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ABBREVIATION/ACRIMONY

AB: Abay Bank
AIB: Awash International Bank
BIB: Birihan International Bank
BUIB: Buna International Bank
BOA: Bank of Abyssinia
CBB: Construction and Business Bank
CBE: Commercial Bank of Ethiopia
CBO: Cooperative Bank of Oromiya
CC: Correlation Coefficient
CLRM: Classical Linear Regression Model
DB: Dashen Bank
DGB: Debub Global Bank
DW: Durbin-Watson
EB: Enate Bank
EFY: Ethiopian Fiscal Year
FEM: Fixed Effect Model
JB: Jarque-Bera
LIB: Lion International Bank
NBE: National Bank of Ethiopia
NIB: Nib international Bank
OIB: Oromiya International Bank
OLS: Ordinary Least Square
REM: Random Effect Model
RMP: Relative Market Power
ROA: Return on Assets
SCP: Structure-Conduct-Performance
UB: United Bank
WB: Wogagen Bank
ZB: Zemen Bank
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ABSTRACT

The objective of the study was to determine the impact of deposit growth on profitability of selected private commercial banks in Ethiopia. Using quantitative research approach, it was found that deposit growth of banks (DEPG) has a significant effect on profitability of the banks. A mixed research approach and explanatory and descriptive research design were used in this study. In this study, panel data of eight private banks for 10 years (2005 to 2015) was employed as panel data has the advantage of giving more informative data and the rationality to choosing eight commercial banks was due to the availability of structured data for the specific duration. As the result indicates that DEPG with coefficient of 0.6665 and the p-value of 0.0001. The descriptive analysis showed that Cooperative Bank of Oromiya (CBO) had the highest ROA (0.047%) followed by both Bank of Abyssinia (BOA) and Wegagen Bank (WB) (0.040%). The least percentage of ROA is 0.034% in the United bank (UB). In general rule of thumb in other the banking sector expects not less than 5% of ROA, in the banking sector which strives to record. Thus, based on these findings, the following policy implications are forwarded to enhance their efficiency in utilizing the resources they collected from the public by paying significant large amount of interest. The banks should also offer competitive rate on deposits as mechanism of mobilizing more, use different channels of making advertisement of the existing and new product offered to the customers, do the campaign of awareness on agency banking in order to build the trust of customers by studying and minimizing challenges faced by people using this channel.

Key Words: Private Commercial Banks, Deposit Growth, Return on Assets
CHAPTER ONE

1. INTRODUCTION

1.1 Background of the study

The role of banks in a financial market is that of a financial intermediary, which makes use of loan and deposit services to effectively channel the idle funds of the general public into valuable production and other investment projects helping people to reach their goals. Deposit growth is an indispensable factor to increase the sources of the banks to serve effectively. Commercial banks as well as the sector in general do depend on customer’s deposit to advance its clients. According to Sharma (2009), the bank credit and bank deposits are very closely related with each other that they represent, roughly speaking, two sides of the same coin, and the balance sheets of banks.

Performances of the bank depend on deposits, as the deposits are normally considered as a cost-effective source of working fund. To enhance profitability, banks take steps to minimize the expenditure and are forced to mobilize low cost deposits (Sylvester, 2010). Deposit mobilization is the chief source of funds to undertake lending operations, for profitable operation, the amount of deposits is very important (Rajeshwari, 2014).

Ultimately, the goal of financial sector development and increased financial inclusion in Ethiopia is to improve the lives of Ethiopians. In Ethiopia, the first bank establishes by outsider in the name of Bank of Abyssinia in 1905. In 1936 these banks were governed by the Ethiopian government and change its name to The Bank of Ethiopia. Over the past ten decades Ethiopia has many governmental and privet banks participate in the overall of the economy in order to enjoy the profit that was generated from the industry. Among the various activities mostly they depend on deposit growth that can facilitate their credit activity, import and export activity and capital requirement. It generates additional income or money to achieve their objectives and day to day activity. After the down fall of the Dergue regime many private banks join the industry in accordance with proclamation 84/94 and the commercial code of Ethiopia.
The mobilization of resources through deposits helps the bank to meet the growing demands from various sectors of the economy namely, agriculture, small scale industry, weaker sections of the community and the like. It is the size of the deposits that largely decides the lending potential of a bank. According to (Varman, 2005), deposits are foundations upon which thrive and grow. They are unique items on a bank's balance sheet that distinguish them from other types of business organizations. The ability of a bank's management and staff to attract checking and savings accounts from business and individuals is an important measure of the bank’s acceptance by the public. Deposits provide most of the raw materials for bank loans and thus represent the ultimate source of bank profits and growth. If the resource not adequately managed it may lead to insolvency (in case of low liquidity) or low profitability (in case of high liquidity) and ultimately destroy the wealth of shareholder and breakdown of entire financial institutional framework due to strong integration, dependencies and contagion effect (Birhanu, 2015).

According to Zewdu (2014), the Ethiopian financial sector consists of two public banks including the Development Bank of Ethiopia (DBE), 16 private banks. The government-owned Commercial Bank of Ethiopia (CBE) is the dominant commercial bank and accounts for 70% of total assets of banks as of May, 2016. The balance, 30%, is accounted by the other 16 banks. Unlike many government-owned commercial banks, CBE is relatively well run and profitable.

1.2 Statement of the Problem

The finance literature provides support for the argument that banks with better deposit growth and mobilization grow faster, while inefficient deposit growth and deposit growth bear the risk of bank failure (Tuyisime & Memba, 2015). The deposit or liquidity position of a bank can be affected by internal or external factors. This factor has a direct relationship with the organization objective achievement especially on profit maximization and shareholder satisfactions. According to Birhanu (2015) the liquidity position of banks can be affected by bank specific factors, macroeconomic factors and government/central bank regulations. Firm specific factors include profitability, loan growth, bank size, capital adequacy, the percentage of non-performing loan on the total volume of loans which measures loan quality and others. Macroeconomic factors include gross domestic products/GDP, the saving investment trade off, the rate of inflation, different types of interest rates and other macroeconomic factors.
Private banks in Ethiopia play their mediation role by absorbing financial surpluses from their holders (depositors) and put them at the disposal of investors (borrowers) to be directed towards various investment channels. In preliminary interview with eight executives of private banks in Ethiopia, it was assured that this investment activity carried out by the banks are hardly avoid of risks and problems. This is because the private banks are seeking to maximize its expected profits on these investments, and this requires optimum utilization of the available resources, since the banks’ existence is determined by the profit it makes.

In theory, banks increase their deposit from year to year their deposit also increase so it shows a positive relationship between deposit and profitability. Respective banks annual reports (2012-15) as organized on Table 1.1 showed that there is a mismatch on the theoretical relationship between deposit growth and profitability.

Table 1.1: Banks with deposit and profit

<table>
<thead>
<tr>
<th>Banks</th>
<th>Description</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dashen Bank</td>
<td>Deposit</td>
<td>14,065.60</td>
<td>15,851.26</td>
<td>17,681.34</td>
<td>19,814.11</td>
</tr>
<tr>
<td></td>
<td>Profit</td>
<td>652.02</td>
<td>606.79</td>
<td>712.48</td>
<td>729.13</td>
</tr>
<tr>
<td>Awash International Bank</td>
<td>Deposit</td>
<td>9,204.36</td>
<td>12,545.21</td>
<td>15,039.71</td>
<td>18,520.42</td>
</tr>
<tr>
<td></td>
<td>Profit</td>
<td>394.42</td>
<td>507.56</td>
<td>618.00</td>
<td>645.34</td>
</tr>
<tr>
<td>Bank of Abyssinia</td>
<td>Deposit</td>
<td>6,771.46</td>
<td>8,496.15</td>
<td>9,096.48</td>
<td>11,118.17</td>
</tr>
<tr>
<td></td>
<td>Profit</td>
<td>216.32</td>
<td>216.32</td>
<td>447.42</td>
<td>291.74</td>
</tr>
<tr>
<td>Nib International Bank</td>
<td>Deposit</td>
<td>5,838.13</td>
<td>6,655.21</td>
<td>7,923.29</td>
<td>9,774.11</td>
</tr>
<tr>
<td></td>
<td>Profit</td>
<td>286.23</td>
<td>299.37</td>
<td>297.37</td>
<td>337.07</td>
</tr>
<tr>
<td>Wegagen Bank</td>
<td>Deposit</td>
<td>5,758.18</td>
<td>7,550.66</td>
<td>8,384.48</td>
<td>9,870.94</td>
</tr>
<tr>
<td></td>
<td>Profit</td>
<td>336.25</td>
<td>343.32</td>
<td>304.90</td>
<td>352.45</td>
</tr>
<tr>
<td>United Bank</td>
<td>Deposit</td>
<td>6,757.51</td>
<td>8,063.47</td>
<td>8,904.98</td>
<td>11,804.36</td>
</tr>
<tr>
<td></td>
<td>Profit</td>
<td>297.86</td>
<td>213.74</td>
<td>198.27</td>
<td>281.32</td>
</tr>
<tr>
<td>Lion International Bank</td>
<td>Deposit</td>
<td>1,736.66</td>
<td>2,105.86</td>
<td>2,686.98</td>
<td>4,457.00</td>
</tr>
<tr>
<td></td>
<td>Profit</td>
<td>75.41</td>
<td>111.41</td>
<td>96.58</td>
<td>150.58</td>
</tr>
<tr>
<td>Cooperative Bank of Oromiya</td>
<td>Deposit</td>
<td>2,797.54</td>
<td>4,465.04</td>
<td>5,450.10</td>
<td>7,367.89</td>
</tr>
<tr>
<td></td>
<td>Profit</td>
<td>102.02</td>
<td>204.47</td>
<td>343.16</td>
<td>312.44</td>
</tr>
</tbody>
</table>

Source: Banks Respective Banks Annual Reports (2012-15)

According to the above table, Bank of Abyssinia decreased it profit whereas it deposit increased from 9,096.48 to 11,118.17 in 2014 and 22015. Nib bank had the same experience as no change
on profit whereas deposit increased from 6,655.21 to 7,923.29. Wegagen Bank’s profit decreased from 343.3 to 304.9 while the deposit increased from 7,550.66 to 8,384.48 from the previous year of 2014. This shows there is a relationship between a deposit and a profit. Thus, the researcher attempted to investigate relationship of deposit and profit and the impact of deposit on profitability. Thus, the unusual negative relationship between deposit and profitability was the central attention of this paper and it was attempted to investigate relationship of deposit growth and profit.

In regard to literature gap especially in Ethiopian studies, a number of studies has been undertaken to analyze determinant or factors that influence profitability of private commercial bank in Ethiopia. For instance, Belayneh (2011) and Habtamu (2012) examined the determinant of profitability by employing capital adequacy, bank size, loan production, income diversification, asset quality and administrative cost. Whereas (Getahun, 2014) on his study shows deposit fund, number of branches bank liquidity and managerial efficiency has an impact on profitability. Other studies like sisay (2013); zewdie (2015) and Yirgalem (2015) showed the internal and external factors that determine profitability of private commercial banks with many variables. However, either of them did not show us to what extent that deposit growth (excluding other variables) affects profitability and which deposit type has a major effect on profitability.

In relation to literature gap specially conducted to other countries experience, many studies also show the impact of deposit growth on profitability with different proxies in different countries of the world. For instance, Richard et al. (2015), on their study on the impact of deposit mobilization on profitability, marketing strategy, deposit interest rate and technology advancement has a direct impact on deposit and profitability. Profitability of a commercial bank affected by internal and external factor and it has a significant impact on profitability (Jaber & Abdullah, 2014). Thus, According to Eliona (2013) study conducted on the impact of internal factors on bank profitability are loans, bank deposits and bank interest had a positive correlation with profitability. These are the major gaps that the researcher would like to study to show the impact of deposit growth on profitability. Therefore, this study attempted to determine and investigate the impact of deposit mobilization on profitability in selected private commercial banks in Ethiopia to investigate to what level deposit has influence profitability.
1.3  **Objective of the Study**

1.3.1  **General Objective of the study**

The general objective of the study was to determine the effect of deposit growth on profitability of selected private banks in Ethiopia.

1.3.2  **Specific Objective of the study**

- To compare and contrast deposit growth and profitability among the selected private commercial banks under the study.
- To understand the strength of relationship between deposit growth and profitability
- To know the solution to prevent inefficient management of deposit growth of private commercial banks

1.4  **Research Hypotheses**

The empirical study aims to test the differentiation in result by private banks in Ethiopia. The banks operating across the country were proposed as the target organization of this thesis. The establishment year of the banks were various (few are recently established before 2006) and it showed they were different by establishment year. The relationships between each variable are expected to be compared showing the similarities by time (2006 -2015). The hypotheses for testing variables: deposit growth and profitability by its proxy of Return were generated for testing. This research work proposed the following hypothesis that was considered relevant to the study in the case of private commercial banks in Ethiopia.

- H1: There is no significant relationship between deposit growth and Profitability of banks measured by Return on Asset

The hypothesis and links for testing associations were demonstrated in conceptual framework found at the end of Chapter two.
1.5 Definition of Terms

- **Deposit Mobilization** - is defined as the process of encouraging customers to deposit cash with the bank or luring new clients to come and open accounts with the bank. From an institutional perspective, the primary motive for mobilizing savings lies in lower cost of capital compared to other sources of funds (Elser et al., 1999).

- **Profitability** - The profitability of banks is important to the creditors, owners, employees and management. Some of the variables commonly used to measure banks profitability are Return on Asset, Return on Equity and Net Interest Margin. Return on Asset (ROA) is calculated by net income or profit after tax over total assets. It is also measured by net income over average total assets (Eliona, 2013).

1.6 Significance of the study

Since the purpose of this study is to identify the impact of deposit growth on profitability, it shows the relationship of deposit growth and profitability, the influence of deposit on profit and the role of deposit growth on banks growth to the management of the Banks as well as anyone who has an interest to know about the subject matter. In addition, it raises ideas or strategies that enable banks to have sufficient deposit through mobilization strategy like innovation, technology advancement, quality customer service, new products, marketing strategies, branch expansion and awareness creation on saving. This study helps to modernize the important functions of banking business by becoming the vital source of working fund for the bank.

Since deposit growth is an indispensable factor to increase the sources of the banks to serve effectively, the study plays an important role in providing satisfactory service to different sectors of the economy. Additionally, this study helps the banks to provide large amount of funds to priority sectors for development. In regard to performances of the bank, this study helps on mobilizing the deposit fund as normally considered as a cost-effective source of working fund. This study helps to expand banking operations by operating the successful functioning of commercial banks depends on the extent of funds mobilized. Deposits are the life blood of banking companies. Further, it will be used as a reference material for other researchers who have interest on the subject matter.
This study contributes in the existing literature to provide additional evidence for the deposit growth influencing the bank profitability in developing countries experience. This study is one of very few studies which have investigated empirically and statistically the financial system for the emerging economy of Ethiopia as well as Africa.

1.7 Scope of the study

This study would be better if it were conducted widely by involving all commercial banks operating in Ethiopia so that to come up with more reliable result and valid conclusion. But due to time and resources constraints the study has been delimited to include only eight private commercial banks that had ten year from their establishment date. This study was composed on deposit growth on banking sector special emphases on profitability of private commercial banks. In addition, this study circumstanced on examining the deposit growth on profitability of private commercial banks. Moreover, this study tried to compare and contrast deposit growth and profitability among the selected private commercial banks and the relationship between deposit growth and profitability. Further, it was tried oversee the efficient management of deposit growth of private commercial banks.

1.8 Limitation of the Study

This research did not examine other factors like political, economic and social that have an impact on profitability but for the research purpose this paper thoroughly examined the banks marketing strategy, branch networking, technology advancement and staff trainings that have direct relationship with the activity of resource mobilizations. The study would have the limitation on obtaining the adequate information and available material or information for the study on key deposit growth and profitability determinant variable that may significantly affect bank liquidity like the impact of the latest financial crisis, unemployment rate, and government influence. On the other hand, this study did not include branches of private commercial banks and the government owned commercial bank. Within the sector of banking in Ethiopia, this study did not attempt to extent its scope to development and national bank practices on this regard.
1.9 Organization of the study

This study has been organized into four chapters. The first chapter introduces all about the study conducts. The second chapter presents the literature review; the third chapter deals research design and methodology the fourth chapter deals data presentation and analysis. The fifth and the last chapter end with recommendation and conclusion.
CHAPTER TWO

2. LITERATURE REVIEW

2.1 Theory of Financial Intermediation

According to the theory of financial intermediation, an important role of banks in the economy is to provide liquidity by funding long term, illiquid assets with short term, liquid liabilities (Wang, 2002). Through this function of liquidity providers, banks create liquidity as they hold illiquid assets and provide cash and demand deposits to the rest of the economy. Krueger (2002) emphasize the “preference for liquidity” under uncertainty of economic agents to justify the existence of banks: banks exist because they provide better liquidity insurance than financial markets. However, as banks are liquidity insurers, they face transformation risk and are exposed to the risk of run on deposits. More generally, the higher is liquidity creation to the external public, the higher is the risk for banks to face losses from having to dispose of illiquid assets to meet the liquidity demands of customers and (Wachowicz, 2000).

A usual justification for the existence of deposit-taking institutions, thereby giving also an explanation for the economically important role of banks in providing liquidity, was initially modeled by Bryant (1980); Diamond & Dybvig (1983). They showed that by investing in illiquid loans and financing them with demandable deposits, banks can be described as pools of liquidity in order to provide households with insurance against peculiar consumption shocks (Weisel, Harm, & Brandley, 2003). According to Bello (2005), banking system is the backbone of financial intermediation through the mobilization and channeling of financial resources. Banks in performing their pivotal role in the economy, facilitate financial settlement through the payment system, influence money market rates and provide a means for international payment. The sector mobilizes funds from the surplus-spending units into the economy and by on-lending such funds to the deficit spending units for investment, banks in the process increase the quantum of national savings and investment (Mordi, 2004).

Commercial banks as well as the sector in general do depend on customer’s deposit to advance its clients. According to Sharma (2009), the bank credit and bank deposits are very closely related with each other that they represent, roughly speaking, two sides of the same coin, and the
balance sheets of banks. With regard to the question whether loans make deposits or deposits make loans, two kinds of answers have been given for the puzzle. Banks, the world over, thrive on their ability to generate income through their lending activities. The lending activity is made possible only if the banks can mobilize enough funds from their customers. Since commercial banks depend on depositor’s money as a source of funds, it means that there are some relationships between the ability of the banks to mobilize deposits and the amount of credit granted to the customers. Thus, the main function of financial institutions of mobilizing funds from the surplus economic agents to the deficit economic agents is put to test in order to generate economic growth.

2.2 Concept and Overview of Deposit Mobilization

Mobilization of deposits is one of the important functions of banking business. It is an important source of working fund for the bank. Deposit mobilization is an indispensable factor to increase the sources of the banks to serve effectively. Mobilization of deposit plays an important role in providing satisfactory service to different sectors of the economy. The Commercial Banks must tap deposits from urban and rural areas. This helps the banks to provide large amount of funds to priority sectors for development. The success of the banking greatly lies on the deposit mobilization. Performances of the bank depend on deposits, as the deposits are normally considered as a cost-effective source of working fund. Mobilization of rural savings is one of the important objectives of the Commercial Banks. It helps to expand banking operations. The successful functioning of commercial banks depends on the extent of funds mobilized. Deposits are the life blood of banking companies. Deposits constitute a vital source of funds required for banking business.

Deposit mobilization is defined by Elser et al. (1999) as the process of encouraging customers to deposit cash with the bank or luring new clients to come and open accounts with the bank. From an institutional perspective, the primary motive for mobilizing savings lies in lower cost of capital compared to other sources of funds. According to Kutan et al. (2010) banks serve as intermediaries accepting commercial and individual deposits (savings) and transferring them in the form of loans to investments. Banks went on a massive deposit mobilisation drive by offering a range of products and services that are tailored to their particular clientele which saw them pool
substantial amounts from the depositors. According to Oboh (2005), banks like any other business enterprises uses money input in their normal operation. The input is customer deposits that are used for investment to the customers of the banks. Deposits are defined as funds placed in a financial institution by economic surplus units such as householders, corporations, investors and government. These funds can either be from cash, claims to money, like checks placed in depositor’s accounts, bank loans or money from investments (Van Dahm, 1995). Deposits according to Aliyu (2010), are funds that customers place with a bank and that the bank is obligated to repay on demand, after a specific period of time or after expiration of some required notice period. Deposit is the primary funding source for most banks and, as a result, has significant effect on banks liquidity. Thus, mobilization of deposits for a bank is as essential as oxygen for human being.

In Ethiopia, all the private banks and government owned commercial banks spend many resources in mobilizing deposit through different strategy to earn the necessary deposit for their investment and achievement of objectives. Generally, deposit is one of the main financial products or services being provided by Commercial banks in the country whether public or private banks. A household save their money in the bank for the purposes of security, and for meeting various needs such as emergencies, investment needs, consumption needs or security needs in times of old age/disability, and to manage irregular income streams etc (Annual Report NBE 2008; 179). Banks mobilize deposits from the general public (individuals, businesses, governments, cooperatives, non-profit making associations etc) as part of their intermediation roles (Anteor & Egwu, 2016). Some of the strategy these banks use are branch expansion, high interest rate on deposit, promotion, new products, gifts and lotteries, educating households about the benefit of saving, providing door to door services, training staffs, use of hi-tech technologies and so on.

Mohan (2012), Mobilization of deposits is one of the important functions of banking business. It is an important source of working fund for the bank. Deposit mobilization is an indispensable act or to increase the sources of the banks to serve effectively. Mobilization of deposit plays an important role in providing satisfactory service to different sectors of the economy. The success of the banking greatly lies on the deposit mobilization. Mobilization of deposits is one of the important functions of banking business. It is an important source of working fund for the bank.
Deposit mobilization is an indispensable factor to increase the sources of the banks to serve effectively. Mobilization of deposit plays an important role in providing satisfactory service to different sectors of the economy. The success of the banking greatly lies on the deposit mobilization. Performances of the bank depend on deposits, as the deposits are normally considered as a cost-effective source of working fund. There are different types of deposits, with different maturity pattern carrying different rates of interests. Deposit mobilization is depending on the cost of deposits. Mobilization of deposits for a bank is as essential as oxygen for human being. To enhance profitability, banks take steps to minimize the expenditure and are forced to mobilize low cost deposits. (Sylvester, 2010)

Accordingly, every bank in Ethiopia focuses in mobilizing local currency, foreign currency and sales of share to increase and collect a capital. Capital funds represent equity of the shareholders while deposits are the bank’s liability to customers or depositors (Anteor and Egwu, 2016). Capital usually make-up one of the major sources of funds at the disposal of the commercial banks and its adequacy according to Ekezie (1997) There are reasons that force these banks to struggle to collect a deposit one of the major factor is the enforcement of the central bank NBE regulation in deposit and capital requirement for the banks existence in the industry. Different types of deposit like Demand, Saving, time deposit and issuance of bonds with different interest rate starting from stated 5% up to the banks own interest rate developed in order to attract many depositors as much as possible to come up with remarkable deposit range. This is because of the new regulations set by the central bank that state banks to buy a bond of 27 % from their total outstanding loans. This will reduce the bank’s lending limit from 75 % to 48 % from the total mobilized deposit the other reason is the need of stockholders on their investment as a return in terms of divided from the bank profitability.

2.3 Types of Deposit Account

2.3.1 Saving Deposit

According to Yang (2009), bank savings accounts have traditionally been one of the simplest and most convenient ways to save. These accounts typically have the lowest minimum deposit requirements and the fewest withdrawal restrictions. Savings deposit accounts are accounts
opened by customers to help surplus funds. This type of account is usually operated or opened by small savers, groups of individuals and unincorporated bodies like clubs, associations, etc. (Ujah, 2007). The customers keep money with the bank for some time before they come to withdraw it. For allowing the bank the use of the money for a period of time, savings account holders are paid interest.

Banks pay interest to collect sufficient deposit Singh (2010) in his study proposes substantial interest rates on deposits for banks to lure more deposits in a competitive environment. No cheque withdrawals are allowed on savings accounts. Savings deposit account is mainly operated to encourage savings and thrift. According to NBE (annual report 2006/2007:35-36) the main deposit is saving account that is an interest-bearing account that can be opened for individual’s organizations, financial institutions and associations. It is suitable for the benefit of minors, interdicted persons, bankrupt firms in liquidation and others. The Benefit of the saving in addition to the above statement it is used for emergency, old age, specific needs, to secure the money from fire and theft, future investment and it is eligible for ATM (Automated Teller Machine) services

2.3.2 Current Account (Demand Deposit)

Ujah (2007) posits that a current account or demand deposit account is a deposit account that is kept with the banker on the condition that it may be withdrawn by the depositor or transferred by him to some other persons without previous notice to the bank, at any time during banking hours. Singh (2010) defines a cheque or current account as a transactional deposit account held at a bank that allows for withdrawals and deposits. Elser et al (2005) elaborate that money held in a cheque or current account is very liquid, and can be withdrawn using cheques, automated cash machines and electronic debits, among other methods. The money is therefore repayable to the customer as soon as he demands for it or calls for it.

The balance, on this account is always currently due for repayment on demand, hence the name, “demand deposit account (Anetor and Egwu, 2016). Current account appears to be the most popular of the various types of accounts to businessman and people with high earnings. This can be witnessed by the different cheque leaves circulating around us daily. Demand deposit is a
non-interest bearing deposit and operates mostly by checks. Hence, it is also named as a checking account or current account (current deposit).

The benefit for such type of savings is to enhance business transactions, to reduce money circulation, efficient method of paying bills, safe method of transmitting payments, reduces risk of theft and losing money and to facilitate credit system as overdraft’s facility is permitted with such types of deposit (NBE 2006/2007 Annual report 35-36). These deposits can be withdrawn at any time during the office hours by the issue of the checks (NBE 2008, Annual Report; 36). Most commercial banks do not pay interest on credit balance on current account, however in order to mobilize more deposit some banks in Ethiopia pay interest on and above some specified big amount deposited on customer account. Statements of account are also made out periodically to show the customer’s state of affairs with the particular bank.

2.3.3 Fixed Time Deposit (Certificate of Deposit)

This form of deposit usually has definite tenure and specified interest rate which may be fixed or floating (Nzotta, 2004). Time deposit accounts are accounts into which customers’ deposit money on the condition that the money in such accounts would be left for a fixed period of time. In a typical CD the bank accepts a deposit for a fixed term-usually a pre-set period from six months to five years and pays interest until maturity (Tafirei & Rabson & Linda, 2014). Ujah (2007) sees time deposit accounts as ideal for customers who have surplus funds that they do not need for immediate consumption but on which they may wish to earn some interests.

Since the bank will use the money deposited in this type of account for a longer period, the interest payable on them is usually higher than that payable on ordinary savings deposit account. Fixed time deposit that has an interest bearing with agreed maturity date and interest rate fixed for the agreed period. That has no maximum limit for time deposit and the interest rate is also unaffected for the duration of the deposit. Time deposit is beneficial for both parties (the banker and the depositor) in that it enables the bank to lend the deposited money without the fear of unexpected withdrawals by the depositors unlike the case of the previous type of deposits and Interest rate is guaranteed for the term of the deposit irrespective of market fluctuations. As of Gagan and Rajasekhar (2005), the account is opened with a term in the contract between the bank and the customer that neither the whole, nor part of the deposit may be withdrawn before
the maturity date. The bank acknowledges the deposit by issuing a certificate of deposit that contains the amount deposited, and the duration of the deposit. This certificate of deposit used for the customer as a source document as evidence of debt. However, the customer has a right to break the contract to withdraw the CD before the maturity. At the end of maturity one can cash interest plus principle but now a day’s banks are paying interest from the CD to their customer before the maturity periods some also pay the interest in advance to compute other in the industry as a means of deposit growth strategy.

2.4 Theories of Bank Profitability

Commercial banks are important financial institutions in the financial system and the economy. They have played an important role in the tremendous economic development that has taken place in the region in recent years. Banks mobilize, allocate and invest the greatest part of the economic agents’ savings. In addition, their performance has important consequences on capital allocation, firm expansion, industrial growth and economic development (Belerta, 2014). Flamini et al., (2009) noted that bank profits provide an important source of equity if re-invested into business. This could lead to safe banks, high profits and financial stability. Therefore, profitability of banking sector is important in both individual and macroeconomic level.

Goddard et al., (2004) stated that profitability is vital in maintaining the stability of the banking system and contributes to the state of the financial system. Profitability is a major issue for the sustainability of the bank development and growth and for the depositor and shareholder to have a trust on the investment. Therefore, profitability of banks is very important not only at the individual bank level, but also in the macroeconomic level. Profitability is a reflection of how banks are run, given the environment in which they operate. Profitability is vital in maintaining the stability of the banking system and contributes to the state of the financial system (Goddard et al., 2004). Studies on the performance of banks started in the late 1970s and early 1980s with the application of two industrial organizations model. The Market Power and Efficiency Structure theories (Athanasoglou et al., 2006). Moreover, the balanced portfolio theory has also contributed into the study of bank profitability (Nzongang and Atemnkeng, 2006).

According to Aburime (2008), profit means the difference between the revenue generated from the sale of output and the full opportunity cost of factor used in the production of that output.
Included within costs are the premium charged for risk taking and the costs of using the owners’ capital. These are not included as cost in the accountant’s measure of project which therefore does not correspond to this economic definition of profit. However, profit could either be normal or supernormal. Normal profit is that minimum amount of profit which a firm must acquire in order to induce the firm to remain in operation. Corporate profit planning remains one of the most difficult and time consuming aspects of financial management because of the many variables involved in the decision which are often outside the control of the company. It is even more difficult if the company is operating in a highly competitive economic environment.

A business unit can only grow focusing on its inner strengths to exploit the opportunities in the market. Consequently, the best definition as opined by Tsomocos (2003) should be adopted from a survival growth perspective as business unit should think of surviving before making profit. Again, optimizing profit involves two variables; revenue and cost. The issue of profitability is a continuous issue that a company has to consistently make. Essentially profitability is concerned with the level of turnover that must be achieved in order to cover the level of turnover that must be achieved in order to cover costs and make surplus. Corporate profitability may be improved through ratio analysis, breakeven analysis, marginal analysis, cost control or through financial control. It is therefore necessary to mention at this juncture that whether a bank is planning for profit or taking steps to improve its profitability, it must ensure that it has adequate liquidity to transact business and finance operations. If the plan is to improve or increase profitability by increasing the income level, the bank must be able to determine the financing needs for the new income level.

### 2.4.1 The Market Power Theory

Tregenna (2009) stated that market power theory indicates that performance of bank is influenced by the market structure of the industry. There are two different approaches within the market power theory: the Structure-Conduct-Performance (SCP) and the Relative Market Power (RMP) hypotheses. According to the SCP approach, banks in more concentrated market are more willing to raise their profitability, by the opportunity to lower the deposits rates and to charge higher loan rates as a result of the monopolistic environment, rather than firms operating in less concentrated markets (Tregenna, 2009). While, RMP hypothesis implies that bank profitability is
influenced by market share. It supposes that only banks with differentiated products can influence prices, exercise market power and earn non-competitive profits (Tregenna, 2009).

2.4.2 The Efficiency Theory

The efficiency theory assumes that banks earn high profits because they are more efficient than others. The efficiency theory has two different approaches such as: the X-efficiency and Scale-efficiency hypothesis. Efficient firms are more profitable because of their lower costs due to X-efficiency. Furthermore, the scale approach emphasizes economies of scale rather than differences in management or production technology. Larger firms can gain lower unit cost and higher profits through the economies of scale. Such firms tend to have large market share, which can provide higher concentration and profitability (Athanasoglou et al., 2006).

2.4.3 The Balanced Portfolio Theory

The balanced portfolio theory is the most significant and plays an important role in bank performance studies (Nzongang and Atemnkeng, 2006). According to the Portfolio theory, the optimal holding of each asset in a wealth holder’s portfolio is a function of policy decisions determined by a number of factors such as the vector of rates of return held in a portfolio, a vector of risks associated with the ownership of each financial assets and size of the portfolio. They stated that the ability to receive maximum profits depends on the feasible set of assets and liabilities determined by the management and the unit costs incurred by the bank for producing each component of assets.

2.5 Determinants of Profitability

Many studies have introduced some useful variables in the profit function of commercial banks to show key factors that make a difference in bank profit. Such studies are not without ambiguity especially with regard to the measurement of the variable and the result reported thereafter. However, there is a general agreement that bank profitability is a function of internal and external factors. Internal determinants of bank profitability can be defined as those factors that are influenced by the bank’s management decisions and policy objectives. Management effects are the results of differences in bank management objectives, policies, decisions, and actions reflected in differences in bank operating results, including profitability.
External determinants of bank profitability are concerned with those factors which are not influenced by specific bank’s decisions and policies, but by events outside the influence of the bank. The external factors are sector wide or country wide factors which are beyond the control of the company and affect the liquidity of banks. In general, the two approaches seem similar in context and wide variation is not observed in classifying the determinants of bank liquidity and most of the researchers used both internal and external variables in their studies. Pasioura & Kosmidou (2007); Rajan & Zingales (1998); and Levine (1998). In their studies shows the factors that influence banks’ profitability are important for stakeholders such as the central banks, governments, bankers associations, and other financial authorities as well as the managers of the banks.

2.6 Measurement of Banks Profitability

The profitability of banks is important to the creditors, owners, employees and management. Some of the variables commonly used to measure banks profitability are Return on Asset, Return on Equity and Net Interest Margin. Return on Asset (ROA) is calculated by net income or profit after tax over total assets. It is also measured by net income over average total assets. Ramlall (2009), Flamini, Donald and Schumacher (2009), Gul, Irshad and Zaman (2011), Khrawish, Siam and Khrawish (2011), Aminu (2013) and Soyemi, Akinpelu and Ogunleye (2013) used net income over total assets to measure ROA. While, Srairi (2009), Sufian (2011) and Antonina (2011) are used net income over average total assets to measure ROA. Return on Equity (ROE) is measured by net income or profit after tax over total common stock equity. It is also measured by net income over average total common stock equity. Ali, Akhtar and Ahmed (2011) and Aminu (2013) used net income over total common stock equity to measure ROE. While, Sufian (2011) used net income over average total common stock equity to measure ROE. In addition, Net Interest Margin (NIM) is computed by net interest income over total assets. It is also measured by net interest income over average total interest earned assets. Gul et al. (2011) and Soyemi at al. (2013) used net interest income over total assets to measure NIM. Bank profitability is best measured by ROA, because it represents the best measure of the ability of a firm to generate returns on its portfolio assets (Kosmidou, 2008; Naceur and Goaied, 2008). ROA indicates the profit earned per unit asset and which is most important, it shows the
management’s ability to utilize the bank’s financial and real investment resources to generate profits. As Golin (2001) points out, the ROA has emerged as a key ratio for the evaluation of bank profitability and has become the most common measure of bank profitability in the literature.

2.7 Empirical Literature Review

Zimmerman (1996) found that management decisions, especially regarding loan portfolio concentration, were an important contributing factor in bank performance. Researchers frequently attribute good bank performance to quality management. Management quality is assessed in terms of senior officers’ awareness and control of the bank’s policies and performance. Haslem (1968, 1969) computed balance sheet and income statement ratios for all the member banks of the US Federal Reserve System in a two-year study. His results indicated that most of the ratios were significantly related to profitability, particularly capital ratios, interest paid and received, salaries and wages.

Wall (1985) concludes that a bank’s asset and liability management, its funding management and the non-interest cost controls all have a significant effect on the profitability record. Bourke (1989) found that both liquidity and capital ratio were positively associated with profitability. Molyneux and Thorton (1992) examined the determinants of European banks profitability over the period 1986–1989. They found negative relationship between profitability and liquidity. Pasiouras and Kosmidou (2007) considered European banks from fifteen countries over the period 1995–2001. They found that profitability was positively associated with real GDP. According to Blerta (2014) in his study on internal and external factors that affect profitability he found that bank size, loan, inflation rate, GDP and deposit has a direct positive relationship with profitability. But the study did not show the effect of deposit on profitability. Sarah; Willy;Andrew & Dennis (2014), their study determined the effect of internal factors on profitability of commercial banks in Kenya particularly the banks liquidity. The study employed a descriptive research design incorporating panel data. Internal factor was Liquidity, while Profitability was measured using ROA ratios. The findings of the study showed that all the variables Liquidity have statistically significant and positive relationship with banks profitability.
Rajeshwari (2014) on his research study on deposit mobilization and social-economic impact in the case of Union Bank of Study try to see the type of deposit and effect of deposit on the performance of the bank and find that deposit increase due to effectiveness in mobilization, saving habit of people increase and deposit is concentrated on term deposit rather than on current and saving account. Therefore, he concludes UNI has to introduce new product, increase market share and the bank should create awareness. However, the study did not show us the purpose of this all activities or the end result of the mobilized resource and its effect on profitability. Tuyisime & Memba (2015) on their research the effect of deposit mobilization on financial performance in the case of Rwanda Bank examine the effect of marketing strategy, technology advancement and interest rate change on deposit on the bank financial performance and deposit mobilization. They found that there is a direct relationship on the bank financial performance. The increase in the number of the customers as well as deposits, led to the performance in deposits as the bank was able to disburse more loans to customers which attracted more interest on loans disbursed hence increase in net income and net profit.

Venkateshan (2012) conducted a study entitled “An Empirical Approach to Deposit Mobilization of Commercial Banks in Tamil Nadu”. The researcher made an attempt to study the trend and growth in deposit mobilization of Scheduled Commercial Banks in Tamil Nadu during the period from 1999-2000 to 2008-2009. The Compound Growth Rate (CGR) and Linear Growth Rate (LGR) were calculated from using simple regression analysis. The study found that, there has been a remarkable growth in mobilization of all kinds of deposits in Scheduled Commercial Banks in Tamil Nadu on the whole. In addition, Pai V. S. (2006) studied a research that entitled “Trends in the Indian Banking Industry: Analyses of Inter-regional Trends in Deposits and Credits”. The researcher makes an attempt to study the banking industry focuses on broad trends across banks and different regions in India. The study focuses on five groups of banks both private and public sector. Deposit and credit are the two performance criteria. The study revealed that, the performance of banks regarding deposits and credits at the two points of time has been largely similar. The study observed that, private scheduled commercial banks have shown superior performance. The study also reveals that, their growth on these two parameters, at the two points in time, have been comparable between them.
Gagan and Rajasekhar (2005) focused on urban bias on fund that entitled “Urban Bias in the Flow of Funds and Deposit Mobilization: Evidence from Karnataka, India”. The researcher examines the impact of contrasting policies on the flow of credit and deposit mobilization in rural and urban areas in Karnataka State. The study found that, the formal financial institutions tended to gravitate towards urban areas in the credit provision after the reforms were introduced. During the reform period, rural areas witnessed negative net flow of funds through banking channels. The study also found that, one unit increase in deposits leads to less credit flow in rural areas as compared to urban areas.

In regard to performance, Ramchandra Reddy B. and Dr. Yuvaraja Reddy (2005) conducted a study that entitled “Financial Performance of State Bank of India: An Analysis”. The researchers made an attempt to study the financial performance of State Bank of India. The study focuses on the responsibility areas like deposit mobilization, credit deployment, non-performing assets, profitability and productivity. The study found that, in the changing banking scenario, the State Bank of India is one of the leading banks which welcomes the radical changes and make the organization fit for the changes without much difficulty. Türker (2002) employed two-step approach to examine the indicators of profitability in Tukey for the period between 1997 and 2000. Empirical findings of the conducted study suggested that equity over total assets, liquid assets over total assets and loans over total assets have significantly positive whereas loan loss over total assets, personnel expenditures and total deposits over total assets significantly negative influence over ROA. Also, results revealed that there is a positive link between inflation, government budget deficit and ROA.

According to the literature a higher share of customer deposits in bank liabilities should increase a bank’s profitability, considering that deposits constitute a cheap and stable financial resource compared with other financing alternatives (Claeys and Vander, 2008). Brunilda and Elvana (2015) examined whether there is a direct relationship between the proportion of customer deposits in a bank's total liabilities and the bank’s profitability. Internal factors like portfolio composition and the type of operations performed in a bank can affect the operational costs which have a direct impact on the bank profitability. Instead, an aggressive competition policy could lead banks to pay higher rates to attract deposits from competitors (the so-called “deposit war”), thus squeezing bank margins. If we analyze the ratio of the deposit to total liabilities of
the bank (graphic below) we see that this ratio has been volatile through the years. Both the theories apply in the Albanian banking sector. The “deposit war” has happened among the banks effecting the bank margin. On the other hand, this deposit war has happened because as it is explained in the literature the deposits constitute a cheap and stable financial resource. Though we expect that this factor should not explain the change of profitability or said in other words in the future empirical and econometric analysis it is expected that the factor of deposit to total liabilities of the bank to be not significant (Brunilda and Elvana, 2015).

2.8 Variables

- **Profitability - Dependent Variables** - Profitability constitutes the dependent variable in this study. Every business organization tends towards profit maximization. The banks are no exception. According to Ujah et al (2007), profitability as a portfolio management concept refers to the earnings of a firm from its operations in a given period of time. It has to do with the excess of earnings over costs. Thus, indicating the performance of a business. In this study, Return on Asset (ROA) is adopted as the proxy for profitability. The financial performance of banks is measured by the profitability, the return on equity, the return on assets, loans volume, etc. (Sylvester, 2010). Return on assets is measured by dividing the profit before taxation of the banks by their total assets and then multiplied by 100% to get a percentage return on assets. Return on Assets is profit before tax divided by the total resources owned and controlled by a Bank (Dew, 2007).

- **Deposit Growth - Independent Variables** - is an indispensable factor to increase the sources of the banks to serve effectively and plays an important role in providing satisfactory service to different sectors of the economy. The success of the banking greatly lies on the deposit growth. Performances of the bank depend on deposits, as the deposits are normally considered as a cost-effective source of working fund. There are different types of deposits, with different maturity pattern carrying different rates of interests. Deposit is depending on the cost of deposits. Mobilization of deposits for a bank is as essential as oxygen for human being (Sylvester, 2010).
2.9 Conceptual Framework

Figure 2.1: Conceptual Framework adapted from Brunilda and Elvana (2015)
CHAPTER THREE

3. RESEARCH DESIGN AND METHODOLOGY

3.1 Research Approach

As noted in Creswell (2003), in an investigative study there are three familiar types of research approaches to business and social research namely, quantitative, qualitative and mixed methods approach. Though, each approach has its own strengths and limitations, Creswell (2003) advocates that certain types of social research problems call for specific approaches. Quantitative research is the systematic empirical investigation of observable phenomena via statistical, mathematical or computational techniques (Creswell, 2009).

The objective of quantitative research is to develop and employ mathematical models, theories and/or hypotheses pertaining to phenomena. The process of measurement is central to quantitative research because it provides the fundamental connection between empirical observation and mathematical expression of quantitative relationships. Quantitative data is any data that is in numerical form such as statistics, percentages, etc. The researcher analyzes the data with the help of statistics. A quantitative strategy is best suited as the research has a large focus on numbers and the use of hypothesis and statistical tools to analyze them. The researcher is hoping the numbers will yield an unbiased result that can be generalized to some larger population. Considering the research problem and objective along with the philosophy of the different research approaches, the quantitative nature of the data collected, quantitative research approach was found to be appropriate for this study. Hence, to meet the objectives of this study, mixed research approach was used in this study.

3.2 Research Design

Research designs is a frame work or blue print for conducting research procedure is necessary for obtaining information to solve the problem. Research designed to assist the decision maker in determining, evaluating and selecting the best course of action to take in a given situation. Descriptive studies are usually the best methods for collecting information that will demonstrate relationships and describe the world as it exists. These types of studies are often done before an experiment to know what specific things to manipulate and include in an experiment. Descriptive
studies are designed primarily to describe what is going or what exist. In this study, it was employed descriptive and explanatory research to study what is the impact of deposit growth on the profitability of banks. Hence, to meet the objectives of this study, descriptive and explanatory research design were used in this study.

3.3 Population of the study

In this research, the target population is the banking sector in Ethiopia. According to NBE annual report (2015/16), the number of banks in Ethiopia declined to 18 from 19 due to the merger of Construction & Business Bank with Commercial Bank of Ethiopia. Of the 18 banks 16 were private and 2 public. Banks opened 494 new branches in 2015/16 (of which 363 were private) raising the total branch network to reach 3187. Awash International Bank S.C (AIB), Wogagen 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), Berehan International Bank S.C (BIB), Buna International Bank S.C (BUIB), Oromia International Bank S.C (OIB), Zemen Bank S.C (ZB), Abay Bank(AB), Addis International Bank(ADIB), Debub Global Bank(DGB) and Enat Bank (EB).

3.4 Sample Frame and Sample Size

Panel data of eight private banks for 10 years (2005 to 2015) was used to drawing sample size to the research. This is because of that panel data has the advantage of giving more informative data and the rationality to choosing eight commercial banks was due to the availability of structured data for the specific duration. The eight-commercial bank chosen for the study as follows Dashen Bank (DB), Bank of Abyssinia (BOA), Awash international Bank (AIB), Nib International Bank (NIB), Cooperative bank of Oromia (CoBO), Lion International Bank (LIB), Wegagen Bank (WB) and United Bank (UB). Sampling size can be defined as the number of elements to be included in a population to be studied. For the researcher in order to have more important decision there should be a more information and that information should be obtained very precisely. Since the number of banks in the country is small, the study assumed the data of all banks without taking sample. Therefore, the sampling frame and the sample was the same. Thus, in this case the sample size was almost equal to the population which enabled to make
appropriate generalization to the overall population. Therefore, the matrix for the frame is 10*8 that includes 80 observations.

3.5 Data Source

In this study, both primary and secondary sources of data were used in the study. Primary data were collected through interview and checklist. Accordingly, the qualitative data sources were the private banks executives and their professional employees. In the same way, secondary data were collected from annual reports of the banks and national bank. Panel data of eight private banks for 10 years (2005 to 2015) was used to drawing sample size to the research. This is because of that panel data has the advantage of giving more informative data and the rationality to choosing eight private banks was due to the availability of structured data for the specific duration.

3.6 Data Collection

To analyze the impact of deposit growth of eight commercial banks for ten years i.e. (from 2005-2015) EFY on profitability data were collected from audited financial reports of commercial banks and from national bank of Ethiopia annual reports. The data are mainly gathered from structured document review and it helps the researcher to combine the strengths and amend some of the inadequacies of any source of data to minimize risk of irrelevant conclusion. Consistent and reliable research indicates that research conducted by using appropriate data collection instruments increase the credibility and value of research findings (Koul, 2006).

Accordingly, structured document review has been used for this research to collect the required information, which would be relevant for addressing the objectives of the study from secondary data. In order to avoid the risk of distortion in the quality of data, data were collected from audited financial statements particularly balance sheet and income statement of each commercial bank included in the sample and various journals and publications of NBE from 2005 to 2014/15.

3.7 Data Presentation and Analysis

To achieve the objective of the study, the study was primarily based on panel data, which were collected through structured document review from secondary data. The collected panel data
related to deposit growth was analyzed using the descriptive statistics and multiple regressions of EVIEW 8 software. Values were used to analyze the trends of the data from 2005 to 2015 based on the sample of eight commercial banks that was collected from websites, annual reports of NBE and the selected private commercial banks. Qualitative data were narratively presented in this study.

3.8 Description and Measurement of Variables

This study has attempted to see the relationship between the dependent and independent variables through testing the hypotheses regarding to the relationships between deposit growth and its impact on profitability in private commercial banks in Ethiopia. It is apparent that the most significant task is to select the appropriate explanatory variables. The study excluded variables such as political incidents, impact of economic reforms or the exchange rate regime. The study also considered which other determinate factors could influence the deposit growth of banks in the Ethiopia.

- **Return on Asset (ROA) as a proxy Dependent Variable - Profitability:** Profitability constitutes the dependent variable in this study. Every business organization tends towards profit maximization. The banks are no exception. According to Ujah et al (2007), profitability as a portfolio management concept refers to the earnings of a firm from its operations in a given period of time. It has to do with the excess of earnings over costs. Thus, indicating the performance of a business. In this study, Return on Asset (ROA) is adopted as the proxy for profitability. Return on assets is measured by dividing the profit before taxation of the banks by their total assets and then multiplied by 100% to get a percentage return on assets. Return on Assets is profit before tax divided by the total resources owned and controlled by a Bank (Dew, 2007).

- **Deposit Growth Independent Variables** - The major explanatory variables in this work are deposit growth which is independent variables. It is an indispensable factor to increase the sources of the banks to serve effectively and plays an important role in providing satisfactory service to different sectors of the economy. The success of the banking greatly lies on the deposit growth.
3.9 Techniques for analysis

The researcher made use of the simple regression technique to evaluate the relationship between deposit growth and profitability of private banks in Ethiopia. Regression analysis is about predicting the future (the unknown) based on data collected from the past (the known). A regression analysis determines the mathematical equation to be used to figure out what will happen, within a certain range of probability. It analyzes one variable, the dependent variable, taking into consideration the effect on it by one or more factors, the independent variables. The analysis determines that some independent variables have more effect than others, so their weights must be taken into account when they are the basis of a prediction. Regression analysis, therefore, is the process of looking for predictors and determining how well they predict Anyanwu (2000). This study used data over the period 2006 – 2015, and in line with the methodology to be adopted, Bank profitability is regressed on a variety of independent variables (deposit growth), while holding constant other factors that may affect profitability. Regression analysis was carried out to test the impact of deposit growth (deposit) on profitability of banks. Here, Deposit Growth is independent variable and profitability is the dependent variable. So, study utilized one DV-one IVliner model. As there was only one independent variable in this study and it was only taken into account, the study was called a simple regression.

\[
Y = \beta_0 + \beta_1 x + \mu
\]

Where:
- \( Y \) = Dependent variable Return on Asset (ROA) as Proxy of Profitability
- \( \beta_0 \) = Constant Coefficient
- \( \beta_1 \) = Regression Coefficient for Deposit Growth
- \( x \) = Independent Variable of Deposit Growth
- \( \mu \) = Error term or Stochastic term
CHAPTER FOUR

4. DATA ANALYSIS AND DISCUSSIONS OF RESULTS

This chapter deals with analysis of the finding and discussion of the result in order to achieve research objectives and set a base for conclusion. The data was analyzed by the known software called eview version 8. The impact of deposit growth of eight private commercial banks in Ethiopia has been calculated by applying regression model and the figures of this calculation are taken Return on Asset (ROA) as the proxy for banks profitability. The detailed figures can be obtained from the appendix section of the paper.

4.1 Normality Test

One assumption of regression model and correlation model is the normal distribution of the residual part of the model. If the residuals are normally distributed, the histogram should be bell-shaped and the Jarque-Bera statistic should not be significant. This part presents the normality test result of the study based on the following assumption.

Figure 4.1 presents graphical presentation of normality test. As it can be observed from above diagram that normality assumption holds, this is because the coefficient of kurtosis is 7.83 which
close to 3 and the skewness are also close to zero with coefficient of -1.943895. In this study, the assumption of classical linear regression model (CLRM) is fulfilled as the normal distribution of the residual part of the model. It meant the residuals are normally distributed and the histogram is expressed as bell-shaped. According to (Kreiberg 2005), for sample sizes that are sufficiently large, violation of the normality assumption is virtually inconsequential. As per the central limit theorem, if the disturbances are not normally distributed, the ordinary list square (OLS) estimators are still normally distributed approximately if there are large-sample data. Thus, since the sample size for this study is large enough, it is approximately considered as normally distributed. The test statistic will asymptotically follow the appropriate distribution even in the absence of error normality. In smaller samples, however, it is important to meet this assumption for the p-values of the t-test to be valid. The null hypothesis for this test is that the data is not normally distributed. The alternative hypothesis of this the data is normally distributed.

4.2 Descriptive Analysis

4.2.1 Deposit Growth Analysis from 2006 -2015

Table 4.1: Deposit Growth Trend From 2006 – 2015

<table>
<thead>
<tr>
<th>Year</th>
<th>Dashen Bank</th>
<th>Awash International Bank</th>
<th>Bank of Abyssinia</th>
<th>Nib International Bank</th>
<th>Wegagen Bank</th>
<th>United Bank</th>
<th>Lion International Bank</th>
<th>Cooperative Bank of Oromiya</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DEPG</td>
<td>DEPG</td>
<td>DEPG</td>
<td>DEPG</td>
<td>DEPG</td>
<td>DEPG</td>
<td>DEPG</td>
<td>DEPG</td>
</tr>
<tr>
<td>2006</td>
<td>0.316631</td>
<td>0.212310</td>
<td>0.249885</td>
<td>0.294077</td>
<td>0.531777</td>
<td>0.263115</td>
<td>1.000000</td>
<td>1.826531</td>
</tr>
<tr>
<td>2007</td>
<td>0.265484</td>
<td>0.243421</td>
<td>0.278121</td>
<td>0.314491</td>
<td>0.089160</td>
<td>0.585558</td>
<td>2.075623</td>
<td>0.768599</td>
</tr>
<tr>
<td>2008</td>
<td>0.288333</td>
<td>0.282433</td>
<td>0.292262</td>
<td>0.334608</td>
<td>0.256902</td>
<td>0.479836</td>
<td>0.875137</td>
<td>0.609879</td>
</tr>
<tr>
<td>2009</td>
<td>0.280036</td>
<td>0.230438</td>
<td>0.143443</td>
<td>0.252033</td>
<td>0.052145</td>
<td>0.306742</td>
<td>0.446245</td>
<td>0.739373</td>
</tr>
<tr>
<td>2010</td>
<td>0.167251</td>
<td>0.268237</td>
<td>0.182222</td>
<td>0.249616</td>
<td>0.518682</td>
<td>0.283812</td>
<td>0.274961</td>
<td>0.443646</td>
</tr>
<tr>
<td>2011</td>
<td>0.187849</td>
<td>0.188613</td>
<td>0.114596</td>
<td>0.131990</td>
<td>-0.033454</td>
<td>0.114031</td>
<td>0.338594</td>
<td>0.412605</td>
</tr>
<tr>
<td>2012</td>
<td>0.126953</td>
<td>0.362964</td>
<td>0.254700</td>
<td>0.139957</td>
<td>0.311293</td>
<td>0.193260</td>
<td>0.212596</td>
<td>0.596057</td>
</tr>
<tr>
<td>2013</td>
<td>0.115453</td>
<td>0.198841</td>
<td>0.070659</td>
<td>0.190539</td>
<td>0.110430</td>
<td>0.104360</td>
<td>0.275955</td>
<td>0.220615</td>
</tr>
<tr>
<td>2014</td>
<td>0.120622</td>
<td>0.231434</td>
<td>0.222250</td>
<td>0.233593</td>
<td>0.177288</td>
<td>0.325591</td>
<td>0.658738</td>
<td>0.351882</td>
</tr>
<tr>
<td>2015</td>
<td>0.265484</td>
<td>0.212310</td>
<td>0.292262</td>
<td>0.139957</td>
<td>0.052145</td>
<td>0.283812</td>
<td>0.338594</td>
<td>0.443646</td>
</tr>
</tbody>
</table>

Source: Its own survey, 2017
This part of the study attempted to analysis the panel data of eight commercial banks for 10 years (2006 to 2015). This is because of that this analysis has the advantage of giving more informative data and the rationality to choosing eight commercial banks. Table 4.1 and Figure 4.2 show trend of deposit growth of eight private commercial banks from 2006 – 2015. The eight-commercial bank had chosen for the study as follows Dashn Bank (DB), Bank of Abyssinia (BOA), Awash international Bank (AIB), Nib International Bank (NIB), Cooprative bank of Oromia (CoBO), Lion International Bank (LIB), Wegagen Bank (WB) and United Bank (UB). Basically, this data shows the major function of banks as collecting deposits from surplus units and lend to deficit units that need financing. By ensuring larger-sized and longer-term financing needs of borrowers with collecting small-sized and short-term deposits banks perform size, maturity and risk transformation.

The study shows that the growth of deposit in the private commercial banks ranges from 0.6496443 to 0.206637. It shows that the growth of deposit of the commercial banks are not attractive and their deposit activities varies with in ten years of data. Out of eight private
commercial banks, only two which is 25% of the total surveyed banks have more than half of deposit growth (0.6496443 and 0.641283). The others, almost 75% of the selected commercial private banks have a very deposit growth; that’s around 0.2 deposit growth specifically their deposit growth is 0.21341, 0.2431, 0.21004, 0.228086, 0.206637 and 0.294012. In general, it can be said that most of the selected bank has a below 0.5 growth deposit rate.

4.2.2 Profit Growth Analysis From 2006 -2015

Similar to the above analysis, this part of the study attempted to analysis the panel data of eight commercial banks for 10 years (2006 to 2015). This is for the reason that the analysis has the advantage of giving more informative data and the rationality to choosing eight commercial banks.

Table 4.2: Profit Growth Trend From 2006 – 2015

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>0.4662</td>
<td>0.5128</td>
<td>0.2824</td>
<td>0.3239</td>
<td>0.2955</td>
<td>0.2069</td>
<td>0.0000</td>
<td>0.7375</td>
</tr>
<tr>
<td>2007</td>
<td>0.2888</td>
<td>0.4545</td>
<td>-0.2687</td>
<td>0.3661</td>
<td>0.3125</td>
<td>0.2368</td>
<td>1.0000</td>
<td>2.7458</td>
</tr>
<tr>
<td>2008</td>
<td>0.2178</td>
<td>-0.0014</td>
<td>-3.5969</td>
<td>0.1933</td>
<td>0.2970</td>
<td>0.3277</td>
<td>-5.0313</td>
<td>0.7959</td>
</tr>
<tr>
<td>2009</td>
<td>0.0433</td>
<td>0.0012</td>
<td>0.8549</td>
<td>0.2314</td>
<td>0.0272</td>
<td>0.2643</td>
<td>1.3161</td>
<td>-3.9902</td>
</tr>
<tr>
<td>2010</td>
<td>0.2289</td>
<td>0.4225</td>
<td>0.2854</td>
<td>0.1912</td>
<td>0.4635</td>
<td>0.2351</td>
<td>0.9344</td>
<td>0.9061</td>
</tr>
<tr>
<td>2011</td>
<td>0.2810</td>
<td>0.3135</td>
<td>0.2230</td>
<td>0.3091</td>
<td>0.2475</td>
<td>0.1848</td>
<td>0.0866</td>
<td>0.4691</td>
</tr>
<tr>
<td>2012</td>
<td>0.3088</td>
<td>0.0857</td>
<td>0.1636</td>
<td>0.0386</td>
<td>0.2217</td>
<td>0.1390</td>
<td>0.4198</td>
<td>0.5366</td>
</tr>
<tr>
<td>2013</td>
<td>-0.0745</td>
<td>0.2229</td>
<td>0.0000</td>
<td>0.0206</td>
<td>-0.3936</td>
<td>0.0439</td>
<td>0.3231</td>
<td>0.5011</td>
</tr>
<tr>
<td>2014</td>
<td>0.1483</td>
<td>0.1787</td>
<td>0.5165</td>
<td>-0.1260</td>
<td>-0.0780</td>
<td>-0.0067</td>
<td>-0.1535</td>
<td>0.4042</td>
</tr>
<tr>
<td>2015</td>
<td>0.0228</td>
<td>0.0424</td>
<td>-0.5336</td>
<td>0.1349</td>
<td>0.2952</td>
<td>0.1178</td>
<td>0.3586</td>
<td>-0.0983</td>
</tr>
<tr>
<td>Mean</td>
<td>0.1931</td>
<td>0.2233</td>
<td>-0.2073</td>
<td>0.1683</td>
<td>0.1688</td>
<td>0.1750</td>
<td>-0.0746</td>
<td>0.3008</td>
</tr>
</tbody>
</table>

Source: Its own survey, 2017

Table 4.3 shows profit growth trend from 2006 – 2015 of the selected private commercial banks. The mean result of the data shows that the mean profit of the banks ranges from 0.3 to -0.2. In chapter three, it was indicated that profitability as a portfolio management concept refers to the
earnings of a firm from its operations in a given period of time. It has to do with the excess of earnings over costs. Thus, indicating the performance of a business. In this study, Return on Asset (ROA) is adopted as the proxy for profitability. Two banks have below zero average profit of the last ten years which is around -0.2 and -0.07. Most of the banks showed a profit on the last ten years as they have a profit series starting from 0.16 to the maximum mean profit 0.3. The recent activity (in 2015) shows that two banks incurred in loss; the first company registered a big loss as -0.53 and the other company suffered a less amount as -0.09. In this year, the maximum profit was registered as 0.35 and the minimum profit was recorded as 0.022.

Figure 4.2 shows the profit growth trend from 2006 – 2015 in graphical presentation. The graph indicates that most of the banks were in loss in year 2008 and 2009. In 2007, the highest profit was earned by the selected private commercial banks. The graph shows that a maximum profit was registered as 0.73 and the minimum was recorded as zero profit. This year (2006) the highest profit was documented as 0.73 and the next record was 0.51. The other profit was registered as 0.4661654, 0.282352, 0.3239437 and 0.2954545. The yearly average profit was registered as
0.353138, 0.641988, -0.84976, -0.15647, 0.458384, 0.264333, 0.23923, 0.080429, 0.110438 and 0.042467 starting from 2006 up to 2015. A performance management framework brings proactive focus on value addition and profitability that translates to better actual performance. It shows the need for implementing such an Enterprise Performance Management (EPM) framework. The data shows that the profit has recorded benefits in the range of 64% - (-85%) over a ten-year period across key profitability metrics that is Return on Assets of the selected private banks. Ranking the banks operating in Ethiopia based on magnitude of ROA, shows that there are only two large banks present among the selected banks; company one and eight are the top-rated banks in this study which has average profit 19% and 30% respectively. Majority of the banks that clock high ROAs are small sized in profit calculation of this study. Old private sector banks although typically higher than new private sector banks, have an equal representation, on the ROA scale. This is possibly the result of experienced service delivery and rapid modernization efforts embarked upon by old private sector banks during this decade that are beginning to bear fruit. Individual bank wise calculated ROA and DEPG for the study period have presented in descriptive statistics format in the table 4.7 for further analysis. The descriptive table includes minimum, maximum, mean and standard deviation skewness and kurtosis of both independent and dependent variables of the study. The descriptive statistics is presented in the table below.

Table 4.3: Descriptive statistical data used for analysis

<table>
<thead>
<tr>
<th></th>
<th>Return on Asset(ROA)</th>
<th>Deposit Growth(DEPG)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Min</td>
</tr>
<tr>
<td>DB</td>
<td>10</td>
<td>0.026</td>
</tr>
<tr>
<td>AIB</td>
<td>11</td>
<td>0.022</td>
</tr>
<tr>
<td>BOA</td>
<td>9</td>
<td>0.003</td>
</tr>
<tr>
<td>NIB</td>
<td>10</td>
<td>0.025</td>
</tr>
<tr>
<td>WB</td>
<td>10</td>
<td>0.025</td>
</tr>
<tr>
<td>UB</td>
<td>10</td>
<td>0.017</td>
</tr>
<tr>
<td>LIB</td>
<td>9</td>
<td>-0.01</td>
</tr>
<tr>
<td>CBO</td>
<td>10</td>
<td>-0.01</td>
</tr>
</tbody>
</table>

Source: It sown survey, 2017 from Eviews8 output
The result of the analysis shows that Cooperative Bank of Oromiya (CBO) had the highest ROA (0.047%) followed by both Bank of Abyssinia (BOA) and Wegagen Bank (WB) (0.040%) and all other banks have a meager different between the DB. The least percentage of ROA is 0.034% in the UB. In general rule of thumb in other the banking sector expects not less than 5% of ROA, in the banking sector which strives to record and ROA 1.5% or above. In this case almost all the banks did not reach the expected level of ROA. The same concept applied in the ten years average of ROA, Wegagen Bank (WB) had 0.034% and it is the highest average among the banks. Here the recordable information from the analysis is that all the banks have positive mean value for the study period.

![Graphical presentation of statistical Mean of ROA](image1)

**Figure 4.4 : Graphical presentation of statistical Mean of ROA**

![Graphical presentation of statistical Mean of DEPG](image2)

**Figure 4.5 : Graphical presentation of statistical Mean of DEPG**
In the case of deposit growth of locally owned commercial banks in Ethiopia, almost are the same, only a meager difference among the banks. Cooperative Bank of Oromya (CBO) had the highest mean value of DEPG followed with Lion International Bank (LIB) had 0.684.

![Figure 4.6: Graphical presentation of standard deviation of ROA](image1)

The standard deviation of ROA indicates that all the banks have positive value. There is no negative standard deviation among the banks in the case of DEPG. The general rule stated that the higher value of standard deviation implies greater spread of data, smaller the standard deviation shows the data is concentrated around mean. In such a case all the bank standard deviation is positive, so the data of the present study spread over the mean value.

![Figure 4.7 : Graphical presentation of skewness of ROA](image2)
In addition, the Table 5 shows that the skewness of ROA fluctuates bank to bank. Except Dashen Bank (DB) the remaining banks skewness are negative.

![Graphical presentation of skewness of DEPG](image)

**Figure 4.8:** Graphical presentation of skewness of DEPG

In the Table 4.7 of deposit growth (DEPG), DB, BOA and NIB shows negative skewness. The negative skewness indicates an even distribution with higher than normal. The negative and positive skewness is not significant above the +1 or -1; therefore, it does not pose a severe threat to data for the future analysis.

![Graphical presentation of comparison of ROA and DEPG](image)

**Figure 4.9:** Graphical presentation of comparison of ROA and DEPG
As the graph indicates in Figure 4.8, graphical presentation of comparison of ROA and DEPG percentage increase of the profitability of the selected private commercial banks is lower than the percentage deposit growth of these banks. As the graph shows CBO shows an average close to 120% percentage growth comparing to its profitability that is less than 1%.

4.2.3 Deposit Growth Comparative Analysis of Private and Public Banks

According to the NBE annual report 2015/16 about deposit growth in Ethiopia financial institution state the total deposit mobilization by banking system increase by 8% and reached Birr 149.6 Billion by end of 2015/16. This part shows type of deposit and their mobilization of all banks in 2015/16.

Table 4.4: Annual Deposit growth of Private and Public Banks as of June 2016

<table>
<thead>
<tr>
<th>Particular</th>
<th>2015/16 In Million Birr</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public Banks</td>
</tr>
<tr>
<td>Deposit</td>
<td></td>
</tr>
<tr>
<td>• Saving</td>
<td>25,960.60</td>
</tr>
<tr>
<td>• Demand</td>
<td>12,897.70</td>
</tr>
<tr>
<td>• Time</td>
<td>3,082.80</td>
</tr>
<tr>
<td>Borrowing</td>
<td></td>
</tr>
<tr>
<td>• Local</td>
<td>1,855.90</td>
</tr>
<tr>
<td>• Foreign</td>
<td>(188.10)</td>
</tr>
<tr>
<td>Collections of Loans</td>
<td>33,722.80</td>
</tr>
<tr>
<td>Total Resource Mobilization</td>
<td>77,331.70</td>
</tr>
</tbody>
</table>

Source: NBE 2015/16 Annual report

The above table shows the annual deposit growth of Commercial Banks and DBE as of June 2016. As commercial banks expanded their branch network, their deposit liabilities increased to Birr 438.1 billion showing a 19.3 percent annual growth. Saving deposits grew by 24.2 percent
followed by time deposits (18.6 percent), and demand deposits (13.7 percent). Saving deposits accounted for 49.5 percent of the total deposits distantly followed by demand deposits (39.0 percent) and time deposit (11.4 percent). The share of private banks in deposit mobilization increased to 33.6 percent from 32.2 percent last year due to the opening of 363 new branches. CBE alone mobilized 66.1 percent of the total deposits banking system owing to its large branch network. International borrowing for the state-owned bank and loan collection are also source of deposit growth Birr 77.2 billion collected during the review fiscal year was up by 28.6 percent of which, 56.3 percent was the share of private banks.

4.3 Correlation Analysis

As noted by Gujarati (2004), the correlation analysis is made to describe the strength of relationship or degree of linear association between two or more variables. In Pearson correlation matrix, the values of the correlation coefficient range between -1 and +1. A correlation coefficient of +1 indicates that the two variables have perfect positive relation; while a correlation coefficient of -1 indicates as two or more variables have perfect negative relation. A correlation coefficient of 0, on the other hand indicates that there is no linear relationship between two variables.

Table 4.5: Correlation Analysis Result

<table>
<thead>
<tr>
<th></th>
<th>Return of Asset - Profitability</th>
<th>Deposit Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return of Asset - Profitability</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>N</td>
</tr>
<tr>
<td>Deposit Growth</td>
<td>Pearson Correlation</td>
<td>.430</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.022</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>80</td>
</tr>
</tbody>
</table>

Source: Its own survey, 2017 from Eview 8
Table 4.5 shows the correlation analysis result Return of Asset – Profitability and Deposit Growth. In Pearson correlation matrix, the values of the correlation coefficient range between -1 and +1. A correlation coefficient of +1 indicates that the two variables have perfect positive relation. Thus, the data analysis indicates that there is a positive correlation between return of asset – profitability and deposit growth. Thus, it can be concluded that there is a positive significant relationship between deposit growth and return on asset. Deposit growth had statistically significant with profitability in Ethiopia selected commercial banks having coefficient of correlation 0.43 with statistically significant because $P < 0.05$. This was in line with the study hypothesis that was based on the argument of private commercial banks focus on deposit growth activities will have a great profit or return on asset.

In literature, deposit mobilization is an indispensable factor to increase the sources of the banks to serve effectively. Mobilization of deposit plays an important role in providing satisfactory service to different sectors of the economy. The success of the banking greatly lies on the deposit mobilization. Performances of the bank depend on deposits, as the deposits are normally considered as a cost-effective source of working fund. There are different types of deposits, with different maturity pattern carrying different rates of interests. Deposit mobilization is depending on the cost of deposits. Mobilization of deposits for a bank is as essential as oxygen for human being. To enhance profitability, banks take steps to minimize the expenditure and are forced to mobilize low cost deposits (Sylvester, 2010).

### 4.4 Discussion of the Result of Regression Analysis

This section presents the regression result of fixed effect model that made to examine the impact of deposit growth on profitability in private commercial banks in Ethiopia. In the above parts the researcher discussed the results of the tests for validity of the classical linear regression model (CLRM) assumptions. Accordingly, model has passed all the important tests of the CLRM assumptions. Thus, now what remains is to discuss the results of the regression analysis which is done by applying the fixed effect panel regression using the Eviews8 software.
Table 4.6: Regression test result

Dependent Variable: ROA
Method: Panel Least Squares
Date: 05/31/17   Time: 21:21
Sample: 2006 2015
Periods included: 10
Cross-sections included: 8
Total panel (balanced) observations: 80

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.3942</td>
<td>0.000933</td>
<td>36.37238</td>
<td>0.0000</td>
</tr>
<tr>
<td>DEPG</td>
<td>0.6665</td>
<td>0.004048</td>
<td>-4.117180</td>
<td>0.0001 ***</td>
</tr>
</tbody>
</table>

R-squared 0.678525  Mean dependent var 0.030322
Adjusted R-squared 0.667993  S.D. dependent var 0.003069
S.E. of regression 0.002800  Akaike info criterion -8.893850
Sum squared resid 0.000611  Schwarz criterion -8.834299
Log likelihood 357.7540  Hannan-Quinn criter. -8.869974
F-statistic 16.95117  Durbin-Watson stat 2.004217
Prob(F-statistic) 0.000095

***, ** and * indicates significant at 1%, 5%, 10% significance level respectively.

Source: It sown survey, 2017 from Eviews8 output

The result of regression analysis surprisingly indicates that deposit growth of banks has significant influence on profitability which is measured by Return on Asset (ROA). As it can be observed from the result of the regression presented in the table below, the coefficient of determination R-square (R2), which measures the degree to which the model explains the actual
variations in the dependent variable, indicates that the extent of 67.85% behavior of profitability variables can be explained by the independent variables which are included in the model.

On the other hand, this study specified a functional relationship between Return on Asset (ROA) and Deposit Mobilization or deposit growth by banks. Generally, the model is specified as:

Thus, the mathematical form of this model is:

\[
Y = 0.3942 + 0.665 \ln X_1 + \mu \quad \text{………………2}
\]

Where:

- \( Y \) = Return on Asset (ROA)
- \( B_0 \) = Regression Coefficient of constant
- \( \beta_1 \) = Regression Coefficient of independent variables
- \( X_1 \) = Deposit Growth (DG) ……………… Independent variables
- \( \mu \) = error term

### 4.5 Tests of Research Hypothesis

Once the regression analysis is run and the outputs are obtained the next step is testing of the research hypothesis which was formulated at the beginning of the research work. There is only one hypothesis in this study which was developed with the aim of achieving the second objective of the study. Accordingly, a test for the hypothesis of this study was as there is significant relationship between deposit growth and Profitability of banks measured by Return on Asset.

As it can be evidenced from the output of the regression analysis presented in above table. It is surprising to know that deposit growth of banks (DEPG) has a significant influence on profitability of the banks. As the result indicates that DEPG with coefficient of 0.6665 and the p-value of 0.0001. This enables to reject the null hypothesis at 1% significance level. The beta coefficient of deposit growth indicate that the one unit increase in deposit growth will result in one 0.016665 decrease in the profitability of the banks.
4.6 Qualitative Data Analysis

It is a remind that this study allowed in-depth qualitative analysis for answering the questions of what the main problems are associated with deposit growth and bank profitability in private banks in Ethiopia. The results of this study have shown that deposit growth and its management is indeed a crucial problem in the Ethiopian private banking industry. The result of the interview revealed that the deposit growth and liquidity of banks were one of the major determinants of Ethiopian banks profitability. The findings of this study showed that deposit and capital have statistically significant relationship with banks’ performance measured in terms of return on equity (ROE).

Since the banking industry in Ethiopia is in the growth stage with opening of new banks, expansion of new branches, and the re-capitalization of the banking industry has continued to change. Although, the change as positive as banks are now expected to play a role in the development of the country economy and the main vehicle for the rapid economic growth in the absence of active secondary stock exchange in the country. Like all businesses, banks profit by earning more money than what they pay in expenses. The major portion of a bank's profit comes from the fees that it charges for its services and the interest that it earns on its assets. Its major expense is the interest paid on its liabilities. The major assets of a bank are its loans to individuals, businesses, and other organizations and the securities that it holds, while its major liabilities are its deposits and the money that it borrows, either from other banks or by selling commercial paper in the money market. Most of the empirical study shown above has been made so far using the impact of deposit growth and liquidity on the traditional measures of the profitability of any business are it return on assets (ROA) and return on equity (ROE).

4.7 Consistency with Others Studies

Once the regression analysis is run and the outputs are obtained the next step is testing of the research hypothesis which was formulated at the beginning of the research work. As it can be evidenced from the output of the regression analysis, deposit growth of banks (DEPG) has a significant influence on profitability of the banks. This study contrasted with the study of Tuyisime & Memba (2015). They found that there is a direct relationship on the bank financial
performance. On their research the effect of deposit mobilization on financial performance in the case of Rwanda Bank examine the effect of marketing strategy, technology advancement and interest rate change on deposit on the bank financial performance and deposit mobilization. The increase in the number of the customers as well as deposits, led to the performance in deposits as the bank was able to disburse more loans to customers which attracted more interest on loans disbursed hence increase in net income and net profit.

In addition, Venkateshan (2012) conducted a study and found that, there has been a remarkable growth in mobilization of all kinds of deposits in Scheduled Commercial Banks in Tamil Nadu on the whole. Moreover, Pai V. S. (2006) studied a research that focused on five groups of banks both private and public sector. Deposit and credit are the two performance criteria. The study revealed that, the performance of banks regarding deposits and credits at the two points of time has been largely similar. The study observed that, private scheduled commercial banks have shown superior performance. The study also reveals that, their growth on these two parameters, at the two points in time, have been comparable between them.

Gagan Bihari Sahu and D. Rajasekhar (2005) focused on urban bias on fund and they found that, the formal financial institutions tended to gravitate towards urban areas in the credit provision after the reforms were introduced. In regard to performance, Ramchandra Reddy B. and Dr. Yuvaraja Reddy (2005) conducted a study and found that in the changing banking scenario, the State Bank of India is one of the leading banks which welcomes the radical changes and make the organization fit for the changes without much difficulty.
CHAPTER FIVE

5. RECOMMENDATION AND CONCLUSION

5.1 Summary

The study investigated the impact of deposit growth on banks profitability of private commercial banks in Ethiopia using return on asset as a proxy of bank profitability and this is the main objective of the study. The study applied an empirical framework to investigate the effect of deposit growth on the profitability of private commercial banks in Ethiopia for ten years covering 2006 to 2015. The study also used an appropriate methodology for the estimation of variable coefficient under regression model.

5.2 Conclusion

Broadly, this study examined the effect of deposit growth on the profitability of selected private commercial banks in Ethiopia. In order to achieve this objective, this study adopted Deposit growth as the explanatory variables to capture financial performance while profitability was proxies by Return on Asset (ROA). To establish this relationship, the study used the regression technique in analyzing the data and from the empirical results; the finding of the study has enabled the researcher to reject the hypothesis and to achieve the objectives of the study. Based on the research findings of the study, it can be concluding that deposit growth of banks has a significant relationship with profitability in disagreement with the hypothesis. The regression output indicated that deposit growth has an effect on private commercial banks' profitability. This ensures that the banks need to change the deposit to the bank’s profitability through disbursement of loan; it meant they should increase their efficiency accordingly.

5.3 Recommendations

From the findings of the study it is concluded that deposit growth of banks has a positive effect on private commercial banks profitability but their efficiency in regard to loan disbursement was indicated as a problem. Thus, it is recommended the following points:

- Private commercial banks in Ethiopia should enhance their efficiency in utilizing the
deposit as they collected from the public by paying significant large amount of interest. In addition to this since the private commercial banks in the country are performing aggressive advertisement and branch expansion to mobilize resources, these banks should give a serious attention in converting these scarce and expensive resources to the bottom line (profitability).

- In order to increase deposit in private commercial banks in Ethiopia, the management of private banks of Ethiopia should design other innovative marketing strategies which can increase the level of low cost deposits such as use of mobile banking and van bank in collecting deposits. As there is positive relationship between Deposits and loans and advances of the bank, the more deposits should be mobilized so as to lend more which in turn brings more revenue to the Bank. In these records the bank should open more branches so that it could mobilize more deposit by covering more member of customer. The banks should put in place strategies aiming at improving deposit policy in order to attract more customers and also ensure that there is an effective and efficient policy of converting deposit mobilized into loan in order to gain the interest paid on the deposits.

- The banks should also offer competitive rate on deposits as mechanism of mobilizing more but at the same time balancing with the interest paid on them, use different channels of making advertisement of the existing and new product offered to the customers, do the campaign of awareness on agency banking in order to build the trust of customers by studying and minimizing challenges faced by people using this channel.

- Either the national bank should liberalize its policy that levied on private banks on purchase of bonds for renaissance dam that influence on their lending capacity or they should negotiate possible solutions with the national bank of Ethiopia to make some amendment on the policy so that they would in the future purchase NBE Bills on the increment rather than the whole amount advanced as a loan.
5.4 Areas for Further Studies

The study recommends that future studies should take a holistic view of impacts of the deposits mobilization and the financial performance in financial sector by comparing private commercial banks and government commercial banks. In order to enhance the performance in the whole financial sector, the same study can be studied in other African banks to see whether the same strategies applied in commercial banks can also be applied.
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**Appendices**

**Appendix I - Public Banks in Ethiopia and Their branch network with their capital**

<table>
<thead>
<tr>
<th>Branch in number capital in Million Birr</th>
<th>Year of Establishment</th>
<th>Branch Network 2015/2016</th>
<th>Total Capital2015/16</th>
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<tr>
<td></td>
<td></td>
<td>Regions</td>
<td>Addis</td>
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<td>Particular</td>
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<td><strong>Public Banks</strong></td>
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<tr>
<td>Construction &amp; Business Bank</td>
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<td>-</td>
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<tr>
<td>Development Bank of Ethiopia</td>
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<td>4</td>
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<tr>
<td>Total Public Banks</td>
<td></td>
<td><strong>994</strong></td>
<td><strong>266</strong></td>
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</table>

Source: National Bank of Ethiopia, Annual Report 2015/16
## Appendix II - Private Banks in Ethiopia and Their branch network with their capital

<table>
<thead>
<tr>
<th>Branch in number capital in Million Birr</th>
<th>Year Of Establishment</th>
<th>Branch Network 2015/2016</th>
<th>Total Capital 2015/16</th>
</tr>
</thead>
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<tr>
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<tr>
<td>Awash International Bank</td>
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<td>Dashen Bank</td>
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<td>66</td>
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<td>Abyssinia Bank</td>
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<td>Wegagen Bank</td>
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<td>Cooperative Bank of Oromiya</td>
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<td>Debub Global Bank</td>
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<td>Enat Bank</td>
<td>2013</td>
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<tr>
<td><strong>Total Private Banks</strong></td>
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<tr>
<td><strong>Grand Total</strong></td>
<td></td>
<td>2,090</td>
<td>1,097</td>
</tr>
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</table>

Appendix III - Interview Check List

1. What are the main problems associated with deposit growth and profitability in private bank in Ethiopia in terms of quality, time and quantity? Please identify the main gaps in deposit mobilization and its requirements.

_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________

2. According to finance transactions and trade, please indicate the main requirements and shortcomings of deposit growth and profitability as the most engaged instrument in private banks in Ethiopia context.

_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________

3. Please indicate the main problems and the key facilitation of holding significant volumes of stable liabilities (especially deposits from retail depositors) or maintaining credit lines with other financial institutions.

_____________________________________________________________________________________________
_____________________________________________________________________________________________
_____________________________________________________________________________________________

4. Please indicate the mechanisms that private banks apply according to the NBE establishment proclamation (No. 591, pp. 4168) related to deposit and short-term government securities that are acceptable by the NBE as collateral (for instance, Treasury bills).
5. How do you rate commonly observed measures of bank profitability like the Net Interest Margin (NIM), the difference between interest income and interest expenses as a percentage of average value of (total loans and advances which includes deposits with foreign banks, treasury bills and other investments) in private banking in Ethiopia?