30, 2014?
    - ☐ Less than 50 branches ☐ 51-100 branches
    - ☐ 101-150 branches ☐ 151-200 branches
    - ☐ More than 200 branches
12. Is your bank increasing the number of its branches every year?
    - ☐ Yes ☐ No
13. If your answer for Number 12 above is 'Yes' what do you think is the main cause for the branch expansion?
    - ☐ Deposit mobilization ☐ Loan availment
    - ☐ To lead the banking sector by having greater number of branches
    - ☐ To reach out foreign currency sources
    - ☐ Other reasons (specify)----------
14. Does the volume of deposit mobilized by respective branches of your bank differ?
    - ☐ Yes ☐ No ☐ I do not know
15. What do you think is the cause for the difference in deposit mobilization among branches?
    - ☐ Convenience of bank office (type of building) ☐ Proximity
    - ☐ Service provision ☐ Awareness of the society
    - ☐ General appearance office & materials
    - ☐ Other reasons (specify)----------
16. Does the volume deposit mobilized by your bank grow year after year?
    - ☐ Yes ☐ No

    If your answer is 'yes', what could be the reason?
    - ☐ Interest rate is attracting & depositors favor it than other investments
    - ☐ The secure feeling of the depositors growing
    - ☐ The service given by the bank ☐ Location and convenience
    - ☐ Branch expansion ☐ Other reasons, specify----------
17. Which of the following transaction or intermediation costs affect the volume of deposit in the bank?(Multiple answers could be given)
    - ☐ The interest rate paid on deposits
    - ☐ Cost of time spent by banker to search new depositors or mobilize deposit
    - ☐ The cost of stationery and office supplies
    - ☐ The advertising and publicity cost
    - ☐ Cost of renting offices
    - ☐ Others, please specify----------
18. Is the cost of mobilizing deposits increasing year after year?
    - ☐ Yes ☐ No
19. Please assign the following costs in order of their magnitude from number one to five. If your bank is expending highest cost that hugely impacts its profitability, then assign the number one(1) to mean '**Most significant'**; otherwise, assign number 2 for '**Moderately Significant**' or number 3 for '**Less significant**'; number 4 for '**Does not affect**'.

    _____ Interest expenses paid for deposits
    _____Rental costs for offices
    _____ Costs related to recruiting, placing and training bankers for deposit purpose
    _____ Costs related to publicity, promotion such prizes and gifts
    _____ Service related costs such system and fixed assets purchases and process improvement costs
20. Which of the following factors do you think affect the volume of deposits of the bank? (Multiple answers could be given)
    - ☐ Economic environment of the country
    - ☐ The money demanded by Government for infrastructure developments
    - ☐ The volume of business transactions of the country
    - ☐ The confidence of the people on the bank
    - ☐ The banking habit of the people

21. Do you think there is stiff competition among local banks for deposit mobilization currently? ☐ Yes ☐ No
22. If your answer for Number 21 above is 'Yes', what are the possible reasons?----------
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23. What mechanisms are being used by the bank to promote awareness of the society pertaining to banking services such as making savings in banks?----------
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24. Do you believe that the volume of deposits grow after the awareness creation?
☐ Yes ☐ No
25. What special services does the bank provide for depositors?
    - ☐ Prize/award for the depositors
    - ☐ Offering bonus, paying lesser commission or premium over normal interest Rate payment
    - ☐ Special consideration on foreign currency allocation
    - ☐ Loan facility for future investment
    - ☐ If others, please specify----------
26. Are there any services given by the bank for the depositors other than services mentioned in question number 25?
☐ Yes ☐ No
If yes, please specify----------

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27. Does the volume of deposit grow as a result of special services provided for the customers? ☐ Yes ☐ No

Thank You for Your Cooperation to Fill the Questionnaire!

College of Business and Economics
Executive Master of Business Administration
Interview Questions

1. In which of these categories of commercial banks you are currently employed?
   ☐ Privately owned banks ☐ State banks
2. Which sources of mobilizing funds (equity, debt or deposit) is preferred by your bank?
   ☐ Equity ☐ Debt or Deposit
3. What are the basic criteria for the selection between the sources/equity versus debt/? ----------
   ---

   ---
4. In terms of magnitude or proportion, which one is higher in your bank -equity, debt/deposit?
   ☐ Equity ☐ Debt or Deposit
5. Which one of the two do you think is much more expensive?
   ☐ Equity ☐ Debt or Deposit
6. What is your perception on the deposit mobilization activity of your bank year after year?
   ☐ Easing ☐ challenging task
7. What is the direction regarding the rate deposit volume growth of your bank in the past two to three years?
   ☐ growing rate ☐ decreasing rate of growth ☐ it remains stagnant

   Please mention the reasons for either increase or decrease in rate of deposit growth-
   ---

   ---
8. Do you think that the volume of deposit trend under No.7 above will continue in future particularly for the banks like yours/private or state banks/?
   ☐ Yes ☐ No
9. Do you think your bank has attained the required level of deposits to fill the demanded magnitude of loans?
   ☐ Yes ☐ No
10. What are the approaches used by your bank to attract deposits?----------
    ---

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11. Do you think that the approaches used by the bank to attract deposits are effective in attracting the needed magnitude of deposits?
    ☐ Yes ☐ No

    Please indicate if there are limitations on the approaches, if any----------
    ---

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12. In what respect do you think your bank's methods of attracting deposits excel the other competitive banks? ----------
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13. Do you believe there are equal opportunities and challenges to attract deposits by all banks-private versus state banks in Ethiopia?
    ☐ Yes ☐ No if 'no', indicate your opinion?---------

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14. Was there a time when your bank faced financial, economic, political and social shocks that affected the volume of deposits of the bank?
    ☐ Yes ☐ No
    What were the shocks and how did they affect the volume of the deposit?----------
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15. Is your bank's deposit activity the function of macroeconomic factors such as **inflation**, **growth of per capita income**, **fiscal policy**, **investment**, **growth rates of population** , **external trade and global economy**?
    ☐ Yes ☐ No

16. If your answer for number 15 is 'yes', order them (the factors) **inflation**, **growth of per capita income**, **fiscal policy**, **investment**, **growth rates of population**, **external trade and global economy)** according to their level of their significance to affect the deposit mobilization in your perception.
    1. ----------
    2. ----------
    3. ----------
    4. ----------
    5. ----------
    6. ----------
    7. ----------
    8. ----------

The end!