ST.MARRY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

MBA PROGRAM

DETERMINANTS OF DEPOSIT MOBILIZATION IN PRIVATE COMMERCIAL BANKS OF ETHIOPIA

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ID.NUMBER:SGS/0226/2005B

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A THESIS SUBMITTED TO THE DEPARTMENT OF MANAGEMENT PRESENTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION IN MANAGEMENT

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ACKNOWLEDGEMENTS

LIST OF ACRONYMS

AIB	Awash International Bank
BOA	Bank of Abyssinia
DB	Dashen Bank
CBE	Commercial Bank of Ethiopia
Capad	Capital adequacy
GDP	Gross Domestic Product
GTP	Growth and Transformation Plan
IMF	International Monetary Fund
Lndep	Natural logarithm of deposits
Lnbr	Natural logarithm of branches
Lnexrate	Natural logarithm of exchange rate
Liq	Liquidity
NBE	National Bank of Ethiopia
NIB	Nib International Bank
OMO	Open market operations
Rgdp	Real gross domestic product
SMEs	Small and Medium Enterprises
SSA	Sub Saharan Africa
UB	United Bank
USD	United States Dollar
WB	Wegagen Bank

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ABSTRACT

The purpose of this study is to investigate determinants of deposit mobilization in private commercial banks of Ethiopia using panel data of six private commercial banks from year 2002 to 2012. The study used both quantitative and qualitative research approach. Secondary financial data are analyzed using multiple linear regressions models for the six bank's deposit. Fixed or random effect regression model was applied to investigate the impact of bank branches, exchange rate, Real Gross domestic product, Capital Adequacy and Liquidity on private commercial banks deposits. Besides, the study used primary data analysis to solicit managers' perception towards the determinants of private commercial banks deposit mobilization. The empirical results from regression analysis showed that bank branches, exchange rate, and real gross domestic product affects deposit of the bank positively whereas, capital adequacy and liquidity affects the deposit of the private banks negatively. This implication show that better capitalized banks tend to create less liquidity that leads to mobilize little deposit amount. On the other hand the feedback of respondents depicted that managerial efficiency, government policy, convenience of bank office, technology, bank size and awareness of savings by society affected deposit level of the banks significantly. Thus, management bodies of private commercial banks should strive to strengthen the identified significant factors and government bodies should also see the adverse effect of tight polices imposed on the existing private commercial banks as well as for the new entrant banks.

Key words: Deposit, Determinants, Private Commercial banks

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

The role of the financial system in economic growth has been at the center of intense policy debate since the beginning of financial history. Financial development should, at least in principle, made financial resources available for the growth and development of the real sector of the economy. In the financial system process commercial banks play a vital role for the economic resource allocation of nations. They channel funds from depositors to investors continuously to generate necessary income to cover their operational cost they incur in the due course. In other words for sustainable intermediation function, banks need to be profitable. Beyond the intermediation function, the financial performance of banks has critical implications for economic growth of countries. Good financial performance rewards the shareholders for their investment. This, in turn, encourages additional investment and brings about economic growth. On the other hand, poor banking performance can lead to banking failure and crisis which have negative repercussion on the economic growth (Adenitis, 2010, Okoth and Gemechu, 2013).

The studies made in the past underlined that deposit money banks have been globally acknowledged for their unique role as an engine of growth and development in any economy. Their intermediation role can be said to be a catalyst for economic growth and development as investment funds are mobilized from the surplus units in the economy and made available to the deficit units. Generally, deposit money banks provide an array of financial services to their customers through which deposits are mobilized from the banking public while credits granted for investment purposes. It can therefore be said that the effective and efficient performance of the banking industry is an important foundation for the financial stability of any nation. The extent to which banks extend credit to the public for productive activities accelerates the pace of a nation's economic growth as well as the long-term sustainability of the banking industry. The banking institution occupies a vital position in the stability of the nation's economy. It plays essential roles on fund mobilization, credit allocation, payment and settlement system as well as monetary policy implementation .In performing these functions, it must be emphasized that banks in turn promote their own

performance and health. In other words, deposit money banks usually mobilize savings and extend loans and advances to their numerous customers bearing in mind, the three principles guiding their operations are profitability, liquidity and safety (Jonathan et al, 2013).

The process of financial liberalization has intensified competition between financial institutions, thus forcing commercial banks to compete for deposits in various forms. First, banks are unconstrained interns of deposit facilities they can offer. Thus, the range of products is much broader than what was previously available. Therefore, customers are free to negotiate any minimum denomination, rates of return and maturity period prior to placing their deposit with a particular financial institution. Second, deposit facilities are now also available at other financial institutions. To remain ahead of its competitors, commercial banks have to be more sensitive on pricing, products offering, and the quality of service they offer to their customers (Sudin Haron et.al, 2006). Thus, in Ethiopia the participation of private banks has been increased to some extent since 1994. For instance, the asset volume of private commercial banks increased from Birr 28.8 billion in 2008 to Birr 78.5 billion in 2012 and the number of branches also rose from 328 to 716 respectively. However, the state-owned banks especially commercial bank of Ethiopia continues to dominate the market share in terms of Asset, capital, and deposits. Accordingly, the asset of the government owned banks increased from 50.4 billion in 2008 to birr 184.1 billion in 2012 and the total number of borrowers increased from 84,174 to 118,149 in which the government banks hold 84,527 (72%) while the rest sixteen private banks hold 33,622 (28%) respectively (Wolday and Tekie, 2012). However, as some past reports indicated still in developing countries of Sub-Saharan Africa (SSA), like Ethiopia, financial systems have not been well-developed to play vital role of intermediation. This indicates that the volume of deposit mobilized in the country is not enough to satisfy the demand of investors who engaged in the economic development of the country. In the current literature, a wide range of savings issues have been investigated but studies on saving determinants have attracted the most attention being the role of commercial banks as the most important financial intermediary will persevere, The objective of this study is to examine the effect of selected economic and financial variables on deposits placed at the private commercial banks in Ethiopia.

1.2. History of Banking Development in Ethiopia

Traditional financial system in Ethiopia has long history and paramount contribution to economic betterment and social wellbeing of the society. Traditional institutions organized with a sense of cooperation and risk sharing has enabled Ethiopians to experience saving and financial management within its cultural context. Eqqub and Edir are some of the informal financial institutions that shaped the social bond and interaction (Gebeyaw Aychile, 2008 as cited by Habtamu Nigusie, 2012). Modern banking in Ethiopia was introduced after the agreement that was reached in 1905 between Emperor Minilik II and Mr.MaGillivray, representative of the British owned National Bank of Egypt when the Bank of Abyssinia was first established with a capital of $500,000.00.it was the foundation of this bank that marked the beginning of modern banking in Ethiopia. The government of Ethiopia and the national bank of Egypt jointly owned Abyssinia bank under a 50 years franchise agreement. But the bank was liquidated in the year 1931 because of inefficiency and poor profit orientation that replaced by the establishment of Bank of Ethiopia with a capital of $750,000.00 that known as the first indigenous bank in Africa.

Following the demise of the Dergue regime in 1991, the new economic policy introduced by the transitional government of Ethiopia laid the blue print for the transition from centrally planned economic system to liberal market economy system in which the critical role of the private sector in development is fully recognized. In line with this, Monetary and Banking proclamation of 1994 established the national bank of Ethiopia as a judicial entity, separated from the government and outlined its main function. Monetary and Banking proclamation No.83/1994 and the Licensing and Supervision of Banking Business No.84/1994 laid down the legal basis for investment in the banking sector. Following this proclamation Awash International Bank established in 1994 G.C with paid up capital of Birr 24.2 million by 486 shareholders, and currently the number of private commercial banks found in fully banking services reached sixteen. From total deposits of birr 187.3 billion (25 percent of GDP) which found in Banking sector, the state owned Banks hold 68% share where as the private Commercial banks hold 32% only as of June,2012.(www.nbe.gov.et).

Table 1: The list of private commercial banks in Ethiopia

No	Name of the bank	Establishment Year
1	Awash International Bank	1994
2	Dashen Bank	1995
3	Abyssinia Bank	1996
4	Wegagen Bank	1997
5	United Bank	1998
6	Nib International Bank	1999
7	Cooperative Bank of Oromia	2005
8	Lion International Bank	2006
9	Oromia International Bank	2008
10	Zemen Bank	2008
11	Bunna International Bank	2009
12	Birhan International Bank	2009
13	Abay Bank	2010
14	Addis International Bank	2011
15	Debub Global bank	2012
16	Enat International Bank	2013

Sources: (NBE Consolidated data report, 2013)

1.3 Statement of the problem

Deposit money banks have been globally acknowledged for their unique role as an engine of growth and development in any economy. Their intermediation role can be said to be a catalyst for economic growth and development as investment funds are mobilized from the surplus units in the economy and made available to the deficit units (Jonathan et al, 2013). In Ethiopia domestic savings size is not sufficient to finance investment and sustain the

economic growth for the long time. As per the international monetary fund (IMF) report the domestic financing gap for Ethiopia is significant as the average financing gap was estimated about 9.4 percent of GDP between 1990 and 2000 which widened to about 17 percent from 2006- 2012.But in sub-Saharan Africa, this gap on average is much smaller; about 6 percent. Similarly, on June 2011 the private credit to GDP ratio for Ethiopia was around 9% compared with the average of 30% for sub- Saharan Africa. Ethiopia ranked 125 out of 142 countries with respect to financial-market development (World Economic Forum's Global Competitiveness Report 2011-12).

In the year 2012 from the total deposits of birr 187.3billion (25 percent of GDP) registered in the banking sector, the state owned banks hold 68% share where as the total private banks hold 32% only (IMF country report No.13/309). Besides, as of June 2012, in Ethiopia the banking sector comprised 18 commercial banks and one state owned development bank. The 18 commercial banks' branches numbered 1,257, with more than a one third located in Addis Ababa alone. Rural areas access to finance is limited. At the same time, the population per bank branch was 63, 644. Despite the country's population of nearly 90 million, there are only 7.1 million deposit accounts, suggesting that less than 8 percent of Ethiopians have a bank account. The number of borrowers were a mere 112, 793 as of September 2012.Ethiopia's overall ranking in Doing Business slipped from 104 in 2011 to 111 in 2012 out of 183 countries with respect to financial-market development while the banking sector remains closed to foreign participation and capital markets are non-existent that limited the progress in innovation and dynamism that might result to categorize Ethiopia as one of the most under-banked countries in sub-Saharan Africa (African economic outlook, 2012).

Hence, commencing from the year 2009 the government of Ethiopia has forced to take further steps to strengthen the financial sector in order to achieve the five years Growth and Transformation Plan (GTP). However, some of the measures that had been taken by the government were likely to weaken financial intermediation and make the playing field between private and public banks more uneven as the public banks have a competitive advantage over private banks. For instance, the financial sector is dominated by state-owned banks (Commercial Bank of Ethiopia) which engaged in aggressively branch expansion to

control the main market share of the banking industry. Households partial saving for low cost house of condominium project are allowed to be deposited only in CBE at low interest rate and CB and DBE are gaining competitive advantageous as they set free from purchasing of bonds through Directive No.MFA / NBE BILLS /001 /2011 while private banks ordered to purchase 27% bill bond against any loan granted to customers effective 4th April, 2011 with 3% interest rate that will be maintained for five years which decreased the deposit of private banks by 15 billion in the last two years (Ethiopian reporter may, 2013).These indicates that discriminatory policies likely to decrease the deposit mobilization of private Banks and made the Banks unable to fulfill the credit demand of their clients. So the restrictions may lead these banks to involve in unfair competition in the market to attract potential depositors. Besides, NBE report indicated that banks deposit is low enough as traditional way of hoarding money is also common in Ethiopia, and limited banks to mobilize less amount of deposit. This is therefore; the number of studies conducted so far on deposit mobilization is limited in number and scope further study is required. So this study was helpful in filling this research gap by identifying the factors that affect the deposit mobilization of the Private commercial banks of Ethiopia in order to manage and control through different strategies in the future.

1.4. Research Questions

➢ What are the factors that determine the deposit mobilization of private Commercial Banks in Ethiopia?

➢ How do you perceive the policy issued by NBE, utilization of advanced technology, convenience of bank office and Management efficiency effects on deposits mobilization of private commercial banks?

1.5.   Hypothesis of the study

H_{01}: there is positive relationship between bank branches and deposit mobilization of banks.

H_{02}: There is a Negative relationship between liquidity and deposit Mobilization of the bank.

H_{03}: there is a positive relationship between Exchange rate and deposit amount of banks.

H_{04}: there is a negative relationship between capital adequacy and deposit mobilization of private commercial banks.

H_{05}: there is a positive relationship between Real GDP and deposits of banks.

1.6. Objective of the study

The general objective of the study is to identify factors that affect deposit mobilization of private commercial banks in Ethiopia. But, the specific objectives of the study are the following:

- ➢ To examine impacts of branch expansion on private commercial banks deposit mobilization
- ➢ To observe the r/ship of liquidity with deposit mobilization in private commercial banks.
- ➢ To explore the impacts exchange rate on deposit mobilization of private commercial banks.
- ➢ To determine effects of capital adequacy on deposit mobilization of private commercial banks.
- ➢ To analyze effects of real GDP on deposit mobilization of private commercial banks
- ➢ To examine the effects of qualitative variables such as Government policy issued, convenience of bank's Office, management efficiency, and using of advanced technology on deposit mobilization of private commercial banks.

1.7. Significance of the study

The study conducted on the Determinants of Commercial Banks deposit mobilization is expected to be used by all stakeholders. Accordingly, the following are the significances that are attained from the study:

- ➢ It helps the bank managers by letting them to know which variable is a core factors so that should be given due emphasis.
- ➢ It persuades regulatory organ to see and adjust the tough policies imposed on private commercial banks.
- ➢ It provides information for all stakeholders especially for boards and management in order to minimize the impact of factors determining deposits mobilization by making them to design effective strategies.
- ➢ It serves as source of reference for further studies in the area of deposit mobilization.

1.8. Delimitation of the Study

As of June 30, 2014 the number of banks engaged in operation reached 19 in Ethiopia which includes 18 commercial banks and 1 development bank. But this study was conducted on six selected private commercial banks in Ethiopia, excluding state owned banks, ten private commercial banks, other financial institutions, Micro finances institutions, saving and credit associations, Iqube and Idir respectively. The study focused only on one of the area of finance which the factors determining private commercial banks deposit. The regressions have one dependent variable (total deposit of selected private commercial banks), and five independent variables including Liquidity, Capital adequacy, Exchange rate, real gross domestic product and number of private commercial bank branches.

1.9. Organization of the paper

This thesis paper was organized into five chapters. The first chapter is the introduction part which consists of the background of the study, history of banking development in Ethiopia, statement of the problem, objectives of the study, research questions, Hypothesis, significance of the study, and delimitation of the study. The second chapter introduces related literature review which deals with the theoretical and empirical literatures on private commercial bank deposits. The third chapter deals with research design and methodology of the study. The fourth chapter concerned with findings and discussion of the study. The fifth chapter which is the last but not the least focused on conclusions, limitations and recommendation of the study.

CHAPTER TWO: RELATED LITERATURE REVIEW

The Literature review is discussed in two parts which include the theoretical review and empirical review parts. In the theoretical review part the theories that states about banks deposits and theories of variables that is claimed to affect it are discussed and in the empirical literature part past studies that were conducted on the areas of factors determining banks deposits has been discussed.

2.1. Theoretical review

2.1.1. The role of Banks in Financial Systems

Financial sector is broad which consists of the banking sector and other financial institution (such as insurance corporations and pension funds, brokers, public exchange and securities markets etc), however in the context of African continent the banking industry carries the greater share of the financial system (Sheku A.F. Bangura 2005). Most of the businesses rely on banking sector as a source of financing (Medhat 2004). Banks have historically been viewed as playing role in financial markets for two reasons. One is that they perform a critical role in facilitating payments. Commercial banks, as well as other intermediaries, provide services in screening and monitoring borrowers; and by developing expertise as well as diversifying across many borrowers, banks reduce the costs of supplying credit (Katherine 2004). Thus in their role as lenders, banks are often not merely buying someone's debt, rather they are providing significant financial services associated with extending credit to their customers and to the extent that investors want to hold banks liabilities, banks can fund borrowers directly. The main providers of additional financing are domestic commercial banks (Herald and Heiko, 2009) .Commercial banks are joint stock financial institutions whose main aim is to make profit for their shareholders. They accept deposit and keep valuable items for their customers and make them available on demand. Commercial banks by accepting deposits provide safe keeping place for their customer's money and at the same time mobilize savings for development. The deposit is made up of three forms; demand, savings and time deposits.

2.1.2. Commercial Bank Deposits

Depositors keep their money in banks for a motive to undertake some activities in the future. According to (Bhatt *et al.*, 1970), there are motives to save money, these motives are:

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

Commercial Bank deposits are major liabilities for commercial banks. (Kelvin, 2001) said that deposits of commercial banks account for about 75% of commercial bank liabilities). Due to the fact that commercial banks are using this liability to lend it and gain return on it their deposits are using them do their business. Therefore, banks will be better if they are mobilizing more deposits. Commercial banks are dependent on depositor's money as a source of funds. According to the Keynesian theory of demand for money, there are three main motives why people hold money: transactions, precautionary and investment motives. In order to cater for these motives, commercial banks offer three categories of deposit facilities that are demand, savings and time deposits. Hence, the completion for deposits is really a completion for profits. Commercial banks compete for deposits in order to become profitable and thus to be able to supply more funds to the public. However, such financial growth is profitable only if the commercial bank does not incur additional expenses to obtain and retain cash (Davinaga, 2010).

2.1.3. The importance of Deposit for Banks

2.1.3.1 Deposits as a source of fund for loan

According to (Herald, 2009) states deposits are the main source of banks to provide loan. This deposit is mainly provided by people as (Mohammad and Mahdi, 2010). However deposits can also be provided by business organizations, NGOs, government and so on. Therefore, whether deposits are from individuals, businesses and government they are

important financial source of banks. In similar way banks in our country give bank services by receiving deposits from any depositors on interest base and lend back to borrowers in need of the fund against offering of security with attracting interest rate above nominal rate set for saving depositors.

2.1.3.2 Attracting deposit is cheaper than raising equity

In the banks context raising equity is more expensive or costly than attracting deposits. (Lorenzo *et al*, 2010) states that, if the lending channel plays a role, the deposit growth should lead to an increase in the supply of loans due to the additional source of financing for banks. As demand for loan increases because of the development work done by individuals, businesses and government, banks should extend their deposit base.

2.1.3.3 Banks make profit using their deposit

Deposits provide most of the raw materials for bank loans that represents the ultimate source of the bank's profits and growth. Banks make profit by using their deposits, therefore it is said that depositors can disciple banks (*Maria and Sergio, 2001, Mahendra, 2005)* found that depositors discipline banks by withdrawing deposits and by requiring higher interest rates. According to Ethiopian context, we call as "customer is the king" being all our salary and benefits of employees, cost of all material expenditures, building cost or lease cost achieved only if there is enough deposit granted to borrowers to get a profit.

2.1.3.4 Fund Investment and Development projects

Debt is largely held by domestic banks which are funded mainly from deposits, the government demand for bank assets enabled banks to continue to expand their deposit base rapidly and profitably (*Herald and Heiko, 2009)*. Individual investors and government are mainly depending on the deposits of banks to fund their investments and/or development projects. Generally, the banking system can be viable only if it can mobilize deposits at the required rate. And this can be done only by making a bank deposit more attractive.

2.1.4 Factors Affecting Banks Deposits

Deposit mobilization is not a simple task of banking activities. It depends up on various factors external to bank as well as bank specific (Desinga, 1975). External factors are the general economic environment of the region, the volume of business transaction of the region, the confidence of the people on the banking system, the banking habit of the people and the saving potential of the region. Even when exogenous factors are more conducive for deposit mobilization, banks may fail because factors related to bank specific factors. As (Desinga, 1975) did the researcher classify the variables which are claimed to have effect on the banks deposits into two, namely exogenous and endogenous factors.

2.1.4.1. Exogenous Factors

Exogenous factors subdivided in to two as country specific and bank specific factors.

2.1.4.1.1. Country specific factors

The past researcher has identified various country specific factors that have effect on the commercial bank's deposits from the literature. These are saving interest rate or deposit rate, inflation, Taxation, Government expenditure, Monetary Policy, Open market operations, reserve requirement, population growth, Discount rate, Special deposit, per capita income of the society, economic growth, consumer price index, gross domestic product (GDP) and shocks.

Interest rate

Interest rate is the price for money that depositors receive from the bank. This is the opportunity cost of capital that savers/borrower receive/pay by lending to/borrowing from the financial intermediaries. With regards to deposit mobilization the ruling interest rates attracts more deposits when it is comparatively higher than the rate of investment. In the developing countries the trend of the government has been the use of interest rate ceilings as a regulatory mechanism to provide cheap credit to SMEs (World Development Report, 1989). (*Mustafa and Sayera, 2009)* said that low deposit rates are discouraging saving mobilization. (*Bhatt, 1970)* said that the banking system is unlikely to be in a position to

meet the demand for bank credit unless concerted policy is pursued to raise the rate of saving generally and the rate of saving in the form of deposits in particular.

Inflation rate

It is a fall in the market value of money (purchasing power) as a result of persistent rise in prices. Real value of money declines resulting in benefit to debtors and loss to creditors *(Brealey and Myers 2003)*. From the monetarist point of view inflation is demand pull and an exogenous rise in money supply is the causality. In the short run an increase in money supply induces demand above supply of goods and services which causes prices to rise until the market adjusts to the equilibrium. The study undertaken by (*Mohammad and Mahdi, 2010)* showed that in Latin America the effect of inflation on saving and time deposit to GDP was significantly negative. In this case the classical belief is that, because bank assets and liabilities are expressed in monetary terms and because these assets will normally grow in line with growth in money supply, banks are relatively immune from the effects of inflation (*Devinaga, 2010)*. In brief, monetary policy works by controlling the cost and availability of credit. During inflation, the Central bank can raise the cost of borrowing and reduce the credit creating capacity of banks. According to *(Devinaga, 2010)*, this will make borrowing more costly than before and thereby the demand for funds will be reduced. Similarly with a reduction in their credit creating capacity, the banks will be more cautious in their lending policies. The banks demand for fund decreases obviously the deposits will decrease. High inflation rates reduce the real value of deposits; inflation technically did not decrease deposit; however it decreases the value of deposit (Baqui *et al*, 1987)

Taxation

Taxation is the main source of government revenue and the effectiveness of which rests on its ability to generate required revenue and support investment (Tanzi, 1991). Taxation is often defined as "the levying of compulsory contributions by public authorities having tax jurisdiction, to defray the cost of their activities. Taxes are compulsory statutory payment made to government with no obvious and immediate benefit to the taxpayer but for the benefit of all. Hence, in the short run taxation reduces the deposit of the nation but in the

long run if government uses the taxation properly to improve infrastructure facilities, it increases the deposit.

Government expenditure

All monetary expenditure on goods and services made by the government on behalf of the community is named as capital expenditure. It includes both recurrent and capital expenditure on items like health, education, administration and so on. The recurrent expenditure refers to the expenditures that occur at regular intervals in the annual budget of the government. These expenses include expenditure on defense, administration and debt servicing particularly payment of interest on loans, road maintenance, and cost of health and education services. Thus, if Government expenditure increases, it will create additional job opportunities that lead to enhance the income of the nation and increase deposit mobilization of the society.

Monetary Policy

Monetary policy to be "a policy used by a government or central bank to influence the supply of money and credit in private hands, used for controlling inflation. In Ethiopia the government controls money supply through the central bank unlike in the United Kingdom where the Bank of England is independent of the government in pursuing monetary policies. The central bank being the main actor in this respect uses monetary tools such as reserve ratios, discount rates, and open market operations to control money supply and inflation in the economy. Control of money supply has a direct relationship with deposit mobilization and inflation control

Open Market Operations

Open market Operations (OMO) is one of the three monetary tools commonly used by the central banks to regulate money in circulation. This deals with the purchase and sales of government securities in the open market with the objective of influencing bank reserves. If the government engages in selling of bonds, the deposit of that commercial bank retain will reduce.

Reserve Requirements

Out of every deposit that commercial banks receive from depositors, a proportion is set aside in accordance with the central bank directives. This reserve neither forms part of the loan able funds nor earns interest and serves as a form of liability to the commercial banks. The central bank is the repository of reserve and uses it to facilitate interbank clearance as well as bailing out banks in time of crises. So the reserve requirements maintained by central banks deteriorated the deposit size of the commercial banks and negatively affect the deposit. (Richard Goode and Richard S. Thom, 1959) said that reserves that are fixed legally can influence the deposits that banks can hold. Reserve requirements also have the effect of limiting the reduction in bank credit and deposits that is forced up on the banking system by a primary decrease in deposits.

Discount Rates (prime rate)

Money supply and interest rates which determine deposits can be influenced by the discount rates at which central banks lend to commercial banks. Commercial banks borrow from the central banks when they are in need of excess reserves to buttress their reserve requirements to meet withdrawals and extend more loans. The rate at which central banks charge commercial banks is the discount rate (NBE report).

Special deposit

This is the amount the Commercial Banks are required by law to keep with the Central Bank when the need arises. The Central Bank may reduce or increase it to regulate the money in circulation. When the special deposit is increased by the Central Bank, it reduces the money in circulation and hence, deposits mobilization (NBE report).

Per capita income

According to (Jim, 2008), per capita is the level of GDP divided by the population of the country or region. Changes in real GDP per capita over time are often interpreted as a measure of changes in the average standards of living of a country. The relationship between

income and deposit is positive, that is as income of the society increase the same happens for the commercial bank's deposit.

Shocks

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

2.1.4.1.1. Bank specific factors

Liquidity

Liquidity from the banks point of view is "the ability to meet its day to day withdrawals". Banks by accepting short term deposits (liabilities) and lending them to borrowers by loan commitments (assets) have the obligation to keep part of the deposits to meet daily demands for money (Hull 2003). Where the bank has enough cash to meet daily demand for money then it is liquid (Freixas *et. al.* 1998). This is not in any way a measure of soundness of the bank regarding its capital adequacy ratio. The soundness of the bank measured by the ratio of the bank's paid up capital and accumulated reserves (adjusted capital) to total asset, less risk free assets plus off balance sheet assets. A bank can be liquid but not necessarily solvent (Basel II). Households and firms who are the bank main depositors are also affected by the concept of liquidity. Liquidity preference on the part of household/firms is the desire to hold money other than assets. Thus, it is the unwillingness on the part of potential savers to part with money based on three motives; transaction, speculative and precautionary (Keynes, 1964). Keynes identifies that people keep money rather than investing it for the purpose of meeting daily transactions and/or making a purchase of securities they speculate to appreciate in value and/or meeting unforeseen expenditures. Speculation is higher in the developing countries with persistent inflation. In such economies people keep money in assets and these affect deposits banks receive. In an economy of political and future uncertainties lots of precautions have to be taken. People keep money and/or any form of assets rather than deposits with the banks to deal with unexpected situations such as making

unplanned journeys, sickness and bereavement. Expenditure affects liquidity and it is inversely related to deposit mobilization. The concept of liquidity in finance principally lies in two areas (Ismal Rifki, 2010).

a) Liquidity of financial instruments in the financial market and

b) Liquidity related to solvency.

An important measure of liquidity is loan to deposit ratio. The loans to deposit ratio is inversely related to liquidity and consequently the higher the loans to deposit ratio the lower the liquidity and vice versa (Devinga, 2010). Key liquidity indicators such as central bank credit to financial institutions, deposits as a share of monetary aggregates, loans to deposits ratios, are important for open market operations and liquidity management (Sheku, 2005). According to (Voon-Choong *et al*, 2010), the basic need for liquidity, asset, liability, capital adequacy, credit and interest rates risks management are now more challenging than before. The more liquid banks can attract the deposits. When banks fail to pay for its depositors then it faces liquidity risk that makes other depositors not to deposit in that particular bank.

Profitability of the bank

The long run relationship between Commercial bank deposits and the profitability of the banks indicated that higher banks profits would tend to signal increased bank soundness, which could make it easier for these banks to attract deposits (Erna and Ekki, 2004, Herald and Heiko, 2009) .However, the effect of bank profitability and bank size are found to be insignificant once controlling for other variables. So, the effect of profitability and banks size on commercial bank deposit is lower as compared with other variables.

Security of the bank

Security of banks matters in mobilizing deposit being risker banks would be able to attract deposits only by paying higher Interest rates. The securities of banks have its own impact on its attractiveness for depositors. For example in the existence of deposit insurance the depositors no longer are concerned about the soundness of their banks because their deposits

are insured in the event of bank failure. So the bank should secure its system so as to mobilize more deposit than before through attracting new depositors and maintaining the exiting depositors.

Bank size

Among the factors prominently identified as affecting deposit variability, one is bank size. Evidence indicates that the number and diversity of the ownership of individual deposit accounts as well as the distribution of deposits by type vary with bank size (George, 1972). (Herald and Heiko, 2009) find that although insignificant once controlled by other variables bank size have an effect on deposits. A smaller bank has to generate less deposit in absolute terms to achieve the same deposit growth than large banks, thus possibly favoring smaller banks in achieving higher deposit growth.

Bank branches

There is a relationship between banks deposits and commercial bank's branch expansion. Not only are deposits influenced by bank branches, but the expansion of bank branches is also influenced by the level of deposits in any area (Baqui *et al*, 1987). It is expected that banks make decisions on expanding their facilities by considering factors such as level of competition, deposit potential, regional income and existence of road and vehicles. As deposit potential is one thing that banks consider in expanding its branches, the deposit can also be a reason for branch expansion strategy that the banking sector uses. According to Erna and Ekki (2004), there is a long run relationship between commercial bank branch and banks deposits.

Transaction costs

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

2.1.4.2. Endogenous factors

In the literature three endogenous factors are identified that can affect the growth of commercial banks deposits. These are awareness of the society for using Banks to deposit their money, convenience of Bank's office and service in the bank.

Awareness of the society

Some analysts argue that demand for deposits is influenced by education level which in turn increases the awareness of the rural people about banking services. The study of conducted by taking rural area as a base considers the awareness as a factor of deposit mobilization. It was found that literacy as a proxy for awareness about banking, positively influence deposits. (Baqui *et al*, 1987).

Convenience of bank's office

Road and vehicles directly influence interest bearing deposits because of the reduction in depositors' transaction costs through reduced time spent in travelling to and from banks (Baqui *et al*, 1987). Banks can mobilize more deposit when they make themselves closer to their customers. This indicate that convenient location for transportation, quality and strength of office attract more deposits.

Services in the bank:

It is known that banks are service giving organizations and the service delivery can affect their business undertakings (Baqui *et al*, 1987) stated that there is some empirical evidence demonstrating the positive influence of services rendered to depositors.

2.2. Empirical Literature Review

The study made by Bruce C. Cohen and George G. Kaufman, (1965) on factors determining bank deposit growth by state in America takes 1951-61 year as a sample to gather data. The dependent variables were total deposit of commercial banks, demand deposits and time deposits. Both one- and two stage linear regressions are estimated. To reduce

multicollinearity, independent variables found to be highly intercorrelated are introduced into regressions one at a time and only the yielding the best fit retained. In addition, variables whose coefficients are not statistically significant at the 5% level are removed. The study of (Bruce and George, 1965), have three dependent variables namely total deposit of commercial banks, demand deposits and time deposits of commercial banks.

Accordingly, the regression identifies the relationship between the dependent variables and independent variables as follows:- According to one-stage linear regression results, deviation from the mean percent change in total commercial bank's deposits are best explained by percent change in permanent income, percent change in the importance of the state as a financial center and financial center(level). These three variables explain 42 percent of the variance in interest rate deposit growth. The Percent change in permanent income, percent change in financial center also explains differential demand deposit growth among states best. The coefficient of multiple determinations is 0.38, somewhat lower than for total deposit of commercial banks. The regression shows that time deposit growth is related positively to percent increases in permanent income, importance as financial center, number of bank offices and interest paid on time deposits and to the ratio of interest rates paid by banks to that paid by near banks. Time deposit growth is negatively related to legal ability to branch, wealth per capita and time deposits to income. These variables explain almost 30 percent of the interest rate variance in percent change in time deposits. In the study branch banking and percent change in bank offices enter the regression significantly (Bruce and George, 1965)

.The total volume of commercial bank deposits in America is determined largely by the Federal Reserve System in accordance with the needs and objectives of the economy. However, the distribution of these deposits among individual banks and areas is determined by market forces. When explaining the importance of deposits for banks, they said that bank deposits are one of many forms in which liquid wealth may be held and the very important one. As a medium of exchange demand deposits are an alternative to currency particularly for individuals and small business firms. Banking industry is one of the service giving industries. Consequently, a major factor influencing decisions of whether to hold commercial bank deposits is convenience of bank offices. It is argued that population

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growth and shifts necessitate corresponding growth and shift in banking offices if banks are to both continue servicing their old customers and attract new ones. Therefore, beside the convenience of the office the commercial banks deposits can also be affected by the population growth (Bruce and George, 1965)

New bank offices are believed to increase total deposit of banks in an area by capturing some funds which otherwise would have either been placed in banks outside the area or escape the banking system. As to them other things being equal deposit growth may be expected to be positively associated with increases in the number of banking offices. Moreover, they concludes that other things being equal states permitting branch banking would experience faster deposit growth than states which forbid branch banking and the more liberal the branching regulations, the faster the deposit growth. Economic theory relates the volume and composition of liquid assets to the income and wealth of the holders' .Therefore as banks' deposits are one of liquid asset that can be affected by the income and wealth of the holders, banks' deposits can be affected by the income and wealth of the society. Moreover, they said that the demand for money and other liquid assets is theorized to rise as income rises. It indicated that state experiencing faster increases in income may be expected to experience faster increase in banks deposits (Bruce and George, 1965).On the other hand, increases in wealth may reduce the incentive to provide for additional liquid assets for reasons of precaution and security, thereby slowing the accumulation of deposits. Here, the relationship of banks' deposits and the income of the holders are not clear. There are two possibilities on this area:

i. As income increases banks' deposits may increase because societies have additional money to deposit.
ii. .As income increases banks' deposits may decrease because the society have little liquid asset need and they invest their money on the investment that is not liquid and have higher return than banks' deposits.

According to (Daniel, 2005), a deposit holds 63% of commercial bank liabilities. This indicates that factors that affect deposits mobilization have a huge impact on the performance of commercial banks. Developing economies are characterized by unstable

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macroeconomic environments such as inflation, inappropriate fiscal and monetary policies, interest rate controls. The net effect is the change in liquidity which affects savings and capital formation. Where the macroeconomic environment is favorable to savings then the commercial banks are in a better position to increase savings. On the contrary, where macroeconomic policies erode liquidity from the hands of the people then deposits reduce and may negatively impact on capital growth and investment in the country.

The study conducted by (Haron *et al*, 2006) on deposit determinants of commercial banks in Malaysia using co integration techniques they suggest that rates of profit sharing of Islamic banks, rates of interest rate on deposit, base lending rate (BLR), composite index of Malaysian bourse (KLCI), consumer price index (CPI), money supply (M3) and gross domestic product (GDP) have positive effect on deposits of the bank. The higher the rate of interest, the more money will be saved, since at higher interest rates people will be more willing to forgo present consumption. For a net saver an increase in the rate of interest will have an overall effect composed of two partial effects: an income effect leading to an increase in current consumption and a substitution effect leading to a reduction in current consumption.Net lender (net saver) receives more in investment income than he has to pay to service his debt, high interest rates increases net investment income, thus encouraging present consumption and lessening the need to save in order to finance future consumption. If the substitution effect is strong, an increase in rate of return tends to encourage consumers to postpone consumption and increase savings in the present period in order to achieve higher consumption levels later.BLR represents the lowest interest rate charged for bank loans. Changes in the rate will have a direct relationship with the credit availability to customers. Increase in the rate means higher cost of they can easily obtain financing for their needs as well as their capacity to payback the loans. Composite Index of the Malaysian Bourse or Kuala Lumpur Composite Index (KLCI) is another new variable introduced in this study. This variable represents the future growth in the economy and the confidence level of people toward the economics of the country. Instead of putting their money in the bank accounts, they will buy stocks hoping that they will benefit from higher dividend rates and capital gain. Therefore it is expected that this variable will have an inverse relationship with deposits. Consumer Price Index (CPI) is used as a proxy for inflation. Inflation may

influence saving through several reasons. Theory postulates that greater uncertainty should rise saving since risk-averse consumers set resources aside as a precaution against possible adverse changes in income and other factor. Hence, when inflation raises uncertainty regarding future income growth, risk-adverse consumers may increase their precautionary saving. Secondly, savings may rise in inflationary environment if consumers mistake an increase in the general price level for an increase in some relative prices and refrain from buying (Deaton, 1977). Inflation could also influence saving through its impact on real wealth. If consumers attempt to maintain target level of wealth or liquid assets relative to income, saving will rise with inflation.

The research conducted by (Herald and Heiko, 2009) to examine the demand for commercial banks deposits in Lebanon, a regional financial center classified the variables into two, i.e. macro and micro level variables. At the macro level, they found that domestic factors such as economic activity, prices, and the interest differential between the Lebanese pound and the U.S. dollar are significant in explaining deposit demand, as are external factors such as advanced economic and financial conditions and variables proxying the availability of funds from the Gulf. At the micro level, they found that in addition, bank-specific variables, such as the perceived riskiness of individual banks, their liquidity buffers, loan exposure, and interest margins, bear a significant influence on the demand for deposits. They have used quarterly data from 1993 to 2008. They have estimated a number of vector error correction model (VECMs) to take account of co integration in the non-stationary time series. They found that both domestic and international factors help explain deposit demand. Among domestic variables, they found that the coincident indicator for real economic activity in Lebanon, consumer prices, and the interest differential between the local currency and the U.S. dollar matter. Among the external variables, advanced economy economic and financial conditions appear significant (especially advanced economy industrial production and the Goldman Sachs Risk Aversion Index), as do so proxying the availability of funds from the Gulf. While both domestic and external variables are significant in explaining deposit demand, impulse response functions and variance decomposition analyses underscore the relative importance of the external variables. Regarding bank specific variables they found that the banks' perceived riskiness (z-score), their liquidity buffers,

loan exposures and interest margins all bear a significant influence on deposit growth at the bank level, controlling for domestic and external macroeconomic factors. In a similar way (Opoku S, 2011) investigated a research on deposit mobilization in Ghana to evaluate the trend of deposit through secondary data from commercial banks in Ghana that received from 2000 to 2004 were studied using nine sample banks out of twenty seven commercial banks and the result from the analysis indicated that deposits mobilization of Commercial Banks in Ghana show increasing trend, that is increases at a decreasing rate. Hence, the present level of deposits as a ratio of the total amount of money in circulation is woefully inadequate. The study also reveals certain basic facts about commercial banks in Ghana. Their concentration in the cities and a few urban areas as well as their product design and services are targeted to the literate formal sector employees. In addition, unfavorable macroeconomic conditions have resulted in negative real interest rate on deposits while unnecessary government intervention has reduced the confidence in the banking sector. The effects of these factors are the low deposits that commercial bank's receive.

The study conducted by (Fadare, 2011) through linear least square model and time series data from 1980 to 2009 examine the determinants of Banking Sector liquidity in Nigeria and assesses the extent to which the recent financial crises affected liquidity in deposit money banks in the country. The findings indicate that only liquidity ratio, monetary policy rate and lagged loan-to-deposit ratio are significant for predicting Banking Sector liquidity; and that a decrease in monetary policy rates, liquidity ratios, volatility of output in relation to trend output, and the demand for cash, leads to an increase in current loan-to-deposit ratios; while a decrease in currency in circulation in proportion to Banking Sector deposits; and lagged loan-to-deposit ratios leads to a decline in current loan-to-deposit ratios. The result suggests that during periods of economic or financial crises, deposit money banks are significantly illiquid relative to benchmarks, and getting liquidity monetary policies right during these periods is crucial in ensuring the survival of the Banking Sector.

The research study undertaken by (Wubitu, 2012) on factors determining commercial bank deposits in Ethiopia using both primary and secondary data from the year 2000 – 2011 which regressed the dependent variable or total deposit with three independent variables bank branch, deposit rate and inflation rate through multiple regression model indicated that all have positive effect on deposit of the bank, but their significances differ from one variable to others. Hence, the findings depicted that branch expansion had positive and significant effect where as deposit rate and inflation rate have positive and insignificant effect on total deposit of the banks.

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CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

3.1. Research Design

A research design is the logic that links the data collected and the conclusions to be drawn to the initial questions of the study (Yin, 2003). Accordingly, this research is a basic research type that used both qualitative and quantitative data to examine determinants of deposit mobilization in private commercial banks of Ethiopia using six private commercial banks through panel secondary data (comprising cross-sectional and time serious data) of eleven years from 2002-2012.

3.2. Population, Sample size and Sampling Techniques

In Ethiopia there are sixteen private commercial banks and three state owned banks on June30, 2014. Commercial bank of Ethiopia is one of the oldest and highly progressed state owned commercial bank in Ethiopia's banking history. Banks with different year of establishment may not have a proportional share of asset size. Thus, the appropriate base of sampling for this study is considering private banks with more than eleven years of services since establishment. Accordingly, six private commercial banks were selected purposely from total of 16 private commercial banks in Ethiopia. Hence, Awash International Bank, Dashen Bank, Bank of Abyssinia, Wegagen Bank, United Bank, and Nib International Banks with service year ranging from 20 years to 15 years only included in this study. Also the gross profit annually earning of this selected banks on average showed birr 4.51 million in the fiscal year 2012 which made them comparatively more competitive than the rest private banks.

3.3. Data Sources and Method of Collection

The study used both primary and secondary sources of data. Primary data were collected through structured questionnaires from 18 purposely selected managers having enough working experience and knowledge to provide information on factors of deposit mobilization in private commercial banks than other respondents. The primary data were focused on the qualitative factors. Such as: awareness of the society, use of technology, convenience of bank's Office, management efficiency, and Government policy...etc on

deposit mobilization of private commercial banks. Besides, secondary data were collected from NBE consolidated data, selected banks annual reports, Central Statistical Agency, and other relevant data sources. The secondary data were focused on providing information regarding balance sheet data for the dependent and independent variables for regression purpose. The panel Secondary data collected was comprised cross-sectional and time serious data. Cross-sectional elements were reflected by the different banks and the time series element is reflected in the period of study (2002 – 2012). As Saona (2011) observed, the main advantage of using panel data is that it allows overcoming of the unobservable, constant, and heterogeneous characteristics of each bank included in the study. The independent variables included in regression as bank specific factors are Number of bank branches, liquidity of the bank, capital adequacy and exchange rate of the specific or internal factors while macro or country specific factors include real GDP only. All the data collected for this study was managed properly by the researcher which ensures the confidentiality, reliability and accuracy of the data being it is free from any bias and dependence.

3.4. Operational definition of Variables

3.4.1 Dependent Variable

The study used deposit level of the selected private commercial banks as a dependent variable.

3.4.2 Independent Variables

Most of the studies on bank deposits have categorized the determinants of Deposits into internal and external factors (Rasiah, 2010b; Naceur & Omran, 2011; and Khrawish, 2011). Furthermore, Sastrossuwito and Suzuki (2012) refer to the internal factors as the bank-specific determinants of deposits, while the external factors refer to the macroeconomic determinants of deposits.

3.4.2.1 Bank-Specific Determinants

This paper used the major dimensions of a bank's operations: Capital adequacy, number of branches, liquidity, and exchange rate as banks specific factors.

Capital Adequacy

Capital refers to the amount of own funds available to support a bank's business and, therefore, bank capital acts as a safety net in the case of adverse development. Capital is calculated as the ratio of equity to total assets. The ratio measures how much of the banks' assets are funded with owners' fund and is a proxy for capital adequacy of a bank by estimating the ability to absorb losses (Ommeren, 2011).

Liquidity

Liquidity measured as the ratio of loans over total deposits of the bank. The liquidity position of a bank should be ascertained, monitored and controlled daily. The liquidity of an entity requires that its ability to pay its debts when due and the ability of its debtors to pay the amount they owe to the entity are of great importance. However, the liquidity or solvency of a firm is usually measured by liquidity ratios, which are a class of financial ratios used to determine a company's ability to honour its short-term debt obligation. Commonly used liquidity ratios are the current ratio and the quick ratio (also known as the acid test ratio). The current ratio is used to test a firm's liquidity because it shows the proportion of the firm's current assets available to cover its current liability. The concept behind this ratio is to ascertain whether a company's short-term assets (such as cash, cash equivalents, marketable securities, receivables and inventory) are sufficient to pay its short-term liabilities (notes payable, current portion of term debt, payables, accrued expenses and taxes). The only difference between the current and acid test ratios is that inventory is omitted from the acid test ratio (Loth, 2012). In this study, we shall use the ratio of total loan-to-total deposit as a measure of the liquidity of the deposit money banks (Fadare, 2011).

Bank branches

The number of outlets a firm holds in different geographical areas to maintain the market share of the banking industry (Wubitu, 2012). As revealed in past studies banks should expand their number of branches in order to compete moderately with all their capability they have from year to year which is the core factor to mobilize sufficient deposit to the company.

Exchange Rates

Exchange rate is the value of one nation's currency at which it may be converted into other nation's currency. The rate is based on a fixed relationship to the US dollar.

3.4.2.2. Macroeconomic determinants

Real GDP Growth

The economic output of a country minus the effect of inflation or deflation. The real GDP growth is used as a proxy of business cycle in which banks operate, and controls for variance in deposit due to differences in business cycles which influence the supply and demand for loans and deposits (Staikouras & Wood, 2004; Ommeren, 2011).Higher (lower) GDP indicates favorable (unfavorable) business opportunities under which a bank can achieve higher (lower) deposits. This is because an increase in economic activities of the country signals that customers' demand for loans will increase, and with improved lending activities make banks able to generate more profits.

Table 2: Description of Variables used in the regression

No.	Variables	Specification and measurement	Notation	Expected sign
	Dependent variable			
1	Deposit	Deposit size of the bank.	Dep.	
	Independent variables			
1	Branches	Number of bank branches to total deposit	Br.	+
2	Liquidity	Ratio of loan to total deposit	Liq.	-
3	Capital Adequacy	Ratio of capital to Asset of the bank	CAP	-
4	Exchange rate	Rate of USD to Ethiopian Birr	Exrate.	+
5	Real GDP	Real GDP to Deposit size	Rgdp	+

CAPTHER FOUR: RESULTS AND DISCUSSIONS

This chapter presents the empirical test results based on the linear regression using random effect model and assessment of qualitative data were described by using descriptive statistics for the six selected private commercial banks in Ethiopia. The investigation is with regard to the relationship between deposit and explanatory variables which include both internal and external factors as well as their effect on deposit. It includes the findings and interpretation of primary and secondary data output. Data collected through structured questionnaires were described in tabular form and incorporated in the analysis and discussion part of the study. For the regression analysis this study has applied STATA software to code and analyze the panel data from secondary sources.

4.1. Deposit trends of selected private commercial banks

Total deposit of private commercial banks is the dependent variable in this study. Since the study involves six private commercial banks in Ethiopia as a sample, then total deposit of the selected banks were analyzed. In econometric analysis total deposit is regressed with five independent variables which include bank branches, liquidity, Capital adequacy, exchange rates and real GDP respectively.

Table 3: Deposit trends of the six selected private commercial banks

Year	AIB	DB	BOA	WB	UB	NIB
2002	930	1191	909	515	189	345
2003	1164	1621	1076	704	287	588
2004	1493	2178	1275	876	532	832
2005	1940	2833	1627	1288	865	1223
2006	2567	3692	2177	1778	1220	1442
2007	3112	4861	2721	2724	1541	1879
2008	3870	6152	3477	2966	2443	2470
2009	4962	7925	4494	3728	3616	3296
2010	6106	10145	5139	3923	4725	4127
2011	7744	11841	6075	5957	6066	5157
2012	9204	14066	6771	5758	6758	5838

Sources: NBE Consolidated data

Figure 1: Deposit trends of selected private commercial Banks.
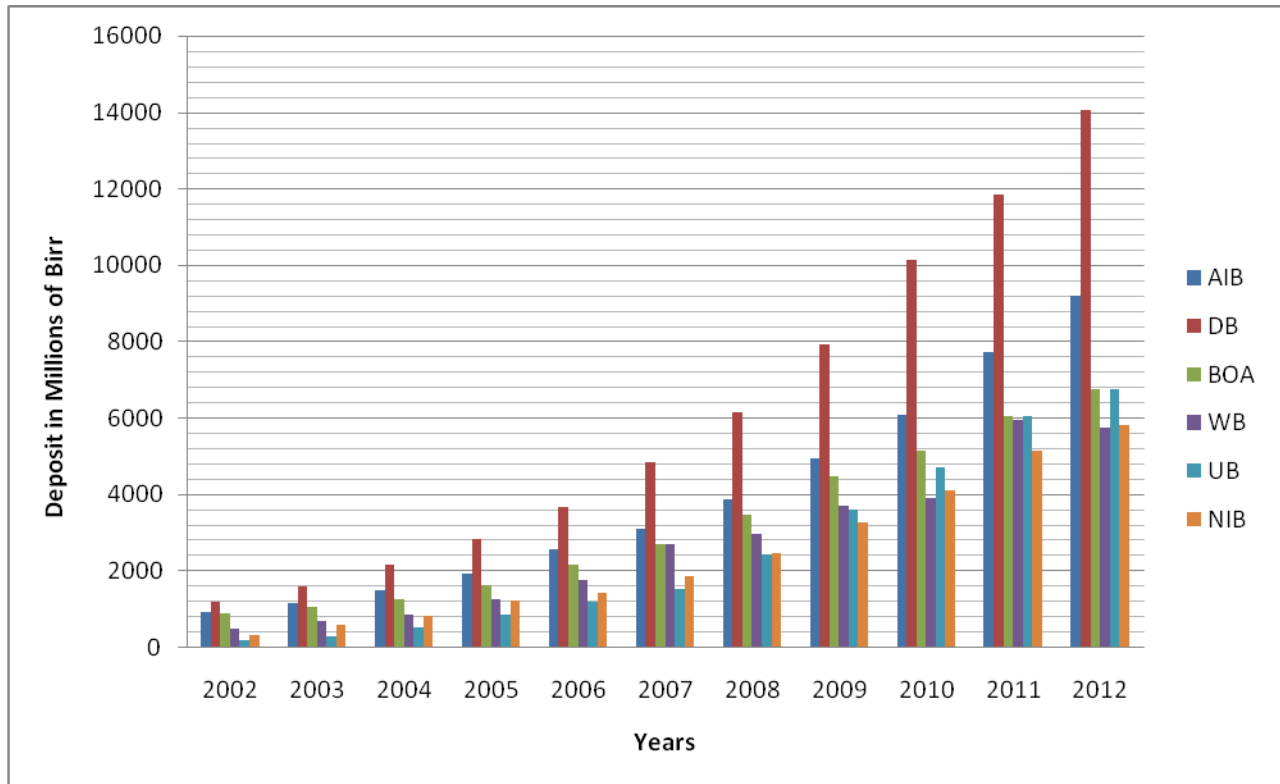
Sources: Own computation from NBE consolidated data

As indicated in table 3 and figure 1 above, we observed from each bank's deposit mobilization trends of deposit mobilization calculated, the deposit amount of the selected six banks indicated increasing trend from year to year with different rates except the deposit of wegagen bank in the year 2012 that declined as its percentage change showed Negative. Also the deposit of the selected banks depicted that it was increased continuously from year to year from 2002-2006 for AIB and BOA while the other bank's deposit trend change showed fluctuation from year to year i.e. increasing or decreasing. On the other hand, the deposit increment trend of all the six banks showed declining trend at high rate in the year in the year 2009 and 2012 than other years due to the tight policy imposed by NBE on private banks by setting CAP limit and to purchase bond with 27% deposit respectively against any loan disbursed to borrowers. Similarly, the deposit trend of this banks depicted that it was increased at declining rate commencing from the year 2009 to 2012 except Wegagen bank that may resulted as the Government policy on private banks imposed various measures to control the deposit of private banks for its own advantages such as to control the inflation rate through setting credit CAP discretionary limit, deposit report

required against Anti-money laundering policy, partial deposit allowed to be deposited in CBE only for Condominium house projects, and the 27% bond purchase policy imposed on private commercial banks respectively.

4.2. Trends of selected banks branch expansion

Table 4 represented the trends of branches expansion of selected private commercial banks. The results of the analysis depicted that all the selected banks were showing increasing trends in expansion of their branches. The expansions of these branches were contributing to enhance the deposit mobilization of these banks since it encouraged additional customers located in different geographical areas. Thus, from this study we can conclude that the existences of branches of private commercial banks were increasing their deposit through reaching the uncovered areas of the country that holds potential resources.

Table 4: Trends of branches for the selected private commercial banks

Year	AIB	DB	BOA	WB	UB	NIB
2002	25	26	15	21	12	9
2003	28	28	17	23	13	11
2004	31	31	19	25	14	13
2005	34	33	22	29	43	17
2006	36	37	26	33	22	20
2007	45	42	28	39	30	28
2008	53	48	42	40	36	42
2009	60	54	47	49	41	45
2010	62	59	52	50	42	48
2011	70	65	57	53	50	51
2012	86	75	61	60	69	58

Sources: From each selected banks annual report

Figure 2: Trends of branch expansion for the selected banks
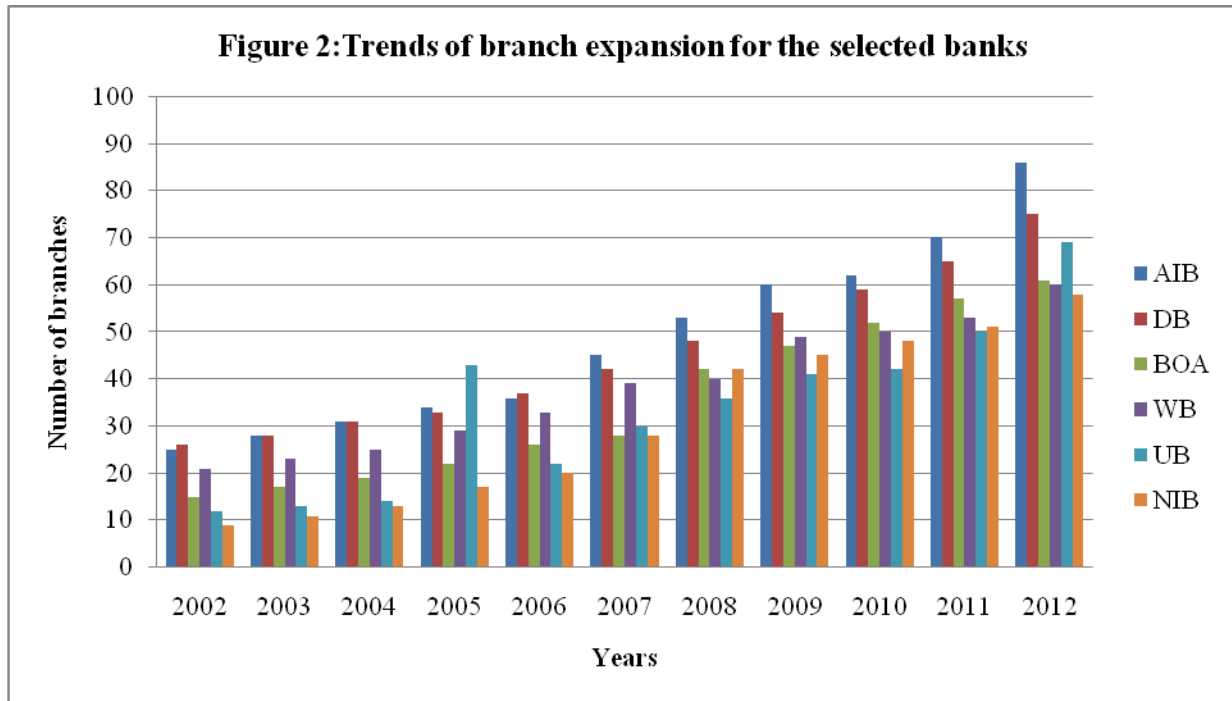
Sources: Own computation from the data of selected banks annual report

4.3 Primary data analysis on determinants of bank deposits

In this section primary data gathered from the managers of private commercial banks through structured questionnaires were analyzed and discussed. Eighteen Managers of selected private commercial bank were employed purposely to rank the major factors that determine the deposit level of private commercial banks in Ethiopia.

4.3.1 Background of the respondents

Table 5 represented the level of education and working experiences of the respondents. As clearly described in Table 4.3.1 below, 88.88 percent of survey respondents indicated that they have first degree and the remaining 11.12 percent of the respondents are second degree holders. In relation with work experience of the respondents, about 50 percent of respondents indicated that they had more than 15 years of banking experience. Further, the study indicated that 33.33 percent of survey respondents had 10-15 years of work experience in the banking industry, and the rest 16.67 percent had 5-10 years of banking work experiences.

Table 5: Respondents profile

Education level	Frequency	Relative frequency (%)	Cumulative frequency (%)
Diploma	-	-	-
First Degree	16	88.88	88.88
Second Degree	2	11.12	100.00
Above 2nd degree	-	-	-
Total respondents	18	100.00	100.00
Work experience			
1 – 5	-	-	-
5 – 10	3	16.67	16.67
10 – 15	6	33.33	50.00
Above 15 years	9	50.00	100.00
Total respondents	18	100.00	100.00

Source: survey output, 2014

4.3.2 Respondent's perception towards private banks deposit mobilization.

This study used liker scale to measure the perception of respondents on determinants of deposit mobilization in private commercial banks of Ethiopia.

5=strongly agree 4=agree 3=undecided 2=disagree 1=strongly disagree

Table 6: Respondent's perception towards private banks deposit mobilization, 2014

No.	Variables Name	1	2	3	4	5
1	Bank branches	0	0	0	4	14
2	Bank Size	0	0	1	8	9
3	Liquidity	0	0	11	4	3
4	Profit after Tax	2	8	4	4	0
5	Capital Adequacy	0	2	9	4	3
6	Government policy	0	0	1	4	13
7	Level of GDP	0	1	1	9	7
8	Technology	0	1	0	4	13
9	Human Capital	0	0	3	13	2
10	Saving habit of society	0	0	1	0	17
11	Inflation rate	1	7	6	4	0
12	Exchange Rate	1	7	4	6	0
13	Reserve requirement	0	3	12	2	1
14	Managerial efficiency	0	0	0	5	13
15	Convenience of Bank office	0	0	0	4	14

Sources: survey output

Table: 7: respondent's perception by percentage.

Variable	Strongly disagree	Disagree	Undecided	Agree	Strongly Agree	Sum of agree	Ranks
Bank branches	0	0	0	22.22	77.78	100	1st
Bank Size	0	0	5.56	44.44	50.00	94.44	2nd
Liquidity	0	0	61.11	22.22	16.67	38.89	5th
Profit after Tax	11.11	44.45	22.22	22.22	0	22.22	7th
Capital Adequacy	0	11.11	50.00	22.22	16.67	38.89	5th
Government policy	0	0	5.56	22.22	72.22	94.44	2nd
Level of GDP	0	5.56	5.56	50.00	38.88	88.88	3rd
Technology	0	5.56	0	22.22	72.22	94.44	2nd
Human Capital	0	0	16.67	72.22	11.11	83.33	4th
Saving habit of society	0	0	5.56	0	94.44	94.44	2nd
Inflation rate	5.56	38.89	33.33	22.22	0	22.22	7th
Exchange Rate	5.56	38.89	22.22	33.33	0	33.33	6th
Reserve Req.	0	16.67	66.67	11.11	5.56	16.67	8th
Managerial effic.	0	0	0	27.78	72.22	100	1st
Convenience of Bank office	0	0	0	22.22	77.78	100	1st

Sources: survey output survey output

As it can be seen from the table 6 & 7, bank branches, Managerial efficiency and convenience of bank office towards the private commercial banks deposit has 100% impact and categorized as primary factors. In addition, bank size, government policy, technology and saving habit of society have 94.44% effect on the deposit mobilization of private commercial banks in Ethiopia and categorized as secondary factors while level of GDP and human Capital affects deposit of private commercial banks with 88.88% and 83.33% and categorized as 3rd and 4th determinants of deposit mobilization of private commercial banks respectively. Therefore we can summarize from the given analysis bank branches, Managerial efficiency, convenience of Bank office, bank size, government policy, technology, saving habit of society, level of GDP and human capital affects deposit mobilization of private commercial banks significantly. On the contrary, liquidity and capital adequacy with 38.89%, exchange rate with 33.33%, profit after tax and inflation with

22.22% and reserve requirement with 16.67% affects deposit mobilization of private commercial banks insignificantly.

4.3.3 Challenges of private commercial banks deposit mobilization

As per the respondents feedback judged when conducting this courses of study some of the main challenges for deposit mobilization processes for private commercial Banks are mentioned as follows:

- ➢ The partial saving deposit requirements by the society for condominium houses construction program that were allowed to be deposited in CBE only challenged the deposit of the private commercial banks.
- ➢ The current reconstruction of Addis Ababa roads project were also another problem for all banks.
- ➢ The directive issued by NBE obliged domestic private Banks to purchase NBE bills amounting 27% of their loan granted at 3% annual interest rate will gradually erode the liquidity position of private commercial banks.
- ➢ The aggressive branch expansion by CBE was the critical challenges for deposit mobilization of private commercial banks to encourage potential customers found in remote areas.
- ➢ The directives issued by NBE against money laundering case put depositors in dilemma to deposit and withdraw their money freely like the past.

4.4 Econometric Analysis

This section provides the analysis of the correlation analysis, the test for classical multiple linear regressions assumptions, identification of the panel model regression, the panel data regression and analysis for quantitative data.

4.4.1 Correlation Analysis

Correlation coefficient represents the linear relationship between two or more variables in the model. The most widely-used type of correlation coefficient is Pearson correlation and it is also named as linear or product-moment correlation. Correlation coefficients should range from -1.00 to +1.00. The value of -1.00 represents a perfect negative correlation as well as a

value of +1.00 represents a perfect positive relationship and finally value of 0.00 represents no correlation (Lind, Marchal & Wathen, 2006). Due to this, coefficient of the correlation matrix is the basic measurement to the degree of linear relationship between the existing variables. The detailed correlations between dependent and independent variables are explained in the Table as follows:

Table 8: Correlation Matrix of Dependent and Explanatory Variables.

	Lndep	liq	capad	rgdp1	lnbr	lnexrate
Lndep	1.0000					
Liq	-0.6928	1.0000				
Capad	-0.3173	0.4056	1.0000			
Rgdp	0.5982	-0.2434	0.0191	1.0000		
Lnbr	0.9218	-0.7373	-0.3309	0.6060	1.0000	
Lnexrate	0.7281	-0.6961	0.0365	0.4502	0.7122	1.0000

Source: Stata Results for correlation test (2014)

Table 8 showed that the correlation of explanatory variables with dependent variable of deposit and the linear relationship with each other. Both internal and external factors determining the private commercial banks deposit amounts revealed positive and negative relationships with deposit. Liquidity and capital adequacy are negatively correlated with deposit. The magnitude of their coefficient of correlation indicates -0.6928 and -0.3173 respectively. This indicated that as these variables increases, the value of deposit moves in opposite direction. Number of branches and exchange rate of banks are the other firm specific characteristics which have positive correlation coefficients with the dependent variable i.e. with deposit. The magnitude of their relationships with deposit indicated 0.9218, and 0.7281, respectively. This reflected that as these variables increases, the deposits of the private commercial banks increases but with different amounts.

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The macroeconomic variable real growth domestic product (rdgp) is positively correlated with deposit. The correlation coefficient amount is 0.5982. The positive relationship of the rgdp with deposit indicated that, the past economic growth rate and the current deposit of private commercial banks in Ethiopia goes hand in hand to the same direction.

4.4.2 Tests for the Classical Linear Regression Model Assumptions

In this study, various diagnostic tests were carried out to ensure that whether the data fits the basic assumptions of classical linear regression model. Therefore, the test results for each assumption regarding the data are presented as follows:

4.4.2.1. Tests for Normality of Data

4.4.2.1.1. Smirnov-Kolmogorov's Test for Normality

Test of normality means determining whether the data is well modeled by normal distribution or not. This test of normal distribution may take place either graphical (histogram and dot plot) or non-graphical (Skewness /Kurtosis tests for normality) methods of tests. The decision rule behind the Skewness/Kurtosis tests for normality states that if the p-value of the error term is greater at the chosen level of significances, i.e., 1%, or 5 %, or 10 %, it indicated that the error terms are normally distributed (Gujarati, 2004). The testing mechanism for the residuals whether they were normally distributed or not is by using Smirnov-Kolmogorov's test. According to this test, if the test is significant i.e. P.value is greater than 0.05 (5%), then the residual are normally distributed i.e. the model is normal. But, if the p.value is less than 0.05, it is not normally distributed.

Table 9 showed the results of Skewnes /Kurtosis tests for normality. The value of error terms in the table showed that the p-value 0.4576 is greater than 0.05 i.e. the chosen level of significance is 5%. From this analysis we can conclude that the error terms of the specified model are found to be normally distributed.

Table 9: Skewness /Kurtosis tests for Normality

Variable	Obs	Pr (Skewness)	Pr (Kurtosis)	adj. chi2 (2)	Prob.>chi2
Error	66	0.2410	0.7149	1.56	0.4576

Source: STATA result for normality (2014)

4.4.2.1.2 Graphical Test Method for Normality

Graph is also another method to test whether the error terms or residuals were correctly distributed over the model or not. The Graph below showed that almost all the residuals were normally distributed.

Figure 3: Graphical Method of Normality Test
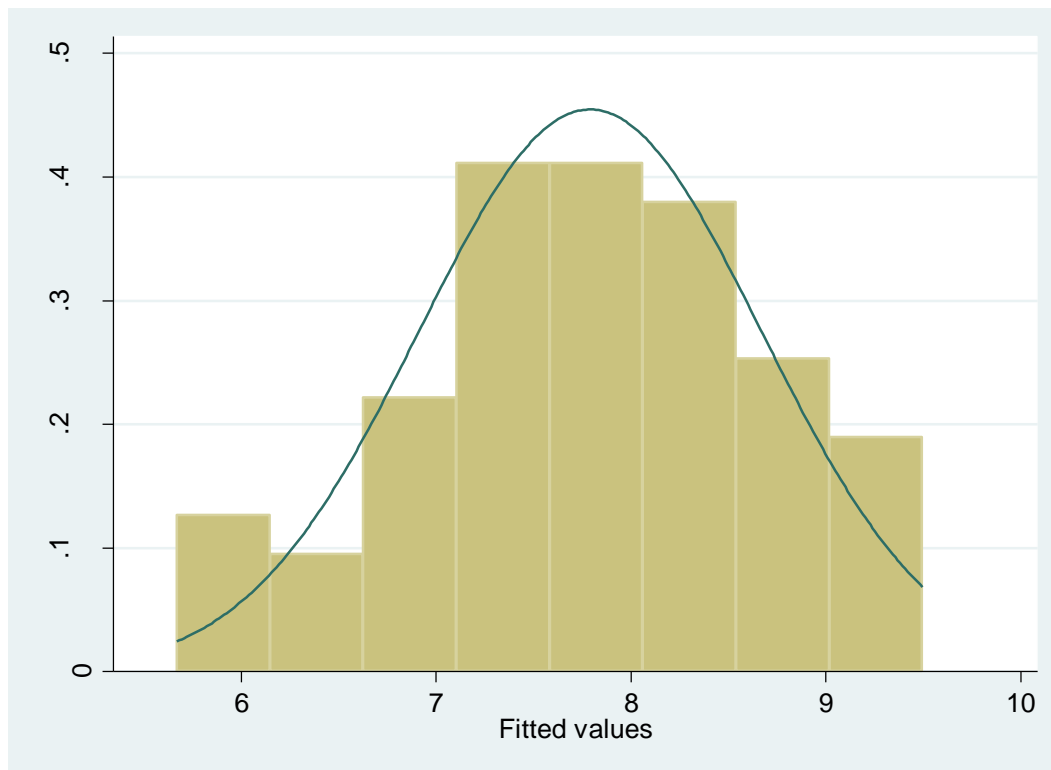
Source: STATA result for normality (2014)

4.4.2.1.3. Shapiro-Wilk W Test for Normality

Shapiro-Wilk W test is also another mechanism for normality test. According to Shapiro-Wilk W test, if the p-value is greater than 1%, 5% and 10%, it indicated that the residuals are normally distributed. So, the result of the test i.e. Prob.>z is 0.5442 or about 54.42% which indicated that this result is greater than 0.05 of the confidence interval. This depicted that the error terms of the model are normally distributed.

Table 10: Shapiro-Wilk W test for normal data

Variable	Obs	W	V	z	Prob>z
Error	66	0.9838	0.950	-0.111	0.5442

Source: STATA result for test of normality of data (2014)

4.4.2.2 Tests for Hetroscedasticity

The second assumption of CLRM stated that the variance of the errors is constant, $\sigma2$ this is known as the assumption of homoscedasticity. If the residuals of the regression have systematically changing variability over the sample, that is a sign of heteroscedasticity. If errors do not have a constant variance (not homoscedastic), they are said to be Hetroscedastic (Brooks, 2008). Hetroscedasticsity makes estimators to be not efficient because the estimated variances and covariance of the coefficients are biased and inconsistent. Thus, the tests of hypotheses are no longer valid.

4.4.2.2.1 Breush-Pagan/Cook-Weisberg test for Hetroscedasticsity

The decision rule behind Breush-Pagan/Cook-Weisberg test for heteroscedasticity states that the significant result from the test is indicating the regression of the residuals on the predicted values reveals significant heteroscedasticity. On the other hand, the problem of heteroscedasticity exists if the p-value obtained from Breush-Pagan/Cook-Weisberg test of heteroscedasticity is smaller than the chosen level of significances, i.e., 1% or 5% (Gujarati, 2003). Table below showed that the value of prob > Ch2 is significant at 0.05 of given level

of significance i.e. 0.071 is greater than 0.05. Therefore, there is no problem of hetroscedasticity.

Table 11: Breusch-Pagan / Cook-Weisberg test for heteroscedasticity

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity
Ho: Constant variance
Variables: fitted values of dep
chi2 (1)   =   3.26
Prob> chi2 =   0.0710

Source: Stata result for heteroscedasticity test (2014)

4.4.2.2.2 White's Test for Hetroscedasticsity

White test was used for general test of heteroscedasticity. It tests the null hypothesis that the variance of the error term is homogenous (there is no Hetroscedasticsity problem). To test the presence of Hetroscedasticsity, the residual sum of squares for each observation have been calculated and regressed against the independent variables. If the value of chi square calculated is greater than the chi square tabulated at a given significant level, we have to accept the Ho of no Hetroscedasticsity and reject H1 that indicates the existence of hetroscedasticsity. The t-statistics value (chi square calculated) from Table below is 36.84% which is greater than chi square tabulated at 5% level of significance i.e. 21.50. In this case it is indicated that there is no evidence for the existence of Hetroscedasticsity.

White's test for Ho: homoscedasticity

Against Ha: unrestricted heteroscedasticity

chi2 (41)   =   21.50

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Prob> chi2 =   0.3684

Table 12:   Cameron & Trivedi's decomposition of IM-test

Source	chi2	df	p
Heteroscedasticity	21.50	20	0.3684
Skewness	5.48	5	0.3604
Kurtosis	0.75	1	0.3877
Total	27.72	26	0.3723

4.4.2.3 Tests for Autocorrelation

Autocorrelation problem occurs when the error term in each period is influenced by each other so that the variance of error term is not in an optimal level. The term autocorrelation may be defined as "correlation between members of series of observations ordered in time [as in time series data] or space [as in cross-sectional data]. The most celebrated test for detecting serial correlation is that developed by statisticians Durbin and Watson. It is popularly known as the Durbin-Watson d statistic.

Table 13. Durbin-Watson d Test: Decision Rules

Null hypothesis	Decision	If
No positive Autocorrelation	Reject	$0<d<dL$
No positive Autocorrelation	No decision	$dL \leq d \leq dU$
No negative correlation	Reject	$4-dL<d<4$
No negative correlation	No decision	$4-dU \leq d \leq 4-dL$
No autocorrelation, positive or negative	Do not reject	$dU < d < 4-dU$

Source: Gujarati, 2004

To see the autocorrelation problem based in the decision rules, significance points of dL and dU at 1% level of significance from Durbin – Watson d statistic table.

Results on Durbin- Watson d test: Decision Rules

This is an assumption that the errors are linearly independent of one another (uncorrelated with one another). If the errors correlated with one another, it would be stated that they are auto correlated. To test for the existence of autocorrelation or not, the popular Durbin-Watson test was employed. Autocorrelation test will be invalid with the presence of lagged dependent variable. Therefore, this was tested without the lag variable and the DW calculated value for five regressors and one regresses and became 0.68738. To test whether there is autocorrelation or not, it should be compared with the table value. According to this, the dL value is 1.438 and dU is 1.767. By comparing the DW value with dL and dU, falls on zone of positive autocorrelation which is failed to reject the null hypothesis for the existence of autocorrelation. If 0<d<dL, the decision are we reject null hypothesis. That is, there is statistically significant positive autocorrelation exist in the panel model which is the main measurement of banking deposit mobilization in the study.

4.4.2.4 Tests for Model Specification

Testing the model is very important to check out whether one or more relevant variables are omitted from the model or one or more irrelevant variables are included in the model. There are different methods to detect specification errors of the model. Ramsey RESET test for omitted variables are commonly used methods in the test (Tikue, 2011).

Ramsey RESET for Model Specification Test

Ramsey RESET test for omitted variables (ovtest) was tested as depicted in table below. It tests the null hypothesis that H0: model has no omitted variables. As a decision rule according to Ramsey RESET test, a model specification is fit for regression analysis if the p-value stated in P>F is greater than the chosen level significances i.e. 1%, 5% and 10%. Accordingly, this test indicates the model has no relevant omitted variables since the test

was failed to reject the null hypothesis, i.e., Prob.>F of 29.07% is found greater than any of the significance levels of the specified model of the study.

Therefore, the model is correctly specified.

Ramsey RESET test using powers of the fitted values of lndep

Ho: model has no omitted variables

$F (3, 57) =$ 1.28

Prob > F =   0.2907

Sources: STATA result for model Specification Test (2014)

4.4.2.5 Tests for Multicollinearity

Multicollinearity is an indication for a linear relationship between independent variables (Gujarati, 2003). To test the existence or not-existence of multicolliniarity problem, Variable Inflation Factor (VIF) technique is employed. The variance inflation factor, VIF, is a measure of the reciprocal of the complement of the inter-correlation among the predictors: $VIF=1/ (1- r2)$.where r2 is the multiple correlations between the predictor variable and other predictors. A decision rule for multicolliniarity test of the model states a variable whose VIF values are greater than 10 indicate the possible existence of problem of multicolliniarity. Tolerance, defined as 1/VIF is used by many researchers to check on the degree of co-linearity (Gujarati, 2003).

Table 14. VIF Technique to detect Multicolliniarity

Variable	VIF	1/VIF
Lnbr	4.48	0.223453
Liq	3.63	0.275417
Lnexrate	3.41	0.293361
Rgdp	1.95	0.511534
Capad	1.77	0.564521
Mean VIF	3.05	

Source: Results of Stata Regression (2014)

From the above table 13, the result showed that VIF value for all variables became less than the tolerable value i.e. VIF values of all variables are less than 10. It indicates that this model is free from multicolliniarity and there is no problem of multicolliniarity between the variables in this model. So, the regression model is as follows:

$$Lndep_{it} = \beta_o + \beta_1 lnbr_{it} + \beta_2 liq_{it} + \beta_3 lnexrate_{it} + \beta_4 rgdp_{it} + \beta_5 capad_{it} + U_{it}$$

$lndep_{it}=$ stands for Natural logarithm of Deposit amount.

$lnbr_{it=\text{ refers to Natural logarithm of Number of bank}}$ branches.

$Lnexrate_{it = \text{ refers for natural}}$ logarithm of .exchange rate.

$liq_{it = \text{ refers to liquidity that calculated as Ratio of loan to deposit amount}}$

$rgdp_{it= \text{ stands for real GDP that calculated based on the difference of gross domestic product and inflation rate.}}$

$capad_{it= \text{ refer to capital adequacy that calculated as ratio of capital amount to asset amount}}$

4.4.2.6 Identification of Panel Model Regression

The collected data were estimated based on panel model, which includes cross sectional and time series observations for six private commercial banks that ranges over 11 years (2002-2012). The commonly used models for panel data are fixed effects and random effects models. The estimation technique was carried out on the basis of balanced panel data regression. An balanced panel data have equal time series observations for the study entities. In this study, the cross sectional units are six and the time series (period taken for the study) is 11 years..

In addition to this criterion, there is a formal test that helps to choose between fixed effect model (FEM) and random effect model (REM), which was developed by Hausman in 1978. The null hypothesis of the underlying Hausman test is that there is no substantial difference between FEM and REM estimators. Again the test statistic developed by Hausman has an asymptotic χ^2 distribution. If the null hypothesis is rejected we use FEM, while if non-

rejection (accepted) adopted the conclusion is that REM applied. In the case statistical inferences will be conditional on the U_{it} in the sample (Gujarati, 2004, P 651). Therefore, this study was estimated using random effect regression. The choice of random effect model over a fixed effect model was based on the use of the Hausman test.

Table 15: Hausman Test for Fixed Effect and Random Effect Model

	---- Coefficients ----			
	(b)	(B)	(b-B)	sqrt (diag (V_b-V_B))
	Re	Fe	Difference	S.E.
Liq	0.0244422	-0.2041321	-0.2285743	0.1682444
Capad	-1.120945	-0.6943695	-0.4265756	-0.3139852
Rgdp	0.66052	0.6789096	-0.0183895	0.1459547
Lnbr	1.308866	1.311902	-.00030353	0.033485
Lnexrat	.6621583	0.5658775	0.0962807	0.081159

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2 (5) = (b-B)'[(V_b-V_B) ^ (-1)] (b-B)

= 2.79

Prob>chi2 = 0.7331

(V_b-V_B is not positive definite)

Source: Results of Stata Regression (2014)

Accordingly, the result from Hausman test showed in favor of fixed effect model than random effect model since the P-values is 0.7331 and Ho is rejected using random effect and the regression resulted reconciled with expectation of hypothesis using fixed effect regression model.

4.4.2.7 Results of regression analysis

This regression analysis is based on the data collected from each private commercial banks head offices, and National Bank of Ethiopia. It depicted the relationship between the factors determining deposit mobilization level of private commercial banks with deposit using six selected banks over the study period. Table below showed the regression output of the dependent variable and the explanatory variables.

Table 16: Panel fixed Effect Estimation Result

REGRESION RESULT						
Lndep	Coef	Std.Err.	T	P>|t|	[95% Conf. Interval]	
Liq	-.2041321	.5148246	-0.40	0.693	-1.235864	.8275994
Capad	-.6943695	.9950157	-0.70	0.488	-2.688426	1.299687
Rgdp	.6789096	.4561412	1.49	0.142	-.2352178	1.593037
Lnbr	1.311902	.1616691	8.11	0.000	.9879096	1.635894
Lnexrate	.5658775	.2688325	2.10	0.040	.0271251	1.10463
-cons	2.035508	.9123722	2.23	0.030	.207073	3.863942

Model: random effect regression

Number of obs. 66

R-sq: within = 0.9065

Between = 0.6465

Overall = 0.8660

F (5, 55)   =   106.68

Prob> F   =   0.0000

Sources: fixed Effect Regression Result Stata (2014)

The Table 16 showed that the results of the independent variables entered into the regression model. The overall model is strongly significant (P-value = 0.0000) and (F (5, 55) =106.68) with R² of 90.65% and its overall R^2 is about 86.6% in the model. The overall regression result showed that three of the independent variables are insignificant while the other two are significant. From internal or bank specific variables, liquidity and capital adequacy are not significant with (P=0.693), and (p= 0.488) respectively. The empirical finding is consistent with the findings of past other researches which are conducted by (Bruce and George, 1965, Haron et al., 2006, Herald & Heiko, 2009 and Wubitu, 2012) and also the results reconciled with the researcher expectation on hypothesis too. From the external variables, real gross domestic product affects deposit with insignificant but with positive value (p= 0.142). The result obtained from the regression analysis indicated that branch expansion and exchange rate are strongly significant with (P=0.000), and (P=0.040) respectively. From this analysis it can be concluded that deposit mobilization of the private commercial banks in Ethiopia are positively affected by bank branch expansion, exchange rate and rgdp while deposit of the banks were affected by liquidity and capital adequacy negatively. In general, the dependent variable, deposit is the function of both the internal and external variables included in the model and presented as like below based on the regression result.

Lndep. = 2.03551-0.20413liq-0.69437capad+0.67891rgdp+1.3119lnbr+0.56588lnexrate+U$_{it}$

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

5.1. Conclusions

The study is conducted on determinants of deposit mobilization in private commercial banks of Ethiopia. This study was undertaken with overall objective of identifying factors determining deposit mobilization of private commercial banks. In meeting this objective the study used both primary and secondary data sources. Accordingly, the summary of the findings were listed as follows:

➢ The results of the study showed that the branch expansion of the selected private commercial banks revealed increasing trends.

➢ The output of the study also indicated that total deposit of each selected private commercial banks were increasing from year to year proportional to their branch expansion.

➢ The results obtained from the regression analysis indicated that branch expansion and exchange rate are strongly significant in affecting deposit mobilization with (P=0.000), and (P=0.040) at 5% confidence level respectively while liquidity and capital adequacy were insignificant and affects the deposit negatively with (P=0.693), and (P= 0.488) respectively. The results of the study also showed that real gross domestic product were affecting deposit of the private commercial banks positively with insignificant value (P= 0.142).

➢ From the feedback of the respondents' bank branches, managerial efficiency, convenience of bank office, government policy, technology, saving habit of society, and human capital affects deposit mobilization of private commercial banks significantly.

➢ The respondents' perception reflected that liquidity, capital adequacy, inflation rate, profitability, exchange rate and reserve requirement were affecting deposit of the banks insignificantly.

➢ The current condominium house construction program partial saving by society that allowed to be deposited in CBE only affects deposit amounts of the private commercial banks negatively.

- The aggressive CBE branch expansion affects deposit mobilization of the private commercial banks negatively.
- The policy issued by NBE on private commercial banks in investing 27% of their deposit against bond purchase reduced credit amount availed to their customers directly while it discourages deposit mobilization of these banks indirectly.

5.2. Limitation of the study

The study was conducted using the data for 11 years from the year 2002 - 2012. The sample of the study is shortened because of lack of data; however it is believed that it can be the main limitation of the study which should be considered when interpreting and using the result of the study. The other limitation of this study was the fact that it only considers six private commercial banks in Ethiopia because this banks only fit for the study in terms of time period i.e. existed in business for more than a decade that enables to get enough panel data for the study. The qualitative data is collected by using scheduled questionnaires distributed for 18 Managers from selected banks purposively with proportional ratio that allotted to three respondents from each selected six banks. The number of respondents limited due to time and budget limitation.

5.3. Recommendations

Based on the research findings and conclusions the followings were recommended for the improvement of deposit mobilization of private commercial banks in Ethiopia

- Since deposit is the main source of funds for commercial banks, therefore due emphasis should be given by all the concerned bodies of the private commercial banks to enhance its deposit mobilization level.

- The bank should provide excellent service for its customers to mobilize more deposits through giving various incentives such as coupon prizes for the potential customers.

- Private commercial banks should be flexible, transparent and have strong relationship to handle the existing in sustainable way and to encourage others.

- ➢ Private Commercial banks should arrange enough and secured parking areas for their customers to maintain the potential depositors.
- ➢ Private commercial banks should provide technology connected service like ATM, Mobile banking, internet banking…etc to attract new customers and hold the existing one in a sustainable ways to have enough deposits.
- ➢ The private commercial banks should apply research and development for market assessment to identify the potential resource of the area during their branch expansion.
- ➢ The government should have free and fair policies among the state and private owned banks to have liberalized economy to achieve welfare of the societies.
- ➢ To improve management efficiency private commercial banks should give due attention in providing training packages consistently for their employees to update their knowledge and skills.
- ➢ The private commercial banks must be focused in doing with exporters and foreign banking agents to have enough foreign currencies which attracts potential depositors.

Finally, this study investigates the determinants of deposit mobilization of private commercial banks in Ethiopia. But, the variables included in the study were not exhaustive. Thus, I recommend that future researchers could include other bank specific and macroeconomic variables in the regression models.

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APPENDICES

Appendix A: Questionnaires

St.Marry's University School of Graduate studies MBA Program Masters of Business Administration in Management.

Dear respondents:

This scheduled questionnaire is prepared by **Jembere Hambissa** who is enrolled at St.marry University in MBA program in the field of Business Administration in Management. The objective of the questionnaire is to collect information from Managers about the determinants of Deposit Mobilization of private commercial banks in Ethiopia. Note:

✓ The information you provide will be valuable for the successes of the research paper. Please be honest and objective while filling the questionnaire.
✓ The information you give is used only for academic purpose and will be kept confidential by the researcher.

Thank you in advance for your cooperation.

Part one: Demographic Information

1. Respondent's Name_____
2. Company Name_____
3. Level of education

A. Diploma   C. Second Degree

B. First Degree   D. Above second degree

   4. Work experience in the banking industry

   A. 1-5 years   C. 11-15 years

   B. 6-10 years   D. More than 15 years

Part two: Determinants of Banks deposit Mobilization

1. The major factors that affecting private commercial banks deposit mobilization in Ethiopia are listed below. After you read each of the factors, evaluate the extent of their effect on deposit mobilization in relation to your bank experience and then put a tick mark (√) under the choices below using lacerate scale measurements.

5=strongly agree 4=agree 3=undecided 2=disagree 1=strongly disagree

| Ser.No. | Key Variables | Agreement Scale | | | | | Remarks |
		1	2	3	4	5	
1	Bank branches						
2	Bank Size						
3	Liquidity						
4	Profit after Tax						
5	Capital Adequacy						
6	Government policy						
7	Level of GDP						
8	Use of Advanced Technology						
9	Human Capital						
10	Saving habit of society						
11	Inflation rate						
12	Exchange Rate						
13	Reserve requirement						
14	Managerial efficiency						
15	Convenience of Bank office						

Appendix B: Trends of Bank Deposit

Deposit trends of AIB for the last eleven years.

Year	Deposit Amount	change in amount	Change in (%)
2002	930	-	-
2003	1164	234	25.16
2004	1493	329	28.26
2005	1940	447	29.93
2006	2567	627	32.31
2007	3112	545	21.23
2008	3870	758	24.35
2009	4962	1092	28.21
2010	6106	1144	23.05
2011	7744	1638	26.82
2012	9204	1460	18.85

Deposit trend of Dashen bank for the last eleven years

Year	Deposit Amount	change in amount	Change in (%)
2002	1191	-	-
2003	1621	430	21.59
2004	2178	557	34.36
2005	2833	655	30.07
2006	3692	859	30.03
2007	4861	1169	30.03
2008	6152	1291	26.55
2009	7925	1773	28.81
2010	10145	2220	28.01
2011	11841	1696	16.71
2012	14066	2225	18.79

Deposit trend of BOA bank for the last eleven years

Year	Deposit Amount	change in amount	Change in (%)
2002	909	-	-
2003	1076	167	18.37
2004	1275	199	18.49
2005	1627	352	27.60
2006	2177	550	33.80
2007	2721	544	24.98
2008	3477	756	27.78
2009	4494	1017	29.24
2010	5139	645	14.35
2011	6075	936	18.21
2012	6771	696	11.45

Deposit trend of WB bank for the last eleven years

Year	Deposit Amount	change in amount	Change in (%)
2002	515	-	-
2003	704	189	36.69
2004	876	172	24.43
2005	1288	412	47.03
2006	1778	490	38.04
2007	2724	946	53.20
2008	2966	242	8.15
2009	3728	762	25.69
2010	3923	195	5.23
2011	5957	2034	51.84

| 2012 | 5758 | 199 | (3.34) |

Deposit trend of UB bank for the last eleven years

Year	Deposit Amount	change in amount	Change in (%)
2002	189	-	-
2003	287	98	51.85
2004	532	245	85.36
2005	865	333	62.59
2006	1220	355	41.04
2007	1541	321	26.31
2008	2443	902	58.53
2009	3616	1173	48.01
2010	4725	1109	30.66
2011	6066	1341	28.38
2012	6758	692	11.40

Deposit trend of NIB bank for the last eleven years.

Year	Deposit Amount	change in amount	Change in (%)
2002	345	-	-
2003	588	243	70.04
2004	832	244	41.49
2005	1223	391	46.99
2006	1442	219	17.90
2007	1879	437	30.30
2008	2470	591	31.45
2009	3296	826	33.44
2010	4127	831	25.21
2011	5157	1030	24.95
2012	5838	681	13.20

Declaration

I the undersigned, declare that this thesis is my original work which was prepared under the guidance of Zenegnaw Abiy (PhD). All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

Name   **Signature**

Jembere Hambissa Geleta   _____