ST.MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES

THE NATIONAL BANK OF ETHIOPIA BILL PURCHASE POLICY ON COMMERCIAL BANKS IN ETHIOPIA

BY

YOSEPH GETACHEW WOLDE
ID.NO. SGS1/0063/2004

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APPROVED BY BOARD OF EXAMINERS

Dean, Graduate Studies	**Signature& Date**
Advisor Signature & Date	
External Examiner	**Signature & Date**
Internal Examiner	**Signature & Date**

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List of Abbreviations and Acronyms

IMF: International Monetary Fund

NBE: National Bank of Ethiopia

NBE Bills: National Bank of Ethiopia government bonds maturing in five years and earning three percent interest rate.

ZB: Zemen Bank S.C

WB: Wegagen Bank S.C

BOA: Bank of Abyssinia S.C

DB: Dashen Bank S.C

CBB: Construction and Business Bank

UB: United Bank S.C

AIB: Awash International Bank S.C

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Abstract

Commercial banks in Ethiopia have a prominent role in the financial sector. Time and time again, as any business organization these banks, face problems that puts pressure on their performance. The National Bank of Ethiopia as the Central Bank of the country monitors and controls commercial banks in the view of protecting depositors (public) interest. In line with this objective National Bank issues different proclamation and directives as part of the government monetary policy. Back in March 2011, it issued a directive which forced commercial banks to allot 27% of the total fund held for loan and advances to purchase government bonds with five years maturity time. Banks were calming that the Bill is taking a huge amount of fund that could otherwise have been forwarded as a loan. The study tried to investigate if what the banks are calming is true. In line with the stated problem, the study investigated the impact of the NBE Bill purchase on liquidity, profitability & lending capacity. Lending capacity and liquidity of commercial banks is compromised as a result of the directive and profitability has also been affected but, since banks don't solely relay on income generated from loan and advances the magnitude of its impact is relatively higher on lending capacity and liquidity. As for the results from the model the NBE Bill purchase negatively affects liquidity and lending capacity of commercial banks and the impact on profitability is insignificant. Though, 2012/13 is not included in the study report from the media showed that old private banks registered a fall in their profit for the first time in their history and the NBE Bill is among the major factors that contributed for the fall. Empirical results in the study emphasize that more caution is needed on commercial banks' lending capacity and liquidity positions. Thus, involvement of NBE to help neutralize the impact created on liquidity and lending capacity is necessary.

Chapter 1 Introduction

1.1 Background of the Study

Modern banking in Ethiopia goes back to the turn of the century in1905; the Bank of Abyssinia was established in Addis Ababa under the reign of MenelikII. This event marked the introduction of the banking industry in the country. In the 1930's the Bank was bought by the state and the state bank of Ethiopia was established by proclamation issued in August 1942. The bank was later disintegrated into two different banks to form The National Bank of Ethiopia and Commercial bank of Ethiopia. (Downloaded from www.nbe.com in April, 2013)

Post 1991 marked a new era for the banking sector and the economy as a whole as the country moved out of the socialist regime and private banks started to flourish, Awash International bank being the first Bank as the government allowed Ethiopian nationals to engage in banking and insurance business as per proclamation no. 84/1994. As of May 2013, there were 16 private banks operating in the country (Downloaded from www.nbe.com in April, 2013)

Commercial banks in Ethiopia are engaged in three key areas- collecting deposits, providing loans and securing foreign exchange funds needed for trade services. (Annual report Zemen Bank S.C, 2011)

The principal reason of banks chartered by the government and the central bank is to make loans to their customers. Banks are expected to support their communities with an adequate supply of credit for all legitimate businesses and consumer financial needs and to price that credit reasonably in line with competitively determined interest rates. Indeed, making loans is the principal economic functions of banks that is to fund consumption and investment spending by businesses, individuals, and units of government. (Khan, 2011)

The National Bank of Ethiopia, in order to protect depositors and stabilize macroeconomic conditions of the country, issues different proclamations and directives and undertakes monitoring and controlling activities on commercial banks operating in the country. The

Bank claims that private banks loan disbursement to long term projects was not more than 20 percent and majority of the loan granted was short term which can maximize their profit as a result directive no. MFA/NBEBILLS/001/2011 was put in place.

According to the directive '**NBE BILL'** is a long-term obligation of the National Bank of Ethiopia having a maturity period of five years and sold to all banks.

As stated in the directive "each bank shall calculate its own allotment based on the monthly plan of loan and advances disbursement. The applicable ratio for the allotment shall be 27 percent of such disbursement." By this directive all banks including the state owned Construction and Business Bank except Commercial bank of Ethiopia and Development bank of Ethiopia are obliged to allocate the 27 percent of the total loan disbursed during the month for the purchase of the Bill. The bill purchase by commercial banks is likely to have adverse effect on their financial performance which will be the main theme of the study.

1.2 Statement of the problem

It is widely believed that efficiency in the banking sector is crucial for economic growth as it has a direct impact on the productivity of all the other sectors in the economy. (Muluneh, 2013)

Stable growth, in the context of developing economies, requires that the economy be put on a path of higher savings and further ensuring that these savings are channeled into productive investment. In this scheme of growth, the banking system has a dual role to play. It mobilizes savings and allocates credit for production and investment. Effectiveness of the banking sector's contribution to the economic growth and development is broadly determined by its efficiency in the allocation of the mobilized savings amongst competing projects (Misra, 2003).

The National Bank of Ethiopia (NBE); the regulatory body of financial institutions in the country, issued a new directive on commercial banks, setting the minimum requirement for short term loans at 40 percent of the bank's total loan provision. Private Banks raised a

concern on the constraint that forces them to set aside 40 percent of their loans for short term loans. The directive is to be effective as of the coming new Ethiopian budget year that starts from July 2013. The central bank has also given the Banks until January 2015 to restructure their loan portfolios to the stated ratio. "The new directive is supposed to push commercial banks to purchase more NBE bills worth 27 percent of the loans disbursed" as stated by officials of the commercial banks.

The 27 percent NBE bill purchase requirement is likely to have a tangible impact on the banking sector, including maturity mismatch and less profitability, as private banks collect savings at two to three-year maturity, even shorter in some cases, but have to freeze these resources for five years at rates lower than the cost of funds, according to the International Monetary Fund (IMF) report released in October 2012. The requirement on private banks to purchase NBE bills equivalent to 27 percent of any new loans appears to have a sizable negative impact on private banks' intermediation activities," says the report.

The banking sector being the dominant segment in the financial sector is strictly monitored by the National Bank of Ethiopia and different regulations are issued at different times in order to guide and monitor the commercial banks. The study tried to investigate the impact of the Bill purchase on commercial banks in Ethiopia. After the regulation was put on operation on 4th April, 2011 commercial banks, World Bank and The International Monetary Fund (IMF) are claiming that the regulation is affecting their performance by taking a considerable amount of fund at a lower interest[1] that would otherwise could have been advanced as a loan and on the other hand, the Ethiopian government is claiming that loan provided to long term projects is not more than 20% which is significantly affecting the economic growth of the country as long term projects are an integral part of the economic growth. The study accordingly tried to find out if what the banks are claiming is true? If so, what is the extent of its effect on their performance?

[1] The National Bank of Ethiopia pays 3% interest for the bill that commercial banks purchase but commercial banks pay 5% minimum interest for the deposit they mobilized.

1.3 Basic Research Questions

The directive is said to compel commercial banks to use significant amount of depositors' money to buy the NBE required bonds. As the money is not available to banks before the end term of the bond, this may have impact on their liquidity or ability of credit. However the extent of the impact the policy creates requires investigation. To what extent of the banks liquidity, profitability, among others is affected needs investigation. Hence the motivation of this research work is to see the extent of the influence the NBE directive has resulted on commercial banking performance.

Accordingly, this investigation exercise has the following research questions for addressing:

i. To what extent is the bill purchase affecting the performance of commercial banks?
ii. Does the bill purchase have any impact on the liquidity position of commercial banks?
iii. What is the impact of the bill purchase on lending capacity of commercial banks?

1.4 Objective of the Study

1.4.1General Objective

The general objective of the study is to investigate the impact of the bill purchase on commercial banks in Ethiopia.

1.4.2 Specific Objectives

The specific objectives of the study are;

- ✓ To investigate the impact of the bill purchase on loan availability
- ✓ To examine the impact of the bill purchase on liquidity.
- ✓ To examine the impact of the bill purchase on profitability

1.5 Definition of Terms

National Bank of Ethiopia Bill (NBE Bill): is a long-term obligation of the National Bank of Ethiopia having a maturity period of five years and sold to all private banks and state owned Construction & Business Bank. (National Bank of Ethiopia, 2011)

Loan Available: is the total amount of loan availed to the economy by the commercial banks operating in the country. (National Bank of Ethiopia)

Saving Interest Rate: is the interest rate paid for saving money at a bank, the rate is determined by the National Bank Of Ethiopia. (National Bank of Ethiopia)

Deposit: is the total amount of money saved by customers at a particular bank earning interest which is greater or equal to the minimum saving interest rate determined by The National Bank of Ethiopia based on the agreement with their respective bank. (National Bank of Ethiopia)

Net Profit: is the total amount of profit earned after provision for taxation and legal reserve. (National Bank of Ethiopia)

Return on Asset (ROA): is net income divided by total asset that indicates how well a bank's assets are being used to generate profits. (Adugna, 2009)

Return on Equity (ROE): is the amount of net income returned as a percentage of shareholders equity. It reveals how much profit a Bank earned in comparison to the total amount of shareholder equity found on the balance sheet. (Adugna, 2009)

Liquidity: is the ability of a bank to fund increases in assets and meet obligations as they come due, without incurring unacceptable losses. (Basel Committee, 2008)

Reserve Requirement: is the percentage of deposit held as a reserve by commercial banks in order to protect depositors from unexpected losses. The rate for the reserve requirement is determined by The National Bank of Ethiopia. (National Bank of Ethiopia)

1.6 Significance of the Study

As the bill purchase is a recent development, the effect of its magnitude has not yet been fully discovered, although commercial banks are roughly claiming that it has a significant effect on their performance to this regard the study will be very significant in putting out a quantifiable result that can be putted in terms numbers or percentage so that they can have a clear image of its effect on their performance. Having a clear image will help them find solutions that can help mitigate the problem, further more; possible solutions will be forwarded by the researcher which can be further developed by the banks. The study will also lay the ground for further research.

1.7 Delimitation/Scope of the Study

The study tried to assess the impact of the bill purchase on commercial banks by taking a look at different performance measures used in the banking sector like ROE, ROA, liquidity and loan availability. As the directive came to operation on4th April, 2011 the study covered a short time frame.

As the subject matter is new literatures are not adequately available additionally the time frame is only five years stretching from 2007/08 to 2011/12 which is a very short in regard with investigating a depth view of the phenomena. An effort was made to include 2012/13 in to study but full data required for the study were not in place as result it's omitted from the study.

Chapter 2 Literature review

2.1 Theoretical Review

Bond is a debt instrument issued for a period of more than one year with the purpose of raising capital by borrowing. The Federal government, states, cities, corporations, and many other types of institutions sell bonds. Generally, a bond is a promise to repay the principal along with interest (coupons) on a specified date (maturity). Some bonds do not pay interest, but all bonds require a repayment of principal. However, the buyer does not gain any kind of ownership rights to the issuer, unlike in the case of equities. On the hand, a bond holder has a greater claim on an issuer's income than a shareholder in the case of financial distress (this is true for all creditors). Bonds are often divided into different categories based on tax status, credit quality, issuer type, maturity and secured/unsecured (and there are several other ways to classify bonds as well). The yield from a bond is made up of three components: coupon interest, capital gains and interest on interest (if a bond pays no coupon interest, the only yield will be capital gains). Some bonds are tax-exempt, and these are typically issued by municipal, county or state governments, whose interest payments are not subject to federal income tax, and sometimes also state or local income tax. (Downloaded from www.investorwords.com, Feb.2013)

Commercial banks in Ethiopia purchase bills as an investment in order to use idle funds at their disposal and thereby earning interest that will help cover the cost of acquiring funds. To the contrary, The National Bank of Ethiopia as a regulatory body issues bills for two main reasons: the first purpose is collecting excess money circulating in the economy i.e. using the bill as a tool for the country's monetary policy and financing government projects there by funding budget deficits from local sources at a lower interest rate. It is evident that the country has been suffering from budget deficit for a long period of time and recently the Ethiopian government has introduced "The GTP (The great transformation plan)" and there are enormous projects from railways to electric power station which require a huge amount of fund and commercial banks and international organization like the IMF and World Bank associate the bill policy with the GTP and the ongoing projects in line with the plan.

The bill policy as claimed by commercial banks is sucking up funds that could otherwise have be forwarded to the market as loan thereby taking away one major source of income for them. This is forcing commercial banks to highly depend on income generated from bank fees and foreign trade but, as indicated on the annual reports of these banks income generated from bank fees is very insignificant (taking out Commercial Bank of Ethiopia) which in turn forces banks to highly depend on income generated from foreign trade. To the contrary the National Bank claims that commercial banks are not adequately allocating funds for long term projects which is taken as a rationale for putting out the policy, as long term projects are corner stone's for facilitating and maintaining the economic growth of the country.

The liquidity position of banks has also been deteriorating since the policy came in to effect. Maintaining a good and reliable liquidity position has been an issue for banks operating in the country since before the policy came in to effect and the policy is said to aggravate this problem further putting the banks in a very critical position. The National Bank of Ethiopia understanding this problem has lowered the reserve requirement of banks from 15% to 10% on January 2012 and further to 5 % but, Banks are still questioning the adjustment as it fails short to mitigate the liquidity problem.

2.1.1 NBE Bill Market

On April 4, 2011 NBE introduced NBE Bill market to mobilize resource from the banking system to finance priority sectors identified as the driving forces of the economy. Following the introduction of the NBE Bill market, the total NBE bill purchased by the banking sector reached Birr 6.3 billion at the end of the fiscal year. (NBE Annual report, 2011)

2.2 Empirical Review

According to a study released on may31,2012 by Hans Lorenzen a senior strategist at Citi Bank, US and European regulators are essentially forcing banks to buy up their own government's debt—a move that could end up making the debt crisis even worse. Regulators are allowing banks to escape counting their country's debt against capital requirements and loosening other rules to create a steady market for government bonds, the study says.

While that helps governments issue more and more debt, the strategy could ultimately explode if the governments are unable to make the bond payments, leaving the banks with billions of toxic debt.

Captive bank demand can buy time and can help keep domestic yields low however, the distortions that build up over time can sow the seeds of an even bigger crisis, if the time bought isn't used very prudently and having banks loaded up with domestic sovereign debt will only increase the domestic fallout if the sovereign ultimately reneges on its obligations.

Institutions both in the U.S. and abroad have been busy buying up their national **sovereign debt** for years; Spanish banks bought 90 billion Euros worthwhile Italian firms picked up 86 billion Euros just between November and March 2012. Even in the UK, which has avoided a debt crisis as it is outside the euro zone and able to set its own monetary policy, banks have increased holdings of gilts by 100 billion pounds over the past few years. And in the U.S banks, though having comparatively low holdings of **treasuries**, have bought $700 billion of American debt since 2008.

In emerging markets, large fiscal deficits have not always led directly to liquid bond markets. In the past, governments typically borrowed abroad or placed paper with local banks rather than issue bonds in the local market. However, this has begun to change, as governments have recently been issuing more medium- and long-dated paper in their

domestic markets, especially in Latin America, where the maturities of debt paper had been overwhelmingly short-term. In Asia, the development of government bond markets has been held back less by high and variable inflation than by the dearth of government paper, and the financial aftermath of the East Asian crisis has changed that. The Korean authorities, for example, had 93 trillion won ($82 billion) in domestic public sector debt outstanding at end-June 2000, including a three-year benchmark issue that is now served by a futures contract. In June 1998, the Thai Financial Institutions Development Fund began an 800 billion baht ($21 billion) program to issue government-guaranteed bonds in maturities of up to 15 years (McCauley and Remolona 2005). Also in Africa Zimbabwe forced banks operating in the country to buy its Treasury bills after attempts to sell the first central bank securities since 2008 failed, The Reserve Bank of Zimbabwe on October 4, 2012 offered its first Treasury bills since the country abandoned its currency and adopted the dollar in a bid to curb inflation estimated by the International Monetary Fund at 500 billion percent.

Though it took long time to develop the Ethiopian government is also developing the same thing in order to borrow from local source and commercial banks seem to be the first victim as The National Bank of Ethiopia has launched its NBE bill purchase policy back in March 2011 and as claimed by The International Monetary Fund (IMF) the bill purchase is affecting banks in the following three ways:

1. **The requirement has the potential of creating maturity mismatches**

   .

   The directive requires private commercial banks to hold 27 percent of the gross loan extension (irrespective of the tenor) in a 5 year NBE bill at an interest rate of 3 percent per annum while deposit rates are around 5 percent. Private Banks collect savings mostly at two to three-year maturity and even shorter in some cases. Fulfilling the 27 percent requirement means that they have to freeze these resources for 5 years, creating a clear maturity mismatch

2. **Profitability of Banks can also be affected**

There is also a risk that as the profitability of private banks reduces on account of less intermediation because of this directive, they could raise non-interest income charges such as fees and commissions to recoup these losses, further impacting negatively on the private sector.

3. **The 27 percent NBE bill requirement has the potential of crowding out private sector financing**.

To highlight this possibility, an illustrative numerical scenario is considered where the initial fund available to a bank for its intermediation activities is birr 1.27 million (Table1). Out of this fund, the bank is assumed to disburse a one-year loan in the amount of 1 million birr at the current lending rate of 9 percent and purchase NBE bills of 0.27 million birr as required. After one year when this loan is paid back, the total loanable fund available to the bank (birr 1,098,100) would be the loan repaid plus the interest it generated, plus the interest accrued on the NBE bills. Out of this fund, the bank can extend the maximum of birr 864,676 and is required to purchase additional NBE bills of birr 233, 463, with the stock of NBE bills rising to birr 503,454.Renewing such an operation every other year over five years would reduce the fund available for lending by the bank to birr 590,677 in the fifth year, while the stock of NBE bills rises sharply to birr 1,045,748 (Table 1), suggesting a significant crowding out of private bank lending to the private sector. It is also an indication that the allocative role of private banks is being taken over by the government, raising the issue of the efficiency of such an allocation.

Year	1	2	3	4	5
Lending to the private sector	1,000,000	864,646	753,900	663,827	590,677
Stock of NBE bills	270,000	503,454	707,032	886,265	1,045,748

Source: IMF staff calculations

Table 1: NBE Bill requirement

2.3 Performance Measures in Banking

Bank is a very old institution that is contributing toward the development of any economy and it is treated as an important service industry in modern world. It is an important source of financing for most businesses. The common assumption, which underpins much of the financial performance research and discussions, is that increasing financial performance will lead to improved functions and activities of the organizations. The concept of financial performance and research into its measurement is well advanced within finance and management fields. Recently a well-judged technique named CAMELS rating is widely used for evaluating performance of financial institutions, especially to banks.

Performance of the banking sector under CAMELS frame work; which involves analysis and evaluation of the six crucial dimensions of banking operations, thus CAMELS consists of a set of performance measures that give a comprehensive view of the banks based on the following rates: (B. NIMALATHASAN, 2008)

- Capital Adequacy,
- Asset Quality,
- Management Soundness,
- Earnings and Profitability,
- Liquidity, and
- Sensitivity to Market risk.

2.4 Profitability

Profitability is essential for a bank to maintain ongoing activity and for its investors to obtain fair returns; but it is also crucial for supervisors, as it guarantees more resilient solvency ratios, even in the context of a riskier business environment. The main drivers of banks' profit are earnings, efficiency, risk-taking and leverage. Measuring a bank's performance in terms of its capacity to generate a sustainable profit is taken as a good

measure because, profitability is a bank's first line of defense against unexpected losses, as it strengthens its capital position and improves future profitability through the investment of retained earnings. An institution that persistently makes a loss will ultimately deplete its capital base, which in turn puts equity and debt holders at risk. Moreover, since the ultimate purpose of any profit-seeking organization is to preserve and create wealth for its owners, the bank's return on equity (ROE) needs to be greater than its cost of equity in order to create shareholder value.(European Union bank performance report,2010)

Gruening and Bratanovic, (2000) believe that profitability is an indicator of a bank's capacity to carry risk and/or to increase its capital. They also think that profitability is a revealing indicator of a bank's competitive position in banking market and quality of its management (p.83). Usually, the profitability of banks measured using standard ratios that include Return on Asset (ROA), Return on Equity (ROE), Return on Deposit (ROD), and Net Interest Margin (NIM). ROA is net income divided by total asset that indicates how well

a bank's assets are being used to generate profits. ROE tells the amount the company earns on its equity investment. ROD reflects the bank management's ability to utilize the customers' deposits in order to generate profits. NIM is the difference between interest income and interest expenses as a percentage of total assets. (Adugna, 2009)

Profitability based measurement can serve as a more robust and inclusive means to measure the performance by gauging the extent of operational efficiency as well as capturing the nuances of bank's diversifying earnings through non-interest income activities and management of their costs(PWC,2011) .

The association of profitability of banking sector and business cycle is important in order to appraise the soundness and steadiness of the banking sector (Albertazzi & Gambacorta, 2009). The study on the determinants of profitability for the banking sector of a country is emphasized by virtue of the fact that the majority of countries have a financial system that is based on banking system. The significance of profitability of the banks can be valued at

both the micro and macro stages of the economy. It is of no doubt that as share of banking sector in the financial

System boosts, the function of the banking sector in microeconomic & macroeconomic steadiness, and economic growth also turns out to be more important. On the micro level, profit is the indispensable condition of a cutthroat banking institution and the resource of funds. It is not purely a result, but also inevitability for thriving banking in a phase of mounting competition on financial markets. On the macro level, a profitable and lucrative banking sector is better capable to endure negative distress and adds to the strength of the economic system (Aburime, 2009). A profitable and sound banking sector is in a superior position to endure negative upsets and add to the permanence of the financial system (Athanasoglou, Brissimis & Delis, 2008)

2.5 Liquidity

Loan to deposit ratio could be defined as the amount of a total bank's loans divided by the amount of its deposits at any given time. It is usually used as a measure of liquidity in the banking sector. Banks could be over liquid or under liquid depending on the particular circumstance they face. The higher the ratio, the more the bank is relying on borrowed funds (deposits), and could lead to liquidity problem, i.e., inability to meet depositors' obligation. In contrast, when ratio is very low it tells that the bank is not efficiently utilizing its resources (deposits) and could entail high cost to the bank. Although, it depends on the country's own situation, loan to deposit ratio is preferred to be 80 %.(Adugna, 2009)

Liquidity management requires that a sufficient balance of cash should be ensured. If the level of liquid assets is not adequate, it enhances the company's operating risk – loss of liquidity. If the level of liquid assets is too low, then a company may encounter problems with timely repayment of its liabilities. At the same time, surplus liquid assets may negatively affect the company's profitability. This is because upon exceeding the "necessary" level of liquid assets, their surpluses, when the market risk remains stable, become a source of ineffective utilization of resources. (G. Michalski, 2008)

According to the modern theory of financial intermediation, banks exist because they perform two central roles in the economy—they create liquidity and they transform risk. Analyses of banks' role in creating liquidity and thereby spurring economic growth have a long tradition, dating back to Adam Smith (1776). Modern reincarnations of the idea that liquidity creation is central to banking appear most prominently in the formal analyses in Bryant (1980) and Diamond and Dybvig (1983). These theories argue that banks create liquidity on the balance sheet by financing relatively illiquid assets with relatively liquid liabilities. Holmstrom and Tirole (1998) and Kashyap, Rajan, and Stein (2002) suggest that banks also create liquidity off the balance sheet through loan commitments and similar claims to liquid funds (Allen and Christa, 2009)

The liquidity problem of banks is primarily and basically the problem of assuring that there will be an adequate amount of cash on hand, when needed, to meet all demands for cash. The task of providing sufficient cash presents itself in two ways: the individual bank, if it is to stay in business, must be able to meet all demands for cash including those resulting from the transfer of money to other banks in the system; and banks as a whole must be able to supply whatever demands are made upon them for the purpose of drawing money out of the system, whether abroad or for use in domestic circulation. While a drain of cash out of the banking system necessarily involves the withdrawal of funds from some individual bank or group of banks, a withdrawal from an individual bank, which may simply represent a transfer of funds to other banks, does not necessarily involve a withdrawal from the system. (Charles, 1945)

Managing liquidity risk and market liquidity risk is integral to the role that banks play in maturity transformation, which is in turn, a fundamental aspect of intermediation between savers and borrowers that contributes to the efficient allocation of resources in the economy. If funding liquidity risk and market liquidity risk are not adequately managed, they can lead to severe liquidity spirals. (Tamara and Khan, 2011)

An important component of the supervision of banking institutions concerns their liquidity position (Goacher, 1999).All banks should be able to meet their obligations when they are

due. In order to achieve this, banks must hold cash or other liquid assets and be aware that their value may vary due to fluctuations in market prices. Another approach would be to attempt to match the maturity characteristics of assets with the maturity characteristics of the deposit base, so that there is an appropriate cash flow from maturing assets (Howells and Bain, 1999)

Accordingly the National Bank of Ethiopia has given a due attention regarding liquidity and risks associated with it and have issued a risk management guideline in January, 2010 which is to be implemented by commercial banks. As stated in the guideline: Liquidity risk is the risk of being unable to meet commitments, repayments and withdrawals at the correct time and place and in the correct currency and at a reasonable price. The purpose of liquidity management is to ensure that every bank is able to meet fully its contractual commitments. The ability to fund increases in assets and meet obligations as they come due is critical to the ongoing viability of any bank. Therefore, managing liquidity is among the most important activities conducted by banks.

Sound liquidity management can reduce the probability of serious problems. Indeed, the importance of liquidity transcends the individual bank, since a liquidity shortfall at a single bank can have system-wide repercussions. For this reason, the analysis of liquidity requires the management of the bank not only to measure the liquidity position of the bank on an ongoing basis, but also to examine how funding requirements are likely to evolve under various scenarios, including adverse conditions. Banks should review frequently the assumptions utilized in managing liquidity to determine that they continue to be valid. Since a bank's future liquidity position will be affected by factors that cannot always be forecasted with precision, assumptions need to be reviewed frequently to determine their continuing validity. These assumptions should be made under the different categories of assets, liabilities and off-balance sheet activities. (Risk management guide line NBE, 2010)

To the researchers knowledge there has been no previous work on the subject, hence this research endeavor tried to fill the knowledge gap.

Chapter 3 Research Design and Methodology

3.1 Research Design

The study used both qualitative and quantitative data in order to investigate the impact of the Bill purchase on commercial banks. As the purpose of the study is to investigate the impact of the Bill purchase, the study mainly implemented explanatory research. This research is a continuation of descriptive research and it goes beyond merely describing the characteristics to analyzing and, explains why or how the phenomenon being studied is happening. Thus explanatory aims to understand phenomena by discovering and measuring casual relations among variables. (George.M, David.M and David.F, 2005)

Descriptive research has also been used to show the share of Bill purchase to total loan availed by commercial banks; liquidity position of Banks before and after the implementation of the policy and finally the impact NBE Bill purchase created on profitability is discussed. This methodology involves gathering data that describe events and then organizes, tabulates, depicts, and describes the data collection (Glass & Hopkins, 1984). As the three main purposes of research are to describe, explain, and validate findings. (Krathwohl, 1993) using both the qualitative and quantitative methods together helped describe, explain and validate the finding of the study.

3.2 Sample and Sampling Techniques

The banking industry in Ethiopia comprises 19 private banks and fully state owned Development Bank of Ethiopia (DBE), Commercial Bank of Ethiopia (CBE) and Construction and Business Bank (CBB). DBE is established with the aim of granting long term loans for big development programs in the country whereas, CBB which is also state owned is established with the aim of assisting the construction sector in particular as indicated in its name. CBE also owned by the state has about 70% share in the industry and currently playing a major role in the housing projects lunched by the Ethiopian government.

Though commercial banks are the theme of the study all of them can't be studied due to time availability so; non-random purposive sampling technique is used. Size and length of time they have been operating in the industry is taken as a ground to select the following listed private banks;

Awash international Bank, Dashen Bank, Wegagen Bank, Bank of Abyssinia, United Bank and Zemen Bank[2]. Construction and Business Bank is also selected as it is the only state owned bank that purchases the National Bank of Ethiopia bills. Though CBB is state owned it is treated the same way as private banks as long as purchasing bill is considered and taking it in to consideration will help reveal the impact of the bill purchase on public banks to a certain degree.

Respondents are selected from each of these banks. Finance managers, credit managers, credit analysts, bank officers and research officials of the commercial banks answer the non structured interview. Interview was forwarded to the National bank of Ethiopia supervision division to understand the logic behind in putting out this directive and what is intended to achieve by implementing it.

3.3 Data Collection Tools

As both primary and secondary data are to be used, the research employs related tools to collect the data. Annual reports and publications by the commercial banks will be the source of the secondary data; interview will be the source of the primary data. As the theme of the study is directly related with loan and advances, authorities from loan and advances department of these commercial banks will be interviewed. To cross check the data, authorities from the other side will be interviewed i.e. authorities from National Bank of Ethiopia.

[2] The above listed private banks comprise above 50% of the total capital registered by all private banks operating in the country.

3.4 Procedures of Data Collection

A non standardized face to face interview is employed to help guide the data collection process so that an accurate and reliable data can be driven out. In collecting the data using the interview as a tool, interviews are selected from the credit and finance department as they are directly related with the development. Different sorts of questions will be forwarded regarding the directive and its overall impact.

The secondary data will be of pooled type, which is the combination of cross sectional and time series.

As it is a new development the time span covered by the research is very short covering the time from 2007/08 to 2011/12 a total of five years form which 2007/08 to Aril 2011 is the time before the implementation of the directive and the time from April 2011 to june2012 is the time after implementation.

3.5 Methods of Data Analysis

Panel data analysis is used to analyze the data collected. According to Arellano-Bond (1991) and Arellano-Bover (1995)/Blundell-Bond (1998) this method is designed for situations with small T and large N panels, meaning few time periods and many individuals; The Panel data analysis uses both cross sectional and time series data covering a time frame from 2007/08 to 2011/12 in which, six private banks and one state owned bank are included.

The short time covered by the research is a draw back as it would have been more thrilling if the time span was a bit longer to show the impact of the bill purchase on the performance of banks. Longer time frame would have been very thrilling as it would reveal trends starching over the years which will help in drawing out trends showing the depth view of its impact and also forecasting the future outcome would have been an easy job. In order to curve the above stated drawback panel data is used, as panel data uses both cross sectional and time series data the problem will be resolved to some extent.

3.6 Model Specification

As stated earlier panel data is used for the study and three functions are derived based on previous studies and adding variables which are assumed by the researcher relevant both for the country's banking industry and specifically for the study. The models are specified as follows:

1. Ben S. Bernanke and Cara S. Lown in 1991 said that loan availability is the function of deposit mobilized and saving interest rate. For the purpose my study I have added NBE Bill purchased as another variable. Thus the function will be as follows:

LA =f (D, SI, B)

Where,

LA is the total available loan commercial banks have,

D is the total deposit mobilized by commercial banks,

SI is the saving interest rate given by The National Bank of Ethiopia for commercial banks, and

B is the total amount bill bonds purchased by commercial banks from The National Bank of Ethiopia.

The relationship between the selected exogenous variables and the dependent variable is as follows:

LA is positively related with deposit mobilized by banks thus, as deposit mobilized increases, loan available will also increase. The main reason banks mobilize deposit by incurring a certain cost is in order to utilize the money for loan purpose performing two tasks at the same instance, one generating income for themselves and second distribution of collected funds to the economy.

LA is also positively related with saving interest rate thus, as interest rate increases people will be encouraged to save more as a result deposit mobilized will increase causing the amount of loan available to increase. In Ethiopia saving interest rate is strictly monitored by The National

Bank of Ethiopia and the Bank have been revising the rate over the years using as one major tool for the country's monitory policy.

LA is negatively related with bills purchased as the bill is purchase from the total amount of loan available.

2. According to Marvin Goodfriend and Monica Hargraves 1983 liquidity is the function of reserve requirement and deposit for the purpose this study I have splinted deposit as current and time deposit and added NBE Bill purchased as another variable determining liquidity of banks. Thus the function will be as follows;

LI=f (CS, TD, B),

Where,

LI is the liquidity position of commercial banks measured as a ratio of current asset to current liability.

CS is the total amount of current saving held by commercial banks form the total deposit mobilized**.** It is negatively related with **LI** as funds held by current saving are for business purpose and they have high transaction tendency.

TD is also a deposit which is based on a special agreement between the banks and customers and it's held for a long period of time with a higher interest rate and a high amount of money as a deposit**.** It is positively related with liquidity**.**

B a stated earlier is the amount of bill purchased by commercial banks and it is negatively related with liquidity**.**

3. Van Gruening and Bratanovic (Gruening and Bratanovic, 2000) believe that profitability is directly related with Return on Asset (ROA), Return on Equity (ROE), Return on

   Deposit (ROD), and Net Interest Margin (NIM). For the purpose of this study ROD and NIM are omitted and NBE bill is added as another exogenous variable. Thus, the function will be as follows;

II= f (ROE, ROA, B)

Where,

II is the net profit of after tax.

ROE is the amount the company earns on its equity investment. It is positively related with II.

ROA is net income divided by total asset that indicates how well a bank's assets are being used to generate profits. It is also positively related with II.

B is negatively related with II.

Chapter Four: Results & Discussion

4.1 Findings & Discussion of the Study

The impact of the bill purchase on commercial banks can be evaluated using different variables that are used to measure performance of banks. ROA and ROE which are usually used to show how effective banks are in making profit; how they are doing with respect to giving back to their shareholders. Looking how banks are doing by evaluating the above listed factors while taking the bill purchase in to consideration will help create results that are quantifiable enough to show the real impact of the bill purchase on profitability of commercial banks operating in the country. Lending capacity and liquidity as stated in the objective are other variables under investigation, how the Bill-purchase has affected them consequently the time before the Bill-purchase is compared with the time after the Bill-purchase so that a clear image of its impact can be revealed. To this regard the study formulated three different models and descriptive static to analyze the collected data.

4.1.2 Lending Capacity

To look at the impact of the bill purchase on lending capacity of banks the study used the ratio of NBE Bills to total loan and deposit to total loan by taking the years before and after the implementation of the directive which forced Banks to purchase the NBE-Purchase Accordingly:

A. Time before the implementation of the Directive

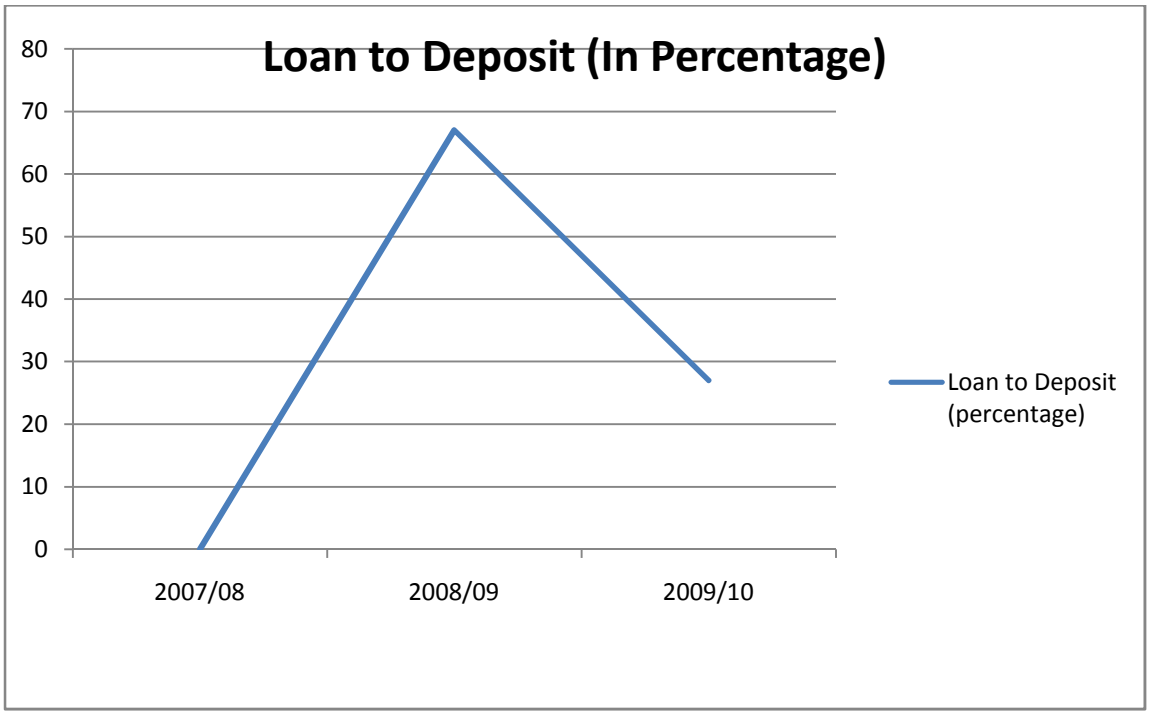
The directive came into effect as of April 2011 but for the purpose of this study the time before the change covers the years between 2007/08-2009/10 a time span of three years. As stated earlier to investigate the impact of the Bill-Purchase on lending capacity NBE Bill to total loan and loan to deposit ratio is used but the discussion here only covers the time before so only loan to deposit ratio is used as Banks were not purchasing the NBE Bill at above stated years.

Accordingly each of the seven selected Banks will be discussed as follows:

I. Zemen Bank

Although the time before covers the time between 2007/08 and 2009/10, the Bank started full operation in 2008/09 so the time covered here is 2008/09 and 2009/10.

Graph 1: loan to deposit ratio of Zemen Bank between 2007/08 and 2009/10



Source: **Bank's Annual Report**

In its first year of operation Zemen Bank was able to advance 67 % of the total deposit it mobilized, considering that the Bank is new to the industry and also operating with a single branch this figure is very significant and we can say that the Bank did a very good job in efficiently allocating the mobilized fund for loan and advances.

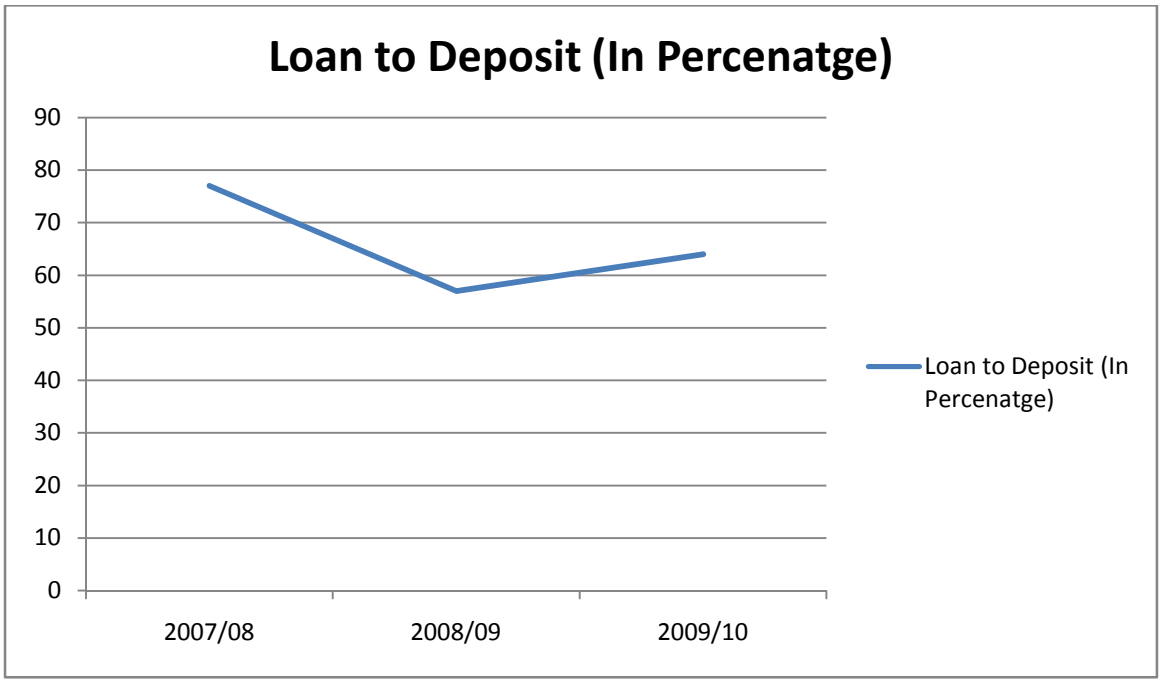
Year 2009/10 the Bank recorded a very significant decline from what was a good achievement a year earlier. The loan to deposit ratio declined to 27% (graph 1), which shows that the Bank was not efficiently allocating the mobilized funds. Because of the

strategy that the Bank follows, when compared to other banks Zemen Bank has a smaller number of customers and year 2008/09 in the banking industry was marked by high shortage of foreign currency and compared to other banks foreign exchange holding of Zemen Bank was in a better position which consequently increased the share of income generated from foreign exchange dealings thereby explaining the sharp decline in the loan to deposit ratio.

II. Wegagen Bank

The pattern on the graph shows that the Bank utilized more than 50% of the total deposit mobilized for the three years before the implementation of the directive (Graph 2).

Graph 2: Loan to Deposit ratio of Wegagen Bank between 2007/08 and 2009/10



Source: **Bank's Annual Report**

The loan to deposit ratio in the year 2007/08 was 77% (graph2) , which shows that the Bank is was efficient in utilizing the mobilized fund but the figure has shown a decline by 20% in the year 2008/09 to reach 57%.

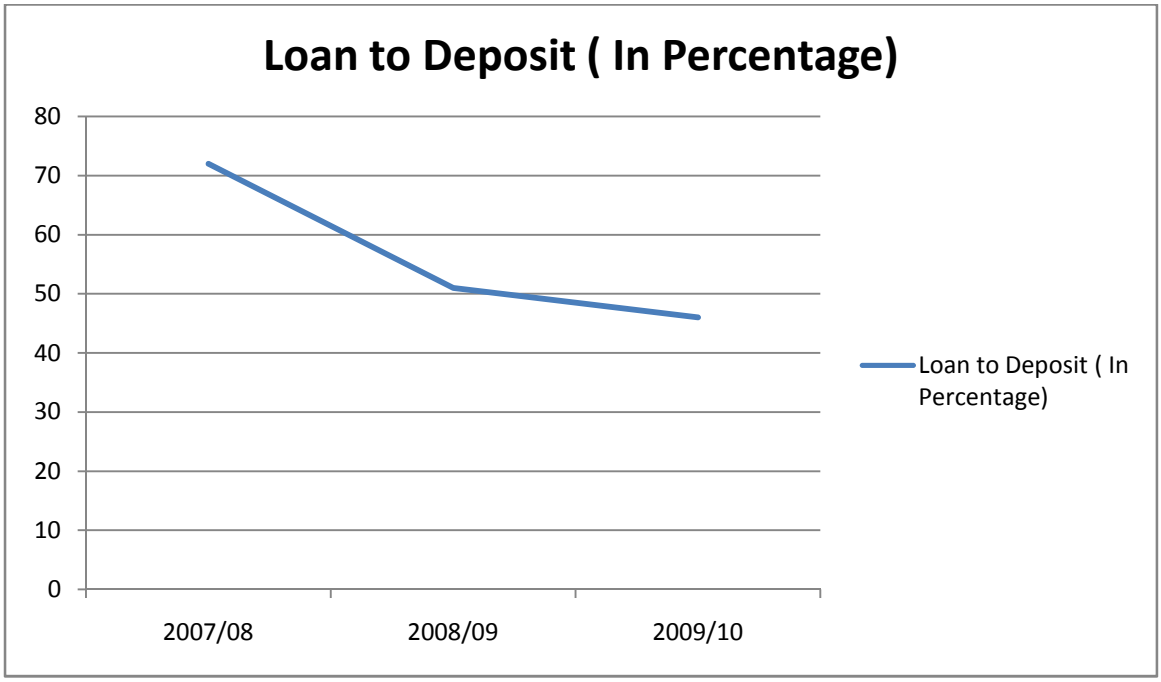
Wegagen Bank like Zemen Bank generates a bigger share of its income from foreign exchange dealings so, the decline in the share of loan to deposit is understandable and can also be attributed to that. But the figure has shown a slight increment in the year 2009/10 to reach 64%. The Bank before the implementation of the policy was on average using 66% of the mobilized deposit for loan and advances which is a good share as it indicates the Bank is utilizing the fund efficiently.

III. Awash International Bank

Awash International Bank is the first private bank in the country and by far the biggest in its capital and asset possession.

The Bank in the year 2007/08 advanced 72% (graph 3) of the total fund mobilized. This figure is very significant for a bank which is very big not only for its capital or for its asset possession but also it mobilizes a considerable amount of deposit year and allocating 72 % of it very efficient indeed.

Graph 3: Loan to deposit ratio of Awash International Bank between 2007/08 and 2009/10



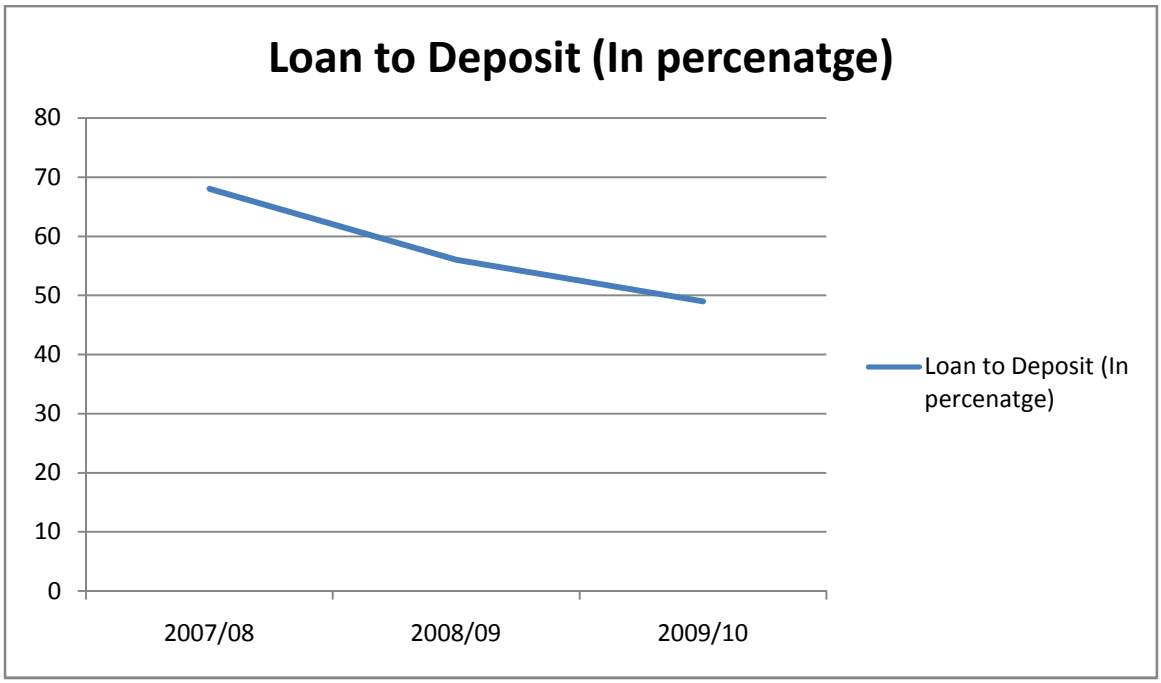
Source: **Bank's Annual Report**

Though the Bank was very efficient in allocating the mobilized fund it has recorded a sharp decline for the year 2008/09 to 51% and further to 46% in 2009/10. As discussed earlier these two years were marked by a chronic foreign currency shortage and Awash is among Banks which are relatively in a better position which enabled it to increase the share of income generated from foreign exchange dealings. The decline in loan is then compensated from foreign exchange dealings.

IV. Dashen Bank

The Bank having a wider branch network was able to mobilize a considerable amount of deposit ever year. In the year 2007/08 it mobilized birr 6,200 million from depositors and allocated birr 4,200 million or 68% of the total deposit mobilized for loan and advances. We can clearly see that Dashen is efficient in allocating the mobilized fund as it mobilized a considerable amount when compared to other private banks in the industry.

Graph 4: Loan to deposit ratio of Dashen Bank between 2007/08 and 2009/10



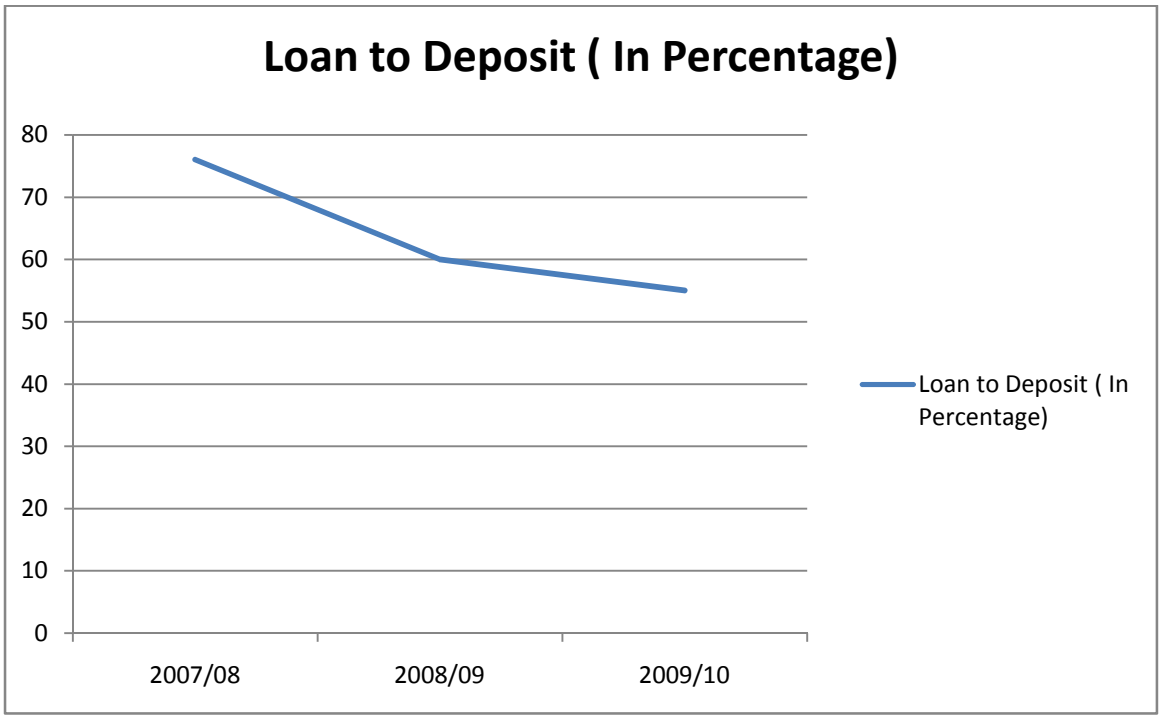
Source: **Bank's Annual Report**

Though the Bank has recorded a fall for two consecutive years, if we take the average for the whole three years the Bank has utilized about 57.67% of the total deposit mobilized which is a good figure, considering the huge amount of fund mobilized by the Bank.

V. United Bank

United bank is also among those who have a wider branch network and has also been mobilizing a considerable amount of fund from depositors over the years. In the year 2007/08 the Bank allocated 76% (graph 5) of the deposit mobilized for loan which is significant considering both the amount and the percentage itself.

Graph 5: **Loan to deposit ratio of United Bank between 2007/08 and 2009/10**



Source: **Bank's Annual Report**

The figure has shown a decline for two consecutive years (2008/09 & 2009/10) but the average percentage for the whole three years shows that the Bank is utilizing 63.67% of the

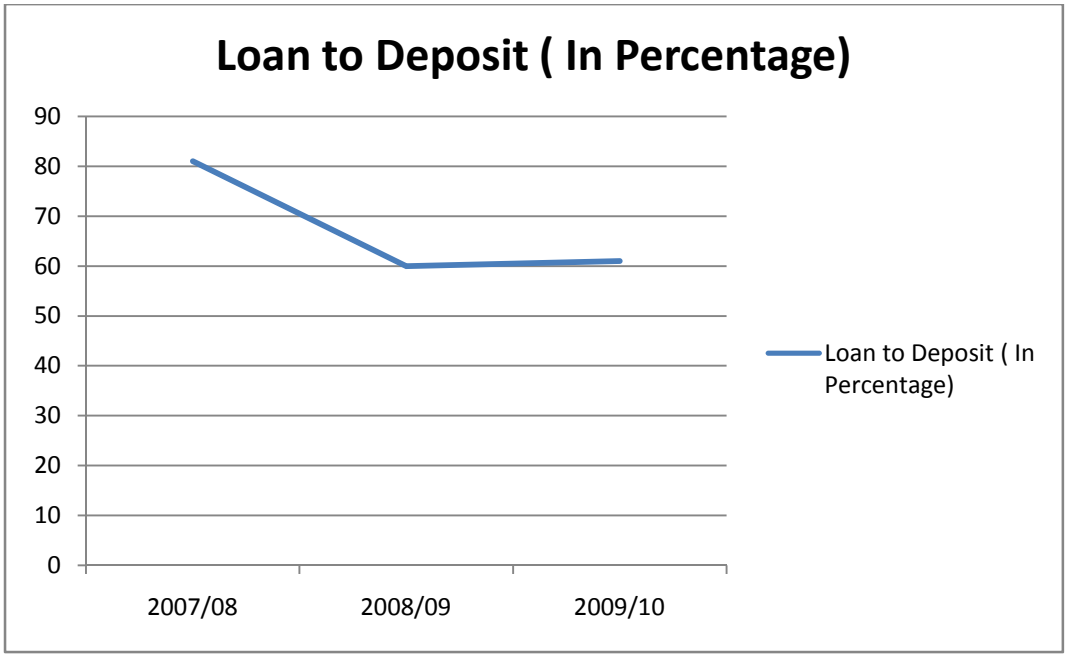
total deposit mobilized which puts the Bank on a higher rank when compared to other private banks in the industry. United is categorized among those whose majority of income is generated from loan income which pretty much explains the higher share of loan to deposit ratio.

VI. Bank of Abyssinia

The Bank is among the oldest in the industry and it relatively has a wider branch network which created a suitable condition for deposit mobilization and it is rated among the highest as long as deposit mobilization is talked about.

In the year 2007/08 the Bank utilized about 81% of the deposit mobilized, which is the highest percentage share in that year from all the private banks considered in the study. The Bank to this regard can be taken as very efficient so long as allocating mobilized funds for a loan is concerned.

Graph 6: Loan to deposit ratio of Bank of Abyssinia between 2007/08 and 2009/10



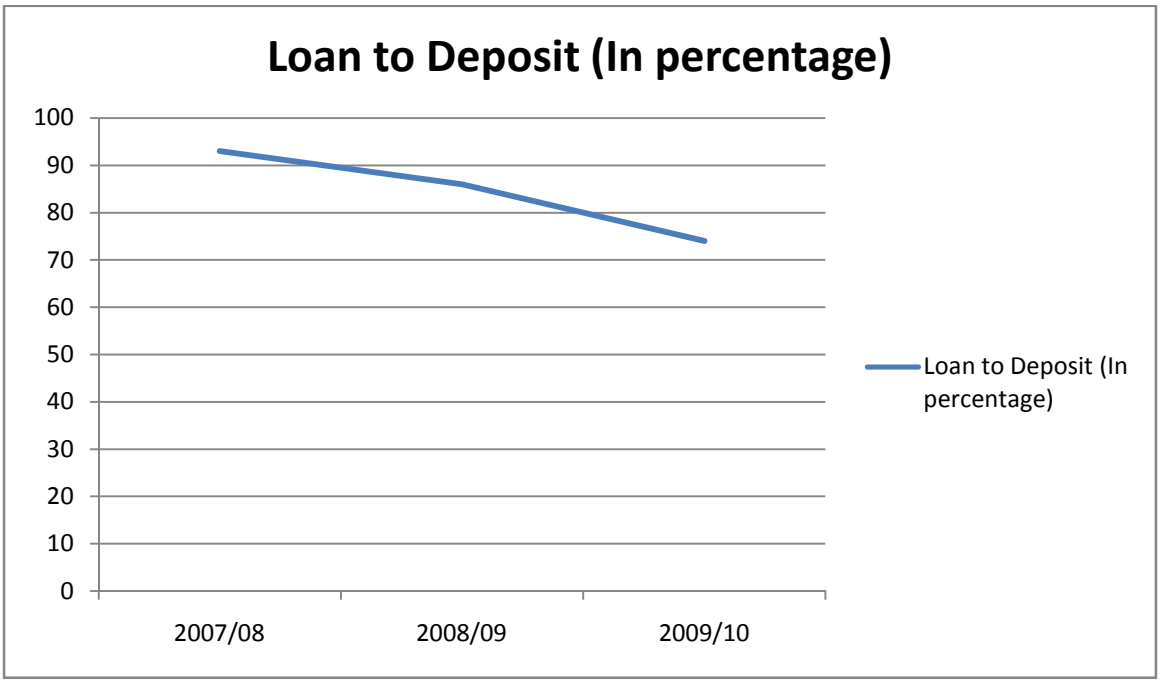
Source: **Bank's Annual Report**

In the year 2008/09 (graph 6) the Bank recorded a 21% decline to drop the share to 60%, this decline is attributed to the credit crunch that the Bank was alligated with the previous year. In the year 2009/10 the Bank increased its share by 1% coming back from what was a bad year for the Bank. On average the Bank utilized about 67.3% of the total deposit mobilized which shows that the Bank is efficient in utilizing funds and ranks among the top in doing so.

VII. Construction and Business Bank

The Bank is the only government owned bank which is obliged to purchase the NBE Bills .CBB is established with the objective of supporting the construction sector by advancing long-term loans which the sector needs. This point is pretty much explained when we take a look at the percentage share of loan to deposit of the Bank.

Graph 7: Loan to deposit ratio of Construction & Business Bank between 2007/08 and 2009/10



Source: **Bank's Annual Report**

In the year 2007/08 the Bank used 93% (table 7) of the deposit mobilized registering a very efficient figure so long as allocating deposit mobilized for a loan is concerned.

Though the figure has shown a slight decline in 2008/09 and further in 2009/10, on average CBB was advancing 84.3% deposit mobilized showing that it really is established to advance loan for the construction sector.

As indicated before the implementation of the directive Banks from 2007/08 to 2009/10 on average were advancing about 64.66% of the total deposit mobilized which shows that banks were efficient in allocating their deposit for the economy there by playing their role for the Ethiopian economy by advancing loans. As stated by Khan (2011) making loans is the principal economic functions of banks i.e. to fund consumption and investment spending by businesses, individuals, and units of government. As the banking sector is the dominant figure in the financial sector, it has to play the expected role from the industry by efficiently allocating the fund which is mobilized from depositors and distributing that fund to the economy there by achieving two goals at the same time. The first target which is attained by Banks is making profit for their share holders and secondly distributing funds for the economy there by encouraging investment which in turn, will contribute for the economy by creating more jobs and by increasing tax revenue for the government as new projects are now funded by commercial banks.

B. Time after the implementation of the Directive

The time span covered here is 2010/11 and 2011/12 a total of two years. Though the given percentage for the Bill-Purchase by the National Bank of Ethiopia is only 27% even in its first year of implementation the total NBE Bill holding to total loans reached 26% on average after being implemented only for three months (From April 04 to June 30, 2011) and all the Banks under this study bought NBE Bill worth 5,432 million birr only in 2010/11. To investigate the impact of the NBE Bill purchase the study took both NBE Bills to total loan ratio and loan to deposit ratio. Accordingly each of the seven selected Banks will be discussed as follows:

I. Zemen Bank

As the Bank is operating in one branch and also the youngest of all the other six banks, the deposit it mobilized is the lowest from all. In the year 2010/11(table2) the ratio of NBE Bill holding to total loan was 34% which is among the highest

compared to other banks the same year and the loan to deposit ratio was 57%. The Bank in that year was utilizing 57% of its capacity as the NBE Bill has taken 34% of its capacity. Graph 8 further proves this point as the loan to deposit ratio was decreasing and the NBE Bill to loan ratio was increasing.

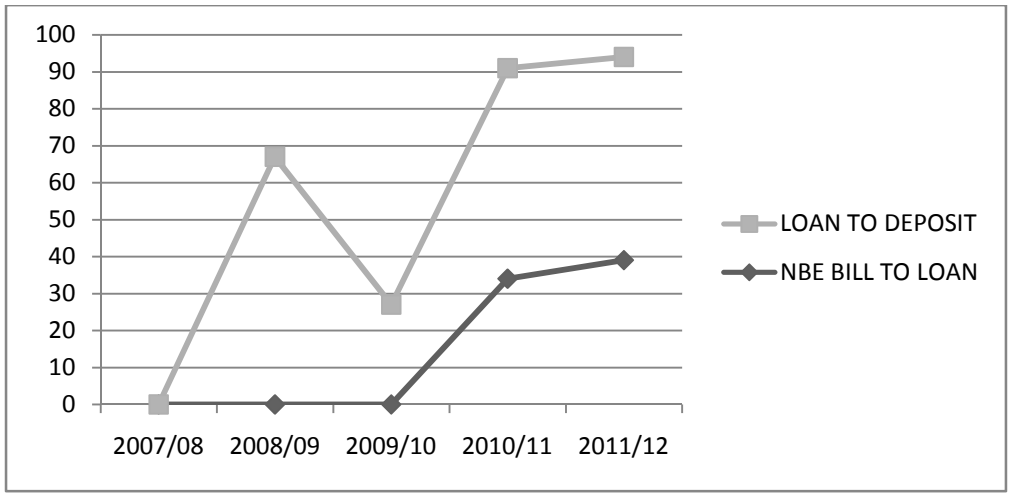
Table2 : NBE Bill to total loan and Loan to deposit ratio of Zemen Bank between 2007/08 and 2011/12

Year	NBE Bill to total loan	Loan to deposit
2007/08	0	0
2008/09	0	67%
2009/10	0	27%
2010/11	34%	57%
2011/12	39%	55%

Source: **Bank's Annual Report**

In the year 2011/12 the ratio of NBE Bill to loan has shown a 5% increment to reach 39% though the increment may seem insignificant but taking a look at the total percentage which almost 40% (table2), we can clearly see that the NBE Bill is taking a quiet amount of money that could have been advanced as a loan. Looking at the loan to deposit ratio has a slight decline it is about 55% showing that 5% increase in NBE Bill purchase has caused a 2% decline in loan to deposit ratio.

Graph 8: NBE Bill to loan and Loan to deposit ratios of Zemen Bank between (2007/08-2011/12



Source: **Bank's Annual Report**

II. Wegagen Bank

In the year 2010/11 the Bank's share of NBE Bill holding to loan was 32% which is five percent higher than the rate determined by The National Bank. Considering that it's only the first year after the NBE Bill purchase policy being implemented the Bank is clearly being disturbed by the policy. In line with NBE Bill holding there has also been a sharp decline in loan to deposit ratio to 48% (table 3) recording a 16% decline in just a year. Looking at the overall situation in 2010/11 the Bank utilized only 48% of the total deposit mobilized for loan which can be attributed to the 32% NBE holding that same year.

Table 3: NBE Bill to total loan and Loan to deposit ratio of Wegagen Bank between 2007/08 and 2011/12

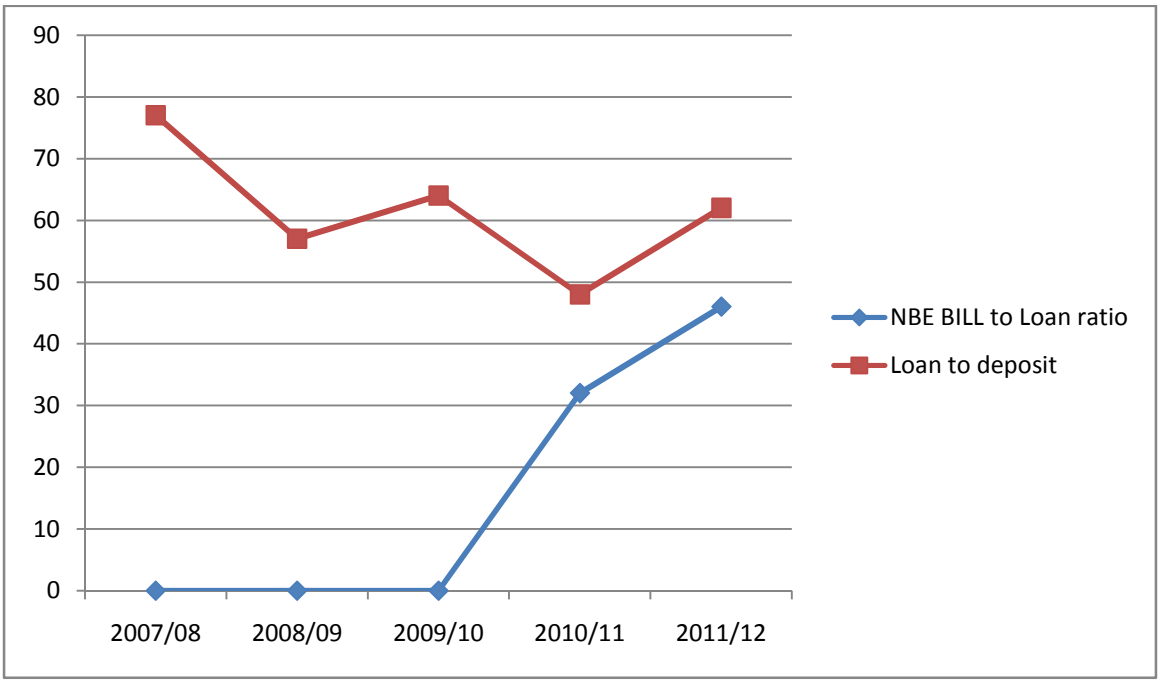
Year	NBE Bill to total loan	Loan to deposit
2007/08	0	77%
2008/09	0	57%
2009/10	0	64%
2010/11	32%	48%
2011/12	46%	62%

Source: **Bank's Annual Report**

The NBE Bill holding to loan ratio reached 46% registering a 14% increment from what was already a big figure. Though the NBE Bill holding has increased the loan to deposit ratio has increased to 62%, but if we take a look at the average share of loan to deposit ratio before the implementation of the policy it is about 65% and this figure has dropped by 10% to reach 55% on average for two years after the implementation of the policy.

Though the loan to deposit ratio has shown some increment the average figure tells that the years after the implementation of the policy, lending capacity of the Bank has been pressurized by the Bill purchase.

Graph 9: NBE Bill to loan and Loan to deposit ratios of Wgagen Bank between (2007/08-2011/12)



Source: **Bank's Annual Report**

III. Awash International Bank

The Bank's NBE Bill holding to loan ratio was 41% (table 4) in 2010/11 which the highest from all the banks considered in the study. Loan to deposit ratio the same year was 49% indeed showing that the NBE Bill has affected the lending capacity of the Bank. The Bank in that year utilized only 49% of the total fund mobilized as a loan which is even less than half of what the Bank mobilized from depositors. The Bank in the same year incurred 5.4% on average for the mobilization of the fund from depositors this figure increases when others cost beyond the interest paid for savers are considered and after incurring all this costs the Bank only utilized less than half of what it mobilized.

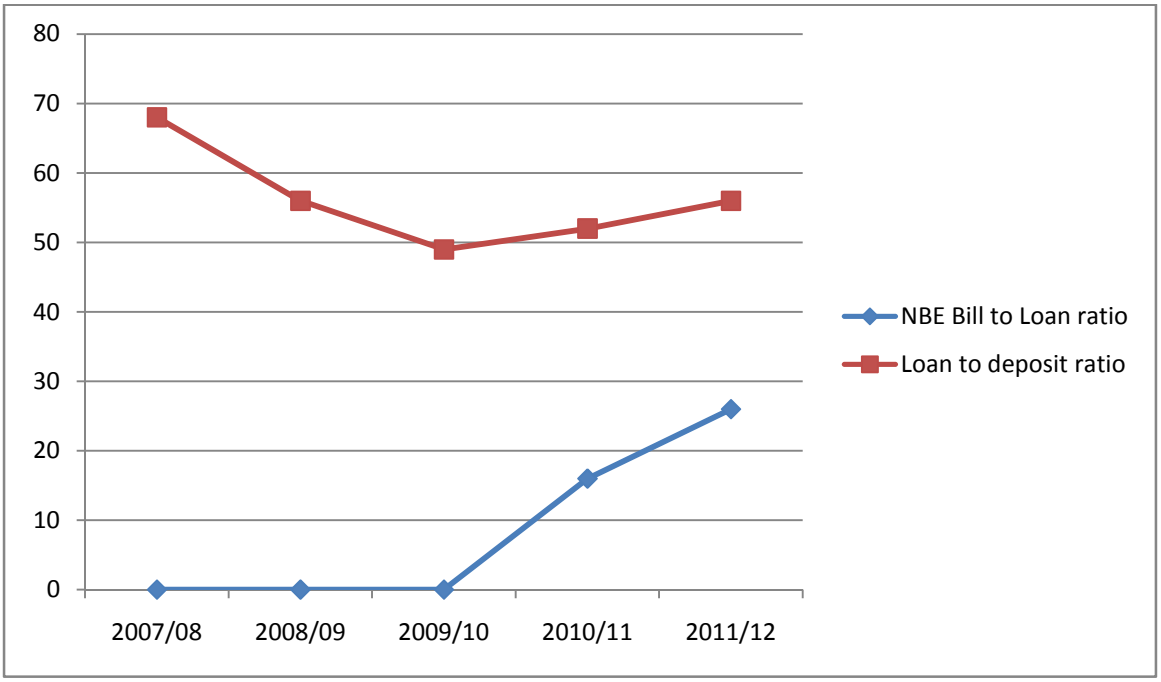
Table 4: NBE Bill to total loan and Loan to deposit ratio of Awash International Bank between 2007/08 and 2011/12

Year	NBE Bill to total loan	Loan to deposit
2007/08	0	72%
2008/09	0	51%
2009/10	0	46%
2010/11	41%	49%
2011/12	45%	57%

Source: Bank's Annual Report

In the year 2011/12 the NBE Bill holding of the Bank has increased to 45% again registering a very high percentage for the second year in a row. Despite the increment in the NBE Bill holding loan to deposit ratio has shown an increment but still we can conclude that the Bank is not efficiently allocating mobilized funds for loan and advances and the NBE Bill purchase is among the reasons for that.

Graph 10: NBE Bill to loan and Loan to deposit ratios Awash International Bank between (2007/08 and 2011/12)



Source: **Bank's Annual Report**

IV. Dashen Bank

Dashen Bank is categorized among banks whose majority of income is generated from loan income and 16% (table 5) NBE Bill holding in the year 2010/11 is really a good sign as it's very low when compared to other banks. This low figure is achieved by purposefully avoiding new loan advances.

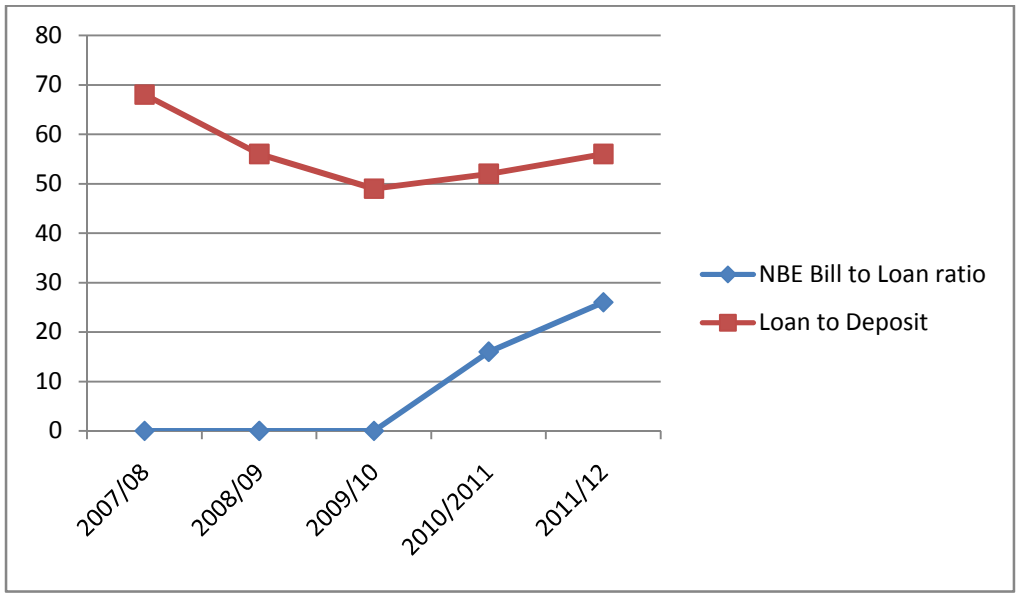
Table 5: NBE Bill to total loan and Loan to deposit ratio of Dashen Bank between 2007/08 and 2011/12

Year	NBE Bill to total loan	Loan to deposit
2007/08	0	68%
2008/09	0	56%
2009/10	0	49%
2010/11	16%	52%
2011/12	26%	56%

Source: Bank's annual report

The Bank in 2011/12 has recorded a 10% increase to reach 26% in its NBE Bill holding but amazingly it is still less than the 27% sated by The National Bank. The Bank to this regard is doing a very good job.

Graph 11: NBE Bill to loan and Loan to deposit ratios of Dashen Bank between (2007/08-2011/12)



Source: **Bank's Annual Report**

Thought NBE Bill holding of the Bank is low when compared to other banks, its lending capacity has been pressured by the Bill while the Bank was trying to avoid the purchase of the Bills.

V. United Bank

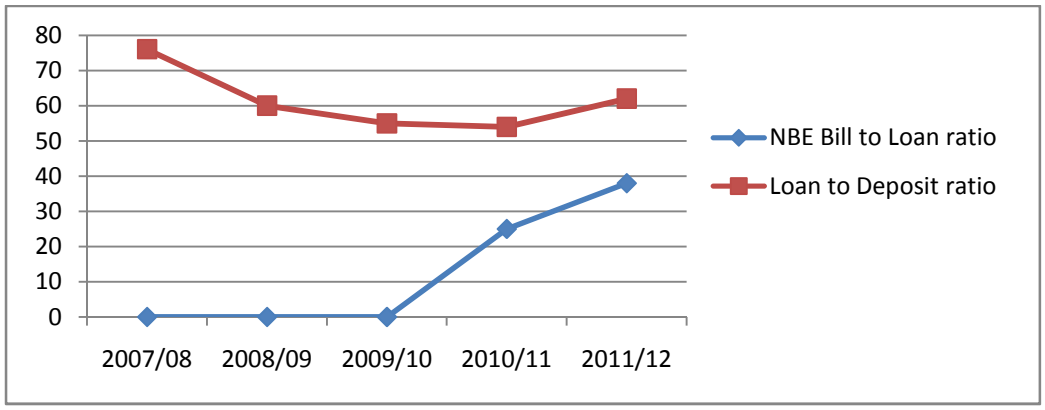
United just like Dashen Bank did a good job in trying to avoid the purchase of NBE Bills in 2010/11 and the NBE Bill holdings of the Bank that was only 25% (table 6) which is less than the rate given by The National Bank of Ethiopia but the story has changed as United raised its NBE Bill holding by 13% to reach 38% in the year 2011/12 and in the same year the Bank was able to utilize 62% of the total deposit mobilized as a loan, which is not a good sign as the Bank generates majority of its income from loan and advances. The 38% NBE Bill holding the same year has attributed for this inefficient utilization of mobilized funds.

Table 6: NBE Bill to total loan and Loan to deposit ratio of United Bank between 2007/08 and 2011/12

Year	NBE Bill to total loan	Loan to deposit
2007/08	0	76%
2008/09	0	60%
2009/10	0	55%
2010/11	25%	54%
2011/12	38%	62%

Source: Bank's Annual report

. **Graph 12: NBE Bill to loan and Loan to deposit ratios of United Bank between (2007/08-2011/12)**



Source: Bank's Annual report

If we take a look at loan to deposit ratio average for the three years before the implementation of the policy, which is 63.67% and the average for the two years after implementation of the policy, which is 58% we can clearly see that the policy is indeed affecting the loan capacity of the Bank by taking a considerable amount of fund that could otherwise have been forwarded as a loan.

VI. Bank of Abyssinia

Bank of Abyssinia as a Bank which highly relies on income generated from loan and advances was on average utilizing about 67.3% of the total deposit mobilized for the three years before the implementation of the policy that forces banks to purchase government Bill bonds but that figure has declined by 11.8% to reach 55.5% on average for the three years after the implementation of the policy showing that the Bank's lending capacity has been compromised by the policy.

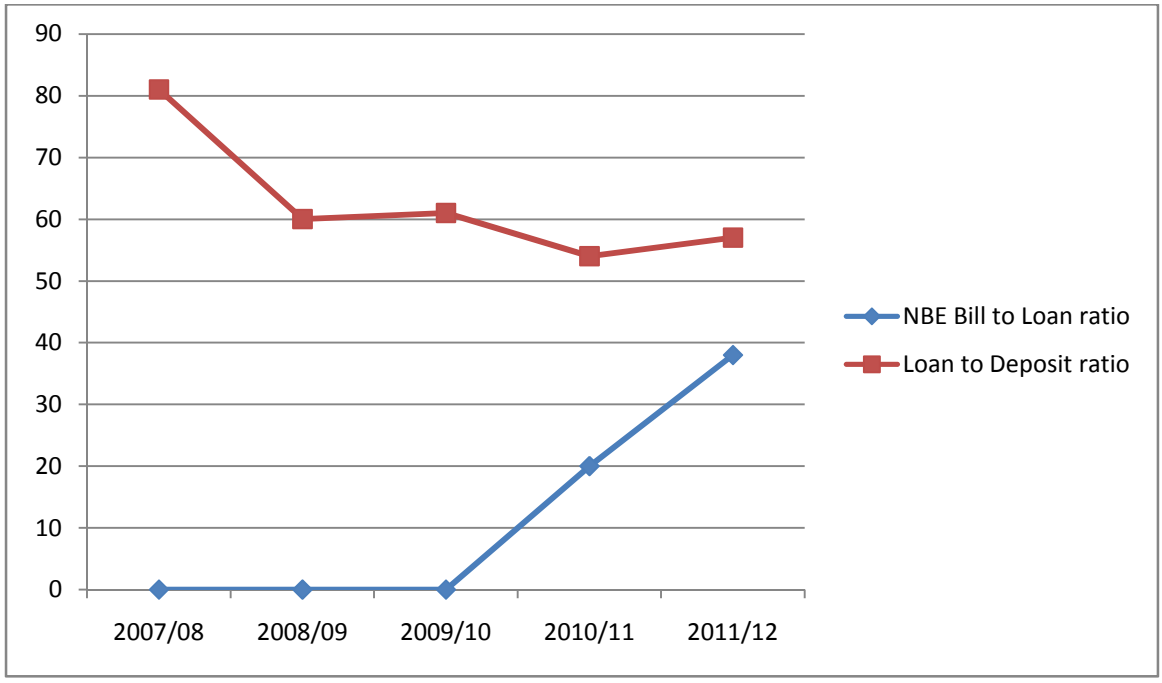
Table 7: NBE Bill to total loan and Loan to deposit ratio of Bank of Abyssinia between 2007/08 and 2011/12

Year	NBE Bill to total loan	Loan to deposit
2007/08	0	81%
2008/09	0	60%
2009/10	0	61%
2010/11	20%	54%
2011/12	38%	57%

Source: Bank's Annual Report

The NBE Bill holding in the year 2010/11 was only 20% which is below the rate given by The National Bank but the rate was raised by 18% to reach 38% in 2011/12 which is even higher the average NBE Bill holding of all the seven banks considered in the study, the average NBE Bill holding of all the seven banks in 2011/12 was 36%. The Bank as result was losing a significant amount of mobilized fund that could otherwise have been forwarded as a loan.

Graph 13: NBE Bill to loan and Loan to deposit ratios of Bank of Abyssinia between (2007/08-2011/12)



Source: **Bank's Annual Report**

VII. Construction and Business Bank

The Bank established with the aim of supporting the construction sector by advancing loan for the sector pretty much relies on income generated from advancing loan. Table 7 shows the Bank's loan to deposit ratio declined sharply by 24% to reach 50% in 2010/11 though, the NBE Bill holding of the Bank stood only at 11%. The Bank in the same year utilized only half of the mobilized fund as a loan there by showing that the Bank is not efficiently using its lending capacity; the NBE Bill holding played its part for this to happen.

On average the Bank was utilizing 84.3% of the total mobilized deposit as loan for the three years before the implementation of the policy that forced banks to purchase government bonds which pretty much was standing for the objective it was established for but after the implementation of the policy the figure has dropped by 30.3% for the two years to reach 54% on average. This figure puts a

question on the Bank who aims to advance to the highest level but is only allocating only 54% the total deposit mobilized fund.

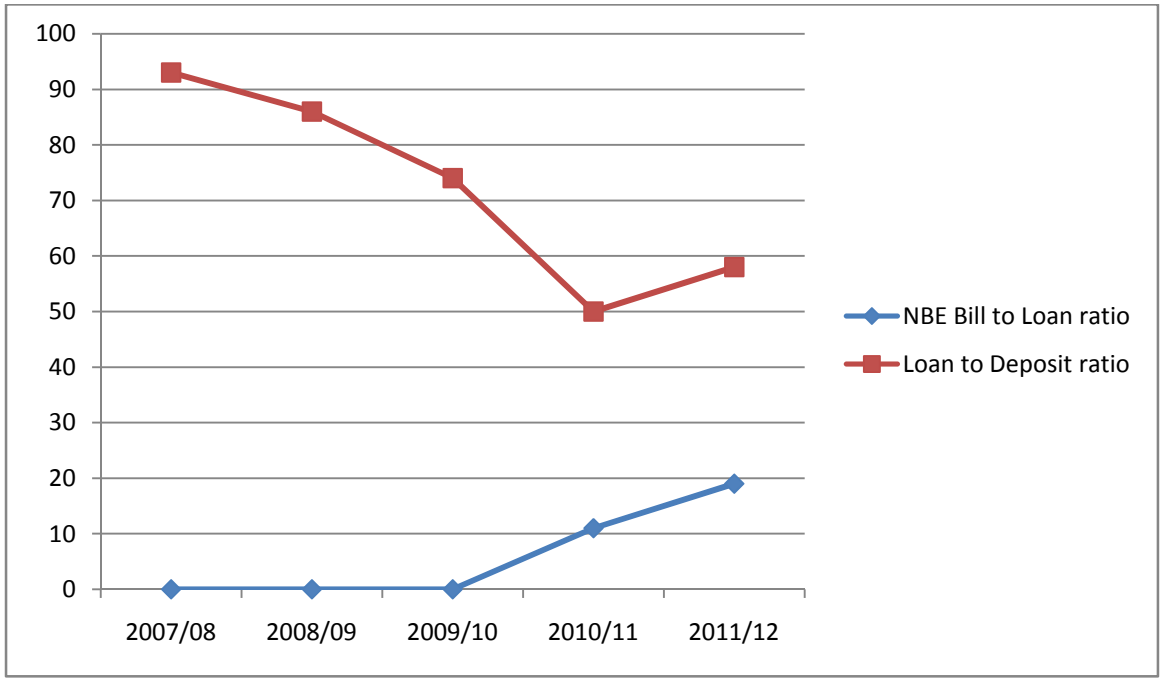
Table 8: NBE Bill to total loan and Loan to deposit ratio of Construction & Business Bank between 2007/08 and 2011/12

Year	NBE Bill to total loan	Loan to deposit
2007/08	0	93%
2008/09	0	86%
2009/10	0	74%
2010/11	11%	50%
2011/12	19%	58%

Source: Bank's Annual Report

The years before the implementation were marked by high percentage of loan to deposit ratio thereby showing efficient utilization of mobilized funds for loan and advances but the figures started to drop as the Bill policy came in to effect putting pressure on lending capacity of the Bank.

Graph 14: NBE Bill to loan and Loan to deposit ratios of Construction and Business Bank between (2007/08-2011/12)



Source: Bank's Annual Report

C. Results obtained from the Model constructed to investigate the impact of the NBE Bill on Lending Capacity of Banks

The model constructed to investigate the impact of the Bill on lending capacity of Banks comprised four variables Loan granted being the dependent variable and independent variables being deposit, saving interest rate and Bill purchased by banks during a fiscal year.

Results from the model show that the lag variable L1 positively affects the dependent variable at 90% confidence interval i.e. a 1% increase in loan availed this year affects next year loan to be availed by 91%. When looking at the impact of deposit on loan availed it's also positively related as indicated in the model. At 99% confidence interval as deposit mobilized during a year increases by 1% the loan availed in the same year increases by 29.5%. Banks by exhaustively mobilizing deposits in a fiscal year significantly increase the loan that they can avail to the market and as the availed this year increase it'll automatically increase next year's loan to be availed as indicated by the lag variable.

The impact of the Bill on loan available is insignificant in this model though the model said otherwise, the reason behind is that Banks started granting long-term loans to avoid the purchase of the NBE Bill as there was no regulation restricting Bank's loan portfolio as, the time frame covered by the study stretches only until June 2012 understanding the tactics implemented by Banks The National Bank issued a directive which forces Banks to increase their short term-loan to 40% and they are given until January 01, 2015 to adjust their portfolio to the stated amount the directive was issued in February 18,2013. As a result, Banks were able to neutralize the impact of the NBE Bill purchase but this new directive is likely to compel Banks to Purchase more NBE Bills. Saving interest rate is also insignificant for this model as the rate is not determined by market forces rather by the National Bank of Ethiopia.

As indicated in the illustrations Bank's share of Bill to total loan is a considerable amount though the rate determined by The National Bank is only 27% it's share has increased significantly the following factors are said to contribute for this increment:

1. Banks are forced to purchase additional Bills on loan repayments i.e. if Banks' forward the repaid amount as a loan. For example, let say Zemen Bank has one birr which is available for loan but as the directive forces the bank to purchase government Bills for 0.27 cents maturing in five years earning 3% interest which is to be given to the bank yearly and let's assume the bank granted the remaining 0.73 cents as loan which is to be repaid in one year and having interest rate of 10%. By the end of the year the bank gets 0.008 cents interest on the Bills and 0.073 cents interest from the loan granted. So by the coming year the bank will have total fund of 0.81 cents available for loan which is the sum of the interest earned on the Bill, loan and the repaid loan then, the Bill purchased amount will be 27% of 0.81 cents which is 0.22 cents which makes the total stock of Bill the bank purchased 0.49 cents.
2. The National Bank has also determined share of short-term loan portfolio to be not less than 40% of the total outstanding loan and advances of the Bank excluding NBE-Bills outstanding at any given time and Banks have until January 01, 2015 to adjust their portfolio to stated percentage. This directive has also clearly defined what short-term loan means ,i.e. a loan extended by Banks to finance the working capital needs and/or to address other short-term financial constraints of a borrower's business having a maturity period of one year. This directive will compel banks to grant new short term loans every year there by forcing them to purchase more NBE-Bills, as the Banks were intentionally avoiding short-term loans to avoid the purchase of the Bills pulling their share of short-term loan far behind what The National Bank is demanding them to fulfill by January 1st, 2015 and they are now forced to push their short-term loans higher than 40% in order to reach at the bar given by the National Bank.

4.1.3 Profitability

To take a look at the impact of the NBE Bill on profitability the study used a model which tried to investigate the impact of NBE Bill purchased on net profitability of banks and two cases in which the impact of the NBE Bill is discussed with some assumption for the purpose of making the illustration easy so that a clear image can be created on its impact on profitability.

A. Result obtained from the model constructed to investigate the impact of the NBE Bill on Profitability of Banks

The model constructed for profitability comprised one independent variable namely NBE Bill purchased. Results from the model indicated that the independent variable is insignificant. As indicated in the annual reports of banks, their source of income comprises four basic components; interest income, service fee, gains on foreign exchange dealings and other charges. Taking out Commercial Bank of Ethiopia, commercial banks in the country earn a very insignificant amount from services fee and other charges. The two major sources of income are interest income and gains on foreign exchange dealings. Interest income is the difference between what banks pay for the deposit they collected and what they earn for the loan they granted also known as Net Interest Margin (NIM).

As indicated earlier the NBE Bill is really affecting loan capacity of Banks which in turn affects profit generated from availing loan to the market. But the impact has been tolerated, at least for the time being. Though, 2012/13 is not included in the study report from the media showed that old private banks registered a fall in their profit for the first time in their history and the NBE Bill is among the major factors that contributed for the fall. If 2012/13 could have been included the result could have been otherwise.

The importance of earning profit from diversified sources helps any organization in creating a wider shoulder in case unexpected events occur in one segment of its income source. Thus the implementation of this directive is making short-term loan and advances un preferable source of income generation which forced Banks to focus on income generated from long term loan and foreign exchange dealings.

European Union financial segment considers profitability as a bank's first line of defense against unexpected losses, as it strengthens its capital position and improves future profitability through the investment of retained earnings and Van Gruening and Bratanovic (Gruening and Bratanovic, 2000) believe that profitability is an indicator of a bank's capacity to carry risk and/or to increase its capital. They also think that profitability is a revealing indicator of a bank's competitive position in banking market and quality of its management.

B. Time after the implementation of the policy

To investigate the impact of the NBE Bill we will take two cases so that there will be a clear image of its impact on profitability can be revealed. For simplicity we assume that Banks' do not pay tax on revenue generated from the loan they advance to the economy and also they don't incur any other cost for the deposit they mobilize other than interest paid for depositors which is taken to be the only cost of mobilizing fund.

Let's first take 2010/11, in this year all the seven banks under this study bought NBE Bill worth birr 5,432 million. Accordingly the cases will be discussed as follows:

i. Year 2010/11

Case one:

In this case Banks' pay 5.4% interest for the whole they mobilized; the saving interest rate is taken from The National Bank of Ethiopia yearly average saving interest rate and Banks' gain only 3% interest from The National Bank of Ethiopia for the NBE Bills they bought:

Gain from the NBE Bill=5,432*0.03= **Birr 162.96 million**

Interest paid for depositors'=5,432*0.054= **Birr 293.33 million**

Looking at the above illustration we can see that the Banks' incurred a loss of birr 130.37 million because of the NBE Bills purchased. The loss Banks' incurred could have been a gain if the policy was not in place and looking at the impact on ROE and ROA, the loss

directly affects gross profit which then affects net profit then the reduction in net profit ultimately reduces both ROA and ROE.

Case Two:

In this case we assume that Banks' do not purchase the NBE Bills rather they advance the 5,432 as a loan for the export sector (the minimum interest rate for loan advances is in this sector) this is done on purpose to show the impact using the lowest interest applied for loan and advances. Banks' earn 8.5 % on the loan they advanced for the export sector. Accordingly:

Interest paid for depositors'= 5,432*0.054=**Birr 203.33 million**

Gain from loan advanced= 5,432*0.085=**Birr 461.72 million**

Even taking the lowest interest gain for loan and advanced Banks' in this case are making a profit worth **birr 168.39 million** there by showing that Banks' could have made at least this much profit if the fund was not tied up by the NBE bill purchase.

In this case ROA and ROE are affected positively as the increment in gross profit increases net profit and net profit being the denominator assuming that the numerators remain the same will increase both ROA and ROE and finally those increasing will increase the earning per share.

As illustrated, the impact is not only limited on the Banks' but has an economy wide stretching effect when all the private banks and the government owned Construction & Business Bank are taken in to consideration. The aggregate amount taken by the NBE Bill is very huge and the effect will ultimately stretch to the economy as a whole.

ii. Year 2011/12

The total stock of NBE Bill holding of the seven banks selected for this study reached birr 9,898 million in 2011/12, the total loan advanced of the same Banks for that same year

was birr 27,918 million. The same two cases discussed in 2010/11 will be discussed with same assumption being applied.

Case one In this case Banks' pay 5.4% interest for the whole 9,898 million they mobilized; the saving interest rate is taken from The National Bank of Ethiopia yearly average saving interest rate and Banks' gain only 3% interest from The National Bank of Ethiopia for the NBE Bills they bought:

Gain from the NBE Bill=9,898*0.03= **Birr 296.94 million**

Interest paid for depositors'=9,898*0.054= **Birr 534.49 million**

Looking at the above illustration we can see that the Banks' incurred a loss of birr 239.98 million because of the NBE Bills purchased. The loss Banks' incurred could have been a gain if the policy was not in place and looking at the impact on ROE and ROA, the loss directly affects gross profit which then affects net profit then the reduction in net profit ultimately reduces both ROA and ROE. The loss has increased from what was birr 109.61 million registering 84% increase in just a year time.

Case Two:

In this case we assume that Banks' do not purchase the NBE Bills rather they advance the 9,898 as a loan for the export sector (the minimum interest rate for loan advances is in this sector) this is done on purpose to show the impact using the lowest interest applied for loan and advances. Banks' earn 8.5 % on the loan they advanced for the export sector. Accordingly:

Interest paid for depositors'= 9,898*0.054=**Birr 534.49 million**

Gain from loan advanced= 9,898*0.085=**Birr 841.33 million**

Even taking the lowest interest gain for loan and advanced Banks' in this case are making a profit worth **birr 306.84 million** there by showing that Banks' could have made at least this much profit if the fund was not tied up by the NBE bill purchase.

In this case ROA and ROE are affected positively as the increment in gross profit increases net profit and net profit being the denominator assuming that the numerators remain the same will increase both ROA and ROE and finally those increasing will increase the earning per share.

4.1.4 Liquidity

a. Results obtained from the model constructed to the investigate the impact of NBE Bill on liquidity of Banks

The model constructed for liquidity comprises three independent variables namely Current Saving, Time Deposit and NBE Bill and liquidity is the dependent variable measured as a ratio of current asset to current liability. The results in the model show that only the lag variable L1 is significant where as current saving, NBE Bill and Time deposit all being insignificant.

A one percent increase in the lag variable in a fiscal year will result in 79.9% increase in next year liquidity position of banks. Though the impact of the NBE Bill is insignificant , at 80% confidence level it negatively affects the liquidity position of Banks by 20% somewhat showing that the NBE Bill indeed is affecting liquidity of Banks further proving the logic behind the reduction of the reserve requirement from 15% to 5% in two years time by The National Bank of Ethiopia.

The impact of the NBE Bill on liquidity reached to this point in short period of time after the implementation of the directive in April 2011 exactly in about twenty month and adding to this the National Bank has also requested Banks to adjust their loan portfolio implementing a tight monetary control on Banks which is further putting banks in a very difficult position. Different scholars have underlined the importance of liquidity for Banks Michalski in 2008 said that if the level of liquid assets is not adequate; it enhances the company's operating risk – loss of liquidity. If the level of liquid assets is too low, then a company may encounter problems with timely repayment of its liabilities. According to Howells and Bain, 1999 all banks should be able to meet their obligations when they are due. In order to

achieve this, banks must hold cash or other liquid assets and be aware that their value may vary due to fluctuations in market prices. Another approach would be to attempt to match the maturity characteristics of assets with the maturity characteristics of the deposit base, so that there is an appropriate cash flow from maturing assets. Adugna, 2009 stated that, when liquidity ratio is very low it tells that the bank is not efficiently in utilizing its resources (deposits) and could entail high cost to the bank.

The National Bank of Ethiopia after putting out the Bill policy has decreased the reserve requirement from 15% to 5%, which is a 10% point reduction and about 66 parentage reduction which is a very significant as Banks mobilize funds worth billions of birr. This illustration clearly shows that Banks are facing liquidity problem because of the NBE Bill purchase.

The Basel Committee in 2008 established seventeen principles which are accepted worldwide in order to establish Banks so that they can create sound liquidity management. The principles are categorized in to four major parts; fundamental principle for the management and supervision on liquidity risk being the first, it states that a bank should establish a robust liquidity risk management frame work that ensures banks to maintain sufficient liquidity to with stand a range of stressful events but Banks in the county doesn't really have fundamental principles that can guide their liquidity management and The National Bank as a regulatory body should help Banks create a sound liquidity management principles beyond setting reserve requirement bars.

b. Time before and after the implementation of the directive

To investigate the impact of the NBE Bill on Banks' liquidity the time before and after is discussed for the all the seven Banks' considered in the study. Commercial Banks' in the country calculate their liquidity as a ratio of current asset to current liability and the minimum percentage given by The National Bank of Ethiopia for this ratio is 20%.

1. **Awash International Bank**

As we can see from the table 9, for the three years before the implementation of the directive the Bank was in a far better position than for the two years after the implementation of the policy

Table 9:Awash international Bank liquidity ratio(2007/08-2011/12)

Year	liquidity ratio		
2007/08	46%		
2008/09	60%		average for
2009/10	63%	56.3%	three years
2010/11	49%		average for two years
2011/12	33%	41%	

Source: Bank's Annual Report

The Bank's liquidity position on average for the three years before the implementation was 56.3% but, this figure has dropped by 15.3% to 41% showing that the Bill indeed is putting pressure on liquidity position of Banks'.

2. **Wegagen Bank**

Wegagen Bank like Awash International Bank has shown a reduction in its liquidity position after the implementation of the policy, the figure dropped from what was 70% in 2009/10 to 65% in 2010/11.

If we take a look the average before the implementation of the policy and after the implementation we can see that the Bank has deteriorated by 11% (table 10). The liquidity ratio has also shown a decline by 20% in 2011/12 from what was 65% in the previous year.

Table10: Wegagen Bank liquidity ratio(2007/08-2011/12)

Year	liquidity ratio		
2007/08	55%		
2008/09	73%		average for three years
2009/10	70%	66%	
2010/11	65%		average for two years
2011/12	45%	55%	

Source: Bank's Annual Report

3. **Dashen Bank**

The Bank moving from 2009/10 to 2010/11 didn't register any change in its liquidity position but, this has changed as the Bank dropped from 50% in 2010/11(table11) to 39% in 2011/12 registering 11% decline in one year time.

Table11: Dashen Bank liquidity ratio(2007/08-2011/12)

Year	liquidity ratio		
2007/08	46%		
2008/09	57%		average for three years
2009/10	50%	51%	
2010/11	50%		average for two years
2011/12	39%	44.50%	

Source: Bank's Annual Report

On average the Bank's liquidity position was 51% before the implementation of the policy but, the figure has declined to 44.5% on average for the years after the implementation of the policy.

4. **United Bank**

The Bank was showing an increasing trend for the three years before the implementation of the policy and the trend went the opposite direction after the policy was implemented. The Bank dropped from what was 65% in 2009/10 to 56% in 2010/11 and further to 41% in 2011/12(table 12).

On average the Bank's liquidity position dropped by 11.5% to 48.5% (table12) after the implementation of the policy. The average for the three years before the implementation was 60%.

Table 12:Dashen Bank liquidity ratio(2007/08-2011/12)

Year	liquidity ratio		
2007/08	52%		
2008/09	63%		average for three years
2009/10	65%	60%	
2010/11	56%		average for two years
2011/12	41%	48.50%	

Source: Bank's Annual Report

5. **Zemen Bank**

Liquidity position of the Bank increased from what was 63% in 2008/09 to 73% in 2009/10 and further increased to 74% in 2010/11 but, the figure has dropped by 14% in 2011/12 to 60% (table13).

Though, the average figure after the implementation has shown only a 1% decline, the liquidity position of the Bank declined by 14% in 2011/12.

Table 13:Zemen Bank liquidity ratio(2007/08-2011/12)

Year	liquidity ratio		
2007/08			
2008/09	63%		average for two years
2009/10	73%	68%	
2010/11	74%		average for two years
2011/12	60%	67.00%	

Source: Bank's Annual Report

6. **Construction and Business Bank**

The Bank registered an increasing trend for three consecutive year's form 2008/09 to 2010/11 and finally, the liquidity position declined to 41% in 2011/12.

Though the average decline after the implementation of the policy is only 1% the Bank's liquidity position declined by 14% going from 2010/11 to 2011/12. Clearly indicating the pressure the Bill is causing on the liquidity position of the bank.

Table:14 Construction and Business Bank liquidity ratio(2007/08-2011/12)

Year	liquidity ratio		
2007/08	46%		
2008/09	50%		average for three years
2009/10	51%	49%	
2010/11	55%		average for two years
2011/12	41%	48.00%	

Source: Bank's Annual Report

7. Bank of Abyssinia

The Bank before the implementation of the policy was in far better place than after the implementation of the policy in its liquidity position. Moving from 2007/08 to 2008/09 the Bank registered a 17% decline but, this figure has shown a 3% increment in 2009/10.

Table:15 Bank of Abyssinia liquidity ratio(2007/08-2011/12)

Year	liquidity ratio		
2007/08	41%		
2008/09	58%		average for three years
2009/10	55%	51%	
2010/11	46%		average for two years
2011/12	36%	41%	

Source: Bank's Annual Report

In 2010/11 the Bank recorded a 9% decline in its liquidity position indicating the impact of the NBE Bill purchase, this figure further declined to 36% in 2011/12 making the aggregate decline 19% since the implementation of the policy.

As discussed in the illustrations, the liquidity position of Banks' is affected by the NBE Bill purchase and the following factors are said to contribute for the impact the Bill created on the liquidity position of Banks:

1) A significant amount of loanable fund is taken from Banks' as a result of the NBE Bill purchase.
2) There is no loan repayment from the NBE Bill that can replenish the loanable fund taken by the Bill from Banks'.
3) The fund taken by the NBE Bill is at least tied up for five years.

Chapter 5: Summary of Finding, Conclusion and Recommendation

5.1 Summary of Finding

The study selected three variables to investigate the impact of NBE Bill purchase on commercial banks. Accordingly; profitability, liquidity and lending capacity were discussed before and after the implementation of the policy covering a total of five years.

As the NBE Bill purchase is directly related with loan and advances, its first impact is seen on lending capacity of Banks. Banks before the implementation of the policy were using a considerable share of deposits mobilized for loan and advances, the loan to deposit ratio of Banks before the implementation of the policy magnifies this point. Banks were more or less efficiently utilizing mobilized funds for loan and advances. Looking at the patterns, the loan to deposit ratio for the years before the implementation of most Banks were recording an increasing trend from year to year. Even taking Banks which mobilize a huge fund from deposit, their loan to deposit ratio shows that they were advancing a very considerable amount of fund as a loan to the economy.

Banks forward loan for different sectors stretching from the export to import, industry to building and construction, and others thereby helping the country by pumping the very needed fund in the economy at the same time playing their role as a financial institution by facilitating business activities. Banks being the dominant figure in the sector should play their given role to the highest of standards for the sector contribute its share to the whole economy beyond just giving back to their shareholders.

After the implementation of the policy both loan to deposit ratio and NBE Bill to loan were considered to investigate the impact of the Bill purchase on lending capacity. Loan to deposit ratio of Banks showed a decline after the implementation while NBE Bill to loan increased from what was in 2010/11 to 2011/12 explaining the decline in loan to deposit ratio. The two years after the implementation of the Bill policy Banks were forced to construct a considerable amount of their asset in the form of government bonds. Though, the determined rate for the Bill is 27% the percentage share of the Bill to loan reached up

to 34% for some banks only in its first year and the average figure in the same year (2010/11) was 26%. The following year (2011/12), which is the second year since the start of the Bill purchase showed a significant increase taking both the increment in amount and also the percentage increment. On average the Banks' NBE Bill to loan ratio in 2011/12 was 34%. Two factors contributed for the increment registered in the NBE Bill purchase: Banks were forced to purchase NBE Bills on loan repayment if they forward the repayment as a loan being the first factor and the directive which forced Banks to construct 40% of their loan portfolio from short-term loans being the second factor. Additionally, a model was constructed to further develop the investigation made through loan to deposit ratio and NBE Bill to loan ratio.

Profitability of Banks in line with the NBE Bill purchase is investigated by the model constructed and considering two cases for which some assumptions are made, so that a clear picture of the situation is revealed

Banks have two major sources of income, from foreign exchange dealings and interest income. Therefore, profit which banks make is composed of the above two sources of income. If the aggregate sum of the two is positive banks will make profit and if the sum is negative banks will incur a loss. So, whenever we talk about profit the aggregate income is considered. .

The two cases considered showed that, the Bill purchase is taking a considerable amount of fund that could otherwise have been used for lending purpose and showed the opportunity cost which Banks are forced to incur as a result of the NBE Bill purchase. This simple illustration proved that the Bill indeed is putting pressure on income which the Banks generate from advancing a loan. The Bill purchase has made short-term loans un preferable source of income, since short-term loan makes bill purchase re List of Abbreviations and Acronyms repetitive.

The impact the Bill creates is not limited to profit alone but stretches to further impact ROA, ROE and also reduces tax revenue which the government could have collected if the Bill purchase wasn't in place impacting Banks profitability. The aggregate impact of the Bill on the economy and the Banking sector is significant.

Though the study forecasted the purchase that profitability is affected by the NBE Bill purchase the result from the model is insignificant. But, a 1% increase in NBE Bill at 84% confidence interval negatively affects profitability of Banks by 7%.

Result from the model shows that the NBE Bill is affecting the liquidity position of Banks though, the result was at 80% confidence interval. The ratio of current asset to current liability is used to measure the liquidity of Banks. Commercial banks in the country use this method to calculate their liquidity position.

To demonstrate the impact of the Bill purchase on liquidity position of Banks, the average figure before and after the implementation of the policy was compared. The average figure after the implementation of the policy showed that the Bill has pressurized the liquidity position of banks. The National Bank of Ethiopia has reduced the reserve requirement to help Banks neutralize the impact the Bill created on their liquidity position.

The fund taken by the NBE Bill is at least tied up for five years this and others factors contributed for the impact the Bill created on liquidity position of Banks.

5.2 Conclusion

In line with the objective of the study the impact of the NBE Bill purchase on commercial banks in Ethiopia focused on three variables: namely profitability, liquidity and lending capacity. The impact on each variable is investigated by taking the time before and after the implementation of the policy covering a total of five years (2007/08-2011/12).

Lending capacity of commercial banks before the implementation of the policy showed a different outlook compared with the time after the policy implementation, as the time after was marked by the pressure the Bill laid on Banks. The Bill purchase was taking a considerable amount of fund that could otherwise have been advanced as a loan, thereby affecting their lending capacity.

The story was the same for the liquidity position of commercial banks, as the Bill purchase ties up a considerable amount of fund at least for five years from the time of the purchase thereby deteriorating their liquidity position.

Profitability of banks is discussed by taking two cases. Where case one considered the Bill purchase in its illustration and the second case took the Bill purchase out of the illustration. The two illustrations showed that Banks are incurring an opportunity cost derived from the purchase of the Bill that could rather have been a source of income.

To the researchers knowledge there has been no previous work on the subject hence; this research endeavor tried to fill the knowledge gap and also laid the ground for researches in the future time.

5.3 Limitation of the Study.

The time covered by the study stretches from 2007/08 to 2011/12 a total of five years but, Zemen Bank started full operation in 2008/09 so Zemen's analysis covers the time from 2008/09 to 2011/12 a total of four years. Additionally, as the NBE Bill purchase is a recent development the time covered in the model is short and the analysis could have been more thrilling if the time could have been a bit longer.

5.4 Recommendation

The impact the Bill purchase created on commercial banks is measured with three variables and for commercial banks to neutralize the impact the bill created the study suggested the following three points. Accordingly:

1. Taking out Commercial Bank of Ethiopia, commercial banks in the country generate their income from two major sources, interest income and foreign exchange dealings. So they should try to generate more income from service charges and other income and increasing the share of income generated from foreign exchange dealings should be given emphasis. To generate more income from foreign exchange dealing, Banks can do the following:

    a) Raise their capital so that they can have more foreign currency holding capacity. This however, has its own disadvantage through its negative effect on dividend and it can also increase the fund available for loan which will

take the bank to the same problem. So the next point may be a panacea for this effect.

b) Banks should work hard to attract foreign currency though different marketing approaches to increase the turnover of foreign dealing which increases revenue.

2. To mitigate the liquidity problem commercial banks should try to mobilize low cost deposits. One major source of low cost deposit can be corporate organizations that open current account for business transactions rather than generate interest income out of it.

3. It may seem un realistic but, the only solution for commercial banks to neutralize the impact levied on their lending capacity is to negotiate possible solutions with The National Bank of Ethiopia to make some amendment on the policy so that they would in the future purchase NBE Bills on the increment rather than the whole amount advanced as a loan.

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DECLARATION

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of Ass. Professor Abebe Yitayew. 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.

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Name Signature& Date

ENDORSEMENT

This thesis has been submitted to St. Mary's University College, School of Graduate Studies for examination with my approval as a university advisor.

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Advisor Signature& Date