



ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES

**AN ASSESSEMENT OF NON-PERFORMING
LOAN OF COMMERICAL BANKS OF ETHIOPIA**

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JANUARY, 2017

ADDIS ABABA

**AN ASSESSEMENT OF NON-PERFORMING
LOAN OF COMMERICAL BANKS OF
ETHIOPIA**

**A THESIS SUBMITTED TO ST. MARY'S UNIVERSTY,
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DEGREE OF MASTER OF BUSINESS
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By

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JANUARY, 2017

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DECLARATION

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

Name

Signature

St. Mary's University, Addis Ababa

January, 2017

ENDORSEMENT

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

Advisor

Signature

St. Mary's University, Addis Ababa

January, 2017

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ABSTRACT

This study intends an assessment of non-performing loan of commercial banks of Ethiopia. The mixed research approach was adopted for the study. Survey was conducted with professionals engaged in both private and state owned Banks in Ethiopia holding different positions using a self-administered questionnaire. In addition, the study used structured review of documents of banks and in-depth interview of senior bank officials in the Ethiopian banking industry. The findings of the study shows that poor credit assessment, failed loan monitoring, lenient credit terms and conditions, aggressive lending, compromised integrity, weak institutional capacity, unfair competition among banks, willful default by borrowers and their knowledge limitation, fund diversion for unintended purpose, over/under financing by banks ascribe to the causes of loan default. The study suggests that banks should put in place a vibrant credit process that ensures proper customer selection, robust credit analysis, authentic sanctioning process, proactive monitoring and clear recovery strategies for sick loans; formulate a clear policy frame work that addresses issues of conflict of interest, ethical standard and check and balance in credit process; organizational capacity enhancement of banks; deliberate effort to develop culture of the public towards credit and its management by banks and ensuring prudent policies that govern bank loans.

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CHAPTER ONE

INTRODUCTION

1.1. Background of the study

The role of banks in the economy of any country is very significant. They play an intermediary function in that they collect money from those who have excess and lend it to others who need it for their investment. Availing credit to borrowers is one means by which banks contribute to the growth of economies. One of the major components of bank's assets is loans and advances. It generates the lion's share of the banks operating income and represents the greater risk exposure (Mac Donald and Koch, 2006).

Credit has been recognized as one of the important financial services that contribute to the success of a business venture and this success in turn contributes to the major economic development of a country. However, the existence of credit facility alone does not necessarily result in supporting economic development unless otherwise, it is accompanied by the existence of factors conduct to the efficient utilization of credit funds (Oyatoya, 1983).

The immediate consequence of large amount of NPLs in the banking system is bank failure. The cause of bank failures found that asset quality is a statistically significant predictor of insolvency (Dermirgue-Kunt, et al 1989), and that failing banking institutions always have high level of non-performing loans prior to failure.

In the case of Ethiopia, banks, insurance companies and micro-finance institutions are the major financial institutions. The sector is closed for non-Ethiopian citizens. ProclamationNo.592/2008 (FDRE, 2008) does not permit foreigners to own and operate banks in Ethiopia. There is a relatively favorable environment for banking industry and other financial institutions in Ethiopia. As of June 30, 2013 the number of banks operating in the country were nineteen, of which sixteen were private and the remaining three state-owned (NBE,2013).

According to National Bank of Ethiopia, (NBE, 2008) Non-performing loans (NPLs) are loans that are no longer earning income and: (1) full payment of principal and interest is no longer anticipated, (2) principal or interest is 90 days or more delinquent, or (3) the maturity date has passed and payment in full has not been made. Non-Performing Loans reduces the liquidity of banks, credit expansion, slows down growth of the banking industry, the firm which is in default and the economy as a whole. The failure of many commercial banks is not because of their inability to mobilize adequate deposits from the surplus sector to the deficit sector of the economy, but mainly because their lending portfolio have been poorly managed.

NPLs can arise from factors specific to the bank (Emmanuel, 2014). Therefore, the aim of the study is to assess the non-performing loan of commercial banks of Ethiopia, which contribute to the profitability as well as financial sustainability of any lending institutions, strength of which is believed to foster economic development.

1.2. Statement of the Problem

Lending represents the heart of the banking industry. Loans are the dominant asset represent 50-70 percent of the total amount at most banks, generate the largest share of operating income and represent the banks greater risk exposure. Moreover, its contribution to the growth of any country is huge in that they are the main intermediaries between depositors and those in need of fund for their viable projects (creditors) thereby ensure that the money available in economy is always pit to good use(MacDonald and Koch, 2006).

Lending is considered the most important function for fund utilization of Commercial Banks as major portion of their income is earned from loans and advances (Radha, 1980). But if the uncertainties materialize they would lead to deterioration of loan qualities. Deterioration in banks' loan quality is one of the major causes of financial fragility. Past experience shows that a rapid build-up of bad loans plays a crucial role in banking crises(Demirgüç-Kunt and Detragiache, 1998, and González-Hermosillo, 1999).

High level of non-performing loan is linked with banks failures and financial crisis. Failure in one bank might lead to run on bank which in turn has contagious impact affecting the whole banking industry as has recently been experienced in the USA and other parts of the world. Though the recent financial crisis began with Fannie Mae and Freddie Mac, US banks, it rapidly spread from Wall Street to the rest of world economies (Jonathan and Peter, 2011).

The literature reviewed concentrate on two grand factors- macroeconomic and bank specific factors. Studies in the US and the rest of the world provide this result. For instance, Bercoffet al (2002) examine the fragility of the Argentinean Banking system over the 1993-1996 periods; and came up with a finding that NPLs are affected by both bank specific factors and macroeconomic factors.

Empirically high level of NPLs has been found to be associated with contraction of credit, slowdown of GDP growth, depreciation of exchange rates, inflation and unemployment (Bockand Demyanets 2012, Klein 2013). The impact starts with the pressure NPLs create on the income statement and balance sheet of banks.

NPLs affect the profitability of the banks adversely by way of affecting both income and expenses. A high NPL means the asset is not performing or bringing in the interest income it was expected to bring. Income from NPLs can be booked only on actual realization of the same and not on accrual basis. So this will have an adverse impact on bank's interest income. A lower interest income would lead to lower total income and hence lower net profits. From expenses point of view, a high NPL means higher provisioning requirements as well as higher expenses involved in NPL recovery process (like litigation and administrative costs), both of which would reduce the net profits. Capital adequacy also cause reduction in profits due to high NPL is likely to result in lower retained earnings. Moreover, Total Risk Weighted Assets (TRWA) increase because of the risks attached to NPA portion of the total asset composition.

Lower profits or earnings arising from NPLs also boils down to lower cash inflow, thereby impairing bank's liquidity. Poor liquidity together with pressure on profits and capital adequacy

adversely affects the willingness and ability of the banks to expand its loan portfolio. Reluctance on the part of banks to grant loans can spill over to the economy in the form of credit rationing and credit crunch. On the other hand high NPL signals weakness in asset quality of banks and is likely to bring down the stock prices of banks because the investors would perceive assets of such banks to be of high risk.

Despite the fact that several studies were conducted by different researchers on the Ethiopian Banking sector, empirical studies of non-performing loans could hardly be traced with exception Zewudu (2010) who has indicated the relations between banks health (NPL) and lending. Zewudu also indicated in the study that NPL is also among the factors that are used as performance measurement of the sector in Ethiopia. However, the study was focused on performance measurement of banks that it lacked empirical evidence as to what caused occurrences of NPL. On the other hand Tihitina (2009) who studied legal problems in realizing non-performing loans of Ethiopian Banks also highlighted major problems in realizing non-performing loans in Ethiopian banks and solutions thereof. Tihitan's study also concentrated on resolving NPL and as such issues of factors that because it was not subject of the research though theoretical review of some of the factors causing NPL were discussed.

NPLs create an adverse impact on the bank's balance sheet and income statement, overall financial institutions profitability and economic growth of a country. In this regard, to control the adverse impact of increasing non-performing loans in Ethiopian banking sector, the National Bank of Ethiopia has issued a directive which strictly requires all banks to maintain ratio of their non-performing assets below 5% in 2008. Basel standard of NPL ratio is also 5%.

However, the banking industry average of NPLs of Commercial Banks is still above the 5% of the Basel standard limit. This can be seen from Dashen Bank (DB) stood at 7.3% on 2009 (Annual Report, 2009), Cooperative Bank of Oromia (CBO) 6.75% on 2010 (Annual Report, 2010) and Zemen Bank (ZB) 8.8% on 2013 (Annual Report, 2013) are relatively very high compared with the threshold set by NBE.

Many studies have examined the causes of non-performing loans in several countries around the world; however, little research has gone to the study of the causes of NPLs in Ethiopia, to the knowledge of the researcher, there has not been much research which is conducted on An assessment of non-performing loan of commercial banks of Ethiopia, except the study made by Daniel (2010), Wondimagegnehu (2012), Tilahun and Dugasa (2014) and Habtamu (2015), Getachew (2015). All of the above studies made in Ethiopian case, considers Determinants of Nonperforming Loans. They focused more on the determinant factors of loan only. But this study will focus on assessment of non-performing loan of commercial banks of Ethiopia. Though the impact of macro-economic factors on NPLs are exhaustively assessed by different international studies.

Previous study in Ethiopia directly related to this research i.e. An assessment of non-performing loan of commercial banks of Ethiopia, is the work of the researcher, not found though there are other researches done on these specific factors. Therefore, this researcher will contribute towards filling the gap by examining the effect of bank specific factors are found to be having significance on the occurrence of NPLs, that affect the quality of asset.

1.3. Research Objectives

1.3.1. The General Objective

The general objective of this study is An Assessment of Asset Quality of Commercial Banks of Ethiopia.

1.3.2. The Specific Objective

The specific objectives of this study are to:

1. Identify the relationship between interest rate and level of non-performing loans in Commercial Banks of Ethiopia.

2. Reviewing the Lenient credit terms and how affect non-performing loans in Commercial Banks of Ethiopia.
3. Identify the relationship between loan composition and non-performing loans in Commercial Banks of Ethiopia.
4. Examine the relationship between Loan follow-up (monitoring) and non-performing loans in Commercial Banks of Ethiopia.
5. Reviewing the risk assessment and how affecting non-performing loans in Commercial Banks of Ethiopia.
6. Reviewing the Operational efficiency and how affecting non-performing loans in Commercial Banks of Ethiopia.

1.4. Significance of the Study

The finding and recommendations of this study may have various benefits. It will assist in identifying the factors that affect non-performing loan of Commercial Banks of Ethiopia, that could be helpful for those specific banks to take corrective action on their lending. On the other hand the study will also informative for bank customers (lenders) and for the general public. It also will assist the central bank (NBE) to examine its policy in banking supervision pertaining to ensuring asset quality banks maintain. In addition the study would also contribute to the existing body of knowledge regarding the assessment of asset quality of commercial bank of Ethiopia and motivate further research on Ethiopian Banking.

1.5. Scope and Limitation of the Study

This study were delimited by number of branches (geographically), number of respondents and data type variables in perception of manageability and time budget. Accordingly, the study were only considered the head office braches of the sample banks and due to the confidentiality of the data considered all financial data is not available by the banks.

In this study the researcher only considered for the NPL analysis of the following selected sample banks, one government bank and six private commercial banks; Commercial Bank of Ethiopia, Awash International bank, Dashen Bank, Bank of Abyssinia, Wegagen bank, United bank and Nib International bank. The criteria for the selection of those banks is their year of establishment, they were on operation before 2000 E.C. Justification for the selection is they have more experienced than the recent established banks.

Due to time and budget constraints the study were focused only on same bank specific factors (Bank Internal Factors) affecting non-performing loans only. The researcher were relied on secondary sources of information to satisfy the qualitative aspects and primary sources for the quantitative analysis, the researcher were collected data from commercial bank's annual report and National Bank of Ethiopia.

1.6. Definition

National Bank of Ethiopia (NBE):- It is the reserve or central bank of Ethiopia. Besides licensing and supervising banks, insurers and other financial institutions, NBE fosters a healthy financial system and undertakes other related activities that are conducive to rapid economic development of Ethiopia. (Proclamation No.592/2008, FDRE, 2008).

Loans and Advances : means any financial assets of a bank arising from a direct or indirect advance or commitment to advance funds by a bank to a person that are conditioned on the obligation of the person to repay the funds, either on a specified date or on demand, usually with interest (NBE Directive, SSB/43/008).

Borrower: - is the one who borrows money from the lender (Bank).

Lending: - is the provision of resources (granting loan) by one party to another party where the second party doesn't reimburse the first party immediately there by generating a debt, and instead arranges either to repay or return those resources a later date.

Non-performing loans - loans or advances whose credit quality has deteriorated such that full collection of principal and/or interest in accordance with the contractual repayment terms of the loan or advances are in question; or when principal and/ or interest is due and uncollected for 90 (ninety) consecutive days or more beyond the scheduled payment date or maturity (NBE Directive, SSB/43/008).

Credit risk - it is the risk that a financial contract will not be concluded according to the agreement. It is the risk that the counterparty to an asset will default.

1.7. Organization of the Study

This study were organized into five chapters. The first chapter deals with the introduction of the study which consists of background of the study, Statement of the problem, Objectives of the study, Definition of Terms, Significance of the study, Scope of the study and Organization of the study. The Second chapter were included review of related literature which comprises, critical review of related studies and different literatures. The third chapter contains Research design and methodology. The fourth chapter deals with Presentation, Analysis and Interpretation of data. Finally, the last chapter presents summaries, conclusions and recommendations of the study.

CHAPTER TWO

REVIEW OF RELATED LITRATURE

2.1. Introduction

It is crucial for the regulators to understand the factors which underlie high levels of NPLs in banks so that they can accordingly devise prudential measures towards NPLs prevention and containment. The bank authorities would also need to take their resource allocation decisions towards selecting banks for on-site inspections so that banks with potential problem loans can be detected early. So, a better understanding of the NPLs behavior of banks would help the authorities allocate their resources more efficiently. Stress testing and forecasting exercises by the banks authorities can also be improved depending upon the factors which are found to be most important in driving the levels of NPLs.

So that this chapter deals with the related literatures of the study. The chapter discusses the history of the banking industry in Ethiopia, role of banks, bank lending, non-Performing Loans (NPLs), classification of non-performing loans, provision of non-Performing Loans (NPLs) and different issues which have relation with an assessment of asset quality of commercial banks of Ethiopia.

2.2. Theoretical Review

The National Bank of Ethiopia indicates that modern Banking in Ethiopia dates back to the year 1905 when the Bank of Abyssinia was established (NBE, 2010). Bank of Abyssinia was formed under a fifty year franchise agreement made with the National Bank of Egypt, which was owned by the British by then. To widen its reach in the country the Bank had expanded its branches to Dire Dawa, Gore and Dessie. It also had an agency and a transit office in Gambella and at the port of Djibouti respectively. After its formal liquidation on August 29, 1931 the Bank of Abyssinia was replaced by the Bank of Ethiopia. According to NBE (2010) Bank of Ethiopia, which was also known as Banque National Ethiopienne, was a national Bank and one of the first

indigenous banks in Africa. The Bank of Ethiopia operated until 1935 and ceased to function because of the Italian invasion. During the five years of the Italian occupation (1936-41), many branches of the Italian Banks such as Bancod'italia, Banco de-Roma, Banco Di-Napoli and BancoNazianali del lavoro were operational in the main towns of Ethiopia. After evacuation of Italians, the State Bank of Ethiopia was established on November 30, 1943 with a capital of one million Maria Theresa dollars. Pursuant to the Monetary and Banking Law of 1963 the State Bank of Ethiopia that had served as both a central and a commercial bank was dissolved and split into the National Bank of Ethiopia and Commercial Bank of Ethiopia Share Company. Accordingly, the central banking functions and the commercial banking activities were transferred to the National Bank of Ethiopia and the Commercial Bank of Ethiopia Share Company respectively.

Further, as per (NBE, 2010), due to change of government in 1974, and the command economic system which had prevailed in the country, the Commercial Bank of Ethiopia S.C. and other banks and financial institutions were nationalized on January 1st, 1975. The nationalized banks were re-organized and one commercial bank, the Commercial Bank of Ethiopia; two specialized banks- the Agricultural and Industrial Bank (AIB), renamed as the Development Bank of Ethiopia (DBE) and a Housing and Savings Bank (HSB) named as the Construction and Business Bank (CBB) currently merged with Commercial bank of Ethiopia; and one insurance company, the Ethiopian Insurance Corporation (EIC) were formed. During the era of state socialism (1974-1991), Ethiopia's financial institutions were charged with executing the national economic plan; state enterprises received bank finance in accordance with the plan's priorities. This system based on the template of the Soviet Union, saw little need to develop the tools and techniques of financial systems (NBE, 2008). Following the change of Government in 1991 and the change of economic policy directions, financial institutions were re-organized to operate towards a market oriented policy framework. Proclamation No. 83/1994 which had allowed the establishment of private banks has marked the beginning of new era in the Ethiopian banking sector development. Commercial Banks both public and private are currently operational in line with Banking Proclamation No. 592/2008.

Following the enactment of the banking legislations in the country in the 1990s, a fairly good number of private banks have been established. For example, now, in the 2014/15 fiscal year the total number of banks already operational in the country is nineteen. Of these banks, sixteen are private and the other three are government owned (NBE, 2015).

2.2.1. Role of Banks

The banking sector makes a meaningful contribution to the economic growth of every country. Banks contribution to the growth lies in the role they play in mobilizing deposits and allocating the resources efficiently to the most productive uses investment in the real sector. So making credit available to borrowers is one means by which banks contribute to the growth of economies. Banks pool resources together for projects that are too large for individual shareholders to undertake (Bagehot, 1873). They are also considered the most important enabler of financial transactions in any country's economy and are the principal source of credit (Rose, 2002). Bank finance is the primary source of debt funding.

Commercial banks extend credit to different types of borrowers for many diverse purposes, either for personal, business or corporate clients (Saunders & Cornett, 2003). Besides, banks are also the custodians of nation's money, which are accepted in the form of deposits and paid out on the client's instructions (Sinkey, 2002; Harris, 2003).

A bank's role has expanded considerably and is no longer limited to the taking of deposits and providing credit. Banks also perform the following activities (Fourie et al., 1998; Valdez,2000):

- **Money creators:** Commercial banks create money by way of deposit liabilities. In contrast to liabilities of other businesses, bank liabilities (chques) are generally accepted as a means of payment.
- **Managers of the payment system:** This refers to the payment of cheques through the Automatic Clearing Bureau (ABC). It also facilitates payments of credit and debit cards, internet and cell phone banking and automatic teller machines.

- **Creators of indirect financial securities:** Commercial banks hold assets that are subject to specific risks, while issuing claims against them in which these risks are largely eliminated through diversification.

- **Information agents:** Commercial banks developed sound databases of client information and the information is not publicly available (asymmetric information).The information is only shared with other banks by way of a bank code or a full general bank report.

- **Financial 'spectrum fillers':** The capital market cannot supply the full range of instruments required by borrowers. Commercial banks assist in this regard by supplying specific instruments to fill the gap.

- **Dealers in foreign currency:** Due to the globalization of the world's economies this has become a very important function. Commercial banks assist in the conversion of currencies, transfer of funds and negotiate foreign financing.

The banking sector in Ethiopia provides the most basic banking products including deposit facilities, loans and advances, fund transfer (local /global) , import/export facilities, and guarantees. Recently, most of the banks are striving to improve their service delivery through introducing different IT solutions. Recent trends also indicate that banks are competing in the market on the basis of branch expansion, advertisements, raising capital bases, improved service delivery, and investment on IT software and infrastructure. However, these technological innovations are at their infant stage and the sector is required to do much more to meet its customer expectations (NBE, 2010).

Banking business is done in accordance to “Banking Business Proclamation No. 592/2008”and different directives on banking business operations issued by the central bank, which is the National Bank of Ethiopia.

The first Banking proclamation is for the re-establishment of NBE (FDRE, 591/2008). The proclamation sets out the purpose, powers and duties of the central bank. According to Federal Democratic Republic of Ethiopia (FDRE, 2008) proclamation No 591/2008, the functions of NBE include:

- License and regulate banks, insurance companies and other financial institutions in accordance with the relevant laws of Ethiopia,
- Determine on the basis of assessing the received deposit, the amount of assets to be held by banks. (Reserve requirement),
- Issue directive governing credit transactions of banks and other financial institutions, and
- Determine the rate of interest.

The Second proclamation is banking business proclamation (FDRE, 2008) proclamation No592/2008. The proclamation sets the following banking business issues:

- Requirement for obtaining license for banking business in Ethiopia,
- Prohibit foreign nationals or organizations fully or partially open banks or branch offices, Subsidiaries of foreign bank in Ethiopia or acquire the shares of Ethiopian banks,
- Limitation of the acquisition of shares,
- Appointment of bank directors and officers,
- Maintenance of required capital, legal reserve and adequate liquidity and reserve balance,
- Limitations on certain transaction (investment),
- Inspection of banks, and
- Revocation of license.

All the banks are now regulated by the central bank which is the National Bank of Ethiopia. A central bank plays the most influential role in a country's economic and financial development. Generally, the primary role of a central bank is the same in all countries. It acts as a banker and financial advisor to the government as the nation's monetary authority, and is responsible to the government for promoting monetary stability in the country. To improve the stability of the financial system further, a central bank will act as a banker to the banking and other financial institutions in the country. Consequently, a central bank can influence the lending policy of commercial banks and thus their debt recovery.

In spite of all other activities, banking industry considers lending as their most important function for utilization of funds. Since the major portion of gross profit of the industry is earned from loans; the administration of loan portfolios seriously affects the profitability of banks (Wei-shong and Kuo-chung, 2006).

2.2.2. Bank Lending

Investment on a productive sector is the precondition for achieving the economic growth from a country perspective. Capital formation positively supports this investment function. Once a satisfactory level of capital is formed, the option of sound investment comes, that ultimately leads to flow of capital in the future. Financial institutions, mainly banks do these functions through different mechanisms such as loans (Islam, 2009). Provision of resources (granting loan) by one party to another is termed as lending. Lending presumes the fact that the second party doesn't reimburse the first party immediately rather arranges either to repay or return those resources at a later date, making it a debt.

To enable them function as financial intermediaries, banks collect funds from savers in the form of deposit and then supply it to borrowers as loans. Thus banks accept customer deposits and use those funds to give loans to other customers or invest in other assets that will yield a return higher than the amount bank pays the depositor (McCarthy et al., 2010). It follows that customers' deposit is the primary source of bank loan and hence, increasing or guaranteeing deposits directly has a positive effect on lending. Commercial banks extend credit to different types of borrowers for many diverse purposes, either for personal, business or corporate clients (Saunders & Cornett, 2003).

Bank finance is the primary source of debt funding. This intermediation functions benefit both the banks and the borrowers. The principal profit-making activity of commercial banks is making loans to its customers. In allocating funds, the primary objective of bank management is to earn income while serving the credit needs of its community (Reed and Gill, 1989).

In Ethiopia, Loans and advances are defined under Article 13 (FDRE 592/2008) and (NBE/2008) Article (4.5) as:

“... any financial assets of a bank arising from a direct or indirect advance (i.e. unplanned overdrafts, participation in a loan syndication, the purchase of loan from another lender etc.) or commitment to advance funds by a bank to a person that are conditioned on the obligation of the person to repay the funds, either on a specified date or on demand, usually with interest. The term includes a contractual obligation of a bank to advance by the bank on behalf of a person. The term does not include accrued but uncollected interest or discounted interest.”

2.2.3. Non-Performing Loans (NPLs)

Loans and advances constitute the primary source of income by banks. As any business establishment a bank also seeks to maximize its profit. Since loans and advances are more profitable than any other assets, a bank is willing to lend as much of its funds as possible (Koch and McDonald,2003). However the bank should consider the credit risk that arises because the possibility that the expected cash flows from advances and securities held, might not be paid in full. Credit risk is dependent on the quality of assets, and is reflected through the volume of NPLs (Ekanayake&Azez, 2015). In general, loans that are outstanding in both interest and principal for a period of time contrary to terms and conditions spelt out in the loan agreement are considered as non-performing loans.

Under the Ethiopian banking business directive, non-performing loans are defined as “loans or advances whose credit quality has deteriorated such that full collection of principal and/or interest in accordance with the contractual repayment terms of the loan or advances in question (NBE, 2008). It further states that loans or advances with pre-established repayment programs are non-performing when principal and/or interest is due and uncollected for Ninety consecutive days or more beyond the scheduled payment date or maturity (NBE, 2008).

Loans and advances constitute the primary source of income by banks. As any business establishment a bank also seeks to maximize its profit. Since loans and advances are more profitable than any other assets, a bank is willing to lend as much of its funds as possible. But banks have to be careful about the safety of such advances (Radha .M, et al, 1980). Bankers

naturally try to balance the issue of maximizing profit by lending and at the same time manage risk of loan default as it would impair profit and thereby the very capital. Thus a bank needs to be cautious in advancing loans as there is a greater risk which follows it in a situation where the loan is defaulted. In other words loan loss or defaulted loans puts a bank in a difficult situation especially when they are in greatest amount. Despite the fact that banks hold security for the loans they grant they cannot be fully be certain as to whether they are paid or not. It is when such risks materialize that loans turn to be non- performing.

The concept of non-performing loans has been defined in different literatures. According to Patersson and Wadman (2004), non- performing loans are defined as defaulted loans which banks are unable to profit from. They are loans which cannot be recovered within stipulated time that is governed by the laws of a country. According to the International Monetary Fund(IMF, 2009), a non- performing loan is any loan in which interest and principal payments are more than 90 days overdue; or more than 90 days' worth of interest has been refinanced. Non-performing loans generally refer to loans which for a relatively long period of time do not generate income; that is the principal and/or interest on these loans has been left unpaid for at least 90 days (Fofac, 2009). Non- performing loans are further defined as loans whose cash flows stream is so uncertain that the bank does not recognize income until cash is received, and loans those whose interest rate has been lowered on the maturity increase because of problem with the borrower (Machiraju, Undated). HR Machiraju expresses non-performing loans as a leading indicator of credit quality.

Non-Performing Loans (NPL) or bad loans arise in respect of the loans and advances which are given by banks to the whole range of different projects including but not exclusively retail or wholesale, personal or corporate or short, medium or long term projects. NPLs are a very sensitive element of a bank's operations. According to Brown, Mallett and Taylor, the losses bad loans (NPLs) cause, by reducing the capital resource of the bank, affects its ability to grow and develop its business (Taylor,1993). Disclosure of the extent of these losses in its financial statements may lead to a loss of confidence in the bank's management and a reduction in its credit ratings. This will in turn increase the bank's cost of borrowing in the wholesale market and make it more expensive or more difficult to raise capital. In extreme cases, it can leads to a loss

of deposits, the withdrawal of the bank's authorization and ultimately insolvency (M.G. Taylor, 1993). Thus NPL is one of the concrete embodiments of credit risk which banks take. They have greater implication on the function of the banks as well as the overall financial sector development.

Historically, the occurrence of banking crises has often been associated with a massive accumulation of non-performing loans which can account for a sizable share of total assets of insolvent banks and financial institutions, especially during episodes of systemic crises. Deterioration in banks' loan quality is one of the major causes of financial fragility. Past experience shows that a rapid build-up of bad loans plays a crucial role in banking crises (Demirgüç-Kunt and Detragiache, 1998, and González-Hermosillo, 1999).

It is widely accepted that the quantity or percentage of non-performing loans (NPLs) is often associated with bank failures and financial crises in both developing and developed countries. In fact, there is abundant evidence that the financial/banking crises in East Asia and Sub-Saharan African countries were preceded by high non-performing loans. The current global financial crisis, which originated in the US, was also attributed to the rapid default of sub-prime loans/mortgages. In view of this reality it is therefore understandable why much emphasis is placed on non-performing loans when examining financial vulnerabilities (Sorge, 2004). It is apparent that insolvency of banks is costly to the macro economy *per se*, but this cost can be increased or decreased by the regulators and the policies they use in resolving the insolvencies. The faster banks can be resolved before their economic capital turns negative, the smaller are both losses to depositors and costs to the macro economy (G. Kaufman, 2004). This is why most countries provide their own rules regarding NPLs and its classifications.

The classification of a loan as bad or doubtful may result from a specific act by the borrower, for example, petitioning for bankruptcy, or from circumstances that have the potential to place the loan at risk. For example, the borrower may have defaulted on one or more of the terms of the loan, or a substantial part of its assets may be in an industrial sector or country that is suffering from an economic recession (M.G. Taylor, 1993). Nonperforming loans could be recognized early from the violation of the terms of agreement by the borrower. When we see the context of

Africa, the criterion for identifying non-performing loans varies. Some countries use quantitative criteria to distinguish between “good” and “bad” loans (e.g., number of days of overdue schedule payments), while others rely on qualitative norms (such as the availability of information about the client’s financial status, and perspectives about future payments). However, the Basel II Commission emphasizes the need to evolve to ward standardized and internal rating-based approach. Accordingly, the Basel committee puts non-performing loans as loans left unpaid for a period of 90 days as has been mentioned in the preceding paragraphs.

Under the Ethiopian banking business directive, non-performing loans are defined as “loans or advances whose credit quality has deteriorated such that full collection of principal and/or interest in accordance with the contractual repayment terms of the loan or advances in question” (NBE, 2008). This is in accordance with the Basel rules. If a loan is past due for 90 consecutive days, it will be regarded as non-performing. The criteria used in Ethiopian banking business to identify non-performing loan is a quantitative criteria based on the number of days passed from loan being due. The economic and financial costs of these impaired loans are significant. Potentially, these loans may negatively affect the level of private investment, increase deposit liabilities and constrain the scope of bank credit to the private sector through a reduction of banks’ capital, following falling saving rates as a result of runs on banks, accumulation of losses and correlative increased provisions to compensate for these losses. These loans also have potential for reducing private consumption, and in the absence of deposit guarantee mechanisms to protect small depositors, can be a source of economic contraction, especially when coupled with declining gross capital formation in the context of a credit crunch caused by erosion of banks’ equity and assets (Fofac, 2009).

2.2.4 The Effect of Non-Performing Loan

Non-performing loan is part of being in the banking business. The trick is how to keep it in control and predictable. A higher than expected NPL rate have serious consequences, affecting the banks, the customers, and the economy. Onchomba (2014) outlined the below three major impacts of NPL on operation of commercial banks;

2.2.4.1. NPL Reduces Profitability

The interest income generated from loans contribute considerably to the profitability performance of the commercial banks. However, when loans become default, it has a serious negative effect on the health and operations of the commercial banks. One of the reasons is that, in line with National bank of Ethiopia regulations, the lending institution has to make provision and charges for credit losses (bad debt/impairment) which ultimately reduce the profit level. Beside this delay or failure of repayment of loan principal and interest on time and in full, negatively affects the profitability of the banks by reducing the interest income generated from granting more credit. This is because the loan able funds tend to deplete when repayment of loans delays or fail to come. Even if NPL might be eventually paid off by selling collaterals, this incurs a huge loss for the bank because of the time value of money and handling of NPL.

2.2.4.2. NPL Hurts the Bank's Reputation

Reputation is everything in the banking business. A lowered reputation will steer away big customers and forces them to look for other banks. This will surely result in lower deposit and consequently, lower lending.

2.2.4.3. NPL Can Cause Insolvency

Banks kept only some money deposits as a reserve; the rest is lent out. If the lowered reputation due to NPLs results in withdrawal of deposits of big customers, the bank will effectively be insolvent.

2.2.5. Classification of Non-Performing Loans (NPLs)

National bank of Ethiopia require all licensed banks to monitor and review their portfolio of credit and non-performing loan. Non-performing loans are classified into four grades of risk: (A) special mention; (B) sub-standard; (C) doubtful; and (D) loss.

2.2.5.1. Special Mention

NBE directive no SBB/43/2008 classified the following non-performing loans and advance as special mention;

a) Loans or advance with pre-established repayment programs past due 30(thirty) days or more, but less than 90(ninety) days;

b) Overdrafts and loans or advances that do not have a pre-established repayment program, If:

1. The debt remains outstanding for 30 (thirty) consecutive days or more beyond the scheduled payment date or maturity, but less than 90 (ninety) days; or

2. The debt exceeds the borrower's approved limit for 30 (thirty) consecutive days or more, but less than 90 (ninety) days; or

3. Interest is due and uncollected for 30 (thirty) consecutive days or more; but less than 90 (ninety) days; or

4. For overdrafts, the account has been inactive for 30 (thirty) consecutive days or more, but less than 90 (ninety) days or the account fails to show the One to four percent of the approved limit debit balance at least once over 360 days preceding the date of loan review.

2.2.5.2. Substandard

NBE directive no SBB/43/2008 classified the following non-performing loans and advance as substandard.

a) Loans or advances with pre-established repayment programs past due 90 (ninety) days or more, but less than 180 (one-hundred-eighty) days:

b) Overdrafts and loans or advances that do not have a pre-established repayment, if:

1. The debt remains outstanding for 90 (ninety) consecutive days or more beyond the scheduled payment date or maturity, but less than 180 (one hundred eighty) days; or

2. The debt exceeds the borrower's approved limit for 90 (ninety) consecutive days or more, but less than 180 (one hundred eighty) days; or
3. Interest is due and uncollected for 90 (ninety) days or more, but less than 180 (one hundred eighty) days; or
4. For overdrafts, the account has been inactive for 90 (ninety) consecutive days or more, but less than 180 (one hundred eighty) days; or the account fails to show Five to nineteen percent of the approved limit debit balance at least once over 360 days preceding the date of loan review.

In addition to the above NBE directive no SBB/43/2008 categorized the following non-performing loans and advances as substandard:

1. Renegotiated term loans unless equivalent of all past due interest is paid by the borrower in cash at the time of renegotiation and the following payments are made by the borrower on a consistent and timely basis in accordance with the restructured terms of the loan or advance:
 - a. In the case of term loans with monthly or quarterly installment repayments, at least 3 (three) consecutive repayments;
 - b. In the case of loans with semi-annual installment repayments, at least 2 (two) consecutive repayments;
 - c. In the case of loans with annual installment repayments, at least one repayment;
2. Renegotiated non-performing overdraft facilities unless equivalent of all past due interest is paid by the borrower in cash at the time of renegotiation and the account shows at a minimum a nil balance at least once or a turnover rate of once the approved limit.
3. Renegotiated non-performing merchandize loans unless physical inventory of the merchandize taken by the bank at the time of renegotiation shows that the outstanding principal loan and interest thereof are fully covered and the safety margin determined following the inventory is at least not lower than the margin stated in the loan contract entered into by the bank and the borrower at the time of initial extension of the loan.

2.2.5.3. Doubtful

NBE directive no SBB/43/2008 classified the following non-performing loans and advance as doubtful:

a) Loans or advances with pre-established repayment programs: past due 180 (one hundred eighty) days or more, but less than 360 (three hundred sixty) days;

b) Overdrafts and loans or advances that do not have a pre-established repayment program, if:

1. The debt remains outstanding for 180 (one hundred eighty) consecutive days or more beyond the scheduled payment date or maturity, but less than 360 (three hundred sixty) days; or

2. The debt exceeds the borrower's approved limit for 180 (one hundred eighty) consecutive days or more, but less than 360 (three hundred sixty) days; or

3. Interest is due and uncollected for 180 (one hundred eighty) consecutive days or more, but less than 360 (three hundred sixty) days; or

4. For overdrafts, the account has been inactive for 180 (one hundred eighty) consecutive days or more, but less than 360 (three hundred sixty) days: or the account fails to show Twenty to forty nine percent of the approved limit at least once over 360 days preceding the date of loan review

2.2.5.4. Loss

NBE directive no SBB/43/2008 classified the following non-performing loans and advance as Loss:

a. Non-performing loans or advances with pre-established repayment programs past due to 360 (three hundred sixty) days or more;

b. Over drafts and loans or advances that do not have a pre-established repayment program, if:

1. The debt remains outstanding for 360 (three hundred sixty) consecutive days or more beyond the scheduled payment date or maturity; or

2. The debt exceeds the borrower's approved limit for 360 (three hundred sixty) days or more; or
3. Interest due and uncollected for 360 (three hundred sixty) days or more; or
4. For overdrafts, the account has been inactive for 360 (three hundred sixty) consecutive days or more, or the account fails to show Fifty percent and above of the approved limit at least once over 360 days preceding the date of loan review.

2.2.6. Provision of Non-performing Loans (NPLs)

National bank of Ethiopia directive requires all banks to maintain a provisions for Loan Losses account which shall be created by charges to provision expense in the income statement and shall be maintained at a level adequate to absorb potential losses in the loans or advances portfolio. In determining the adequacy of the provisions for Loan Losses Account, provisions may be attributed to individual loans or advances or groups of loans or advances. The provisions for Loan Losses Account always have a credit balance. Additions to or reductions of the provisions for Loan Losses Account should be made only through charges to provisions in the income statement at least every calendar quarter.

2.3. Credit Process

Credit process encompasses every activity involved in lending including sales, customer selection and screening, the application and approval process, repayment monitoring, and delinquency and portfolio management. It is also linked with the institutional structure pertaining to the credit process. Quality of credit process is one of the most determinant factors for the efficiency, impact and profitability of the banks. Thus getting the credit process and product mix right is therefore one of the most demanding as well as rewarding challenges of every financial institutions (banks)(Ferreti, 2007),. The sections that follow discuss major issues in credit process that include credit information, credit analysis process, credit approval and credit monitoring processes. Getting these well significantly affect loan performance.

2.3.1. Credit Information

Engagement in financing begins with customer recruitment. An issue of knowing the customer, customarily known as KYC (Know Your Customer) is so vital before proceeding to details. Banks use various means to obtain such information about the existing or potential customer. Use of financial statement, credit report from credit bureau, customers' history if not new is the potential sources of information (Ross et al., 1998).

According to The Federal Reserve (2004) a credit report is the organized presentation of information about an individual's and/or company's credit record that a credit bureau communicates to those who request information about the credit history of an individual's and/or company's experiences with credit, leases, non-credit-related bills, collection agency actions, monetary-related public records, and inquiries about the individual's credit history.

Further according to (Ferreti, 2007), credit information is usually integrated with data from other sources such as court judgments, electoral rolls and other private information provided by other organizations, which compile additional information referring to a consumer. This naturally is ideal source of input for credit analysis. The purpose of information sharing is to communicate relationship information from existing lending relationships to outside lenders (Gehrig and Stenbacka, 2007). Credit providers use credit information to conduct credit risk analysis of prospective borrowers in order to mitigate credit risk. As (Kallberg and Udell, 2003) highlight that information sharing is useful both at the origination stage and after credit has been extended. Especially at the origination phase, information sharing reduces the problems of adverse selection.

In fact the exchange of credit information improves non-performing loan ratios, leads to fewer losses through write offs and decreases interest rates for good credit risks (Jentzsch,2008: 538). (Jentzsch, 2008) further supports that sharing credit information between lenders intensifies competition and increases access to finance. As (Jappelli and Paggano, 2005) indicate that credit information sharing results in improved bank's knowledge of applicant's character, easing adverse selection and reduce the informational rents that banks could otherwise extract from

their customers. Credit information also acts as a borrower disciplining device, by cutting insolvent debtors off from credit and eliminates or reduces the borrower's incentive to become over-indebted by drawing credit simultaneously from many banks without any of them realizing it.

Further, (Gehrig and Stenbacka, 2007) highlight that information sharing reduces adverse selection problems and thereby promotes financial stability; it serves as a borrower disciplining device and it reduces the informational rents that banks can extract within the framework of their established customer relationships. According to (Khuzwayo, 2008), greater information sharing of trade credit data, particularly in the informal sector, could greatly expand credit access for small and medium enterprises. In addition (Barth, Lin, Lin and Song, 2008) show that information exchange will assist in minimizing lending corruption in banks by reducing information asymmetry between consumers and lenders, improving the bribery control methods and reducing informational rent, and hence the bargaining power of lenders. The exchange of consumer credit information disciplines borrowers to repay loans because borrowers do not want to damage the good report which can make it difficult for them to get credit (Swiss National Bank, 2008).

2.3.2. Credit Assessment

Credit analysis is the first step in the process to tailor-make a solution to fit the customer's needs. The assessment starts with an understanding of the customer's needs and capacities to ensure there is a good fit in terms of the financing solution. Credit assessment is the most important safeguard to ensure the underlying quality of the credit being granted and is considered an essential element of credit risk management (Cade, 1999).

The credit quality of an exposure generally refers to the borrower's ability and willingness to meet the commitments of the facility granted. It also includes default probability and anticipated recovery rate (Saunders & Cornett, 2003). Credit assessment thus involves assessing the risks involved in financing and thereby anticipating the probability of default and recovery rate. A credit analysis is used by the credit official to evaluate a borrower's character, capital, capacity,

collateral and the cyclical aspect of the economy, or generally referred to as the five C's (Strischek, 2000).

The Five C's of Credit

The five C's are considered the fundamentals of successful lending and have been around for approximately 50 years. Initially only character, capacity and capital were considered. However, over the years collateral and conditions were added. These provided an even more comprehensive view and clearer understanding of the underlying risk and resulting lending decision (Beckman & Bartels, 1955; Reed, Cotter, Gill & Smith, 1976; Sinkey, 2002).

According to (Murphey, 2004a), these principles should be the cornerstone of every lending decision. The five C's are discussed as follows:

a. Character

Character refers to the borrower's reputation and the borrower's willingness to settle debt obligations. In evaluating character, the borrower's honesty, integrity and trustworthiness are assessed. The borrower's credit history and the commitment of the owners are also evaluated (Rose, 2000). A company's reputation, referring specifically to credit, is based on past performance. A borrower has built up a good reputation or credit record if past commitments were promptly met (observed behavior) and repaid timely (Rose, 2002; Koch and McDonald, 2003). Character is considered the most important and yet the most difficult to assess (Koch and MacDonald, 2003).

Bankers recognize the essential role management plays in a company's success. Critically analyzing quality of management has been one of the ways of assessing character. The history of the business and experience of its management are critical factors in assessing a company's ability to satisfy its financial obligations. The quality of management in the specific business is evaluated by taking reputation, integrity, qualifications, experience and management ability of various business disciplines such as finance, marketing and labor relations into consideration (Sinkey, 2002; Nathenson, 2004). These factors can be regarded as a risk mitigates if a banker

views these positively. Much of its success can in fact be attributed to competent leadership. Companies with strong and competent management teams tend to survive in an economic downturn.

b. Capacity

Capacity refers to the business's ability to generate sufficient cash to repay the debt. An analysis of the applicant's businesses plan, management accounts and cash flow forecasts(demonstrating the need and ability to repay the commitments) will give a good indication of the capacity to repay (Sinkey, 2002; Koch and MacDonald, 2003).To get a good understanding of a company's capacity evaluating the type of business and the industry in which it operates is also vital. It plays a significant role since each industry is influenced by various internal and external factors. The factors that form the basis of this analysis includes: Type of industry, Market share, Quality of products and life cycle, whether the business is labor or capital intensive, the current economic conditions, seasonal trends, the bargaining power of buyers and sellers, competition and legislative changes (Koch and MacDonald, 2003; Nathenson, 2004). These factors lead the banker to form a view of the specific company and industry. The banker would regard this as a potential risk mitigate if he/she is confident about the company and industry and prospects for both appear to be positive.

Besides, the financial position is also a critical indication of a business' capacity. The company's financial position is evaluated by assessing past financial performance and projected financial performance. A company's past financial performance is reflected in their audited financial statements (Koch and MacDonald, 2003). Financial projections consist of projected cash flows demonstrating the need for the facility and the ability to repay the facility (Sinkey, 2002). In this regard at least three years audited financial statements(balance sheet and income statement) are required for data analysis. A financial spread sheet is used to undertake the analysis. Commercial banks utilize the financial spread (i.e. audited financial statement analysis and ratio calculations - DuPont) and it is applied through the Moody's Risk Advisor. The model also performs a peer comparison and calculates the probability of default (Koch and MacDonald, 2003). The

following financial ratio analyses are very critical in assessing business' position (Koch and MacDonald, 2003):

- **Liquidity ratios** - reflect the company's ability to meet its short-term obligations. According to (Conradie and Fourie, 2002), the current ratio is calculated by dividing the current assets by the current liabilities.
- **Activity ratios**- indicate whether assets are efficiently used to generate sales.
- **Leverage ratios**- indicate the company's financial mix between equity and debt and potential volatility of earnings. High volatility of earnings increases the probability that the borrower will be unable to meet the interest and capital repayments.
- **Profitability ratios**- supply information about the company's sales and earnings performance.

The cash flow analysis need to be done once the ratio analysis has been evaluated. The cash flow analysis allows the banker to distinguish between reported accounting profits (net income) and cash flow from operations (cash net income). Cash flow from operations give san indication of how much cash is generated from normal business activities. The cash flow generated must be sufficient to service the banking facilities (Sinkey, 2002; Koch and MacDonald, 2003).These assumptions are evaluated against the company's past performance, industry averages and expected economic trends (Nathenson, 2004).An assessment of the financial capacity of a company should always include an evaluation of trends. Evaluating trends over a three to five year period gives a clear picture of the direction a firm is heading. Ratio results should always be compared to a peer group of or an industry comparison. Is the firm collecting faster or slower than the rest of the industry? Is this company more profitable than other companies just like them? In this regard making a maximum use of ratios by comparing the firm to its peers using established benchmarks is so vital. Comparison of the company to firms in the same line of business, geographic area and employee size provides a more accurate comparison. The projections also reveal the purpose, amount and type of finance required. It also provides insight into the company's ability to generate sufficient cash flow to service the debt (Murphey, 2004b;

Nathenson, 2004). Banks must ensure that the type of financing is aligned to the purposed of finance (Rose, 2000).

Analysis of the financial capacity of the organization should also be carried out in order to determine a borrower's ability to meet financial obligations in a timely fashion. Its ability to pay may be much more important. It is critical to understand the difference. Watching customer payment habits over time is an excellent indication of cash flow. Also, checking bank and trade references, as well as any pending litigation or contingent liabilities are pivotal. Further checking for a parent company relationship is important as a parent company's guarantee may be available. Intercompany loans might affect financial solvency.

Agency ratings that predict slow payment or default should be carried out before completion of investigating capacity of a borrower.

c. Capital

Capital refers to the owner's level of investment in the business (Sinkey, 2002). Banks prefer owners to take a proportionate share of the risk. Although there are no hard and fast rules, a debt/equity ratio of 50:50 would be sufficient to mitigate the bank's risk where funding(unsecured) is based on the business's cash flow to service the funding (Harris, 2003).Lenders prefer significant equity (own contribution), as it demonstrates an owner's commitment and confidence in the business venture.

d. Conditions

Conditions are external circumstances that could affect the borrower's ability to repay the amount financed. Lenders consider the overall economic and industry trends, regulatory, legal and liability issues before a decision is made (Sinkey, 2002). Once finance is approved, it is normally subject to terms and covenants and conditions, which are specifically related to the compliance of the approved facility (Leply, 2003).

Banks normally include covenants along with conditions when credit facilities are granted to protect the bank's interest. The primary role of covenants is to serve as an early warning system (Nathenson, 2004). Covenants can either be negative or positive (Sinkey, 2002).

Negative covenants stipulate financial limitations and prohibited events (Rose, 2000; Koch and MacDonald, 2003). Some examples of negative covenants are:

- Cash dividends cannot exceed 50% of the net profit after tax (financial limitation).
- No additional debt may be obtained without the bank's prior approval (prohibited event).

Positive or affirmative covenants stipulate the provisions the borrower must adhere to (Rose, 2000; Koch and MacDonald, 2003). Some examples of positive covenants are:

- Audited financial statements must be provided within 90 days of the company's financial year-end.
- The borrower must maintain the following financial ratios: Interest cover ratio of 4:1 (defined as earnings before interest and tax divided by interest paid), Gearing ratio of 2:1 (defined as total liabilities divided by owners equity).

Conditions normally stipulate that all the security relevant to the loan should be in order before any funds will be advanced.

e. Collateral

Collateral (also called security) is the assets that the borrower pledges to the bank to mitigate the bank's risk in event of default (Sinkey, 2002). It is something valuable which is pledged to the bank by the borrower to support the borrower's intention to repay the money advanced. Security is taken to mitigate the bank's risk in the event of default and is considered a secondary source of repayment (Koch and MacDonald, 2003). Supporting of the aforementioned, (Rose and Hudgins, 2005) define secured lending in banks as the business where the secured loans have a pledge of some of the borrower's property (such as home or vehicles) behind them as collateral that may have to be sold if the borrower defaults and has no other way to repay the lender.

The purpose of security is to reduce the risk of giving credit by increasing the chances of the lender recovering the amounts that become due to the borrower. Security increases the availability of credit and improves the terms on which credit is available. The offer of security influences the lender's decision whether or not to lend, and it also changes the terms on which he is prepared to lend, typically by increasing the amount of the loan, by extending the period for which the loan is granted and by lowering the interest rate (Norton and Andenas, 1998: 144).

According to De Lucia and Peters (1998), in the banking environment, security is required for the following three reasons:

- to ensure the full commitment of the borrower to its operations,
- to provide protection should the borrower deviate from the planned course of action outlined at the time credit is extended, and
- to provide insurance should the borrower default.

The security value of an asset is based on the estimated re-sale value of the assets at the time of disposing of it (McManus, 2000). The specific type of property is valued by the bank to determine the property's market value for security purposes (Rose, 2000).

Besides the physical collateral a third party can provide a surety ship for the debt of the borrower. Should the borrower not be in a position to repay the debt, the bank will then call on the surety for repayment (Koch & MacDonald, 2003). It is normal banking practice for the banks to take the surety ships of the shareholders/directors when funds are advanced to a company (Rose, 2000; Vance, 2004). C's" are well-known credit assessment principles, commercial banks have developed their own qualitative credit risk assessment models to assess whether the bank will agree to lend to a specific business (Sinkey, 2002).

Based on the credit information obtained about the borrower and credit assessment carried out, either by quantitative or qualitative model (through the use of the five C's) or combination of both, credit sanctioning is done.

2.3.3. Credit Approval

Extending credit is the careful balance of limiting risk and maximizing profitability while maintaining a competitive edge in a complex, global marketplace. Banks go through thorough process in approving credit to hit the balance. Credit approval is the process of deciding whether or not to extend credit to a particular customer. It involves two steps: gathering relevant information and determining credit worthiness (Ross, Westerfield and Jordan, 1999).

The quality of the credit approval process from a risk perspective is determined by the best possible identification and evaluation of the credit risk resulting from a possible exposure. The credit risk can be distributed among the following risk components: Probability of default (PD), Loss given default (LGD) and Exposure at default (EAD). (Oesterreichische National bank Credit Approval Process and Credit Risk Management, 2000, Bluhm, Overbeck&Wagner, 2003)

Probability of default (PD)

Default probability is the likelihood that the business will default on its repayment over the term of the facility. Reviewing a borrower's probability of default is basically done by evaluating the borrower's current and future ability to fulfill its interest and principal repayment obligations.

Loss given default (LGD)

Exposure at default is the magnitude or exposure that would be materialized in the event of a default. It addresses what fraction of the exposure may be recovered through bankruptcy proceedings or through some other form of settlement in the event of a default. The loss given default is affected by the collateralized portion as well as the cost of selling the collateral. Therefore, the calculated value and type of collateral also have to be taken into account in designing the credit approval processes.

Exposure at default (EAD)

In the vast majority of the cases described here, the exposure at default corresponds to the amount owed to the institution. Thus, besides the type of claim; the amount of the claim is another important element in the credit approval process.

Once information has been gathered, the firm faces the hard choice of either granting or refusing credit. Many financial managers use the "five C's of Credit" as their guide (Ross, Westerfield and Jaffe, 1999) as discussed earlier and identify and evaluate the credit risk resulting from a possible exposure to sanction the credit.

2.3.4. Loan Follow up

Lending decision is made on sound credit risk analysis /appraisal and assessment of credit worthiness of borrowers. A loan granted on the basis of sound analysis might go bad because of the borrower may not meet obligations per the terms and conditions of the loan contract. It is for this reason that proper follow up and monitoring is essential. Monitoring or follow-up deals with the following vital aspects:

- Ensuring compliance with terms and conditions
- Monitoring end use of approved funds
- Monitoring performance to check continued viability of operations
- Detecting deviations from terms of decision
- Making periodic assessment of the health of the loans and advances by noting some of the key indicators of performance that might include profitability, activity level and management of the unit and ensure that the assets created are effectively utilized for productive purposes and are well maintained.
- Ensuring recovery of the installments of the principal and interest in case of term loan as per the scheduled repayment program
- Identify early warning signals, if any, and initiate remedial measures thereby averting from possible default.

Basically there are three types of loan follow up systems. These are: Physical follow up, financial follow up and legal follow up.

Physical Follow -up

Physical follow-up helps to ensure existence and operation of the business, status of collateral properties, correctness of declared financial data, quality of goods, conformity of financial data with other records (such as taxes ,register books), availability of raw materials, labor situation, marketing difficulties observed ,undue turnover of key operating personnel, change in management set up among others.

Financial Follow- up

Financial follow up is required to verify whether the assumptions on which lending decisions was taken continues to hold good both in regard to borrowers' operation and environment ,and whether the end use is according to the purpose for which the loan was given.

Legal Follow- up

The purpose of legal follow up is to ensure that the legal recourse available to the Bank is kept alive at all times. It consists of obtaining proper documentation and keeping them alive, registration, proper follow up of insurances. Specific issues pertaining to legal follow up include: ascertaining whether contracts are properly executed by appropriate persons and documents are complete in all aspects, obtaining revival letters in time (revival letters refer to renewal letter for registration of security contracts that have passed the statutory period as laid down by the law), ensuring loan/mortgage contracts are updated timely and examining the regulatory directives, laws, third party claims among others.

2.4. Banking Risks

Shareholder value maximization requires a firm to engage in risk management practices only if doing so enhances the value of the firm and, by implication, its value to shareholders (Ali, 2006). A volatile economy and recent credit crisis show the importance of banks to increase attention on

how risks can be measured and kept under control. Bessis (2002:11) defines banking risks as “adverse impacts on profitability of several distinct sources of uncertainty”.

Many risks are common to all financial institutions that include: credit, liquidity, market, operational, currency, solvency, and interest rate, country risks among others.

2.4.1 Credit risk

According to Valsamakis et al (2005), credit risk is the risk that a financial contract will not be concluded according to the agreement. It is the risk that the counter party to an asset will default. In other words it is the risk to earnings or capital due to borrowers’ late and nonpayment of loan obligations. Credit risk encompasses both the loss of income resulting from the sector inability to collect anticipated interest earnings as well as the loss of principal resulting from loan defaults. Credit risk arises because the possibility that the expected cash flows from advances and securities held, might not be paid in full. Credit risk is considered the most lethal of the risks banks face (Cade, 1999).

Credit risk includes both transaction risk and portfolio risk. (Risk Management, GTZ, 2000). Transaction risk refers to the risk within individual loans, transaction risk is mitigated through borrower screening techniques, underwriting criteria and quality procedures for loan disbursement, monitoring, and collection. Portfolio risk refers to the risk inherent in the composition of the overall loan portfolio. Policies on diversification (avoiding concentration in a particular sector or area), maximum loan size, types of loans, and loan structures lessen portfolio risk.

2.4.2. Liquidity risk

Liquidity risk is the possibility of negative effects on the interests of owners, customers and other stakeholders of the financial institution resulting from the inability to meet current cash obligations in a timely and cost-efficient manner. Liquidity risk occurs when there is a sudden surge in liability withdrawals resulting in a bank to liquidate assets to meet the demand (Bessis,

2002). It usually arises from management's inability to adequately anticipate and plan for changes in funding sources and cash needs. According to Rose and Hudgins (2005) bankers and other financial institutions are concerned about the danger of not having enough cash to meet payment or clearing obligations in a timely and cost effective manner. Efficient liquidity management requires maintaining sufficient cash reserves on hand (to meet client withdrawals, disburse loans and fund unexpected cash shortages) while also investing as many funds as possible to maximize earnings (putting cash to work in loans or market investments) (Risk Management, GTZ 2000).

2.4.3. Market risk

Market risk is the risk incurred in the trading of assets and liabilities when interest rates, exchange rates and other asset prices change (Saunders and Cornett, 2003). It is the current and potential risk to earnings and shareholders' equity resulting from adverse movements in market prices. It arises from interest rate, equity and foreign exchange risks (Kochand Macdonald, 2003). According to Bessis (2002) due to increased competition the interest income of banks is declining and banks are concentrating more on non-interest income in order to mitigate this risk.

2.4.4. Operational risk

It is the risk of loss resulting from inadequate internal processes, people and systems or from external events (Koch and Macdonald, 2003). Operational risk is the possible risk that existing technology or support systems will fail or malfunction. It also includes human errors, fraud and non-compliance with an institution's procedures and policies (Bessis, 2002).

2.4.5. Currency risk

Concerns the possible impact which fluctuations in exchange rates may have on the foreign exchange holdings or the commitments payable in foreign currencies by business organizations (Valsamakias, et al., 2005). It is the possibility that exchange rate fluctuations can adversely affect the value of a bank's assets and liabilities held in foreign currencies(Bessis, 2002).

2.4.6. Capital or Solvency risk

It is the risk that a bank may become insolvent and fail (Koch and Macdonald, 2003). It isn't considered a separate risk because all of the risks a bank faces, in one form or another, affect a bank's capital.

2.4.7. Interest rate risk

A bank is exposed to interest rate risk when the maturities of the bank's assets and liabilities are mismatched (Saunders & Cornett, 2003). Interest rate risk arises from the possibility of a change in the value of assets and liabilities in response to changes in market interest rates. If interest rates rise and a mismatch occur in maturities by holding longer-term assets than liabilities, the market value of the assets will decline by a larger amount than the liabilities. Also known as asset and liability management risk, interest rate risk is a critical treasury function, in which financial institutions match the maturity schedules and risk profiles of their funding sources (liabilities) to the terms of the loans they are funding (assets). Bessis,(2002) states that interest rate risk could result in economic losses and insolvency.

2.4.8. Country risk

It is associated with the risk that foreign borrowers cannot repay the debt due to foreign currency shortages, adverse political and economical conditions or interference by the foreign government (Saunders and Cornett, 2003). Besides the aforementioned risks Rose and Hudgins (2005) state that banks are also exposed to: Compliance risk, Reputation risk, Sovereign risk, Strategic risk, and Legal and regulatory risks.

Financial institution managers (and regulators) review these risks in light of i) the institution's potential exposure to loss, ii) the quality of internal risk management and information systems, and iii) the adequacy of capital and cash to absorb both identified and unidentified potential losses. In other words, management determines whether the risk can be adequately measured and

managed, considers the size of the potential loss, and assesses the institution's ability to withstand such a loss (Risk Management Framework, GTZ 2000).

2.5. Credit Risk Management

Loan is a major asset, income source for banks and risky area of the industry. Moreover, its contribution to the growth of any country is very clear. Bank credit is the primary source of debt financing available for most customers in the personal, business or corporate market. The underlying need for credit varies across these markets. Banks generally also want to increase the base of their income and use credit extension as an opportunity to cross sell other fee generating services when a customer applies for credit facilities (Koch & MacDonald,2003).

Any successful business must meet its customer needs and make a profit. Likewise, successful financial institutions must meet the desperate needs of depositors and borrowers. Depositors look for high rates, short terms and no risk, while borrowers seek low rates and long terms. Financial institutions are therefore, in the risk intermediation business. To be successful, financial institutions, banks in particular, must properly underwrite risk, manage and monitor the risk assumed (Barrickman, 1990).

Credit risk can be defined as the potential for a borrower or counter party to fail to meet their obligations in accordance with the terms of an obligation's loan agreement, contract or indenture (Sobehart, Keenan & Steyn, 2003). Credit risk is considered the oldest form of risk in the financial markets. Caouette, Altman & Narayanan (1998: 1) state that "credit risk is as old as lending itself", dating back as far as 1800 B.C. The first banks, which started in Florence seven hundred years ago, faced very similar challenges that banks face today. Although managing credit risk is their core competency, many banks failed due to over-extension of credit (Caouette et al, 1998).

The most prominent risk assumed by banks is credit risk. This is due to the various factors that influence a borrower's ability to repay the credit facility. The borrower's ability to repay is closely linked to the general economic conditions of a country. In favorable economic conditions the ability to repay increases, which could be due to a favorable interest rate environment, low

inflation, increased income levels or a combination of these factors. The opposite is however true in poor economic conditions. The borrower's ability to repay is adversely effected under these conditions due to a reduction in disposable income (Koch and MacDonald, 2003).The increasing variety in the types of counterparties (from individuals to sovereign governments) and the ever-expanding variety in the forms of obligations (from auto loans to complex derivatives transactions) has meant that credit risk management has jumped to the forefront of risk management activities carried out by firms in the financial services industry(Basel committee,1999).

The risk profile of banks is fundamentally different from that of other financial institutions, like stockbrokers and insurance industry. An integral part of banking is the management of credit risk and it is done through well-diversified portfolios of exposure. Most banks fail because of poorly managed credit risk (Rose, 2002).Credit risk management primarily focuses on loss avoidance and the optimization of return on risk. Financial institutions in the world are facing two major challenges. Firstly, they need to deliver increasing returns and value to shareholders and secondly, they need to determine how to capitalize on the New Capital Accord's (Basel II) minimal capital requirements(Belmont, 2004).

2.6. Empirical Review of Bank Specific Factors used in this study

The typical nature of the banking sector along with the specific policy choices of a particular bank with regard to its efforts to maximize efficiency and improve in its risk management are expected to exert a vital influence on the evolution of NPLs. As the literature points out, the factors affecting the asset quality of banks can be bank specific in nature. Based on empirical regularities found in the literature (Ghosh,2013)and other different literatures considered the following bank-level factors in understanding their NPLs behavior.

2.6.1. Interest Rate

Banks that charge high interest rate would comparatively face a higher default rate or non-performing loans. Study by Sinkey and Greenwalt (1991) on large commercial Banks in US

depict that a high interest rate charged by banks is associated with loan defaults. Rajan and Dhal (2003) who used a panel regression analysis indicates that financial factors like cost of credit has got significant impact on NPLs. Study by Waweru and Kalini (2009) on the commercial banks in Kenya using statistical analysis indicates that high interest rate charged by the banks is one of the internal factors that leads to incidence non-performing loans.

Increase in interest rates would mean higher interest burden on the banks' borrowers particularly if the loan is based on floating rates. Higher debt servicing costs makes it difficult for the borrowers to honor their financial obligations thus giving rise to the possibility of higher NPLs. Bofondi and Ropele (2011) found new bad loans (NBL) ratio for households to increase with short term nominal money market interest rate. Hoggarth, Sorensen, and Zicchino (2005) found increase in nominal interest rate to increase banks' write-off ratio after 1 to 3 year lags. A number of other empirical papers have found NPLs to increase with nominal or real interest rates (Espinoza & Prasad, 2010; Fofack, 2005; Gerlachet al., 2005; Kalirai & Scheicher, 2002; Messai, 2013; Shuchang, 2002).

Besides, studies by Berger and DeYoung, 1997, for the US; Jimenez and Saurina, 2006, for Spain; Quagliariello, 2007, for Italy; Pain, 2003, for the UK; and Bikker and Hu, 2002, (for 29 OECD countries) banks profit margin exhibited by high interest rate affects occurrence of NPLs.

2.6.2. Credit Terms

Credit sanctioning that has not duly considered the credit terms would potentially lead to occurrence of poor loan performance. Jimenez and Saurina (2005) in their study conducted on the Spanish banking sector from 1984 to 2003 evidence that NPLs are determined by lenient credit terms. Cause for the lenience is attributed to disaster myopia, herd behavior, moral hazard and agency problems that may entice bank managers to take risk and lend excessively during boom periods as per this study. Rajan and Dhal (2003) who studied the Indian commercial banks also found out terms of credit determines occurrence of Non-performing loans. Rajan (1994) hypothesizes that bank managers have short-term decision horizons because their reputations are strongly influenced by public perceptions of their performance, as evidenced by short-term

earnings. Managers' reputations suffer if they fail to expand credit when the economy is expanding and bank earnings are improving.

This herd behavior will result in some loans going to customers with higher default risk than would occur otherwise. Weinberg (1995) also suggests that bank managers adjust lending standards as market conditions change, seeking to smooth overall lending risk. The Office of the Comptroller of the Currency (OCC, 1988) concludes that the dominant reason for bank failure in the early 1980s was poor bank management, which encompasses lax lending standards. An FDIC study of the causes of the banking crises of the 1980s and early 1990s (FDIC, 1997) finds that a combination of factors – economic, legislative, managerial, and regulatory – led to the banking crises.

Importantly, the FDIC study finds that bank managers adjusted lending practices as economic conditions changed, increasing lending into economic and spectral booms and reducing lending during economic contractions. In addition, the FDIC study suggests that bank managers reacted to competition from other bankers and that this competition might have encouraged a weaker lending standard that leads to loan defaults. Besides study by Waweru and Kalini (2009) indicates lack of proper skill amongst loan officials, speedy process of evaluating loans mainly due to external pressure, are among the factors that lead to huge concentration non-performing loans. Commercial banks and other financial institutions experienced an increase in competition in the United States during 1980 and early 1990.

This resulted in a change in lending practices. Due to the competition and the pressure to deliver increasing returns, banks increased the granting of credit facilities to marginal borrowers. These facilities were aggressively priced to compensate for the increase in risk. Although the strategy delivered short-term results, credit losses followed and in many cases caused banks to fail (Koch & MacDonald, 2003). The failure of banks can therefore, not only be linked to unfavorable economic environments, but also to the nature of the credit policies they employ.

2.6.3. Loan Composition

NPLs can also be influenced by the composition of loan portfolio:

a. Secured Loan

Granting secured loans or loans backed by borrowers' assets/collaterals has been suggested in the literature as a solution to adverse selection and moral hazard problems arising out of information asymmetry between borrowers and the lending banks (Boot and Thakor 1994). Banks are found to use collaterals for granting loans to borrowers with poor credit quality (Berger and Udell 1990, 1995; Jimenez et al. 2006), probably to take care of the higher credit risks associated with these loans. So going by this argument, one can say higher use of collaterals reflects higher risks in loan portfolio. But one can also argue that high quality or low risk borrowers might be more willing to pledge collateral.

If this argument holds, then higher secured lending would lead to lower NPLs. Empirically, Salas and Saurina (2002) found loans without collateral to be riskier than mortgages for Spanish savings banks during 1985-1997. Jimenez, Salas, and Saurina (2006) also found collateral to be negatively associated with borrowers' risk. Jimenez et al. 2006 also found that the use of collateral increased in periods of high interest rates. This was probably because higher collateral can take care of the increase in risk premium and hence higher moral hazard arising out of rise in interest rates. So, the impact of secured loans on NPLs is likely to be influenced by the effect of interest rate.

Use of collateral can also be governed by the lending bank's attributes. For example, if collateral acts as a substitute for thorough credit appraisal (Manove and Padilla 2001), banks with inadequate credit appraisal skills might go for higher use of collaterals.

b. Priority Sector Lending

In India, commercial banks are directed to engage in lending to priority sectors like agriculture, exports, small scale industries, weaker sections towards meeting the social goals and national priorities of the government. Banks were required to achieve a target of 40% of their net bank credit as priority sector loans by 1985 (Ghosn, 2013). Priority sector lending has been traditionally associated with higher administrative costs and higher risks, and one of the early studies by RBI also found NPLs in priority sector to have pushed up the NPLs of the banks during 1996-98.

c. Lending to sensitive sectors, capital market and real estate

Advances to sensitive sector in the form of advances to capital market and advances to real estate might be riskier and therefore can lead to increase in NPLs (Pain, 2003).

2.6.4.Loan Follow-up (Monitoring)

Regular monitoring of loan quality, possibly with an early warning system capable of alerting regulatory authorities of potential bank stress, is essential to ensure a sound financial system and prevent systemic crises (Agresti et al.,2008). The need to give due attention to borrower thus need not be overemphasized in order to ensure loan performance. There is a tendency by borrowers to give better attention to their loans when they perceive they got better attention. Some of the loans defaults ascribe to lower level of attention given to borrowers. It is advised that banks keep up with their loans timely.

Banks rarely lose money solely because the initial decision to lend was wrong. Even where there are greater risks that the banks recognize, they only cause a loss after giving a warning sign (Machiraju). More banks lose money because they do not monitor their borrower's property, and fail to recognize warning signs early enough. When banks fail to give due attention to the borrowers and what they are doing with the money, then they will fail to see the risk of loss. The objective of supervising a loan is to verify whether the basis on which the lending decision was

taken continues to hold good and to ascertain the loan funds are being properly utilized for the purpose they were granted. In order to meet these objectives banks need to see whether the character of the borrower, its capacity to repay the loan, capital contribution, prevailing market conditions and the value of the collateral that was taken during loan approval time continues to remain the same (GeorgeG, 2004).

As has been mention a bank can use different ways to monitor the borrower. Follow up the financial stability of a borrower can be done by periodically scrutinizing the operations of the accounts, examining the stock statements and ascertaining the value of security. Visiting the borrower periodically to have understanding of the progress of the borrower's business activity and thereby give advice as necessary is also among the methods Banks adopt to follow up their loans. It is clear that effective credit monitoring involves looking into various operations of the company including operations of the loan, checking whether the company is properly managed, and the environment in which the company is carrying out its business is satisfactory.

Constant monitoring increases the chance that the company will respond to a bank's concern and provide information more willingly. A bank which always closely follows a company's standing can often point out danger or opportunities to the company, as well as quick agreement to request for credit. It thus establishes that monitoring is basically constructive, and not a panic reaction and carries more weight when it expresses concern.

A bank should have clearly defined continuous procedures for identifying potential bad and doubtful loans. These procedures should include regular independent reviews of the loan portfolio. Within this system, there should be formal procedures for the continuous review of all large loans and all areas of lending concentration. These reviews should place particular emphasis upon the borrower's continuing ability to service the loan. Failure to do these continuous reviews and monitoring will lead to loss to banks or increases the risk of such losses. From the regulatory point of view, Ethiopian banks are required to make continuous review of their loan and submit reports to the central bank. This function of banks has a legal as well as contractual base. But the detail as to the frequency of visiting the borrower's premises, verifying the use of the loan and other related circumstances is left to the discretion of individual banks.

The legal base for banks to do the review is provided under Article 5 of Directive No.SBB/43/2008.

2.6.5. Risk Assessment

Risk, and the ways, in which it can be identified, quantified and minimized, is key concerns for a bank's management and its auditors when they are considering the need to provide for bad and doubtful loans. No loan is entirely without risk. Every loan, no matter how well it is secured, and no matter who is the borrower, has the potential to generate loss for the lender. It is the degree of risk to which a loan is susceptible and the probability of loss that vary; these should normally be reflected in the interest margin and other terms set at the inception of the loan (Brown, 1993).

A bank, in considering whether to lend or not, takes into account the quality of a borrower which is reflected in, inter alia, its past and projected profit performance, the strength of its balance sheet (for example, capital and liquidity) the nature of and market for its product, economic and political conditions in the country in which it is based, the quality and stability of its management and its general reputation and standing. It is important for the bank to know the purpose of the loan, to assess its validity and to determine how the funds required for the payment of interest and the repayment of capital will be regenerated. The borrower's ability to repay a loan is of paramount importance. Ideally, the loan will be self- financing in that it will be repaid from the cash flow that the borrower is able to generate from employing the proceeds of the loan. A bank will often require security for a loan in the form, say, of a guarantee or mortgage, in which case it will be concerned about the value and title of that security. The decision to grant loan, however, should be based on the prospects and solvency of the borrower and a careful analysis of how the funds to repay the loan will be generated.

In general, banks lack effective measures to identify, quantify and control the regional and industrial risk, constrained by obtaining historical data, decentralized information systems and immature portfolio management skills. So they have to make judgment mainly based on personal experience and consequently have weak management measures on concentrated and systemic

risk (Ning, 2007). Basically, the non- performing loans are a result of the compromise of the objectivity of credit appraisal and assessment. The problem is aggravated by the weakness in the accounting, disclosure and grant of additional loans. In the assessment of the status of current loans, the borrower's credit worthiness and the market value of collateral are not taken into account thereby rendering it difficult to spot bad loans (Patersson, 2004). Compromise in quality of risk assessment thus leads to occurrence of nonperforming loans.

2.6.6. Operational Efficiency

The quality of management is considered to be critical for the long-run success of any company in general. It is more important for banks in particular due to the dynamicity in the banking industry caused by factors like regulatory changes, technology advancements, and macro-economic cause-and- effect linkages. If the management quality is poor, it is likely to get reflected in bank's credit appraisal decisions as well as monitoring of its collaterals and borrowers. Efficiency is often used in the literature as a proxy for management quality. So a poor management quality, captured through lower levels of operational efficiency, can be an indication of poor credit management in a bank (*Bad Management hypothesis*) and hence cause higher NPLs (Berger & Deyoung, 1997).

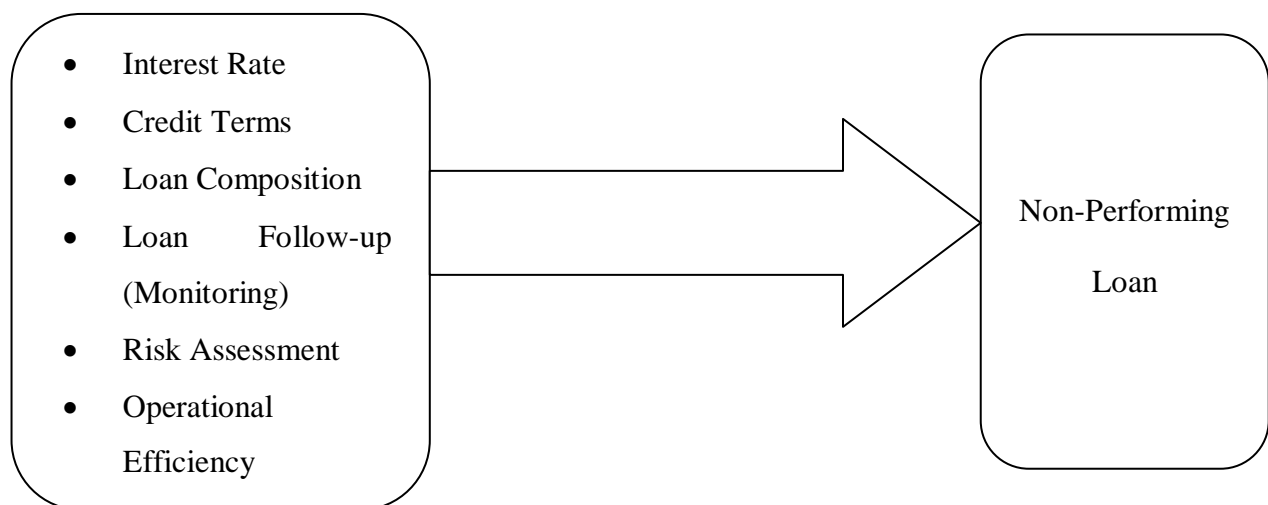
However (Berger & Deyoung, 1997) also argued that higher level of operational efficiency might be associated with lesser resources spent in credit appraisals and therefore can result in higher NPLs in future (*Skimping Hypothesis*). So, a higher operating costs might be an indication that the bank has high quality but expensive credit evaluation mechanism (Pain,2003). Berger and Deyoung (1997) also proposed '*bad luck*' hypothesis, according to which problem loans (caused by uncontrollable factors) can lead to higher future operating costs associated with NPL management.

Thus according to 'bad management hypothesis', higher the operational costs (i.e. lower the efficiency) higher would be the NPLs. But according to skimping hypothesis, lower operational costs (i.e. higher the efficiency) would cause higher NPLs in future (Berger & Deyoung, 1997b). 'Bad luck' hypothesis would however suggest higher NPLs to temporally precede higher

operational costs (or lower efficiency). There is evidence in the literature supporting bad management hypothesis (Williams, 2004) as well as bad luck hypothesis in the context of European banks (Rossi et al., 2005) while bad management hypothesis is found to be supported for Czech banks (Podpiera & Weill, 2008). Several other studies found cost efficiency to be an important determinant of NPLs in banks (Espinoza & Prasad, 2010; Louzis et al., 2012; Quagliariello M., 2006; Salas & Saurina, 2002)

2.7. Conceptual Framework For the Study

From the literature review, discussed above, the researcher constructed the following conceptual framework to summarize the main focus and scope of this study in terms of dependent and independent variables included.



Source: Developed for the Research

2.8. Conclusions and knowledge gap

The empirical literatures that are discussed so far showed that, banks NPLs are determined by both macroeconomic and bank specific factors. However, Most of the literatures that are discussed so far appeared to have focused on studies that were conducted in the banking sector of different countries outside Ethiopia. This is because only few studies have assessed the determinants of NPLs, despite the fact that several studies were conducted by different researchers on the Ethiopian Banking sector. In most of the studies, NPLs are only considered as additional explanatory variable and not deeply assessed. Consequently, the Banking sectors in Ethiopia have so far received inadequate attention in the literature review of NPLs.

In the context of Ethiopia, the related studies conducted by Wondimagegnehu (2012), Daniel (2010), Tilahun and Dugasa (2014) and Habtamu (2015) assessed the determinants of NPLs in Ethiopian commercial banks by using same bank-specific variables. Accordingly, as per the knowledge of the researcher, all the studies conducted in Ethiopian banking sector clearly failed to identify all factors which affect the NPLs.

In general, the lack of sufficient research on the assessment of NPLs in Ethiopian banking sector and the focus of the existing studies being only on the determinants of NPLs initiates this study. Hence, the purpose of this study is to assess the NPLs of Ethiopian commercial banks through the main bank specific factors which is proposed to fill the existing knowledge gap.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1. Introduction

All the elements in this chapter were constructed based upon the purpose of the research which is assessing of Non-Performing Loan of Commercial Banks of Ethiopia. Primary and Secondary data were used for this research. Data were gathered from national bank of Ethiopia, and commercial banks in Ethiopia

3.2. Research Design

This study were adapted descriptive research design approach, because as stated by shajahan (2004) descriptive research design describes the situation or the phenomena as it is, not arguable and it give an answer for why, when, what and who questions. So, it is the suitable design in order to get the relevant and reliable information necessary for successfully completing this study.

3.3. Target Population

The collection of all possible observations of a specified characteristic of interest is called a population while a collection of observations representing only a portion of the population is called a sample. In this study, the target population is the banking industry in Ethiopia. The target population for this study were all commercial banks that were registered by NBE and operational in the country. Currently, the country has nineteen commercial banks licensed and registered by the NBE, three of them are state banks and sixteen of them are private banks.

The target population (respondents) in the banks are credit managers, credit analysts, credit follow up and credit officers from the head offices of the banks.

Table 1: List of Commercial banks in Ethiopia

S.No.	Name of Banks	Year of Establishment
1	Development Bank of Ethiopia	1909 E.C
2	Commercial Bank of Ethiopia	1963 E.C
3	National Bank of Ethiopia	1964 E.C
4	Awash International Bank	1994 E.C
5	Dashen Bank	1995 E.C
6	Bank of Abyssinia	1996 E.C
7	Wegagen Bank	1997 E.C
8	United Bank	1998 E.C
9	Nib International bank	1999 E.C
10	Cooperative Bank of Oromia	2004 G.C
11	Lion International Bank	2006 G.C
12	Zemen Bank	2008 G.C
13	Oromia International Bank	2008 G.C
14	Buna International Bank	2009 G.C
15	Berhan International Bank	2009 G.C
16	Abay Bank S.C	2010 G.C
17	Addis International Bank S.C	2011 G.C
18	Dehub Global Bank S.C	2012 G.C
19	Enat bank	2013 G.C

Source: National Bank of Ethiopia

3.4. Sample Design and Sample Size

This study were used purposive sampling. Due to time and budget constraints the researcher was not include all banks. Particularly, the researcher used the banks service year as a criteria for selection as sample bank those were on operation before 2000 E.C. So that were selected one state bank and six private commercial banks that meet this criterion. The cut off year was set due to the importance of experience in the industry to understand factors that would cause occurrence of loan default. In line with this seven banks fall in the sample frame. The justification for using purposive sampling is to obtain in depth and diverse information from employees who have high involvement in credit practice. The researcher considers that the sample size is sufficient to make sound conclusion about the population, so that it was cover 40% of the total population, i.e. (seven banks of nineteen) and also the researcher taken 40% of the total respondents as a sample (72 respondents/ employees). Questioner were distributed randomly. Moreover, 7 employees who are at managerial level or senior officers were select purposively as participant for interview. The justification for selecting managers or senior officers for the interview is to obtain diverse information from their knowledge and experience.

Table 2: List of Sample Commercial banks in Ethiopia

S.No.	Name of Banks	Year of Establishment	Staff engaged in credit related activities	Sample (40% of staff engaged in credit related activities)
1	Commercial Bank of Ethiopia	1963 E.C	110	22
2	Awash International Bank	1994 E.C	60	12
3	Dashen Bank	1995 E.C	60	12
4	Bank of Abyssinia	1996 E.C	55	11
5	Wegagen Bank	1997 E.C	35	7
6	United Bank	1998 E.C	20	4
7	Nib International bank	1999 E.C	20	4
Total Credit Employees and Sample Credit Employees			360	72

Source: Developed for the research

3.5. Types of Data Collected

The researcher, to successfully accomplish the research work, used both primary and secondary data. Primary data were collected from employees (credit managers, credit analysis, credit follow-up and credit officials) working in different units of credit departments of the selected sample banks. Whereas, secondary data were gathered from different published and unpublished documents, such as proclamations, by-laws (rules and regulations), magazines, reports, newspapers, literatures and web sites.

3.6. Data collection Instruments

This research seeks to assessing of non-performing loan of commercial banks of Ethiopia. The researcher were used open and close ended questionnaire and open-ended structure interview to collect primary data useful for addressing the objective of the study. The questionnaire were prepared in English language and it classified into two sections. The first part of the questions 1-4 were designed to collect participants' profile(background information). The second part, questions 5-27 in the questionnaire were related to factors that determine loan default or occurrence of nonperforming loans. Questions 28 was designed in such a way that respondents rate factors (1-6) that determine non-performing loans in order of their importance when compared with other factors in the list. Questions 5-27 show a rating (a five- point scale) in each factor that determine occurrence on NPL. A rating 1 indicates a strong agreement, 2 agreement, 3 neutral (don't take position), 4 disagreement and 5 strong disagreement. The self-administered questionnaire were delivered to the selected experts engaged in loan related activities. In order to provide feedback, clarification and ensure response a follow up calls were Carried out.

The study were used survey design with a structured self-administered questionnaire. To gather data which were used in the study, self-administered questionnaires were distributed to research participants. In order to gather data, the researcher were used questionnaire as best instrument of gathering primary data from selected employees at different level of credit process of the selected sample banks.

In addition, structured open-ended interviews were conducted with managers or senior officials of credit process to obtain data resulted from in-depth exploration of their knowledge and experience. In this type of interview, a series of open-ended questions were conducted to all interviewees, resulting in ensuring comparability of responses. Data gathered from primary sources were further substantiated by a critical review of secondary data like credit policy, annual reports specifically related to Non-performing loans (NPL) and other published and unpublished materials.

Secondary data were collected to get qualitative data through critical review and analysis of documents such as proclamations, by-laws (rules and regulations), magazines, reports, newspapers and webs. In addition, the credit policy & annual reports of the banks and other relevant documents like journals and other literatures were reviewed as secondary data sources.

3.7. Validity, Reliability and Ethical Issues

Validity and reliability of the research measurement instruments influence, first the extent that one can learn from the phenomena of the study. Second the probability that one will obtain statistical significance in data analysis and third the extent to which one can bring meaningful conclusion from the collected data. Most ethical issues in research fall into one of the four categories: protection from harm, informal consent, right to privacy and honesty with professional colleagues (Leedy and Ormrod, 2005).

3.7.1. Validity

According to Leedy et al (2005), validity is the ability of an instrument used to measure what it is designed to measure. They further explained two basic questions: does the study have sufficient control to ensure that the conclusions the researcher draw are truly warranted by the data and can the researcher use what he/she has observed in the research situation to make generalization to the population beyond that specific situation? The answers to these two questions address the issues of the content validity, internal validity and external validity.

a. Content validity

In order to check content validity for the descriptive survey studies, Leedy et al., (2005) suggests three tactics: using multiple sources of evidence, establishing chain evidence and having key informants reviewing draft of the study report. To ensure content validity the target groups were included in sample represent were those who know better about the issue were investigated.

b. Internal validity

The internal validity of a research study is the extent to which its design and the data it yield allow the researcher to draw accurate conclusions about the relationships within the data. In this case, it's less likely that there were a Hawthorne effect since the respondents have professional background and knowledge about bank lending and credit management and those who were involved in the interview were not expected to change their behavior during interview. They were also asked to give their consent and they were gave all the right not to answer any questions if they did not wish to.

c. External validity

External validity is related to the extent to which the findings from one research can be applied to other similar situations. In other words, how the conclusions drawn can be generalized to other contexts (Leedy et al., 2005). According to Leedy et al, these three strategies are: a real life setting, a representative sample and replication in different settings Leedy et al (2005). To ensure face validity the researcher were performed multi method approach i.e. two or more different characteristics measured using two or more different approaches.

3.7.2. Reliability

According to Leedy and Ormrod (2005) reliability of a measurement instrument is the extent to which it yields consistent results when the characteristic being measured has not been changed. Furthermore, Cameron et al., (2007) states that in order to increase reliability, there searcher used

the same template as far as possible and used static methods. To ensure the reliability of measurement instrument the researcher were performed first standardize the instrument from one person or situation to another.

Besides, the researcher also believes that this study is reliable since the respondents were selected based on their past experience on credit management and their answers were expected to be credible. Given the credibility of selected respondents, the same answers were probably to be given to another independent researcher. Furthermore, ambiguous terms were not used in interviews to avoid confusion.

3.7.3. Ethical Issues

Due consideration was gave to obtain consent from each participant about their participation in the study. It was strictly conducted on voluntary basis. The researcher tried to respect participants' right and privacy. The findings of the research were presented without any deviation from the outcome of the research. In addition, the researcher was gave full acknowledgements to all the reference materials used in the study.

3.8. Data Analysis Methods

Following the collection of both qualitative and quantitative data, analysis and interpretation tasks were performed. The collected data were edited, coded, grouped and transcribe in a manner suite to analysis and interpretation. Next, the collected data were analyzed using descriptive statistics. The data collected from survey questionnaire were checked for consistency and entered into the SPSS spreadsheet. The analysis were performed with SPSS ver. 20. Descriptive statistics were employed to analyze data. Besides, measures of central tendency (mean, standard deviation) will use to analyze the questionnaire survey result. Measures of central tendency (mean and standard deviation) were also use to analyze the variables and to determine the relative importance of each independent variable in explaining the variation of NPLs in Ethiopian commercial banks.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

4.1. Introduction

The previous chapters presented orientation of the study, theoretical foundations, literature review and the research methods adopted in the study. This chapter presents the results. As discussed in the preceding chapter this study is aimed at assessing of non-performing loan of commercial banks of Ethiopia. This chapter tries to present the results of the different sources of data.

4.2. Survey Results

The questionnaire was distributed to credit related professionals (including relationship managers, credit analysts, recovery officers, loan officers, and risk officers) in seven sample banks from all banks that are operational in Ethiopia and registered before the fiscal year 2000 E.C.

The questionnaire was physically distributed to 72 employees (whose positions are related to bank lending). Out of 72 questionnaires 70 were completed and collected. As the result the response rate was 97.2 percent. In light of the poor response culture in Ethiopia this is impressive. According to Fowler (1986) researcher or survey organization differ considerably in the extent to which they devote time and money to improve response rate.

Table 4.1: Survey response rate

S.No.	Items	Respondent
1	Sample size	72
2	Completed and returned questionnaires	70
3	Response rate	97.2%

Source: Developed for the research

The sections that follow present profile of respondents' like ownership of the banks they work for, their banking experience, exposure in bank lending and the positions they hold in the banking industry.

4.2.1 Respondents' profile

In respect of employment, 69 percent of survey respondents were employed in private banks, the rest 31 percent were employed in state owned banks (Table 4.2).

Table 4.2:Employment of respondents

S.No.	Employment	Frequency	Percent
1	Private banks	48	69%
2	State owned banks	22	31%
	Total	70	100%

Source: Developed for the research

Looking at the positions of survey respondents revealed that 25.7 percent were credit analysts while 20 percent were bank customer relationship managers, 17.1 percent were recovery/monitoring officers,17.1 percent were loan officers ,10.0 were credit directors, about 5.7 percent of the respondents were bank vice presidents and 4.3 percent where risk officers (Table 4.3).

Table 4.3:Position of the respondents in bank

S.No.	Position	Frequency	Percent
1	Loan officers	12	17.1
2	Credit analysts	18	25.7
3	Credit directors	7	10.0
4	Relationship managers	14	20.0
5	Recovery/monitoring officers	12	17.1
6	Vice presidents	4	5.7
7	Others*	3	4.3
	Total	70	100

Source: Developed for the research

*Others include: Risk officers

In terms of experience, 37.1 percent of survey respondents indicated that they had 11-15 years of banking experience. The second larger number of respondents, 27.1 percent, had banking experience of above 15 years. About 20 percent, had experience of 6-10 years. The remaining 15.7 percent respondents had banking experience of 1-5 years only. This clearly indicates that respondents had rich experience in providing response that naturally contributed to the data quality of the survey (Table 4.4).

Table 4.4: Respondents' experience in the banking sector

S.No.	Year of experience	Frequency	Percent
1	Less than 1 year	-	-
2	1-5 years	11	15.7
3	6-10 years	14	20.0
4	11-15 years	26	37.1
5	Above 15 years	19	27.1
	Total	70	100

Source: Developed for the research

On the other hand, 58.6 percent of respondents had 6-10 years of experience in bank lending while 31.4 percent had lending experience for 1-5 years. The remaining 10 percent of the respondents had 11-15 years of bank lending experience. The fact that majority of the respondents had many years experience in bank credit operations helped capture a good quality of data (Table 4.5).

Table 4.5: Respondents' experience in credit process

S.No.	Year of experience in credit	Frequency	Percent
1	Less than 1 year	-	-
2	1-5 years	22	31.4
3	6-10 years	41	58.6
4	11-15 years	7	10.0
5	Above 15 years	-	-
	Total	70	100

Source: Developed for the research

4.2.2 Factors Could affect bank lending

Table 4.6 shows responses on factors indicating the relation between credit assessment and occurrence of the non-performing loans. About 74.3 percent of the respondents strongly agree and 20 percent of the respondents agree that easily admitted borrowers usually default the average response. On the other hand 20 percent of the respondents agree .In the case of know your customer (KYC) policy lead to high loan quality. With regard to good loan underwriting, 48.5 Percent of the respondents agree that it ensures loan performance. Poor risk assessment is perceived to lead to loan default by 65.7 percent of the respondents strongly agreed (Table 4.6).

Table 4.6: Factors indicating relation between credit (risk) assessment and loan default

S. No .		Strongly Agree(1) %	Agree (2) %	Neutral (3) %	Disagree (4) %	Strongly Disagree(5) %	Mean	Standard deviation (SD)
1	Easily admitted borrowers usually default	74.3	20	5.7	-	-	1.3143	0.57843
2	Know your customer (KYC) policy Of Banks lead to high loan quality	60	22.8	10	7.2	-	1.6429	0.93306
3	Good loan underwriting ensures Loan performance	18.57	48.57	17.14	11.42	1.3	2.3571	1.06371
4	Poor risk assessment would lead to loan default	65.7	27.1		4.3	2.9	1.4429	0.71497

Source: Developed for the research

From the above result respondents strongly agree that banks that employ a robust KYC policy in recruiting their customers and also do good risk assessment would have a better loan quality. On the other hand when the loan underwriting is poor, the loans would be prone to default. Respondents view was strongly agree to the statement “easily admitted customers usually default”. In general the outcome indicates that poor credit risk assessment cause occurrences of nonperforming loans.

Strict loan monitoring is believed to ensure loan performance by 50 percent of the respondents. On the other hand 34.4 percent of the respondents disagree with the assertion that loan might perform well if properly monitored despite poor assessment during sanctioning. This indicates that loan follow-up can never substitute proper credit assessment.

However, 41.43 percent of the respondents agree that occurrence of nonperforming loan is directly related to loan follow up. On the other hand about 50 percent of the respondents agree that banks with higher budget for loan monitoring have lower nonperforming loans, 30 percent of the response being neutral (Table 4.7).

Table 4.7: Factors indicating credit monitoring (follow-up) and loan default

S. No		Strongly Agree(1) %	Agree (2) %	Neutral (3) %	Disagree (4) %	Strongly Disagree (5) %	Mean	Standard deviation (SD)
1	Strict monitoring ensures loan performance	32.86	50	10	7.14	-	1.9143	0.84687
2	Poorly assessed and advanced loans may perform well if properly monitored	7.1	27.1	21.4	34.4	10	3.1286	1.14108
3	Loan follow up is directly related to occurrence of nonperforming loans	20	41.43	11.43	20	7.14	2.5429	1.23577
4	Banks with higher budget for loan monitoring have lower non-performing loans	4.29	50	30	12.85	2.86	2.6286	0.87097

Source: Developed for the research

From the previous discussion it can be concluded that credit monitoring is directly related to loan performance. Despite this the respondents didn't support the argument that loan would perform well only by proper monitoring, if proper assessment is not carried out while advancing the credit. This indicates that follow up would never substitute credit analysis or assessment. On the other hand though loan monitoring requires budget, allocating higher budget might not ensure loan performance as a average number of respondents are neutral to the assertion.

With regard to the relation between loan composition (collateralizing loans), 40 of the respondents agree with collateralized perform loan, on the other hand 35.71 percent of the respondents view are neutral. About 55.72 percent of respondents agree with statement that collateralizing loan protect loan default and 32.85 percent of respondents disagree with non-collateralized loans would be defaulted. However, respondents view about lending to priority sector is relate to loan default, 50 percent of the respondent disagreed and about 40 percent of respondent disagreed with the statement of there is a relationship between loan default and lending to sensitive sectors. (Table 4.8).

Table 4.8: Factors indicating Loan Composition and loan default

S. No		Strongly Agree(1) %	Agree (2) %	Neutral (3) %	Disagree (4) %	Strongly Disagree (5) %	Mean	Standard deviation (SD)
1	Collateralized loans perform well	4.29	40	35.71	18.57	1.43	2.7286	0.86680
2	Collateralizing loans help protect loan default	12.86	55.72	11.43	15.71	4.28	2.4286	1.04356
3	Most of the time non collateralized loans are defaulted	5.7	22.85	30	32.85	8.6	3.1571	1.05824
4	Lending to priority sector (small scale industries) is related to loan performance	8.57	18.57	22.86	40	10	3.6000	0.89118
5	There is a relationship between loan default and Lending to sensitive sectors (capital market, real state)	2.85	7.14	28.57	50	11.44	3.2429	1.13490

Source: Developed for the research

From the above discussion, can conclude the argument that collateral help for performing loan, but on the contrary the respondents view with non-collateralized loan are defaulted is not acceptable. So that collateralizing loans help loan performance indicates that the relation

between collateralizing loans and loan default is not strong. On the other hand high number of respondent disagree with lending to priority sector is relate to loan performance and there is a relationship between loan default and lending to sensitive sectors. This indicates there is no relation between loan default and lending to sensitive sectors.

Table 4.9: Factors indicating relation between interest rate and loan default

S. No		Strongly Agree(1) %	Agree (2) %	Neutral (3) %	Disagree (4) %	Strongly Disagree(5) %	Mean	Standard deviation (SD)
1	Loans with big interest rate tend to turn to NPL	4.29	11.43	30	40	14.28	3.4857	1.01785
2	Charging big interest rate leads to loan default	1.43	4.29	31.43	58.57	2.1	3.6000	0.71017
3	Loan price affects loan performance	7.14	42.86	25.71	22.86	1.13	2.6714	0.97388

Source: Developed for the research

about 40 percent of the respondents disagree with the statement that loan with big interest rate tend to turn to NPL. In a like manner about 58.57 percent of the respondents disagree with the argument that charging big interest rate leads to loan default. On the other hand, about 42.86 percent of the respondents agree that loan price might affect loan performance. However, the average responses to all the factors were close to neutral. See Table 4.9 above.

With regard to factors relating to credit terms (lenient credit terms, poorly understood terms and /or negotiated credit terms) as to whether they lead to occurrences of loan default responses are in indicated under Table 4.10.

Table 4.10: Factors indicating Credit term and loan default

S. No		Strongly Agree(1) %	Agree (2) %	Neutral (3) %	Disagree (4) %	Strongly Disagree(5) %	Mean	Standard deviation (SD)
1	Lenient / lax credit term cause loan default	21.43	41.43	4.29	2.85	-	1.8857	0.60296
2	Borrowers default because they don't understand credit terms well	4.29	40	35.71	12.86	7.14	2.8000	0.97207
3	Poorly negotiated credit terms lead to loan nonperformance	20	71.43	7.14	1.43	-	1.9000	0.56850
4	Aggressive lending leads to large NPL volume/ratio	14.29	80	5.71	-	-	1.9143	0.44209

Source: Developed for the research

From the above table it can be concluded that respondents agreed with the fact that there is a relation between loan default and credit terms set by banks upon loan approval, because 41.43 percent of the respondent agree with lenient credit term cause loan default, 40 percent agree with borrowers default because they don't understand credit terms, and also 71.43 percent agree with poorly negotiated credit terms lead to loan nonperformance. When we see to the response on the relation between credit growth and occurrence of non-performing loans; almost 80 percent of them agreed to assertion that aggressive lending leads to occurrence of NPL (Table 4.10).

So it can be stated that when banks pursue with latent credit term and aggressive lending strategy and there by experience rapid credit growth they might heap up large volume of non-performing loans.

Table 4.11: Factors indicating Operational Efficiency and loan default

S. No		Strongly Agree(1) %	Agree (2) %	Neutral (3) %	Disagree (4) %	Strongly Disagree(5) %	Mean	Standard deviation (SD)
1	There is a relationship between Operational efficiency and credit performance	30	47.14	11.43	5.57	2.86	2.0714	1.01183
2	Poor operational efficiency lead to high cost	37.4	55.71	7.15	-	-	1.7000	0.59831
3	Poor operational efficiency lead to loan non-performance	25.72	60	2.86	5.71	5.71	2.0571	1.01989

Source: Developed for the research

From the Table 4.11 it can be concluded that respondents agreed with the fact that there is a relation between loan default and operational efficiency. 47.14 percent of the respondents agree that there is a relation between operational efficiency and credit performance. When we see to the response on the relation between poor operational efficiency lead to high cost 55.70 percent of the respondent agree and in the case of poor operational efficiency lead to loan nonperformance almost 60 percent of them agreed (Table 4.11). So it can be conclude that when banks operational efficiency is poor they might heap up large volume of nonperforming loans.

Respondents were also asked to rank factors that could cause of nonperforming loans in Ethiopian Banks in order of importance (from one to six). The results in this regard indicated that 57.14 percent of respondents ranked credit assessment, 45.71 percent ranked poor monitoring /follow up, 50 percent of the respondent ranked credit term and 41.43 percent of operational efficiency as the top ranking from first to fourth place for factor causing occurrences of nonperforming loans while interest rate is ranked fifth factor by 55.71 percent of the respondents and loan composition ranked at sixth place with 58.7 percent.

Table 4.12: Ranking of factors could affect occurrence of nonperforming loans

S. No		1st %	2nd %	3rd %	4th %	5th %	6th %
1	Interest rate	1.43	4.29	5.71	4.29	55.71	28.57
2	Credit terms	17.14	8.57	50	10	10	4.29
3	Loan composition	2.86	2.86	1.43	8.57	25.71	58.57
4	Loan follow-up (monitoring)	34.29	45.71	8.57	4.29	1.43	5.71
5	Credit (risk) assessment	57.14	21.43	2.86	12.86	4.29	1.42
6	Operational Efficiency	14.29	17.14	5.71	50	4.29	8.57

Source: Developed for the research

Thus credit assessment, poor credit monitoring by banks, credit term, operational efficiency, were the top four factors ranked to cause occurrences of non-performing loans. On the other hand, high interest rate and loan composition (collateral) were factors that were ranked fifth and sixth (Table 4.12).

In respect of the factors could affect NPL, the subjective questions in the survey and in-depth interviews identified factors such as poor credit assessment, failed loan monitoring, lenient credit terms and conditions, compromised integrity, weak institutional capacity, unfair competition among banks, willful default by borrowers and their knowledge limitation, fund diversion for unintended purpose, over/under financing by banks ascribe to the causes of loan default.

4.3 In-depth Interview

In order to get deep understanding about the factors affecting non-performing loans, in-depth interview was conducted with senior bank officials. All of the interviewees have had over 10 years credit experience in addition to their several years of banking experience. In terms of profile, credit vice presidents, credit managers, senior credit officials participated. The

interviewees were from private and state owned. The respondents have so many in common as to what they believed cause occurrence of non-performing loans.

The section that follows present factors believed to cause occurrences of NPL by the interviewees. Besides, the factors that are thought to be most critical for the occurrences on NPL are pin pointed by the interviewees. In addition, factors that ascribe to the very nature of the Ethiopian banking industry contributing to the NPL occurrence are specifically presented by the interviewees.

4.3.1 Factors believed to cause occurrences of NPL as per the interviewees

Interviewees indicated that several factors contribute to loan default. As per the outcome of the interview the factors can be categorized as banks internal factors, the external factors and borrowers related.

4.3.1.1. Banks Internal Factors

These are factors relating to internal inefficiencies due to systems, governance, human resource issues and the related. Under this most of the interview participants raised the following issues:

- Bankers lack of integrity,
- Terms and condition not being set properly,
- Credit analysts capacity limitation,
- Banks aggressive lending to maximize profit,
- Not conducting Know your customers (KYC) principles properly before lending,
- Over trading/over financing,

4.3.1.2. External factors

These are factors that were beyond the influence of banks and borrowers. They are:

- Intervention of external bodies in credit decision making both in private and state owned banks,
- Poor credit culture,

- Macroeconomic factors like inflation, market problems,
- Unavailability of data to conduct project analysis,
- Inadequacy of the supervisory authorities polices,

4.3.2 Most critical factors for loan default as per the interviewees

The interviewees were requested to rate the factors they believed are rated top in causing occurrences of nonperforming loans.

- Poor credit analysis by banks,
- Borrowers lack of knowledge –entrepreneurship skill gap, engaging in unstudied business, management capability limitation,
- Inadequacy in the competence of credit operators,
- Not keeping appropriate with national and global business environment by banks
- Compromised integrity of credit operators,
- Poor monitoring and follow up,
- Policy environment (Central bank’s and others)

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

The previous chapter presented the results, analysis and interpretation of the data, while this chapter is dedicated for the summary, conclusions and recommendation of the research.

5.2. Summary

The study conducted survey of banks' employees (using self-administered questionnaires) and structured survey of documents and unstructured interview. The survey had a response rate of ninety seven percent. twenty two percent of the study respondents were from state owned banks while the remaining forty eight percent were private banks' employees. Sixty eight percent of respondents were directly engaged in credit related activities. Eighty five percent of the respondents had over five years of experience in banking and sixty nine percent over five years on lending experience.

As per the response indicated that respondents agreed that credit assessment is related to loan default. They also agreed with the fact that loans follow up/monitoring is related to occurrence of nonperforming loans. On the other hand the response on relation between loan composition, collateral and loan default indicated not much strong. The response on the relation between loan price /interest rate/ and occurrence of loan default depicted disagreement. Average view of the respondents on impact of credit terms on loan default was agreement. Finally the response to a question relating operational efficiency to occurrences of non-performing loans was agreement.

In a question where the respondents were requested to rate factors they believed cause occurrences of non-performing loans in order of importance; poor credit assessment, poor monitoring by banks, credit term, operational efficiency were rated to be the top four factors

causing loan default. On the other hand charging high interest rate and loan composition (collateral) were rated among the least factors causing occurrences of nonperforming loans.

An in-depth interview with senior executives in the Ethiopian banking sector were used indicated that the critical factors causing occurrences of non-performing loans include: poor credit analysis by banks, borrowers lack of knowledge entrepreneurship gap (engaging in unstudied business and management capability limitation), lack of competency of credit operators, not keeping appropriate with national and global business environment by banks and borrowers, compromised integrity of credit operators, poor monitoring and follow up of loans by lending banks and limitations in the policy environment (Central bank's and others).

Generally, In respect of the factors could affect NPL, the subjective questions in the survey and in-depth interviews identified factors such as poor credit assessment, failed loan monitoring, lenient credit terms and conditions, compromised integrity, weak institutional capacity, unfair competition among banks, willful default by borrowers and their knowledge limitation, fund diversion for unintended purpose, over/under financing by banks ascribe to the causes of loan default.

5.3. CONCLUSIONS

The broad objective of this research was to assess the non-performing loan of commercial banks of Ethiopia. To achieve this broad objective, the study used mixed research approach. More specifically, the study used survey of employees of banks, structured survey of documents of bank reports and unstructured interview of senior bankers. The results showed that, based on the respondents' view it was evident that most likely factors that affect occurrences of non-performing loans in Ethiopian banks are concluded as follow.

The study indicated that poor credit assessment ascribing to capacity limitation of credit operators, institutional capacity drawbacks and unavailability of national data for project financing that had also led to setting terms and conditions that were not practical and/or not properly discussed with borrowers had been the cause for occurrences of loan default. Besides,

despite the fact that credit monitoring/ follow-up plays essential role to ensure loan collection failure to do this properly was also found to be causes for sick loans. The research also indicated that over financing due to poor credit assessment, compromised integrity of credit operators were cause for incidences of NPL. In fact cases of under financing loan requirement that meant shortage of working capital or not being able to meet planned targets were associated with defaults.

In-depth interview also indicated that under development of supervisory authority competence in formulating policies, monitoring capability also ascribe to occurrences of non-performing loans.

5.4. RECOMMENDATIONS

Based on the summary of the findings and conclusions, the following recommendations are suggested:

- Banks should put in place a vibrant credit process that would encompass issues of proper customer selection, strong credit analysis, genuine sanctioning process, proactive monitoring and follow up and clear recovery strategies. Because there is high relation between risk assessment, credit follow-up, Poor credit analysis by banks and occurrence of NPLs getting from the finding of the study.
- Banks should put in place a clear policy framework that addresses issues of conflict of interest, ethical standards, check and balance in decision making process for all those involved in the credit process ensure its implementation thereof.
- Banks should give due emphasis it takes to developing the competency of credit operators, information system management pertaining to credit and efficiency of the credit process.
- As loans would contribute to the development of an economy and its default leads to occurrence of huge loss on banks and a country; deliberate effort should be exerted in

developing culture of the public towards credit and its management by individual banks, Ethiopian Bankers Association, Ethiopian Public Financial Institutions Agency, NBE and others. Lack of knowledge about the loan by customer is one factor for occurrence of NPLs.

- Prudence of policies that govern bank loans should continuously be ensured in light of international best practices, macroeconomic situations, level of development of banks and the economy in general by NBE.

Recommendations for further studies

- Macroeconomic determinants of non-performing loans

The focus of this study was Assessing of Non-Performing Loan through internal bank specific factors of commercial banks of Ethiopia, it is, therefore, recommended that a similar study be conducted on macroeconomic factors of commercial banks of Ethiopia.

- Bank specific factors of NPL

Assessing other bank specific factors not included in this research in Ethiopian banking sector could be a future research .

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APPENDIXES

Appendix 1- QUESTIONNAIRE

SECTION ONE

BACKGROUND INFORMATION

- Please tick appropriate pace

1. Your current position in the Banking industry

- | | |
|--------------------------|---------------------------------------|
| 1. Loan Officer _____ | 4. Relationship manager _____ |
| 2. Credit analyst _____ | 5. Recovery/ monitoring officer _____ |
| 3. Credit Director _____ | 6. Vice president _____ |
| | 7. Other, please specify _____ |

2. Indicate your experience in the banking industry

- | | |
|---------------------------|-------------------------|
| 1. Less than 1 year _____ | 4. 11-15 years _____ |
| 2. 1-5 years _____ | 5. Above 15 years _____ |
| 3. 6-10 years _____ | |

3. Indicate your experience in bank credit processes

- | | |
|-----------------------------|-------------------------|
| 1. Less than one year _____ | 4. 11-15 years _____ |
| 2. 1-5 years _____ | 5. Above 15 years _____ |
| 3. 6-10 years _____ | |

4. Indicate ownership of the Bank you work for

- | | |
|------------------|----------------------|
| 1. Private _____ | 2. State owned _____ |
|------------------|----------------------|

SECTION TWO

QUESTIONS ON THE SPECIFICFACTORS OF NONPERFORMING LOANS

- Please indicate your degree of agreement or disagreement to the statements pertaining to credit assessment and the occurrence of NPL

		Strongly agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
5	Easily admitted borrowers usually default					
6	Know Your Customer (KYC) policy of banks lead to high loans quality					
7	Good loan underwriting ensures loan performance					
8	Poor risk assessment would lead to loan default					

- Please indicate your degree of agreement or disagreement to the statements pertaining to credit monitoring and the occurrence of NPL

		Strongly agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
9	Strict monitoring ensures loan performance					
10	Poorly assessed and advanced loans may perform well if properly Monitored					
11	Loan follow up is directly related to occurrence of non-performing loans					
12	Banks with higher budget for loan monitoring have lower non-performing loans					

- Please indicate your degree of agreement or disagreement to the statements pertaining Loan Composition and the occurrence of NPL.

		Strongly agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
13	Collateralized loans perform well					
14	Collateralizing loans help protect loan default					
15	Most of the time non collateralized loans are defaulted					
16	Lending to priority sector (small scale industries) is related to loan performance					
17	There is a relationship between loan default and Lending to sensitive sectors (capital market, real state)					

- Please indicate your degree of agreement or disagreement to the statements pertaining to interest rate and the occurrence of NPL.

		Strongly agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
18	Loans with big interest rate tend to turn to NPL					
19	Charging big interest rate leads to loan default					
20	Loan price affects loan performance					

- Please indicate your degree of agreement or disagreement to the statements pertaining to Credit term and the occurrence of NPL

		Strongly agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
21	Lenient / lax credit term cause loan default					
22	Borrowers default because they don't understand credit terms well					
23	Poorly negotiated credit terms lead to loan nonperformance					
24	Aggressive lending leads to large NPL volume/ratio					

- Please indicate your degree of agreement or disagreement to the statements pertaining to Operational Efficiency and the occurrence of NPL

		Strongly agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
25	There is a relationship between Operational efficiency and credit performance					
26	Poor operational efficiency lead to high cost					
27	Poor operational efficiency lead to loan non-performance					

- Please rank the factors that cause occurrence of non-performing loans in Ethiopian banks. Rank the factors in order of their importance in contributing to the occurrence of NPLs from 1-6.

		1st	2nd	3rd	4th	5th	6th
28	Interest rate						
	Credit terms						
	Loan composition						
	Loan follow-up (monitoring)						
	Risk assessment						
	Operational Efficiency						

29. If you have further comments on the bank specific factors affecting non-performing loans of Ethiopian Banks please use the space below.

Appendix 2- IN-DEPTH INTERVIEW QUESTIONS

1. Summary of the respondent profile (education level, banking experience, experience on credit, current status and the related)
2. Views of the respondents on the factors that determine occurrence of non-performing loans in general and Ethiopian banks in particular.
3. Views of respondents on which factors answered in Q 28 stand at the top and rating of the factors thereof in relation to the other.
4. Opinion of respondents on the impact of the Ethiopian Banking context that might have any bearing on the occurrence of loan default.
5. Recommendation/ if any for mitigating occurrence of non-performing loans proposed by the respondents.