



**ST.MARY UNIVERSITY
SCHOOL OF GRADUATE STUDIES**

**DETERMINANTS OF NON-PERFORMING LOAN:
THE CASE OF ETHIOPIAN COMMERCIAL BANKS**

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ADDIS ABABA**

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**A THESIS SUBMITTED TO THE DEPARTMENT OF
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Approved by Board of Examiners

Dean, school of Business

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DECLARATION

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

Name

Signature

St.Mary's University, Addis Ababa

June, 2019

Endorsement

This thesis has been submitted to St.Mary's university, school graduate studies for examination with my approval as a university advisor.

Abebaw Kassie (Dr.)

Advisor

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St.Mary's University, Addis Ababa June, 2019

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Table of Contents

Acknowledgments	iii
Table of Contents	iv
List of Tables	vi
ACRONYMS AND ABBREVIATIONS	vii
Abstract	viii
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of the study	1
1.1.1 Overview of banking sector in Ethiopia	4
1.2 Statement of the problem	5
1.3. <i>Objectives of the Study</i>	8
1.3.1. General Objective	8
1.3.2. Specific Objectives	8
1.4. Significance of the Study	8
1.5. Scope of the Study	8
1.6. Limitation of the Study	9
1.7. Organization of the Study	9
CHAPTER TWO	10
REVIEW OF RELATED LITERATURE	10
2.1 Theoretical and Conceptual Review	10
2.1.1 Introduction	10
2.1.2. The Nature of non-performing Loans	10
2.1.3. General lending Procedures and processing credit applicatio	13
2.1.4. Laws relating to control of non- Performing loans in Ethiopia	17
2.1.5 Determinants of non-performing loans	18
2.1.6. International experience on NPL	27
2.2. Review of Empirical Evidence	31
CHAPTER THREE	37
3. RESEARCH DESIGN AND METHODOLOGY	37
3.1. Study Area	37

3.2. Research Design and Source of Data	37
3.3. Study Participant	37
3.4. Sampling Method	38
3.5. Sample Size	38
3.6. Types of Data	39
3.7. Method of Data Collection	40
3.8. Method of Data Analysis and Interpretation	40
CHAPTER FOUR	41
4. SURVEY RESULTS AND DISCUSSION	41
4.1. General	41
4.2. Profile of Respondents	43
4.3. Factors that Affect Bank Lending	46
4.4. Effects of NPLs	58
CHAPTER FIVE	60
5. CONCLUSION AND RECOMMENDATIONS	60
5.1. Conclusions	60
5.2. Recommendations	61
BIBLIOGRAPHY	64
APPENDICES	69

List of Tables

Tables	Title	Page
Table 1	Sample size	39
Table 2	Survey response rate	41
Table 3	Number of Credit Department employees who actively responded to the structured questionnaire distributed, by banks' profile	42
Table 4	. Respondents by Category	43
Table 5	Position of respondents in their respective bank	44
Table 6	Respondents experience in the banking industry	45
Table 7	Bank lending experience of the respondents	45
Table 8	Factors affecting occurrences of NPLs are obvious	46
Table 9	Factors considered causing occurrences of NPLs in the Ethiopian banks	47
Table 10	Ranking of factors affecting occurrences of NPLs in the Ethiopian banks.	48
Table 11	Factors on relation between credit assessment and occurrences of NPLs.	50
Table 12	Factors on relation between credit monitoring and occurrences of NPLs	51
Table 13	Factors on relationship between collateralizing loans & occurrences of NPLs	52
Table 14	Relationship between borrower's orientation and occurrence of NPLs	53
Table 15	Relationship between Cost of Loan and Loan Default	54
Table 16	Credit Terms and Loan Performance	55
Table 17	Relationship of credit growth and NPLs	56
Table 18	Bank size and occurrence of NPLs	56
Table 19	Bank ownership type and occurrence of NPLs	57

ACRONYMS

AB	Abay Bank
AdIB	Addis International Bank
AIB	Awash International Bank
BOA	Bank of Abyssinia
BIB	Berhan International Bank
BuIB	Buna International Bank
CBE	Commercial Bank of Ethiopia
CBO	Cooperative Bank of Oromia
DB	Dashen Bank
DGB	Debub Global Bank
EB	Enat Bank
LIB	Lion International Bank
NBE	National Bank of Ethiopia
NIB	Nib International Bank
OIB	Oromia International Bank
UB	United Bank
WB	Wegagen Bank
ZB	Zemen Bank
AMCs	Asset Management Company
FDRE	Federal Democratic Republic of Ethiopia
GDP	Gross Domestic Product
IMF	International Monetary Fund
KYC	Know Your Customer
NPLs	Non-performing Loans
SPSS	Statistical Product and Service Solution
INFR	Inflation Rate
WWW	World Wide Web

Abstract

The study aims to identify the major bank specific determinants of Nonperforming loans of state owned and private commercial banks of Ethiopia. To achieve this objective both descriptive and explanatory research design was used. Data has been collected mainly through primary source using questionnaire and interview from loan administrators and credit officers of both state owned and private commercial banks. Secondary data were also used by reviewing the annual reports directives and procedures issued by the banks and written material from internet. 1 state owned and 12 private commercial banks were selected by using purposive sampling based on their seniority and out of 190 credit department officials 117 (61.6%) staff were selected as a sample by using simple random sampling technique of lottery method. Out of 117 distributed questionnaires 108 of them were filled and collected. For data analysis descriptive statistics including mean, frequency, percentage and standard deviation were used and processed through computer loaded SPSS software. The result of the study shows that poor credit assessment, credit monitoring, credit size(aggressive lending, compromised integrity in approval, rapid credit growth and bank's great risk appetite): lax credit terms ,and elongated process of loan approval were bank specific causes for the occurrence of nonperforming loans. To reduce the occurrence of loan default it is suggests that the bank should strengthen its applicant screening criteria and due diligence assessment to select potential risk taking applicants and adopt appropriate pre and post credit risk assessment. Besides the bank needs to make sure that borrowed funds are being used for the intended purpose through enhanced credit monitoring, borrowers' credit culture, collateralized lending. And also it is better to revise and recheck the impact of their level of lending interest. The central government better to establish a comprehensive institutional frame work including: Asset Management company /AMC/.Banks better to develop clear and understandable and transparent procedural laws.

Key words :- Non Performing loan (NPL), Bank specific cause

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Economic growth in any country is not possible without a sound financial sector (Rajaraman and Visishtha, 2002). Good performance of these financial institutions is the symbol of prosperity and economic growth in any country or region and poor performance of these institutions not only hamper the economic growth and structure of the particular region but also affects the whole world (Khan and Senhadji, 2001). Commercial banks in most of the world economies are dominant type of financial institution that provide installment, facilitates the internal and external trade and the movement of money and capital when compared to any other financial institution (Bofondi & Gobbi, 2003; Salas & Saurina, 2014).

Business study notes 2016 citing (Stephenson & Britain) expressed Banks as the custodians and distributors of liquid capital, which is the life-blood of commercial and industrial activities and upon the prudence of their administration depend the economic well-being of the nation. Effective process of economic development and the health of the economy are closely related to the soundness of banking system. Hence, the countries that possess an advanced banking system grew faster than those whose banking system was weak (Levine, 1997).

Survival and soundness of the banking enterprise is exposed to different risks such as market risk, liquidity risk, operational risk and credit risk. The greatest risk of all is credit risk (Dang, 2011). Credit risks are losses from the refusal or inability of credit customers to pay what is owed in full and on time (Coyle, 2000). It is by far the most significant risk faced by banks and the success of their business depends on accurate measurement and efficient management of this risk to a greater extent than any other risks (Gieseche, 2004). The lending function is considered by the banking industry as one of the most important function for the utilization of funds. Since, banks earn their highest gross profits from loans; the administration of loan portfolios seriously affects the profitability of banks. In the process of providing credit assistance to the investment activities and

projects in the economy, financial institutions face inherent risks in the form of default risk which results in build-up of Non-Performing Loans (NPLs) that have a negative effect on the profitability of the financial institutions.

There is no standard form to define non-performing loans globally. Variation may exist in terms of the classification system, the scope, and contents as per country. (Seema B 2014). 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.

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” National Bank of Ethiopia (NBE, 2008).

The success of individual banks in credit risk management is largely reflected in the proportion of NPL’s loans to gross lending (Flamini, 2009). Non-performing loans are one of the main reasons that cause insolvency of the financial institutions and ultimately hurt the whole economy (Hou, 2007). Each non-performing loan in the financial sector is viewed as an obverse mirror image of an ailing unprofitable enterprise. From this point of view, the eradication of non-performing loans is a necessary condition to improve the economic status of the financial institution. Continuously rolling over nonperforming loans locks up resources that could otherwise be invested to profitable sectors of the economy. Intuitively this hinders economic growth and impairs economic efficiency (Chikoko et al, 2012). In order to control the non-performing loans it is necessary to understand the root causes of these non-performing loans in the particular financial sector.

The traditional role of a bank is lending and loans make up the bulk of their assets (Njanike, 2009). According to the research by (Havrilesky and Boorman, 1994), interest on loans contributes significantly to interest income of commercial banks. (Reed and Gill, 1989) pointed out that traditionally 85 percent of commercial banks’ income is contributed by interest on loans. Loans therefore represent the majority of a bank’s asserts (Saunders and Cornett, 2005). Lending is not an

easy task for banks because it creates a big problem which is called non performing loans (Chhimpa J, 2002) as cited in (Upal, 2009). Due to the nature of their business, private commercial banks expose themselves to the risks of default from borrowers.

Nevertheless, Ethiopian private commercial banks (EPCBs) were also suffered from serious financial fragility manifested by high proportion of NPLs (Mehari, 2012). Recently, the NPLs of EPCBs have shown a substantial improvement and lowered to an average of 5 % (National Bank of Ethiopia 2011). However, NPLs of EPCBs are still high as compared to the developing economy banks like, Namibia, Mozambique and Uganda (Fofack, 2013). Hence, EPCBs are still expected to reduce their NPLs as low as possible in order to achieve their optimal profit and ultimately improve the soundness of the financial system.

Presently there are sixteen private and one state owned commercial banks operating in Ethiopia. Surveyed financial data of banks at the end of June 30,2018 indicate the ratio of NPL for Awash International Bank (AIB) 2.3%, Dashen Bank (DB) 1.7%, Bank of Abissiniya (BOA) 1.8%, Cooperative bank of Oromia (CBO) 1.8%, Oromia International Bank (OIB) 2.3%, Zemene Bank (ZB) 8.8%, Wegagen Bank (WB) 3.1% , United Bank(UB) 1.2%, Nib International Bank (NIB) 3.1%, Lion International Bank (LIB) 2.6%, Buna International Bank (BuIB) 1.3%, Berhan International Bank (BIB) 4.7 % . This shows that NPL assets are still high, deserving due attention of managements and board of directors as well as regulatory body National Bank of Ethiopia (NBE).

The causes for loan default vary in different countries and have a multidimensional aspect both, in developing and developed nations. Theoretically there are so many reasons as to why loans fail to perform. Some of these include depressed economic conditions, high real interest rate, inflation, lenient terms of credit, credit orientation, high credit growth and risk appetite, and poor monitoring. NPLs can arise from factors specific to the bank or macroeconomic conditions (Emmanuel, 2014). Considering these facts, this research tries to find out the causes of non-performing loans in Ethiopian commercial banks focuses on bank specific variables.

1.1.1 Overview of the banking Sector in Ethiopia

The history of modern banking in Ethiopia dates back to 1905. February 15, 1906 marked the beginning of banking in Ethiopia history when the first Bank of Abyssinia was inaugurated by Emperor Menelik II. According to the agreement, the bank was allowed to engage in commercial banking (Selling shares, accepting deposit and effecting payment in cheques) and to issue currency notes. The Bank, which started operation a year after its establishment agreement was signed, opened branches in Harar, Dire Dawa, Gore and Dembi- Dolo as well as an agency office in Gambella and a transit office in Djibouti and It was a private bank whose shares were sold in Addis Ababa, New York, Paris, London, and Vienna (NBE, 2010). In 1908 a new development bank (named Societe Nationale, Ethiopie Pour le Development de l, Agriculture et du Commerce) and two other foreign banks (Banque de l, Indochine and the Compagnie de l, Afrique Orientale) were also established Pankhrust (1968) cited in Alemayehu (2006). These banks were criticized for being wholly foreign owned. In 1931 the Ethiopian government purchased the Abyssinian Bank, which was the dominant bank, and renamed it the _Bank of Ethiopia,, - the first nationally owned bank on African continent Belay, (1990) ; Befekadu, (1995). 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. It was serving both the commercial bank and central bank activities. Later on it is further dissolved into the National Bank of Ethiopia and Commercial Bank of Ethiopia Share Company.

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. Accordingly, the three private owned banks, Addis Ababa Bank, Banco di Roma and Banco di Napoli Merged in 1976 to form the second largest Bank in Ethiopia called Addis Bank. Then Addis Bank and Commercial Bank of Ethiopia S.C were merged by proclamation No.184 of August 2, 1980 to form the sole

commercial bank in the country till the establishment of private commercial banks in 1994. 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) 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).

With the overthrow of the Derg Regime in 1991, Ethiopia began its transition to a market economy. This transition has had profound implications for financial system. New financial system has been expanded, and the role of central bank is being formulated. During the socialist period, the government nationalized the small commercial banks and concentrated them into the Commercial Bank of Ethiopia (CBE). Commercial Bank of Ethiopia (CBE) and the other government banks were obliged to lend to public enterprises according to government instructions, which were in turn based on central planning.

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. After the enactment of the legislation the number of commercial banks in the country grows and reached eighteen. Currently, with the merge of Construction and Business Bank (CBB) with Commercial Bank of Ethiopia (CBE) in January 2016 the number of banks is minimized to seventeen with the composition of one public owned and sixteen private owned.

1.2 Statement of the Problem

One of the main functions of commercial banks is channeling funds from people who have surplus funds to people who have deficit fund by accepting deposit and granting loans and advances. Loans are forming a greater portion of the total assets in banks. These assets generate

huge interest income for banks, which is to a large extent determines the financial performance of banks. But granting loan is the most risky service because of the credit risk, which is directly related to non-performing loans. Non-performing loans reduce the banks' earning capacity, leading to bank distress and financial crises that shrink the levels of domestic investment, put pressure on government revenue to bail the failed banks, and ultimately hinder the intermediation role of banks. According to Brownbridge, (1998) many empirical researches have shown that most of the time banking failures or banking crisis are caused by non-performing loans. NPLs have been also identified as the major threat to the profitability of banks (Aremu, Suberu&Oke, 2010; Sinkey, 1992).

Despite the heavy regulation and ongoing efforts made to control the banking industry in general and the lending activities in particular, the NPLs problems are still a worldwide headache and a major concern for both international and local regulators (Boudriga 2009).In Ethiopia, the banking environment has undergone many regulatory and financial reforms like other African countries with the aim of improving profitability, efficiency and productivity (Lelissa 2007).Despite these changes, the banking industry in Ethiopia is characterized by operational inefficient, little and insufficient competition and perhaps can be distinguished by its market concentration towards the big government owned commercial bank, poor credit risk management practices and eventually less contribution to the GDP as compared to the developed world financial institutions (Abera 2012, Tefera 2011 and Tilahun 2010).

Operational inefficiency and poor credit risk management are usually associated with sizeable volume of NPLs (Berger and Humphrey 1992). 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 five percent in 2008. Following the 2008 NBE declaration, NPLs of ECBs have shown a significant improvement and lowered to an average of 5 % (NBE 2011). However, there is a significant variation on the reduction of NPLs from banks to bank. In some bank the change is abrupt and surprise while in the others the change is steady and constant.

Each non-performing loan in the financial sector is viewed as an obverse mirror image of an

ailing unprofitable enterprise. Virtually all research on the causes of bank and thrift failures find that failing institutions have large proportions of non-performing loans prior to failure and those non-performing loans are a statistically significant predictor of insolvency (Berger & DeYoung, 1997). From this point of view, the eradication of non-performing loans is a necessary condition to improve the economic status of the financial institution.

First and most effective step to treatment of this chronic and epidemic pain is pathology and then finding of effective solutions for modifying and improving of banks conditions as the country's greatest economic patient. Pathology of causes and factors that will raise NPLs amount and provision of practical solutions can reduce the damaging effect of NPLs on banks (Sinkey, 2002:90 cited in Biabani et al., 2012).

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 Africa (Onsarigo, et al., 2013). Like most Africa countries, in Ethiopia, to the knowledge of the researcher, there has not been much research which is conducted on determinants of loan defaults except for the study of Daniel (2010), Geletta (2012), Tesfaye (2015) and Habtamu (2015) assessed the determinants of NPLs in Ethiopian commercial banks focusing on bank-specific variables. And also the study by Anisa (2015) and Mesay (2017) combined both the macroeconomic and bank specific factors but both the studies utilize the same bank specific variables. Accordingly, as per the knowledge of the researcher, the bank specific causes of NPLs in Ethiopian banking sector are not adequately addressed. Moreover, all the studies except for the study of Mesay (2017) use the data before the year 2013 so the current impact of the causes on NPLs is not studied and international experiences are not assessed and adapted. Therefore, the existing knowledge gap along with the very danger of NPLs initiates this research.

The study tried to answer the following one major and five sub research questions that are bank specific issues that relate with loan, which are theoretically suggested factors of NPL.

1. What are the bank specific determinants of Non Performing Loan (NPLs?)
 - 1.1. Is there a relationship between credit assessment and occurrence of NPLs?
 - 1.2. Is there a relationship between credit monitoring and follow up and occurrence of NPLs?
 - 1.3. Is there a relationship between collateralized lending and bad debts?

1.4. What is the influence of borrower credit culture on the occurrences of bad debts?

1.5. Do high lending interest rate entail loans to lead to loan default? These variables are needed to study because they are directly related to loan.

1.3. Objectives of the Study

The study has the following general and specific objectives.

1.3.1. General Objective

The overall objective of the study was to assess or identify determinants of NPLs in the case of the Ethiopian commercial banks.

1.3.2. Specific Objectives

With a view to achieve the overall objective stated above, the specific objectives of the study were to examine relationships between loan default and factors such as; credit assessment, credit monitoring and follow up, borrowers credit culture , collateralized lending, level of interest rates.

1.4. Significance of the Study

The study was explored the factors contributing to NPLs in the case of Ethiopian commercial Banks. As such, the study would yields great contribution to research and practice. The research contribution will attributed to the current contribution to the existing body knowledge and research regarding factors influencing NPLs. Besides providing further evidence to findings of prior studies, the study would have also identified a few additional factors that worth for further research and validation.

The other contribution of the current research would be in relation to practice. The findings of the study will help Ethiopian banks get insight on what it takes to improve their loan qualities and the central bank (NBE) to examine its policy in banking supervision pertaining to the asset quality banks shall maintain.

1.5. Scope of the Study

This research paper, which was essentially, identified determinants of NPLs both in private and state-owned commercial banks targeted on Head Office (particularly Credit Department) of each bank, located in Addis Ababa. This is premised on the fact that the selected commercial

banks have been operating long enough to give the kind of academic insight the study seeks to offer. Besides, these banks extend credit facilities to almost all major sectors of the economy. Again the nationwide credit operation of the banks presents an opportunity for a national outlook of the issues under study. The study covers from June 30, 2013 to 2018 NPL of commercial banks. Because the researcher in order to get recent and current data

1.6. Limitation of the Study

A few respondents were not able to return a questionnaire timely and it was a difficult task to wait until all have returned. In addition to this, the study had conducted on commercial banks only which are located in Addis Ababa. Therefore, the results might be difficult for generalization. And also it didn't use regression analysis and interpretation.

1.7. Organization of the Study

The research paper is organized according to the following five chapters. The first Chapter constitute introduction of the study, chapter two theoretical foundations and empirical review of the study, chapter three describe the research methodology, chapter four together with the survey outcomes and discussions, chapter five provides conclusions and recommendations of the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURES

2.1 Theoretical and Conceptual Review

2.1.1 Introduction

Credit lending remains the chief activity of the banking sector throughout the world. Banks can no longer survive without this activity. This is the reason that credit worth is considered as a key sign of financial health and soundness of financial institutions particularly the banks. The interests charged by the banks on advances and loans shape large part of the bank's assets (Saeed and Zahid, 2016). These assets constitute the primary source of income by banks. As a business institution, a bank aims at making a giant profit. Since loans and advances are more profitable than any other assets, it is willing to lend as much of its funds as possible. But banks have to be careful about the safety of such advances (RadhaandVasudevan, 1980). Despite the loan portfolio is typically the largest asset and the predominate source of revenue of banks, the function of granting credit is not free of risks (Casu et al. 2006).

Risk takes many forms, each affecting the economic activity on a lesser or greater extent (Solomon & Muntean, 2012). In practice, loans are considered as the types of investment which have the highest levels of risks with regards to the difficulty of the funds recovery. Commercial banks are exposed to numerous difficulties regarding the protection and recovery of funds granted in the form of loans and credit facilities. One of the main difficulties that the commercial banks are exposed to is the failure of borrowers to repay their obligations on time (Casu et al, 2006). As Heffernan (2005) noted the failure of the commercial banks' clients to repay their obligations caused the emergence of NPLs, and is considered the most serious financial problems facing commercial banks.

2.1.2. The Nature of non-performing loans

The recent global financial crisis highlighted the importance of appreciating financial institutions vulnerabilities in the context of managing credit risk. The key motivation for this paper is to improve understanding of the causes of NPLs. However a lot of research papers can be found regarding the

problem or non-performing loan. Some prudential researchers intend to work on NPLs because it is perceived as the foremost aspect of bank's survival.

The question of loan default is related with none recovery/repayment of loans. When a borrower cannot repay interest and/or installment on a loan after it has become due, then it is qualified as default loan or non-performing loan (Chowdhury & Adhikary, 2002). It is known as non-performing, because the loan ceases to "perform" or generate income for the bank. The default/non-performing loan is not a "uniclass", rather a "multiclass" concept. It implies that the default/NPLs can be classified into three different categories, usually based on the "length of overdue" of the said loan. These categories are:

- i. Substandard - loans overdue for a period of 91 to 180 days
- ii. Doubtful - loans overdue for a period of 181 to 360 days
- iii. Loss - loans overdue for more than 360 days

The issue of NPLs has gained increasing attentions in the last few decades. The immediate consequence of large amount of NPLs in the banking system is bank failure. Many researchers on the cause of banking failure find that asset quality is a statistically significant predictor of insolvency [e.g Demirguc-kunt 1989, Barr and Siems 1994], and that failing banking institutions always have high level of NPLs can lead to efficiency problem for banking sector. It is found by a number of economists that failing banks tend to be located far from the most efficient frontier, because banks don't optimize their portfolio decisions by lending less than demand. What's more, there are evidences that even among banks that do not fail; there is a negative relationship between the non-performing loans and performance efficiency.

The concept of NPLs has been defined in different literatures. According to Patersson and Wasman (2004), NPLs 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 NPL 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.

NPLs 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 have been left unpaid for at least 90 days (Fofack, 2005). NPLs are further defined as loans, whose 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 borrower (Machiraju, Undated).

Machiraju (2001) expresses NPLs as a leading indicator of credit quality. NPLs 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 very sensitive elements of a bank's operation.

According to Brown, Mallett and Taylor (1993), the losses from bad loans (NPLs) caused by reducing the capital resource of the bank affects its ability to grow and develop its business and 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 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 NPLs 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 buildup of bad loan plays a crucial role in banking crises (Demirgu Kunt and Detragiache, 1998, and González Hermosillo, 1999).

It is apparent that insolvency of banks is costly to the macro economy as such, 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.

Under the Ethiopian banking business directive, NPLs 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 directive, 2008).” It further provides that: ... Loans or advances with pre-established repayment programs are non-performing when principal and/or interest is due and uncollected for 90 (ninety) or more consecutive days beyond the scheduled payment date or maturity (NBE directive, 2008).

According to this directive of NBE, in addition to the aforementioned category of non-performing loans that do not have pre-established repayment program (essentially overdraft loans) shall be nonperforming when:

- a. The debt exceeds the borrower’s approved limit for 90 (ninety) consecutive days or more;
- b. The account has been inactive for 90 consecutive days or
- c. Deposits are insufficient to cover the interest capitalized during 90 consecutive days or
- d. The account fails to show 20 percent of the approved limit or less debit balance at least once over 360 days preceding the date of loan review.

According to the Basel rules, if a loan is past due for 90 consecutive days, it will be regarded as nonperforming. The criteria used in Ethiopian banking business to identify NPLs is a quantitative criteria based on the number of days passed from loan being due.

The theory of asymmetric information tells us that it may be difficult to distinguish good from bad borrowers (Auronen, 2003, as cited in Richard, 2011), which may result into adverse selection and moral hazards problems. The theory explains that in the market, the party that possesses more information on a specific item to be transacted (in this case the borrower) is in a position to negotiate optimal terms for the transaction than the other party (in this case, the lender) (Auronen, 2003, as cited in Richard, 2011). The party that knows less about the same specific item to be transacted is therefore in a position of making either right or wrong decision concerning the transaction. Adverse selection and moral hazards have led to significant accumulation of NPLs in banks (Bester, 1994; Bofondi and Gobbi, 2003).

2.1.3. General lending Procedures and processing credit applications

Although there is no hard and fast rule about the techniques of lending, it is necessary that

defined procedures have to be followed by the bank to properly address the credit needs of its customers. But according to (NBE, 2008 directive):-

General lending procedures:

- i. Getting started:-this is the first stage in which either the customer will come to the bank seeking for a loan or the branch manager initiates the customer to take out a loan for his business because the customer may not always know how to obtain credit from a bank.
- ii. Preliminary discussion with the customer:-after the first encounter the request for a loan can be processed. Then the borrower's credit worthiness is assessed. The request may not be processed if it falls outside the domain of the bank's credit policy. If it is accepted, the customer completes the bank credit application explaining the relevant details to be incorporated therein including the type of collateral he is able to offer.
- iii. Processing the credit application:-if the loan request of a borrower can be processed then the branch manager or other lending officers shall follow a detailed procedure in the appraisal of credit request and execution of the necessary documentation. The following general guideline is to be observed by lending officers of the bank whenever a loan request is presented to them.
- iv. Loan application: the loan application should be in writing stating the following main points: amount of loan requested, the intended purpose for which the loan is to be used, the proposed collateral, mode of repayment and possible sources, duration of the loan, direct and indirect liabilities, the borrower's contribution to the project, a brief history of the firm or the borrower and its future plan, and any other information that may assist the lending in appraising the loan proposal.
- v. Documentation:-along with the written loan application, the following and other documents should be submitted as may be demanded by the bank:-Trade license, registration certificate, investment certificate from the appropriate ministry or bureau, financial statements (preferably audited and reflecting the current years position) including cash flow statement, especially if the borrower runs a sizable business, feasibility study other documents that may justify the need for the loan as may be required by the bank on the merit of each application.

- vi. Bank format:- the bank provides formats on which a customer would complete specific, general and financial information. The bank shall use its own format on which the borrower will have to fill in his assets and liabilities especially if the applicant does not have a ready financial statement or is not able to submit one.
- vii. Interview:- after all the documentations are in order, the customer may be called in for interviews to obtain further information that has not been disclosed in the application or documents or that were not made clear to the lending officer. A general interview on his/her business and future plans can provide useful information. It is usually necessary to have prior preparation on the topics to be discussed and this should be to the point. In the interview important information must be skillfully extracted.
- viii. Site visits:-if the loan interview indicates that the request for credit sound, a site visit to the business for a more detailed assessment is necessary. Site visits are useful for many reasons mainly to become acquainted with new customers; to review changes that are taking place when customers have been granted a continuity line of credit; to review such changes when a significant new loan is to be considered and to assess the manner in which the business is organized. Important benefits can accrue from regular and informal visits to seize up the customer, which might reveal his managerial ability at close range. Any diversification of funds by customer other than for which it was intended should be immediately corrected upon bank's advice.
- ix. Credit Information:- if the borrower or the applicant is new to the bank, it is particularly necessary to obtain as much information as possible. Such information may usually be related to his honesty, ability, stability, managerial capacity, operational efficiency, financial history, etc. The information can be gathered from various sources, including banks, trade partners, suppliers and the like. Credit information from bank must be required at the earliest possible time, while other lending formalities continue to overcome unnecessary delays in processing the loan application.
- x. Credit Investigation:-when as much relevant and adequate information is obtained, the credit investigation can be conducted to determine the accuracy and the authenticity of the
- xi. Statements made during interview and at the time when financial position was declared. One

must also look for information regarding payment habits and the character of the operator of the business. The Investigation process should be comprehensive and detail sufficiently far into the past to establish all pertinent facts regarding the applicant and his business. There is nothing more important than knowing a potential borrower as thoroughly and as fast as possible before making credit decisions.

- xii. Credit analysis:-the next step in the sequence of credit appraisal is conducting credit analysis of the applicant's financial condition should be done carefully. Ratios should be calculated to determine the applicant's liquidity position and ability to repay the debt. The decision to extend credit to the customer should basically depend on such and many other factors outlined above. The nature of the financial analysis is determined by or depends upon the specific interest of the analyst. For example, the banker will focus on the liquidity of the firm if he is considering a short - term loan.
- xiii. The credit decision:-the final decision as to whether the loan request should be approved or rejected is reached by comparing the statements made by the applicant with the information derived through the investigation process and by analyzing various credit factors such as capacity, capital, collateral, track record for repayments and others. At this point it is necessary to underline the need for fast processing of credit application so that credit decision is given without undue delay. Undue delay in credit processing leads to losing good borrowers, a situation which must always be avoided. The competitive environment dictates that priority attention must be given to fast processing of credit applications.
- xiv. Formalizing or Execution of the loan documents:-once the loan is approved, the terms and conditions to which the borrower and lender agree should be incorporated in a written agreement. All documents relative to the transaction should be completed and executed properly. The loan documents include a loan contract, any mortgage or assignments required to secure the indebtedness, evidence of adequate insurance coverage and the like. In particular, the branch manager must ensure that mortgage or the collateral has full legal authority to pledge the collateral offered and the spouse or legal heirs of the borrower, if legally required must sign the mortgage contract. Failure to fulfill this requirement will jeopardize the bank's right in the event of default and the branch manager will bear full responsibility of its and other legal requirements if not fulfilled prior to the disbursement of

the loan.

2.1.4. Laws relating to control of non- performing loans in Ethiopia

In order to create a climate of confidence conducive to private sector business activities, appropriate laws that provide the necessary environment are necessary. Current theories on which economic development policies are based, as well as the guidelines of international financial institutions that provide technical assistance to developing countries are pursuing free market economic policies, emphasize the critical importance of having a modern commercial law infrastructure. The legal infrastructure should enable the developing or transitioning economy to have in place properly functioning credit and other financial systems that stimulate domestic and foreign investment.

NBE surveillance mechanisms require banks to submit key financial data such as the composition of lending and the scale of non- performing loans on a regular basis, in order to identify all the risks to which each bank is exposed. Commercial banks are legally required to make 100 percent provision against “bad” loans (those with no collateral) and 50 percent provision of “doubtful” (those for which repayment is more than one year late, and for which there is no adequate security).

The National Bank of Ethiopia also is given a power under Article 22 of the proclamation to issue directives concerning the conditions and limitations on investments of banks and a loan, advance or other credit facility, financial guarantee or any other commitments or contracts given by a bank, directly and indirectly to a person. The NBE issued directives on loan provision requirements and the responsibility of the banks to maintain their capital adequacy. This helps the banks not to make any decision which results in financial distress.

2.1.5 Determinants of non-performing loans

2.1.5.1. Micro economic factors

Banks has a major role in economic activity of every country through provision of different financial service. In addition to bank influence on economic activity, macroeconomic factor also affect activity of commercial bank in given country, macroeconomic variable which were found to affect NPLs in literature include GDP, exchange rate, Interest rate, inflation rate and others. The following macroeconomic factors are reviewed from different banking area study.

Deposit Interest Rate

The level of interest rates has a direct effect on a consumer's ability to repay a loan. For example, Thordsen and Nathan (1999), assert that when interest rates are low, people are willing to borrow because they find it relatively easy to repay their debt. When interest rates are high, people are reluctant to borrow because repayments on loans cost more. Some consumers may even find it difficult to meet their existing loan repayments, especially if interest rates increase faster than the rise in a consumer's income. If interest rates rise sharply and stay high for a long period, some consumers will default on their loans.

From the main factors of banks NPL every country central bank regulation is the prominent factor that determined the level banks NPL. Regulation in the financial sector is aimed at reducing imprudent actions of banks with regards to charging high interest rates, insider lending and reducing asset defaults. The central banks have achieved this through interest rate ceilings and other monetary policies. Fofack (2005) argues that economic growth and the real interest rate are important determinants of bad loans in the sub-Saharan African countries. He attributes the relationship between macroeconomic factors and doubtful accounts to the undiversified environment of some economies and their high exposure to external shocks.

There is an empirical evidence of positive correlation between the interest rate and non-performing loans (Nkusu 2011; Adebola, Yusoff, & Dahalan, 2011; Louzis, Vouldis and Metaxas, 2011; Berge and Boye, 2007). An increase in interest rate weakens loan payment capacity of the borrower there for non-performing loans and bad loans are positively correlated with the interest rates (Nkusu, 2011).

As far as interest rate policy is concerned it plays very important role in NPLs growth rate in a country/economy, Hoque and Hossain (2008) examined this issue and according to them non-performing loans are highly correlated with the high interest rates which enhances the debt burden of the borrowers and causes loan defaults. Espinoza and Prasad (2010) examined the macroeconomic determinants of non-performing loans in the GCC banking system, according to them high interest rates increases loan defaults but they did not find statistically significant relationship.

Bloem and Gorter (2001) studied causes and treatment of NPLs, according to them frequent changes in the interest rate policy causes an increase in the bad loans. Asari, et al. (2011) also found significant relationship between loan defaults and interest rates they also found that an increase in loan defaults also causes asset corrosion of banks and subsequently capital erosion. According to Dash and Kabra (2010) the banks with aggressive lending policies charging high interest rates from the borrowers incur greater non-performing loans. Collins and Wanjau (2011) also found interest rate as a primary factor boosting non-performing loans.

Inflation Rate

Inflation can be defined as a sustained or continuous rise in the general price level or, alternatively, as a sustained or continuous fall in the value of money.

There is an empirical evidence of positive relationship between the inflation in the economy and non-performing loans (Khemraj and Pasha, 2009, Fofack 2005). While Nkusu, (2011) has explained that this relationship can be positive or negative according to the author inflation affects loan payment capacity of borrowers positively or negatively, higher inflation can enhance the loan payment capacity of borrower by reducing the real value of outstanding debt; moreover increased inflation can also weaken the loan payment capacity of the borrowers by reducing the real income when salaries/wages are sticky, Nkusu further explains that in this scenario inflation reduces the debt servicing capacity of the loan holders as lenders adjust the lending interest rates to adjust their real return. So according to literature relationship between inflation and non-performing loans can be positive or negative depending on the economy of operations.

The researcher also provides evidence of a positive relationship between inflation rate and non-performing loans. He shows that inflationary pressures contribute to the high level of impaired loans in a number of Sub-Saharan African countries with flexible exchange rate regimes. According to this author, inflation is responsible for the rapid erosion of commercial banks' equity and consequently higher credit risk in the banking sectors of this African count. The impact of inflation, however, may be ambiguous. On one hand, higher inflation can make debt servicing easier by reducing the real value of outstanding loan, but on the other hand, it can also reduce the borrowers' real income when wages are sticky. In countries where loan rates are variable, higher inflation can also lead to higher rates resulting from the monetary policy actions to combat inflation (Nkusu, 2011).

Finally the authors do not find strong evidence of feedback effects from the soundness of banks' balance sheets to economic activity. The authors also found that banks which charge relatively higher exchange rate has a significant positive impact and lend excessively are likely to incur higher levels of non-performing loans. Finally, their result reveals that inflation is not an important determinant of NPLs in the Guyanese banking system.

Exchange Rate

Exchange rate can affects borrowers' debt servicing capacity through different channels and its impact on NPL can be positive or negative (Nkusu 2011). For the Spanish banking sector, Jimenez and Saurina (2006) present evidence that the NPL ratio is explained by GDP growth, real interest rates and credit conditions. Based on their model, Khemraj and Pasha (2009) try to find the determinants of NPL in the Guyanese banking sector. They found that the real effective exchange rate (REER) has a positive effect on impaired loans. The result indicates that whenever there is an appreciation of the local currency, the NPL portfolios of credit institutions are expected to be high.

As far as relationship of the exchange rate is concerned literature provides mixed reviews. According to Khemraj and Pasha (2009) there is a positive relationship between real effective exchange rate and non-performing loans. An appreciation in exchange rates may have different implications i.e. it can adversely affect the loan payment capacity of export oriented firms

(Fofack, 2005) on the other hand it can positively affect the loan payment capacity of those borrowers who borrow in foreign currency, the relationship between Nominal effective exchange rate (includes inflation) and non-performing loans is indeterminate. Fofack (2005) by using a pseudo panel based model for several Sub-Saharan African countries finds evidence that economic growth, real exchange rate appreciation and the real interest rate are significant determinants of nonperforming loans in these countries.

2.1.5.2 Bank specific factors

The existence of NPLs for some borrower under the same macro environment show the micro economic factors, which are viewed as exogenous forces influencing the banking industry are not the exclusive determinant of NPLs. On contrary, the distinctive features of banking sector and the policy choice of each particular bank with respect to their effort for maximum efficiency and improvement in their risk management and expected to exert a decisive influence on the evolution of NPLs. (Onchomba, 2014). Three bank specific variable will use in this study are discussed below in detail.

Credit monitoring and follow-up

This hypothesis developed to see the effect of bank efficiency on the level of non-performing loans in the banking industry. The proposed justification links behind this hypothesis is bad management with poor skills in credit scoring, appraisal of pledged collaterals and monitoring borrowers. Managers in such banks do not follow the standard practices of loan monitoring, controlling and underwriting. Thus as “bad managers” they have poor credit scoring, collateral evaluating and loan monitoring and controlling skills. When managers are inefficiently managing the current banking operations then it will lead to future growth in NPLs (Berger and DeYoung, 1997).

A weak Risk assessment can also play a role in increasing NPLs. The reputability of borrowers to repay loan and the market value of securities are not adequately assessed while giving loans which become key reasons behind NPLs (Pettersson, 2004). The study of Ning (2007) shows that the banks use their personal experiences in giving loans rather than using historical data, mature credit portfolio management skills and centralized information system. The banks should access

information about creditability of the customers, so that NPLs can be reduced. In this regard responsibilities of banks should be clearly defined. It should be ensured that banks exercise effective policies and adequate risk management (Basel, 2001).

The study made by Podpiera and Weill (2008) examine empirically the relation between poor credit risk management and NPL. They conclude that there is strong evidence in favor of the bad management hypothesis and propose that regulatory authorities in emerging economies should focus on managerial performance in order to enhance the stability of financial system (by reducing nonperforming loans).

Hassan S.et. al.,(2010) by using the stochastic cost frontier approach and by applying normal-gamma efficiency distribution model to investigate the relationship between non-performing loans and bank efficiency in Malaysia and Singapore. There result also support the hypothesis of bad management proposed by Berger and DeYoung (1997), which suggests that poor management in the banking institutions results in bad quality loans, and therefore, escalates the level of non-performing loans. Banks' inefficiencies might lead to higher non-performing loans.

Deposits to loans ratio effect

According to Ferreira, C. (2008) deposits to loans ratio can be used as rough estimate of profitability on the deposits or as rough estimate of banking reserve ratio or can be used to measure national savings. The growth in deposits to loans ratio can predict the decline in the NPLs ratio. The theoretical justification of the relation is that the growth in deposits to loans ratio means the greater increase in the deposits as compared to the loans. As the deposits of the banks are growing and loans are not, it shows that banks are risk averse and lend only to those customers who have good credit history and are able to repay the loan.

On the contrary, study done by Fawad and Taqadus (2013) rejects the validity of the deposits to loans ratio effect by suggesting significant positive association between NPLs and reserve ratio. There finding is opposite to the findings of the above researchers. The study suggests that banks has already lend funds to the low quality borrowers in order to utilize idle funds because of the bad management and deviation from standard loan allocation practices, wrong evaluation of collateral and lack of loan monitoring and controlling skills (bad management hypothesis) and

expect that in future the borrowers will not repay loans, banks stop lending with the fear of further increase in the riskiness of loans, thus deposits to loan ratio increases because of the expected increase in the future NPLs. Thus it can be concluded that the deposits to loan ratio increases because of the current lending to the low quality borrowers because of the bad management and stop current lending to prevent further growth in future NPLs.

Credit growth

The variable discussed the growth of rate in different period of time and country, the study of Keeton (1999) shows relationship between loans and speedy credit growth. The author has used a vector auto regression model on commercial banks in United States for the periods 1982-1996. Empirical studies show that lenient credit terms is one of the factors which increases NPLs. To expand credit, banks have to ease the standards of credit terms, monitoring of borrowers and decrease the interest rates (Keeton, 1999). The study of Sarlija and Hare (2012) indicates that in case of developed countries, lending is at a much speedy pace.

The study of Jiménez, et al. (2007), points out that herd behavior, moral hazard, agency problems and disaster nearsightedness are the basic factors behind the lenient terms of credit. Furthermore they linked the lenient credit terms with Non-Performing Loans. When the economy is intensifying, bank managers are found to exercise leniency in giving credit because lower credit expansion means lesser income generation which indicates poor performance.

Through the research period our country Ethiopia does not exercise difficult financial crisis but in other country before the financial crisis there was significant credit growth. This was largely thanks to the deregulation of financial markets and the development of information technologies in the banking industry (Rinaldi & Sanchis-Arellano, 2006). Since the financial crisis, the trend has been reversed and banks are now less willing to lend. This has led to an academic focus on bank lending behavior (Micco & Panizza, 2006; Olokoyo, 2011).

Keeton (1999) emphasizes the close relationship between the business cycle and loan growth; in particular that loan growth tends to be high during business expansion, while loan losses tend to be high during business contraction. Keeton (1999) also shows that faster loan growth leads to higher loan losses. This is because during a good business cycle, banks are more likely to grant loans to clients with weaker credit histories even when collaterals are low. Borio et al. (2002), in

a study based on a sample of Spanish banks, highlight that during recession, problem loans increase as a result of firms' and households' financial distress. When the economy is growing, firms request more loans and can repay them more easily, but when the economy stalls, firms show greater distress and difficulty in repaying debts.

Interest income, which suggests that loan growth, is an important driver of the riskiness of banks. Amador et al. (2013) underline the relationship between abnormal loan growth and banks' risk taking behavior. They find that abnormal credit growth over a prolonged period of time leads to an increase in banks' riskiness, accompanied by a reduction in solvency and an increase in the ratio of NPL to total loans.

Several studies find that excessive credit growth can lead to the development of asset price bubbles. Borio et al. (2002) and Borio and Drehmann (2009) show that excessive credit growth is the main leading indicator of a financial crisis in a twelve-month horizon, in cases where it appears that the flow of loans would remain high for the remainder of the year on the basis of forward-looking indicators.

Another important contribution on Italian credit growth is the paper published by the Bank of Italy in 2013. In this study, Panetta (2013) finds that the main obstacle to the growth of loans is the deterioration of the credit risk caused by the prolonged recession. In the first quarter of 2013, the annual rate of input non-performing loans rose to 2.8% of total credit and to 4.5% for business loans. Panetta (2013) shows a positive relationship between non-performing loans and credit reduction by banks, or bank lending behavior. He underlines that uncertain economic prospects, the high default risk and the difficulty of assessing the soundness of each debtor generate adverse selection and aversion to rising risk among banks, which thus adopt policies of lending restrictions (Stringlitz and Weiss, 1981).

With regard to cooperative banks, Panetta (2013) shows that cooperative bank activity expanded significantly between 1995 and 2008, and their market share increased. He also shows that in the early years of the financial crisis (2008-2009), cooperative banks gave stability to the loan supply thanks to their financial soundness and funding stability. In the second half of 2011, cooperative bank liquidity suffered the effects of the sovereign debt crisis, and in October 2011 the net interbank position of the cooperative movement was in debt for the first time. In addition,

cooperative banks are experiencing deterioration in credit quality. In 2012, the stock of nonperforming loans increased by a quarter, and other impaired loans by almost a third. There is thus almost unanimous evidence that banks' risk appetite is compromised by experiences related to loan losses. An increase in NPL is expected to lead to a reduction in banks' credit lines, hence the negative relationship between NPL and loan growth rate.

2.1.5.3. Business characteristic factors

In addition to the above microeconomic variables and bank specific factors borrower have its own impact on the non performing loan in Ethiopia private commercial banks, in this study three borrower impact will assessed in manufacturing loan. Yet according to our country Ethiopia developing plan (GTP I (2010-2015), the manufacturing industry development is a major target to attain the predetermined objective, in line with this the sector have different incentive like tax exemptions, loan, infrastructure facilities and others (AACCSA, 2014). However the loan disbursed to the sector have to repay in full, but now days the sector gone be a primary defaulter dueto different internal and external reasons , beside to this paper use the following two variable to assess the impact of the business characteristic on the NPLs.

Profit margin of the business

According to Mpunga (2004), the level of business income is important factor that would determine the credit worthiness of a client. Because secured lenders do not wish to become general creditors, they usually seek security with a market value sufficiently above the amount of the loan to minimize the likelihood of their not being able to sell the security in full satisfaction of the loan. The degree of security protection a lender seeks varies with the credit worthiness of the borrower, the security the borrower has available, and the financial institution making the loan.

Nature/characteristic of the business

Ethiopia laying a ground to smooth the environment for both local and foreign investors, under council of minster regulation no 270/2012 investment incentive for manufacturing, especially in current situation our country had been build an industry zone in different region and number of

foreign and local investors are participate in the industry zone. Beside to this especially the local firms source of finance are local commercial banks, the banks are obliged to give a priority for the firms. However, this easily availability of the loan may erode the paying ability of the firms. As explained in the literature review, the major challenge of manufacturing sector in most developing countries is lack of educated and trained workforce, innovation, research and development, and global competitiveness.

In addition to these financing manufacturing sectors have also challenge of fulfilling requirement of cumbersome documentation process, inadequate long-term finances, lack of data base, rent seeking in both banking industry and borrowers side. Some of common challenges of financing this sector are indicated here below. The borrowers fail to pay their commitment due to internal and external factors; some of them are natural calamity, government policy changes, mismatch of demand and supply, fail to meet computation in price and quality, the integrity of lender and borrower, on the other side if the business is new or it is new project the business profit is raise gradually at decreasing rate. However, the in Ethiopian private bank trained the grace period only one year, so as per the nature of the business the sector cannot generate profit within that period. (Embiale Bitew October 2015)

According to Munene, and et al, (2013) the study was assesses out in order to establish the causes of such repayment defaults in Kenya North District. Using a descriptive survey design, collected using both structured and unstructured questionnaires were analyzed using descriptive and inferential statistics. The study concludes that there are various factors influencing non repayment of loans which could arise from businesses characteristics.

Kefyalew Endale, (2012) assess business Climate and Manufacturing Performance in Ethiopia In sum, business climate constraints affect the loan repayment capacity negatively. The magnitudes of negative effects are high in the small size firms. Though the data used were 6 years prior to the current analysis, attempts are made to complement analyses with other studies and reports to examine whether there exist major changes in investment climates have occurred, CSA (2009), Kefyalew and Tsegabirhan (2010).

In summary, there are several studies exploring the factors contributing to NPLs. However, there is no similar study in the context of Ethiopia. As a result, one can't tell with confidence whether the

factors identified by previous research holds true in the Ethiopian context or not. Thus, a research undertaken to explore the factors for NPLs in the case of Ethiopian Banks is something that would help addressing an important research gap. According to researchers observation as indicated on statement of the problem the major gaps on the previous studies are issues related to the analysis of international best experience in order to find out better output and to make it more authentic to employ.

2.1.6. International experience on NPL

2.1.6.1. Implications of high NPLs for the financial system and the real economy

Widespread loan defaults will have adverse effects throughout the financial system and real sector. It is important to bear in mind that these effects go well beyond the banks and their borrowers that are directly affected. Also, loan default is of course the mirror image of debt distress. Both emerge in parallel, and will need to be addressed simultaneously through a comprehensive strategy. (IMF, 2015a)

A bank's high NPL stock depresses its earnings as it generates less interest income, requires loan-loss recognition and increases operating costs related to NPLs' management and work-out. Operating costs could be significant as the relevant skills are in short supply within the banking industry. Lack of profitability reduces the capital generated within banks, raises funding costs, and depresses credit growth. This is a particular problem as younger and more productive firms will be starved of credit. (Ibid, 2015a)

Apart from the financial impact, there is a pervasive change in the internal management of the bank as human resources and managerial capacity are diverted away from operational units that generate new lending. Loan workout becomes increasingly central to the operations of the bank, and will further distract from the generation of new business. (Ibid, 2015a)

These effects are well substantiated in numerous empirical studies. There is a clear correlation between individual banks' higher NPL ratios, and lower interest income, capital coverage and lending growth, higher funding costs and lower efficiency. (Ibid, 2015a)

It is clear that with these indicators of financial soundness compromised, credit will be constrained by all banks, impacting both healthy and distressed private sector borrowers.

A delinquent loan arises where a borrower is in excess debt. Failure to address NPLs perpetuates private debt that is not sustainable. In the empirical literature there is a consensus that above a certain threshold, debt has counterproductive effects. This is because beyond that point risks to solvency and liquidity are such that additional revenue from an improvement in demand is directed to debt service rather than investment and hiring. IMF (2015b) shows some striking results for the investment and hiring of a large sample of European firms. While those with low debt levels rapidly increased activity in response to an improvement in the external demand, those with very high debt levels showed a more muted response in terms of hiring, and even a more rapid deleveraging in response to such an improvement.

Where corporate debt distress becomes systemic debt-deflation dynamics could set in. In the context of weak demand prices of capital goods decline, employment falls, and as the general price level drops the real debt burden rises. A vicious circle takes hold between loan defaults, reduced lending by banks, and rising debt levels among households and enterprises. It is this experience of protracted high NPL levels and excess debt that has motivated many reforms to deal with the more recent crises in Europe. (IMF, 2015b)

2.1.6.2. The international experience with systemic NPL crises

Given successive waves of domestic financial liberalization and capital account opening the frequency of private debt crises and the associated spikes in banks' NPLs have become more frequent. (Lehmann, 2017)

Sweden's success in the speedy resolution of its NPL crisis has been closely studied. Following a property market collapse, loan losses in 1992 alone amounted to 3.8 percent of GDP. But debt and NPLs were primarily related to commercial real estate and mortgages, which helped in the design of focused asset management companies ('AMCs', also known as 'bad banks') The government and central bank wanted a clean break for the healthy part of the banking system, and to let specialists focus on restructuring and value recovery. Professional management, political independence, and appropriate funding contributed to success. The recovery of the economy from 1994 and then in real estate markets was of course crucial in this regard. (Ibid, 2017)

By contrast, Japan delayed its response to the NPL crisis that emerged from about 1994. In

the beginning the authorities believed that government support to recapitalization and consolidation in the banking sector would be sufficient to encourage a cleansing of distressed loans. It was only with the establishment of an independent regulator that a full assessment of banks' capital positions became possible. NPLs then declined dramatically from about 2001 as two centralized AMC's acquired and disposed of them. (IMF, 2015b)

In the euro area NPLs are increasingly recognized as a key factor in holding back a recovery in investment and growth, though also as a reflection of banks' poor earnings and capital coverage. Ireland and Spain benefitted from fairly comprehensive banking sector restructuring and recapitalization under EU/IMF programmes', and asset management companies in these countries focused on well-defined problem assets in commercial and residential real estate. By contrast, the assets in other euro area countries with elevated NPL ratios, such as Greece, Slovenia or Portugal and Italy, are concentrated in more complicated corporate and SME loan portfolios. (Demertzis M. & Lehmann, 2017)

2. 1.6.3. Best practices in supervision and banks' handling of NPLs

NPLs should not be seen as a problem whose origin is external to the banking sector. NPLs are a reflection of corporate and household debt distress and at the same time a symptom of banking sector undercapitalization. Adequate capital coverage is therefore a prerequisite for allowing banks to fully engage in NPL resolution and financial restructuring of borrowers. It will signal to the private sector that the banking sector is prepared to withstand the value correction that occurs in the process of debt restructuring. But as the experience from other markets in the previous section make clear, strict regulation and supervision tailored to a systemic problem with loan defaults is important. There has been considerable progress in this area in Europe, from which countries such as Belarus could benefit. These are the key areas where there could be convergence with EU practice:

Adoption of a uniform asset classification methodology, ideally that proposed by the European Banking Authority (EBA) in 2015, or that proposed recently by the Basel Committee.

Early and adequate provisioning against loans that are at risk, even they may not yet be default. New EU accounting standards (IFRS 9) will from next year require forward-looking credit risk models that could lead to impairments of EU banks rising ahead of loan delinquency.

Lifting of restrictions on the transfer of assets either between creditors, or from individual banks to investors who seek to acquire title and manage these assets. Banks may need to own and operate the assets that they acquire in the process of restructuring.

Uniform standards in appraisals of that provide consistent valuation of collaterals. But supervision should go beyond enforcing prudential standards and needs to address capacity gaps within the banks.

All banks typically have a workout department to which all loans are moved at a certain stage of distress. Such units will have specialist staff experienced in restructuring and with access to the required internal legal support. But workout departments are typically under-resourced, and not sufficiently incentivized. Engagement with investors and with other banks is made more difficult due to poor documentation of the loans that are managed and lack of authorization to participate actively in restructuring.

For this reason, the European Central Bank, as the supervisor of the largest banks in the euro area, recently adopted guidelines on best practices in this area (ECB, 2017). These guidelines set standards in terms of management capacity, loan documentation and engagement with investors. It tasks banks' workout units with the early restructuring of distressed assets, and resolution or foreclosure in coordination with other lenders once the borrower has been deemed non-viable. Similarly intrusive supervision was implemented in a number of emerging markets, such as Korea.

2.1.6.4. Asset separation within distressed banks and in systemic NPL crises

Beyond a certain point the workout department of an individual bank will be overwhelmed by the scale of the problem. Handling of the distressed loan portfolio absorbs the bank's management to such an extent that normal new business can no longer be conducted. More fundamentally, banks generally set poor incentives for their staff. Debt restructuring involves difficult decisions in writing down claims, and the equity value of owners and long-standing clients of the bank. Bank staffs who have been involved in the origination of the distressed loan will rarely be empowered to restructure loans in a way that maximizes value recovery. Moreover, restructuring requires specialist skills which are normally in short supply in the bank, if not in the industry as a whole. (EBA, 2017)

Internal asset separation

A key element in any NPL resolution strategy is therefore the separation of distressed assets from the healthy part of a bank's balance sheet. The objective is to eliminate the risk to the valuation of the bank that is due to the uncertain asset quality and recovery values, and thereby return the remainder of the bank to viability. This restores the confidence of depositors and investors. New business once again becomes possible. Asset separation is imperative once the bank is in distress, and deposits are rapidly flowing out as capital coverage diminishes. Two options exist for an asset separation that is limited to operational aspects, though these may not be effective in Belarus: (EBA, 2017)

A 'non-core' division, or internal 'bad bank'. Such a unit would be exclusively tasked with the run-off of distressed assets and be subject to clear performance targets in terms of asset reductions by the main bank. Ultimately, the consolidated balance sheet will of course remain at risk, and such a unit has little value where corporate governance is weak. (EBA, 2017)

In an asset protection scheme certain assets are 'ring-fenced' within the bank's balance sheet and guaranteed by the government. This measure has been employed in a number of European crisis situations, for instance in the UK, and can secure the bank against further value loss. It is of course not an option where the bank is already state-owned, or where the government balance sheet is already at risk. (EBA, 2017)

2.2. Review of Empirical Evidence

Studies show that problem of loans are often used as an exogenous variable to explain other banking outcomes such as bank performance, failures, and bank crises (Boudriga et al., 2009). However, some studies investigate problem loans as an endogenous variable (Sinkey and Greenwalt, 1991; Kwan and Eisenbeis, 1997; Salas and Saurina, 2002, as cited in Boudriga et al., 2009). GDP growth, inflation and interest rates are common macro-economic factors, while size and lending policy are micro-economic variables (Greenidge and Grosvenor, 2010). These variables are by no means exhaustive, but they provide a useful framework for monitoring the development of non- performing loans (Guy, 2011). More recent researches started studying

this problem but with particular reference to both developing countries and emergent economies (Haunerand and Peiris, 2005; Mathewes et al., 2007, as cited in Maggi and Guida, 2009)

Bercoff et al (2002) examine the fragility of the Argentinean Banking system over the 1993-1996 period; they argue that NPLs are affected by both bank specific factors and macroeconomic factors.

To separate the impact of bank specific and macroeconomic factors, the authors employ survival analysis. Using a dynamic model and a panel dataset covering the period 1985-1997 to investigate the determinants of problem loans of Spanish commercial and saving banks, Salas and Saurina (2002) reveal that real growth in GDP, rapid credit expansion, bank size, capital ratio and market power explain variation in non- performing loans.

Furthermore, Jimenez and Saurina (2005) examine the Spanish banking sector from 1984 to 2003; they provide evidence that NPLs are determined by GDP growth, high real interest rates and lenient credit terms. This study attributes the latter to disaster myopia, herd behavior and agency problems that may entice bank managers to lend excessively during boom periods. Meanwhile, Rajiv and Dhal (2003) utilized panel regression analysis to report that favorable macroeconomic conditions and financial factors such as maturity, cost and terms of credit, banks size, and credit orientation impact significantly on the NPLs of commercial banks in India. Babihuga (2007), in an IMF working paper, explores the relationship between several macroeconomic variables and financial soundness indicators (capital adequacy, profitability, and asset quality) based on country aggregate data. She explained the cross-country heterogeneity by differences in interest rates, inflation, and other macroeconomic factors. However, the study does not consider the impact of industry specific drivers of problem loans.

Most empirical studies examine the influence of the macroeconomic environment on NPLs (Louzis et al, 2011). Rinaldi and Sanchis-Arellano (2006) analyzed household NPLs for a panel of European countries and provide empirical evidence that disposable income, unemployment and monetary conditions have a strong impact on NPLs. Berge and Boye (2007) find that problem loans are highly sensitive to the real interest rates and unemployment for the Nordic

banking system over the period 1993-2005. Lawrence (1995) examines the theoretical literature of life-cycle consumption model and introduces explicitly the probability of default. This model implies that borrowers with low incomes have higher rates of default due to increased risk of facing unemployment and being unable to settle their obligation. Additionally, in equilibrium, banks charge higher interest rates to riskier clients. Rinaldi and Sanchis-Arellano (2006) extend Lawrence's model by assuming that agents borrow in order to income and the unemployment rate, which is linked to the uncertainty regarding future income and the lending rates.

Breuer (2006), using Bankscope data, analyzed the impact of legal, political, sociological, economic, and banking institutions on problem bank loans. Nevertheless, her study suffers from a representativeness bias due to the fact that Bankscope data on NPLs are only available for a very limited number of countries and for a few numbers of banks. Other studies focusing on the macroeconomic determinants of NPLs include that of Cifter et al. (2009), Nkusu (2011) and Segoviano et al. (2006).

Carey (1998) argues that the state of the economy is the single most important systematic factor influencing diversified debt portfolio loss rates (Carey, 1998, p. 1382). Quagliariello (2007) finds that the business cycle affects NPLs for a large panel of Italian banks over the period 1985-2002. Furthermore, Cifter et al. (2009) provides empirical evidence for a lagged impact of industrial production on the number of NPLs in the Turkish financial system over the period 2001-2007.

Salas and Saurina (2002) estimate a significant negative contemporaneous effect of GDP growth on NPLs and infer the quick transmission of macroeconomic developments to the ability of economic agents to service their loans (Bangia et al., 2002; Carey, 1998). Nkusu (2011) investigating the macroeconomic determinants of loan defaults through panel regressions and panel vector autoregressive models. The author suggests that hike in interest rates result in deterioration of borrower's repayment capacity and hence, cause of increase in NPLs.

There is significant empirical evidence to suggest that local economic conditions explain to some extent, the variation in NPLs experienced by banks (Keeton and Morris, 1987; Sinkey and Greenwalt, 1991; Salas and Saurina, 2002; Rajan and Dhal, 2003 as cited in Greenidge and Grosvenor, 2010). Research conducted in the Caribbean includes that of Khemraj and Pasha

(2009), who examined the determinants of NPLs in Guyana. The empirical results revealed that with the exception of the inflation rate and bank size, all other factors have a significant relationship with the non performing loan ratio (Greenidge and Grosvenor, 2010).

Causes and treatment of NPLs were studied in detail by Bloem and Gorter (2001). They agreed that bad loans” may considerably rise due to abrupt changes in interest rates. They discussed various international standards and practices on recognizing, valuing and subsequent treatment of NPLs to address the issue from view point of controlling, management and reduction measures. A study conducted by Espinoza and Prasad (2010) focused on macroeconomic and bank specific factors influencing NPLs and their effects in the Banking System. After a comprehensive analysis, they found that higher interest rates increase NPLs but the relationship was not statistically significant.

Salas and Saurina (2002) find a negative relation between bank size and NPLs and argue that bigger size allows for more diversification opportunities. Hu et al. (2004) and Rajan and Dhal (2003) report similar empirical evidences. Another strand of literature has focused on the degree of loan concentration in various sectors, and proposes that vulnerabilities within sectors of high loan concentration tend to exacerbate the non performing ratio (Herring and Wachter, 1999 as cited in Guy, 2011). However, Stiroh (2004) does not find evidence of benefits from diversification in the form of reduced risk, for the US banking system, since non-interest income growth was highly correlated with net interest income during the 1990s.

The moral hazard of too-big-to-fail banks represents another channel relating to bank-specific features with NPLs (Louzis et al, 2011). A policy concern is that too-big-to-fail banks may resort to excessive risk taking since market discipline is not imposed by its creditors who expect government protection in case of a bank”s failure (Stern and Feldman, 2004). Consequently, large banks may increase their leverage too much and extend loans to lower quality borrowers (Louzis et al, 2011). Boyd and Gertler (1994) argue that in the 1980s the tendency of US large banks towards riskier portfolios was encouraged by the US government’s too-big-to-fail policy. On the other hand, Ennis and Malek (2005) examine US banks” performance across size classes over the period 1983-2003 and conclude that the evidence for the too-big-to-fail distortions is in no way definite. Hu et al (2006) also show that bank size is

negatively related to NPLs.

Berle and Means (1933) in Louzis et al. (2011) argue that dispersed ownership of corporate equity may lead to a poorer performance of the firm as the incentive of shareholders to monitor the management weakens. An opposing view is that an efficient capital market imposes discipline on firm's management and therefore dispersed ownership should not have an effect on firm's performance (Fama, 1980 as cited in Louzis et al., 2011). A strand in the empirical literature tests these contrasting views using loan quality as an indicator of riskiness but evidence is inconclusive (Louzis et al, 2011). Iannotta et al. (2007) find a link between higher ownership concentrations and loan quality using a sample of 181 large banks over the period 1999-2004, thus lending support to the Berle and Means view.

On the other hand, Laeven and Levine (2009) employ data on 279 banks and find a positive association between greater cash flow rights of a large owner and risk taking. Furthermore, Shehzad et al. (2010) present empirical evidence, from a data set comprising 500 banks from 2005 to 2007, that ownership proxied by three levels of shareholding (10%, 20% and 50%) has a positive impact on the NPLs ratio when the level of ownership concentration is defined at 10 percent but a negative impact when the level of level of ownership concentration is defined at 50 percent. Therefore they suggest that sharing of control may have adverse effects on the quality of loans extended up to a level, but in cases of a strong controlling owner, bank's management becomes more efficient leading to lower NPLs. Azofra and Santamaria (2011) find that high levels of ownership concentration benefit both the bank's profitability and efficiency for a sample of Spanish commercial banks.

Empirically, Novaes and Werlang (1995) report lower performance for state controlled banks in Brazil and Argentina due to high proportion of problem loans given to government. Micco et al. (2004), analyze 50,000 financial institutions with different ownership types covering 119 countries. They conclude that NPLs tend to be higher for banks with state ownership than for other groups. Hu et al. (2004) use a panel of Taiwanese banks and find a positive correlation between capital share owned by the state and the level of non- performing loans. Garcia-Marco and Robles-Fernandez (2007) investigate the relationship between risk taking and ownership structure. They document that commercial banks (mainly private owned) are more exposed to risk than deposit

banks (mainly state owned). More recently Hu et al (2006) analyzed the relationship between NPLs and ownership structure of commercial banks in Taiwan with a panel dataset covering the period 1996-1999. The study shows that banks with higher government ownership recorded lower NPLs. Using a pseudo panel-based model for several Sub-Saharan African countries, Fofack (2005) finds evidence that economic growth, real exchange rate appreciation, the real interest rate, net interest margins, and inter-bank loans are significant determinants of NPLs in these countries. The author attributes the strong association between the macroeconomic factors and NPLs to the undiversified nature of some African economies.

Gadise Gezu (2014) study conducted a study on both macroeconomic and bank specific determinants of NPL on commercial banks of Ethiopia through explanatory research design. The study shows loan to deposit ratio had positive where as Inflation rate had negative but, insignificant effect on NPL of commercial banks in Ethiopia. However, banks profitability measured in terms of return on equity, banks capital adequacy ratio and lending rate had negative and statistically significant effect on NPL of commercial banks of Ethiopia.

CHAPTER THREE

3. RESEARCH DESIGN AND METHODOLOGY

The purpose of this study was to identify the cause for the occurrence of NPLs. It is more descriptive type and tries to assess the relationship between occurrence of NPLs and some bank specific factors.

3.1. Study Area

Like other business activities, banks strive to make profit and grow. Presently head quarters of all private commercial banks and state owned banks are located at the capital city, Addis Ababa. The Department that is responsible for provision of loans and advances to individuals and projects is contained at the Head Offices of the banks. Therefore, the study was conduct in consultation with staff involved in credit operations at head offices level using survey design with structured self administered questionnaires and unstructured interview.

3.2. Research Design and Source of Data

In order to achieve the objectives of the study, the research was undertaken both explanatory and descriptive research design with mixed approach using both qualitative and quantitative data. Descriptive research design was employed in order to collect data's freely and no need of controlling the variables explanatory research design in order to answer the reason for the problem happened. In doing so, the study may describe, compare, contrast and interpret the existing facts and puts the status of NPL in relation to various variables which was help to understand the issue and lead to causal analysis. Further the research was utilizing a survey as a research method.

3. 3. Study Participants

To conduct the survey, out of sixteen private commercial banks and one state owned bank, professionals working in twelve private commercial banks and one state owned banks located in Addis Ababa at the head office were contacted: Because of time and budget constraint of the

researcher. Twelve of the private commercial banks were in banking operation for a decade more than a decade but Berhan International bank was selected from Abay Bank bay using simple random sampling technique of lottery method and the one state-owned bank, (Commercial Bank of Ethiopia) were in operation for more than forty eight years were taken as study area.

3.4. Sampling Method

The study limit participants because of time, financial related problems of the researcher. In order to simplify the study, purposive sampling was employed. Purposive sampling technique was employed deliberately in order to get general stand of banks NPL from head quarters. Respondents were select by random sampling technique of lottery method from each bank. Accordingly, the commercial banks were classified into two clusters as private owned and stated owned banks. Further all positions and respective tasks were list involving credit processing, loan provisioning, monitoring and follow-ups. Furthermore, professionals may classified based on positions held in the structure of credit department. Such professionals include, loan officers, credit analysts, credit directors, relationship managers and recovery & monitoring officers etc;

3.5. Sample Size

Out of sixteen private commercial banks and one state owned commercial bank; twelve private commercial banks and one state-owned bank were selected for the survey. Therefore, those commercial banks currently operating in Ethiopia were considered as primary sample units to conduct this research. A total sample of 117 professionals working in commercial banks related to credit and credit related operations were selected out of 190 credit department staffs as part of the study. On average eight professionals were select from each private bank, while twenty one were considered from state-owned bank CBE. The researcher used this no of samples by assuming the target groups have better understanding and information about the study.

Table 1 Sample Size

No	List of sample Banks	No of employees on department	Sample	%
1	Commercial banks of Ethiopia	27	21	77.8%
2	Awash International S.C	19	12	63.2%
3	Dashen Banks S.C	16	11	68.8%
4	Bank of Abyssiniya S.C	14	9	64.3%
5	Wegagen Bank S.C	13	8	61.6%
6	United Bank S.C	14	7	50%
7	Nib International Bank S.C	14	8	54.2%
8	Cooperative Bank of Oromiya S.C	14	8	54.2%
9	Lion International Bank S.C	14	7	50%
10	Zemen Bank S.C	11	6	54.5%
11	Oromiya International Bank S.C	15	10	66.7%
12	Buna international Bank S.C	9	5	55.6%
13	Berhan International Bank S.C	10	5	50%
Total		190	117	61.6%

3.6. Types of Data

Both primary and secondary data were collected and systematically presented and analyzed in this paper. Primary data were collect through questionnaires and unstructured interview from sample respondents loan administrators and officers from each bank in order to assess bank specific causes of NPL. The researcher used primary data in order to get first hand information. Secondary data were obtained from publications of National Bank of Ethiopia, private banks, other financial institutions and from internet service. The researcher took secondary data in order to get better information and to understand previous trend.

3.7. Method of Data Collection

Primary data were collected through questionnaires and unstructured interview from respondents that involve Department Managers and Senior Officers working on loan processing. Such group involves Loan Officers, Credit Analysts, Credit follow-up and Monitoring officers, Credit Directors, Relationship Managers and Recovery/Monitoring Officers etc.

Secondary Data were directly gathered from records of each commercial bank under sample study and National Bank of Ethiopia. The data collected include aggregate loans outstanding balances, NPLs at the annual closing date, June 30 of each year. The researcher employed questionnaires for data collection in order to get more data within short period of time and less budget whereas interview in order to get data further on the respondents facial expression.

3.8. Method of Data Analysis and Interpretation

The data were collected from survey questionnaire in order to code and check for consistency and entered into SPSS version 20 spreadsheet. A descriptive statistics type of percentage, frequency, mean and standard deviation were employed to analyze the data. The researcher used percentage and frequency in order to show grouping of data relatively and mean and std. dev. to show the average value and their dispersion to the mean.

CHAPTER FOUR

4. SURVEY RESULTS AND DISCUSSION

In this chapter data analysis results were presented which were collected from different instruments in order to identify determinants of nonperforming loans in commercial banks of Ethiopia and to set possible recommendations.

4.1. General

A structured questionnaire (Appendix I) was distributed to one hundred seventeen employees, loan officers, credit analysts, credit directors, relationship managers, recovery/monitoring officers and vice presidents in twelve private commercial banks and one state owned bank selected randomly from all banks that are operational in Ethiopia.

The questionnaire was distributed in person to hundred seventeen employees (whose positions are related to bank lending). Out of 117 questionnaires 108 were completed and collected (see Table 1 below). As a result, the analysis is made on the valid number of responses.

Table 2. Survey response rate

Respondents	Size
Sample size	117
Completed and returned questionnaire	108
Response rate	92.31%

Source: Survey outcome

Table 3. Number of Credit Department employees who actively responded to the structured questionnaire distributed, by banks' profile.

End of June, 2018

S/N	Banks	Date of Establishment	Quantity of Questionnaire Completed	%	No of Branches
	State Owned banks				
1	Commercial Bank of Ethiopia	1963	19	16.2%	1375
	Private Commercial Banks				
2	Awash International Bank	1999	12	10.3%	382
3	Dashen Bank S.C	2003	11	9.4%	381
4	Bank of Abyssinia S.C	1996	6	5.1%	284
5	Wegagen Bank S.C	1997	8	6.8%	292
6	United Bank S.C	1998	7	6%	233
7	Nib International Bank S.C	1999	8	6.8%	228
8	Cooperative Bank of Oromia S.C	2005	7	6%	332
9	Lion International Bank S.C	2006	6	5.1%	210
10	Zemen Bank S.C	2009	4	3.4%	25
11	Oromia International Bank S.C	2008	10	8.6%	260
12	Bunna International Bank S.C	2009	5	4.3%	176
13	Berhan International Bank S.C	2010	5	4.3%	168
14	Abay Bank S.C	2010			162
15	Addis International Bank S.C	2011			59
16	Dehub Global Bank S.C	2012			43
17	Enat Bank S.C	2013			40
	Questionnaire Filled & returned		108	92.3%	
	Questionnaire not returned		9	7.7%	
	Total		100	100%	4,650

Source: NBE annual report (2017/18), Survey outcome and own computation

4.2. Profile of Respondents

Profile of the respondents like ownership of the banks they work for, banking experience and specific exposure in bank lending and positions held by respondents are presented and subsequently discussed as follows.

Table 4. Respondents by Category

Profile	Frequency	%
Private banks	89	82.4
State owned banks	19	17.6
Total	108	100.0

Source: Survey outcome and own computation

In terms respondents profile, 82.4 percent of survey respondents are employed in private banks. The remaining 17.6 percent are employed in state owned bank. Since the process of administration of loans and advances both in private and state owned banks is under taken in compliance with the National Bank of Ethiopia, Banking Supervision Directorate, directives results are comparable and similar results may not be affected variance in the mix of respondents will not have impact on the findings. Here it shows most of sample respondents were belongs to private commercial banks.

Table 5. Position of respondents in their respective bank

Positions	Frequency	%
Credit Relationship Managers	30	27.8
Credit Analysts	22	20.4
Credit Directors	15	13.9
Recovery/Monitoring Officers	12	11.1
Auditors	9	8.3
Loan Officers	9	8.3
Vice President – Operations	3	2.8
Others	8	7.4
Total	108	100

Others include: Executive assistant to CEO and Board of Directors,

Source: Survey outcome and own computation

As shown in Table 4 above, 30 (27.8 percent) of the respondents were Customer Relationship Managers while 22 (20.4 percent) were Credit Analysts and 15 (13.9 percent) were Credit Directors. The rest of the respondents belonged to other occupations like; Monitoring Officers, Auditors (who are not directly involved in credit operations) Loan Officers and the like.

Table 6. Respondents experience in the banking industry.

Experience in Banking Industry	Frequency	%
Less than one year	-	-
1 - 5 years	13	12.1
6 - 10 years	33	30.56
11 - 15 years	32	29.63
Above 15 years	25	23.15
Note Stated	5	4.63
Total	108	100.0

Source: Survey outcome and own computation

In terms of banking experience, the absolute majority (about 88 percent) of the respondents reported to have served the banking industry for more than 5 years, of which close to 50 percent were long-serving employees, having over 10 years of work experience in the industry. On the other hand, about 12.1 percent of the respondents had as short as one to five years of banking experience. This shows us in the banking activities lending needs long time work experience in order to decrease experience related causes of NPL.

Table 7. Bank lending experience of the respondents

Years of Experience in Loan Process	Frequency	%
Less than 1 year	8	7.4
1 - 5 years	28	25.9
6 - 10 years	42	38.9
11 - 15 years	20	18.5
Above 15 years	4	3.7
Note Stated	6	5.6
Total	108	100.0

Source: Survey outcome and own computation

In terms of bank lending experience majority (66.7 percent) of the respondents had more than five years of experiences particularly in lending (or credit management) activities, of which 27.8 percent reported to have acquired more than 10 years of exposure in the area. The fact that such a majority of the respondents had ample experience in credit activities is believed to have impacted the dependability of the data quite positively.

4.3. Factors that Affect Bank Lending

Respondents were solicited to express their agreement or disagreement to certain statements dealing with bank-specific factors affecting occurrences of NPLs. As a result, 75 percent of the respondents agreed to the statement Factors affecting occurrences of NPL are obvious while 12.96 percent were neutral and 5.6 percent disagreed, and 6.5 percent left the question unanswered (Table 7). This shows that credit relationship managers, credit analysts, credit directors and auditors are highly influence loan success.

Table 8. Factors affecting occurrences of NPLs are obvious

Job Occupation	Agree	Disagree	Neutral	Not Stated
Credit Relationship Managers	22	2	5	3
Credit Analysts	18	1	2	2
Credit Directors	13	-	2	1
Monitoring/Recovery Officers	8	2	2	-
Auditors	10	--	--	--
Loan Officers	5	--	2	--
Vice President – Operations	1	---	--	1
Others	4	1	1	--
Total	81	6	14	7
%	75%	5.56%	12.96%	6.48%

Source: Survey outcome and own computation

In section two of the structured questionnaire, respondents were expected to express specific factors they think causing NPLs pertaining to the Ethiopian banks. Responses are summarized in the following Table.

Responses were reflected in various ways. Respondents from each bank may reflect their own feelings, based on own policy and procedures in administrating credit facilities. The credit operation process may also take different approaches based on credit culture of each bank. However, expected responses were obtained from all the thirteen surveyed banks. Most of the factors were shared by respondents of each bank. Table 8 below reflects common factors that contribute to the occurrence of NPLs. The fact that a particular factor is shared by the respondent bankers reflects how prevalent the cause could be in the banking industry as a whole. However, the response calls for further study to further scrutinize the real causes behind.

Table 9. Factors considered causing occurrences of NPLs in the Ethiopian banks

Factors	No of Respondents	Responses in favor of the factors												
		BOA	UB	WB	DB	NIB	LIB	BIB	ZB	AIB	BuIB	CBO	CBE	OIB
Absence of wise & sound lending pr	10	PA	PA	PA	PA		PA		PA	PA		PA	PA	PA
Borrowers poor knowledge	8	PA	PA		PA		PA	PA	PA			PA		PA
Character credit culture of borrower	9		PA	PA	PA		PA	PA	PA		PA	PA	PA	
Unavailability of complete & correct for analysis	7	PA	PA	PA			PA			PA			PA	PA
Diversion of Fund	11	PA		PA	PA	PA	PA	PA	PA	PA		PA	PA	PA
Economic condition and Policy	12	PA	PA	PA	PA		PA	PA	PA	PA	PA	PA	PA	PA
Poor credit risk analysis	13	PA	PA	PA	PA	PA	PA	PA	PA	PA	PA	PA	PA	PA
Market factors	7			PA			PA	PA	PA	PA		PA	PA	
Over / Under financing	7			PA	PA				PA	PA		PA	PA	PA
Weak / inadequate follow-up & monitoring of loans	11	PA	PA	PA	PA	PA	PA	PA		PA	PA	PA	PA	

PA: - Problem Available

Source: Survey outcome and own computation

According to the Table 8 above, poor credit analysis/appraisal appeared to be the factor shared by all the surveyed twelve banks, while factors like economic conditions, inadequate follow-up and monitoring of loans, and diversion of fund were shared by the overwhelming majority of the respondents in both private and state-owned banks to be the major causes for occurrences of NPLs in the Ethiopians banks. Moreover, unsound lending practices as well as undesired character and credit culture of borrowers were considered to be causes of NPLs by most of the respondents. This shows that most of commercial banks of Ethiopia face related causes for NPLs. Further, respondents were also expected to rank factors causing NPLs in the Ethiopian Banks in order of importance (from 1st/highest to 8th/lowest), as tabulated under Table 9 below.

Table 10. Ranking of factors affect occurrence of NPLs in the Ethiopian commercial banks.

Factors	1 st	2 nd	3 rd	Sub Total	%	4 th	5 th	6 th	7 th	8 th	Total
Rapid Loan growth of banks	6	5	7	18	16.7	17	23	19	10	21	108
High interest rate	7	3	9	19	17.6	13	17	17	17	25	108
Lenient/Lax credit terms	10	9	15	34	31.5	18	15	16	12	10	105
Credit culture/ Orientation	15	18	23	56	51.9	18	11	9	6	5	105
Size of the Bank	1	1	3	5	4.6	4	8	19	27	21	84
Poor monitoring/follow up	26	31	22	85	78.7	18	8	2	-	1	108
Ownership type of bank	6	9	10	25	23.2	3	10	13	12	39	102
Poor risk assessment	50	23	12	85	78.7	6	3	5	5	7	111

Source: Survey outcome and own computation

The survey result indicated that poor risk assessment (78.7 percent), poor monitoring and follow-up of loans and advances ((79.3 percent), as the top ranking factors causing occurrences of NPLs followed by credit culture/orientation of borrowers to credit facilities (51.9 percent). The survey results further reflected that the contribution of such factors as size of bank, rapid loan growth of banks, high interest rates and ownership type of bank to occurrences of NPLs is

quite minimal, varying from as insignificant as 5 to 23 percent, in the order mentioned. This shows us banks should give serious attention to risk assessment, monitoring, and follow up of loans and advances in order to protect NPLs

The following table (Table 10) shows the relationship between credit assessment and occurrences of NPLs. About 98.8 percent (mean 4.6, standard deviation 0.52) of respondents agree that poor risk assessment would lead to loan default while, in conformity to this, 96.5 percent (mean 4.6, standard deviation 0.60) of the respondents share the opinion that proper implementation of know your customer (KYC) principle leads to high loan quality.

On the other hand, 71.7 percent (mean 3.6, standard deviation 0.52) of the sample respondents agree that good loan processing ensures conducive loan performance, while on the contrary, majority (58.3 percent) of the respondents do not share the opinion that easily admitted borrowers usually default. Needless to mention that the purpose of this question was to see if simplicity in customer admittance could involve rush into credit decision, without adequate appraisal of the business as well as the character of the borrower. However, as majority of the respondents reported otherwise, the possible justification for this is that banks usually recruit high-value potential customers (in most cases from competitor banks) on the basis of the customers established goodwill and then process/deliver the loans in a very short period of time (without compromising analytical quality) so as to show them their excellence in service delivery time. Thus, this finding doesn't support the assertion of Brown Bridge (1998) who stated that easily admitted customer's loan would be damaged at the early stage. Therefore KYC policy and risk assessment needs due attention in loan process to protect loan default.

Table 11. Factors on relation between credit assessment and occurrences of NPLs.

Factors	Strongly (5) %	Agree (4) %	Neutral (3) %	Disagree (2) %	Strongly D (1) %	Mean	Std. Dev.
Easily admitted borrowers usually default	13.7	27.9	33.4	21.3	3.6	3.2	1.13
Know your customer (KYC) policy leads to high loan quality	63.9	32.6	2.4	1.1	-	4.6	0.60
Good loan processing ensures conducive loan performance	20.5	51.2	21.1	6.1	1.2	3.6	0.52
Poor risk assessment would lead to loan default	56.2	42.6	1.2	-	-	4.6	0.52

Source: Survey and own computation

Based on the results one can easily observe that all responsible officers involved in credit administration have to carry out comprehensive and detailed analysis in order to determine the prospective borrowers' businesses and related merits prior to providing credit facilities. This would assist the officers and managers to establish, essentially, the extent to which the borrower is able to service the debt by the income generated from businesses.

Further, the importance of employment of know-your-customer (KYC) principle cannot be overemphasized. Respondents agree that banks that employ a stout KYC policy would maintain better loan quality. Such information includes the prospective borrower's business and financial management, organizational setup, credit history or overall track record, and complete profile. As indicated in the literature part there is nothing important than knowing potential customer.

Proper review of documents obtained from applicants, including the information inquiry report is quite essential so as to ensure the extent to which the information collected is credible. Obviously, when the loan undertaking is poor, the probability of default is high. Therefore the bank should conduct due diligence by making every possible examination available.

Table 12. Factors on relation between credit monitoring and occurrences of NPLs

Factors	Strongly (5) %	Agree (4) %	Neutr (3) %	Disagree (2) %	Strongly D (1) %	Mean	Std. Dev.
Strict monitoring ensures loan Performance	31.1	59.5	6.9	2.5	0.0	4.2	0.88
Poorly assessed and advanced loan perform well if properly monitored	2.3	28.1	24.8	41.8	3.0	2.8	1.15
Loan follow up is directly related to occurrence of NPLs.	16.3	42.6	18.1	18.2	4.8	3.3	1.20
Banks with higher budget for loan monitoring have lower NPLs.	8.5	36.2	30.9	20.8	3.6	3.2	1.06

Source: Survey and own computation

The importance of regular monitoring of loan quality, Agresti et al. (2008) stated that it would help insure a sound financial system and there by prevent systemic risk that otherwise would lead to loan default. From the above table (Table 11) one can conclude that strict loan monitoring ensures commendable loan performance as asserted by nearly 91 percent (mean 4.2, standard deviation 0.88) of the times. What is more, close to two-third (3.0%+41.8%+24.5%) of the respondents do not agree with the assertion that loans and advances might perform well if properly monitored; despite inadequate assessment during sanctioning, indicating that loan follow-up can never substitute prudent credit assessment. If loans are not paid as and when due, credit risk is involved on reducing the value of the bank's business. In order to continue lending the banks must be able to collect their outstanding loans on time. Once funds are disbursed the concerned banks cannot afford to rest on their laurels and expect all payments to come in on the due dates without problem. Hence, in order to minimize the occurrence of bad loans every effort of follow-up must be carried to the utmost degree and take timely action when necessary.

The survey results also indicated that, 58.9 percent (42.6+16.3) of the respondents (with mean 3.3, and standard deviation 1.2) agree that occurrence of NPLs is directly related to loan follow-up. Should effective follow-up of loans and advances be in place good asset quality is maintained. From the above data we can infer in loan process it needs a strict and separate work assignment is necessary and proper monitoring cannot cover assessment of loan activities.

Loan follow-up involves confirmation of repayment of currently maturing debts but also continuity of repayments for loans duration. Under physical follow-up existence and operation of the borrowers’ business is ensured. Whether the end use of the borrowed fund is according to the purpose for which the loan was granted should be ascertained by financial follow-up. To protect the interest of lending banks, ensure legal recourse is available at all times legal follow-up should be put into effect. Survey results indicate that banks that incur big cost for loans follow-up would have comparatively lower NPLs.

Table 13. Factors on relationship between collateralizing loans & occurrences of NPLs

Factors	Strongly (5) %	Agree (4) %	Neutral (3) %	Disagree (2) %	Strongly Disagree (1) %	Mean	Std. Dev.
Collateralized loans perform well	3.3	36.2	25.8	31.3	3.4	3.2	0.96
Collateralizing loans helps protect loan	13.8	56	16	14.2	0	3.6	0.92
Most of the time non - collateralized loans default	5.3	20.1	30.9	41.8	2	2.8	0.94

Source: Survey outcome and own computation

Collateral refers to assets that the Bank holds to mitigate default risk. It is a security that a borrower gives to a Bank to guarantee repayment of a loan. It depends on the Bank’s policy that all loans shall be backed by acceptable collateral. It is a second way-out and it should never be a substitute for credit worthiness, which is the existence of adequate cash flow to repay the loan.

Security is taken to mitigate the bank’s risk in the event of default and is considered a secondary source of repayment (Koch & MacDonald, 2003). In the banking environment, security is required among others, to ensure the full commitment of the borrower, to provide protection should the borrower default from the planned course of action outlined at the time credit is extended, and to provide insurance should the borrower default.

The survey results indicated that 69.8 percent of the respondents are of the view that collateralizing loans helps protect loan default, while only 38.5 percent and 25.4 percent agree with the statement that collateralized loans perform well, and that most of the time non-collateralized loans default. On the contrary, 74.7 percent (30.9%+41.8%+2%) and 60.5 percent (31.3%+25.8%+3.4%) of the survey respondents disagree or were neutral to the assertion that collateralized loans perform well and non-collateralized loans usually default, respectively. So the relation between NPLs and collateral is neutral in view of the respondents. And also the interview discussion collateral loans are not give full guarantee for NPLs. That is why there are many political and law sanctions and unexpected accidents. In addition to complete the issue it takes time and needs extra labor and finance. With regard to relationship between borrowers' orientation/culture and loan performance (Table 13), about 92.6 percent of respondents agree with the assertion that loan performance is related to orientation/culture of a society. This indicates strong relation between culture/orientation and occurrences of NPLs.

Table 14. Relationship between borrower's orientation and occurrence of NPLs

Factors	Strongly (5) %	Agree (4) %	Neutral (3) %	Disagree (2) %	Strongly Disagree (1) %	Mean	Std. Dev.
Borrower's orientation/ culture is related to loan performance	26.2	63.2	8.5	2.2	0.0	3.9	1.00
Default in some areas is ascribed to the culture of the borrowers	14.5	68.2	15.7	5.9	0.0	3.8	0.89
Society's cultural development leads to better lending performance.	26.2	66.4	5.2	2.2	0.0	4.1	0.64

Source: Survey outcome and own computation

Moreover, 89.4 percent of respondents have the opinion that there existed relationship between borrowers' culture and loan default. It could also be noted that 82.7 percent of respondents believed loan default in some areas is ascribed to the culture of the borrowers. From this result the culture of

borrowers and society needs due attention in banking sector in order to borrow and collect loans and advances properly. So understand borrowers culture is took as pre requisite study. It indicates existence of strong relationship between each of these factor and NPLs.

Study by Sinkey and Greenwalt (1991), Rajan and Dhal (2003), Waweru and Kalini (2009), Berger and DeYoung,(1997), Jimenez and Saurina (2006), Quagliariello,(2007) Pain, 2003, Bikker and Hu, (2002) indicated that high interest rate charged by banks is associated with loan defaults. The following table (Table 14) indicates that only 41.3 percent of the respondents agree with while 52.7 percent disregard the assertion that loan with big interest rate tend to turn to NPLs. In other words, charging big interest rate doesn't necessarily lead to loan default. In contrary from the interview discussion the respondents raise high interest rate leads to loan default and low interest rate initiate borrowers as well as easy to repay.

In addition on the literature part also state interest rate has a direct effect on consumers' ability to repay a loan. Thordsen and Nathan (1999) assert that when interest rates are low, people are willing to borrow because they find it relatively easy to repay their dept.

Table 15. Relationship between Cost of Loan and Loan Default

Factors	Strongly (5) %	Agree (4) %	Neutral (3) %	Disagree (2) %	Strongly Disagree (1) %	Mean	Std. Dev.
Loan with big interest rate tend to turn NPLs.	1.3	40.0	38.7	10.5	3.5	2.8	0.80
Loan price affects loan performance.	4.9	35.1	30.7	28.4	0	3.0	1.00

Source: Survey outcome and own computation

However, 40 percent of the respondents agree with the statement that loan price affects loan performance. The average responses to all three factors were close to neutral.

Table 16. Credit Terms and Loan Performance

Factors	Strongly (5) %	Agree (4) %	Neutral (3) %	Disagree (2) %	Strongly Disagree (1) %	Mean	Std. Dev.
Borrowers default because they don't understand credit terms well	1.2	20.5	38.4	33.2	4.7	2.9	0.94
Poorly negotiated credit terms lead to no performance	15.6	81.7	0	3.7	0	3.9	0.61

Source: Survey outcome and own computation

Researches indicate that failure to put appropriate credit terms and conditions would lead to loan default. Rajan and Dhal (2003) who studied the Indian commercial banks found out that terms of credit determines occurrences of NPLs. Jimenez and Saurina (2005) also stated that NPLs are determined by lenient credit terms.

Consistent with this, 97 percent of the responses conform to the fact that there is a relationship between loan default and sincerity of negotiation in credit terms set by the banks during loan processing. On the other hand, about 76.3 percent of the respondents do not agree with the statement that borrowers default because they don't understand credit terms well. As the participants raised in the interview session poor negotiation capacity the bank spoil most of the activities related to credit assessment, credit monitoring, collateralized loan. Therefore it is one of the critical issues for the occurrence of NPLs.

Table 17. Relationship of credit growth and NPLs

Factors	Strongly (5) %	Agree (4) %	Neutral (3) %	Disagree (2) %	Strongly D (1) %	Mean	Std. Dev.
Aggressive lending leads to large NPLs volume/ ratio	14.6	62.1	11.3	12.0	0.0	3.6	0.96
Bank's increased risk appetite is cause for NPLs	5.3	62.6	16.3	13.5	2.3	3.5	0.94
Compromised integrity in lending leads to loan default.	19.8	59.3	17.7	3.1	0.0	3.8	0.98

Source: Survey outcome and own computation

Salas and Saurina (2002) who studied Spanish banks found out that credit growth is associated with NPLs. Looking at the responses on the relationship between credit growth and occurrences of NPLs, 79 percent of the respondents agreed that compromised integrity in lending leads to loan default, while nearly 76 percent were of the opinion that aggressive lending leads to occurrences of large NPLs volume/rate. Similarly, about 67 percent of the respondents believed bank's increased risk appetite would cause occurrences of NPLs. The survey results indicate that when banks follow aggressive lending strategy and experience rapid credit growth they might end up with mountainous of NPLs.

Table 18. Bank size and occurrence of NPLs

Factors	Strongly (5) %	Agree (4) %	Neutra (3) %	Disagree (2) %	Strongly Disagree (1) %	Mean	Std. Dev.
Having large number of understand borrow causes loan default	1.0	10.3	31.8	54.6	2.3	2.6	0.87
Loan default rate is directly related to bank size	1.2	10.1	33.2	52.1	3.4	2.6	0.84

Source: Survey outcome and own computation

Studies of Rajan and Dhal (2003), Salas and Saurina (2002), and Berger and De Young (1997) indicated that banks size have significance on occurrence of NPLs. The survey results, however, The survey responses on the relationship between having large number of borrowers and bank's size indicate that neither of them is significant factor for the occurrence of loan default, as only 11.3 percent and 11.3 percent have agreed to the contrary.

Finally, Table 18 below attempts to see if there is a relationship between type of bank ownership and occurrence of NPLs. From the result we can infer that bank size is no significant impact on the occurrence of NPLs. On the other hand, having large no of borrowers can not affect NPLs.

Table 19. Bank ownership type and occurrence of NPLs

Factors	Strongly (5) %	Agree (4) %	Neutral (3) %	Disagree (2) %	Strongly Disagree (1) %	Mean	Std. Dev.
Loan default is not related to bank ownership type (private/state owned)	22.2	38.4	18.9	20.9	0	3.5	1.11

Source: Survey outcome and own computation

The survey results indicate that about 60.6 percent of the respondents agree that loan default is not related to banks ownership type. However, 18.9 percent of them remained neutral, while 20.9 percent disagree. From the interview discussion there is no significant impact raised related to banks ownership type. They said that there is the same rule existed. The difference is the endeavor of the managers.

4.4. Discussion on Interview Analysis

In order to triangulate data from different sources and tools the researcher employed unstructured interview with credit administrators and officers. As the respondents determinate factors for NPL in banks were poor credit assessment, poor credit monitoring and follow up, high interest rate, rapid credit growth, poorly negotiated credit terms, lack of knowledge of borrower, inflation, money devaluation, profit margin, legal gaps and exist in procedural laws, and lack of laws protect financial securities such as Financial Guarantee Bonds and negotiable instruments affect and contribute for NPL or bad loan. From this we can conclude that most of the points are directly matched with analysis

on documents and questionnaire. And also it shows the similarity of problem of NPL in almost head quarters of selected commercial banks in Ethiopia.

4.5. Effects of NPLs

When a bank holds large volume of NPLs it will suffer from serious liquidity problem. That is, most of its liquid assets tend to be lost. At this time the bank will be unable to outstanding loans would be denied. Consequently, the bank loses the principal and the interest income from NPLs. Recovery of such bad debts requires effective legal system to realize the value of the collateral security pledged against the loan. Even if it is possible to sell, loss of value upon sale of the collateral will erode profit of the bank and obviously its capital base.

The problem reaches highest stage when the bank becomes unable to meet the day-to-day cash and deposit withdrawal needs of its customers. Since immediate liquidation of large volume of collateral assets is very difficult or involve large capital loss, the liquidity problem of the bank may deteriorate into a solvency problem. The bank is said to be insolvent when its assets value is less than the value of its liabilities and hence, the value of its capital (net worth) becomes negative. At such times, the bank cannot expect to pay all of its depositors in full and on time. Losses thus will pass to depositors, creditors and shareholders of the bank. Such an event is called bank failure.

Bank failures are widely perceived to have greater adverse effects on the economy and thus are considered more serious than the failure of other types of business firms. Bank failures are viewed to be more damaging than other failures because of a fear that they may spread throughout the entire banking system. Thus, the failure of an individual bank is believed to introduce the possibility of system wide failure and even beyond the banking system to the financial system as a whole and as such to the domestic macro economy.

Banks are viewed as more vulnerable to failure than other business firms due to many reasons. To mention some: first, banks have low capital to asset ratio. This high leverage situation gives them little possibility to absorb losses, and hence they are susceptible to failure. Second, banks have low cash to asset ratio, which may require the sale of earning assets to meet deposits withdrawal obligations. This situation creates high potential for a run, a situation of hurried

sales of assets of non-liquid nature with possibility of large losses to pay off running depositors.

Moreover, banks as operations of the payment mechanisms are highly interrelated and failure of the counterparties to honor their obligations in time can cause the payment mechanism to cease. The chain reaction of such delays or failures of settlement down the line results in contagion. Thus, the failure of one bank is associated in the public's mind with the failure of all the banks and the whole process if not promptly stopped results in a system wide failure in the economy.

To conclude, NPLs can be accumulated due to factors specific to borrowers, lender banks or the macroeconomic conditions of the economy. The effects of large volume of NPLs have far-reaching implications from inability to execute the banking operations within a single bank to failure of the entire banking system and the overall economy as a whole. However, central banks regulate and monitor individual banks and take corrective actions if necessary before such serious problems occur in the system.

CHAPTER FIVE

5. CONCLUSION AND RECOMMENDATIONS

5.1. Conclusions

When a bank disburses a loan, the loan may not be collected because of many factors and those uncollected loans are said to be NPLs or bad loans. All commercial banks render different kinds of services; among which provision of credit is the major one as bank lending is the core function of commercial banks. It is commonly said that the successful banker is the successful lender. It is also noted that when a bank lends to a customer there are principles that should be considered in terms of safety, liquidity, effective utilization of the fund, profitability and diversification of investment and business. Even if the procedures of loan processing differ from one bank to another, in general, the procedures include: prior discussion or interviewing the customer, site visits, processing the credit application, gathering of credit information, detail credit analysis and appraisal, credit decision making, contact signing, registration of collaterals (is applicable), and then disbursement .

NPLs are serious problem that need to be accorded careful attention. A loan is identified and segregated as non-performing depending on the number of days a repayment is delayed or discontinued. According to National Bank of Ethiopia's Directive No SBB/43/2008 Asset Classification and Provisioning Directive, Non-performing means loans or advances whose credit quality has deteriorated such that full collection of principal and/or interest in accordance with contractual repayment terms of the loans or advances is due and uncollected for 90 (ninety) consecutive days or more beyond the scheduled payment date or maturity.

The basic objective of this research has been to identify borrower-, bank- specific determinants of NPLs. On the basis of the broad objective one five research questions were developed and dealt with. For the achievement of the objective the study used survey of employees of banks by employing structured questionnaire and unstructured interviews and secondary data were collected

from written documents, reports, and internet.

Basically, non-performing loans are the result of the compromise of the objectivity of credit appraisal and assessment. The problem is aggravated by the weakness of the accounting disclosure and legal frame works. Identifying the causes of NPL plays important role in designing credit advancing process and also legal frame works. Most causes of NPL includes reduced attention to borrowers/poor monitoring and follow up which could be explained as failure of banks to give due attention to borrower's activity with respect to the loan, poorly negotiated credit terms, lack of knowledge and skill of lenders and borrowers, loans without collateral, borrowers credit culture are bank specific where as political interference and absence of separated Asset Management Company (AMC),less adoption of developed countries experience, lack of criteria for estimating assertive in the existing market, political instability, macroeconomic instability which could be expressed as failure of the overall economy with high inflation rate, unsound assessment of the borrower credit worthiness by lenders and weak risk consciousness and lack of strict admittance polices which is consistent with the lending policies of banks. These and other causes create high NPL in banking business putting the bank as well as the economy in jeopardy. Inconsistent with this almost all the banks faced these above mentioned problems. This is why strong legal support is needed in controlling NPL and ultimately the recovery process. Recoveries are the amounts banks receive from loans employing different method of NPL resolution mechanisms including negotiation, rescheduling, foreclosure, litigation and reinstatement of written off loans. On the other hand, bank size and ownership type are no significant impact on the occurrence of NPLs.

5.2. Recommendations

The resultant effect of a business organization is measured in its monetary achievement /profitability and efficient management. The greater extent of its success depends on the efficient management of its financial resources. Thus management of finance in credit area is a very sensitive and complex issue in the operation of banks where one should be well aware of minimizing risk in the course of administering loans and advances. As deposits of banks are usually payable on demand or on a short notice, banks should also limit the time for which loans are granted and ensure that they are repaid within that period of time.

Lending banks better to be aware of the dangers involved in maintaining bad loans in their books of accounts and make advance preparations as to how disbursed loans should be collected

timely. Collection plans are not to be initiated after approval or disbursement. It has frequently been said that a good banker collects a loan at the time of its disbursement; meaning - a loan properly analyzed and scheduled at the outset is virtually self-servicing.

Administration of loans involves the entire process starting from credit application to final resolution. Therefore, lending banks need to develop and put in place prudent credit processing, encompassing appropriate exercise of KYC for proper customer selection and assessment of credit worthiness of borrowers. Robust credit analysis from the point of view of what contribution the loan will yield to the customer's business, to this bank's income/profit as well as to the overall economic development of the country needs to be accorded earnest concern of the pertinent stakeholders. The central government better to establish a comprehensive institutional framework including Asset Management Companies (AMCs) with clear accountability and transparency are found to be very important.

In order to maintain asset quality banks better to:

- Provide training and development to employees involved in credit operations to enhance the aptitudes and abilities of every member,
- Put in place a clear policy framework and working procedures that effectively address the issues of KYC,
- Develop and put in place framework for the entire credit management process and set objectives, standards and parameters to guide credit personnel in the overall credit processing.
- Institute proper loan processing, and essentially prudent analysis and appraisal system,
- Put in place proactive follow-up and monitoring system to monitor loan performance and check continued viability of operations,
- Develop and implement corporate code of conduct, fraud prevention policy, and proper check-and-balance in credit decision making processes, and
- Identify early warning signals, and initiate remedial measures thereby averting loss from possible default,
- Exert effort to develop borrowers' culture towards credit, and to shape employees involved

in credit operations towards ensuring integrity, making them free of undesired internal and external pressures.

❖ **Recommendations for further studies**

The study topic at hand requires further research on the root-causes of the major determinants; such as lack of financial discipline and out-right-breach of contractual agreements from the side of borrowers; in other words, the business community's increased risk taking attitudes towards credit; and more importantly towards unsound or corrupt practices.

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APPENDICES

Appendix I

Questionnaire

St.Mary UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF GENERAL MANAGEMENT
MBA PROGRAM

Dear respondent,

Thank you very much for your willingness to take time to respond to this research questionnaire. The study is being conducted by a postgraduate student at St.Mary University, College of Business and Economics, Department of Management, MBA Program.

It is all about questions pertaining to Determinants of Non-performing Loans and related practices in the Ethiopian banks. To this end, it intends to gather information from pertinent bank employees involved in credit and related activities (i.e.; credit managers, analysts, recovery/monitoring officers, risk management officers, credit committee members .. etc).

The participation is fully on voluntary basis, and your accurate and frank responses are imperative for the successful accomplishment of the study.

Please be assured that your responses will be treated in a strictly confidential manner, and the results will be used only for the purpose of this research, presented only at aggregate level without focusing on individual bank.

Kindly, therefore, return the questionnaire upon completing each item appropriately. Thank you in advance.

Respectfully;

Delil Akmel

(Please tick appropriate boxes)

Section One - Background Information

1. Your current position in the Banking industry.

- | | | | |
|--------------------|--------------------------|--------------------------------|--------------------------|
| 1. Loan Officer | <input type="checkbox"/> | 4. Relationship manager | <input type="checkbox"/> |
| 2. Credit analyst | <input type="checkbox"/> | 5. Recovery/monitoring officer | <input type="checkbox"/> |
| 3. Credit Director | <input type="checkbox"/> | 6. Vice president | <input type="checkbox"/> |

Other, Please specify.....

2. Indicate your experience in the Banking industry.

- | | | | |
|---------------------|--------------------------|-------------------|--------------------------|
| 1. Less than 1 year | <input type="checkbox"/> | 4. 11-15 years | <input type="checkbox"/> |
| 2. 1-5 years | <input type="checkbox"/> | 5. Above 15 years | <input type="checkbox"/> |
| 3. 6-10 years | <input type="checkbox"/> | | |

3. Indicate your experience in the Banking credit process.

- | | | | |
|---------------------|--------------------------|-------------------|--------------------------|
| 1. Less than 1 year | <input type="checkbox"/> | 4. 11-15 years | <input type="checkbox"/> |
| 2. 1-5 years | <input type="checkbox"/> | 5. Above 15 years | <input type="checkbox"/> |
| 3. 6-10 years | <input type="checkbox"/> | | |

4. Indicate ownership of the Bank you work for.

- | | | | |
|------------|--------------------------|----------------|--------------------------|
| 1. Private | <input type="checkbox"/> | 2. State owned | <input type="checkbox"/> |
|------------|--------------------------|----------------|--------------------------|

5. Determinants of nonperforming loans are obvious.

- | | | | | | |
|----------|--------------------------|------------|--------------------------|-------------|--------------------------|
| 1. Agree | <input type="checkbox"/> | 2. Neutral | <input type="checkbox"/> | 3. Disagree | <input type="checkbox"/> |
|----------|--------------------------|------------|--------------------------|-------------|--------------------------|

Section Two: - Questions on Determinants of Nonperforming loans.

1. What bank specific factors do you think are causing the occurrences of NPLs in Ethiopian banks?

2. Please rank the factors that cause occurrences of NPLs in the Ethiopian Banks by Ranking the factors in order of their importance in contributing to the occurrence of NPLs from 1 - 8.

Factors	Factor that causes occurrence of NPLs	Rank 1=highest ----8=lowest
2.1	Rapid loan growth by banks	
2.2	High interest rate	
2.3	Lenient credit term	
2.4	Credit culture /Orientation	
2.5	Size of the bank	
2.6	Poor monitoring/follow-up	
2.7	Ownership type of bank	
2.8	Poor risk assessment	
2.9	Other, Please specify.....	

3. Please indicate your degree of agreement or disagreement to the statement pertaining to credit assessment and the occurrence of NPLs.

Factors	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
3.1	Easily admitted borrowers usually default				
3.2	Know You customer (KYC) Policy of bank s lead to Loans quality				
3.3	Good loan underwriting ensures loan performance				
3.4	Poor risk assessment would lead to loan default				

4. Please indicate your degree of agreement or disagreement to the statements pertaining to credit monitoring and the occurrences of NPLs.

Factors		Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
4.1	Strict monitoring ensures loan performance					
4.2	Poorly assessed and advanced loans may perform well if p monitored					
4.3	Loan follow up is directly related to occurrence of NPLs					
4.4	Bank with higher budget for loan monitoring has lower NP					

5. Please indicate your degree of agreement or disagreement to the statement pertaining to collateral and the occurrence of NPL

Factors		Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
5.1	Collateralized loans perform well					
5.2	Collateralizing loans help protect loan default					
5.3	Most of the time non collateralized loans are de					

6. Please indicate your degree of agreement or disagreement to the statement pertaining to borrower's orientation and the occurrence of NPLs.

Factors		Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
6.1	Borrower's orientation/culture is related to loan performance					
6.2	There is a relationship between loan default and borrower's orientation					
6.3	Default in some area is ascribed to the culture of the borrower					
6.4	Society's cultural development leads to good loan performance					
6.5	Loan with big interest rate tend to turn to NPL					
6.6	Charging big interest rate leads to loan default					
6.7	Loan price affects loan performance					
6.8	Lenient /lax credit term cause loan default					
6.9	Borrowers default because they don't understand credit terms					
6.10	Poorly negotiated credit terms lead to loan non performance					

7. Please indicate your degree of agreement or disagreement to the statement pertain got credit monitoring and the occurrence of NPLs.

Factors		Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
7.1	Aggressive lending leads to large NPL volume/ratio					
7.2	Banks whose credit growth is rapid experience huge NPL level					
7.3	Bank's great risk appetite is cause for NPL					
7.4	Compromised integrity in lending leads to loan default					
7.5	Having large no. of borrowers causes loan default					
7.6	Loan default rate is directly related to banks size With growth in banks size comes growth on NPL					
7.7	Loan default is not related banks ownership type(private/state owned)					

8. If you have further comments on the bank specific factors affecting NPLs of the Ethiopian Banks please use the space provided below:

Thank you once again for your participation.

Appendix II

Appendix 2.1. Surveyed Banks Financial Data from June 30, 2013 to 2018

Banks	Particulars	2013	2014	2015	2016	2017	2018
AIB	Total Asset in million	7,132,572	9,022,989	11,089,441	13,125,217	17,783,927	22,106,346
	Total deposit in million	4,962,410	6,105,940	8,044,535	9,564,540	13,104,797	16,117,833
	Total Loan in million	2,722,401	3,182,521	3,986,524	5,511,613	7,737,115	9,176,360
	Total NPL in million	157,324	148,309	146,232	105,038	204,350	208,757
	NPL ratio in %	5.8	4.7	3.7	1.9	2.6	2.3
	Profit Before Tax million	303,071	350,836	505,069	530,599	583,019	828,807
DB	Total Asset in million	9,732,583	12,353,386	14,614,795	17,520,042	19,747,175	21,962,202
	Total deposit in million	4,447,020	5,033,070	6,141,670	8,042,000	8,836,630	9,607,825
	Total Loan in million	7,925,210	10,144,549	11,841,239	14,065,600	15,851,264	17,681,343
	Total NPL in million	328,470	150,890	204,390	193,380	482,190	167,755
	NPL ratio in %	7.4	3.0	3.3	2.4	5.5	1.7
	Profit Before Tax million	352,488	458,254	629,878	893,263	812,934	957,590
BOA	Total Asset in million	NA*	6,279,540	7,277,567	8,239,513	10,160,114	11,276,391
	Total deposit in million	NA*	5,138,848	6,075,259	6,771,246	8,496,148	9,096,477
	Total Loan in million	NA*	3,153,244	3,315,862	3,897,724	4,675,875	5,061,009
	Total NPL in million	NA*	219,949	131,620	146,377	129,839	92,451
	NPL ratio in %	NA*	7.0	4.0	3.8	2.8	1.8
	Profit Before Tax million	NA*	167,665	258,383	288,579	351,468	351,489
CBO	Total Asset in million	1,022,882	1,768,615	2,500,359	3,676,170	6,537,470	7,350,372
	Total deposit in million	788,680	1,371,820	1,980,416	2,797,540	4,465,039	5,450,097
	Total Loan in million	579,460	721,920	799,450	1,383,460	2,116,060	3,712,476
	Total NPL in million	54,980	14,970	28,530	8,600	36,341	68,360
	NPL ratio in %	9.5	2.1	3.6	0.6	1.7	1.8
	Profit Before Tax million	3,633	36,140	68,252	139,774	266,959	475,852

OIB	Total Asset in million	326,358	1,118,572	1,961,800	2,787,400	3,911,231	6,151,661
	Total deposit in million	112,132	368,987	661,743	1,019,596	1,621,228	2,551,638
	Total Loan in million	189,498	820,935	1,526,319	2,117,297	3,050,439	5,003,996
	Total NPL in million	NA*	12,293	6,027	14,158	54,495	57,781
	NPL ratio in %	NA*	3.3	0.9	1.4	3.4	2.3
	Profit Before Tax million	NA*	21,510	56,689	65,162	102,148	204,892
ZB	Total Asset in million	NA*	1,055,623	1,613,912	2,394,242	3,248,479	3,924,769
	Total deposit in million	NA*	688,025	1,162,559	1,792,883	2,505,527	3,030,871
	Total Loan in million	186,760	377,920	645,227	1,012,691	1,369,655	1,429,960
	Total NPL in million	1,974	5,996	11,491	18,132	116,729	126,278
	NPL ratio in %	1.1	1.6	1.8	1.8	8.5	8.8
	Profit Before Tax million	NA*	72,145	122,541	123,312	123,810	165,017
WB	Total Asset in million	7,132,572	9,022,989	11,089,441	13,125,217	17,783,927	22,106,346
	Total deposit in million	4,962,410	6,105,940	8,044,535	9,564,540	13,104,797	16,117,833
	Total Loan in million	2,222,401	2,782,521	3,106,524	4,111,613	5,637,115	7,126,360
	Total NPL in million	127,224	157,309	162,232	188,038	208,350	215,757
	NPL ratio in %	5.7	5.6	5.2	4.5	3.6	3.1
	Profit Before Tax million	303,071	350,836	505,069	530,599	583,019	828,807
UB	Total Asset in million	10,239,513	12,353,386	13,614,795	15,520,042	17,947,175	22,162,202
	Total deposit in million	5,771,246	9,033,070	11,046,670	13,042,000	15,936,630	17,607,825
	Total Loan in million	2,997,724	8,144,549	8,941,239	9,065,600	10,851,264	13,681,343
	Total NPL in million	106,377	120,880	154,390	174,380	245,190	167,755
	NPL ratio in %	3.5	1.4	1.7	1.9	2.2	1.2
	Profit Before Tax million	288,579	458,254	629,878	893,263	812,934	957,590
NIB	Total Asset in million	5,732,583	6,279,540	7,277,567	8,239,513	10,160,114	11,276,391
	Total deposit in million	4,447,020	5,138,848	6,075,259	6,771,246	8,496,148	9,096,477
	Total Loan in million	3,925,210	3,153,244	3,315,862	3,897,724	4,675,875	5,061,009

	Total NPL in million	328,470	219,949	205,620	146,377	129,839	155,451
	NPL ratio in %	8.3	6.9	6.2	3.5	2.7	3.1
	Profit Before Tax million	352,488	167,665	258,383	288,579	351,468	351,489
LIB	Total Asset in million	1,022,882	1,768,615	2,500,359	3,676,170	6,537,470	7,350,372
	Total deposit in million	788,680	1,371,820	1,980,416	2,797,540	4,465,039	5,450,097
	Total Loan in million	479,460	521,920	689,450	1,104,460	1,978,060	2,180,476
	Total NPL in million	17,980	18,970	22,530	16,600	52,341	56,360
	NPL ratio in %	3.7	3.6	3.3	1.5	2.6	2.6
	Profit Before Tax million	3,633	36,140	68,252	139,774	266,959	475,852
BuIB	Total Asset in million	426,358	1,118,572	1,961,800	2,787,400	3,911,231	5,151,661
	Total deposit in million	122,132	407,987	551,743	1,019,596	1,621,228	2,551,638
	Total Loan in million	179,498	710,935	951,319	1,927,297	3,150,439	4,773,996
	Total NPL in million	NA*	9,893	9,827	21,158	48,495	62,781
	NPL ratio in %	NA*	1.4	1.0	1.1	1.5	1.3
	Profit Before Tax million	NA*	21,510	56,689	65,162	102,148	204,892
BIB	Total Asset in million	NA*	1,055,623	1,613,912	2,394,242	3,248,479	3,924,769
	Total deposit in million	NA*	688,025	1,162,559	1,792,883	2,505,527	3,030,871
	Total Loan in million	196,660	386,920	525,227	1,012,691	1,179,655	1,229,960
	Total NPL in million	2,107	6,996	13,491	22,132	52,729	58,278
	NPL ratio in %	1.1	1.8	2.5	2.2	4.4	4.7
	Profit Before Tax million	NA*	72,145	122,541	123,312	123,810	165,017

Source: Audited Financial Statement of each Banks.

NA* the data is not available.