# St. Mary's University School of Graduate Studies Masters of Business Administration



Factors Affecting Non Performing Loan in Case of Bank of Abyssinia

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The Masters of Business Administration

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Addis Ababa, Ethiopia June, 2022

# St. Mary's University School of Graduate Studies

# Masters of Business Administration

# Factors Affecting Non Performance Loan in Case of Bank of Abyssinia

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# DECLARATION

I, Eskedar the under signed, declare that this thesis entitled: "Factors Affecting Non Performance Loan in Case of Bank of Abyssinia", prepared under the guidance of Asmamaw Getie. All sources of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

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#### **ENDORSEMENT**

This is to certify that this thesis, "Factors Affecting Non Performance Loan in Case of Bank of Abyssinia", under taken by Eskedar Birhanu for the partial fulfilment of Master of Business Administration at St. Mary's University, is an original work and not submitted earlier for any degree either at this University or any other University.

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#### ABSTRACT

The Occurrences of banking financial crises as well as bank failures are usually associated with elevations in accumulation of non-performing loans. The objective of this study was to identify the Factors Affecting Non Performance Loan in the Bank of Abyssinia. For this objective, Bank size, Borrowers orientation, Collateralized lending, Credit risk assessment and Credit monitoring were considered as independent variables. Survey was conducted with professionals engaged in Credit department with different positions using a self-administered questionnaire. In addition, the study used structured review of documents and records. The data analysed through regression and descriptive analysis with diagnostics tests by using SPSS version 26.0 for window. Poor credit analysis is related to poor credit assessment this indicates that the causes for the occurrences of non-performing loans and also show a loan is poorly assessed directly affects the occurrence of NPLs while Borrowers orientation and Bank size did not the causes for the occurrence of nonperforming Loan in BOA. The study suggests that, the bank should conduct intensive and adequate assessment before credit monitoring of a loan, the bank should follow a balanced policy between profit maximization and risk taking, adequate monitoring system which should start before giving loans by identifying the status of a borrower and adapt pre-and post-credit risk assessment. Key words: Non-Performing Loan, Credit risk assessment, Credit monitoring, Borrowers

orientation

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#### List of Abbreviations

BS=Bank size B0=Borrowers orientation BOA=Bank of Abyssinia BS= Bank Size CPC= central processing centres CL=Collateralized lending CRA=Credit risk assessment CM=Credit monitoring DV=Dependent Variables IVs=Independent Variables NBE – National Bank of Ethiopia NPL=Non-Performing Loans SD=Standard Deviation DBE=Development Bank of Ethiopia

# CHAPTER ONE INTRODUCTION

This chapter gives a brief background of the study and introduces the thrust for the research and the beneficiaries of the study. The chapter also outlines the problem statement, states the objectives of the study and the significance, and scope of the study. Also it includes the definition of important terms and the organization of the thesis.

# 1.1. Background of the Study

World over, the banking industry, being amongst the highly recognized sectors for spurring economic growth of country, is a very important platform for enhancing collection of money from those people regarded as having excess (lenders) and availing that money for access to those in need of it; that is the borrowers (Ghasemi& Rostami, 2016). Thus, this industry plays the intermediation role of collecting surplus money and lending it for investment. Efficient financial intermediation of lending credit to borrowers, by banks, is one means of contribution to the growth of a country''s economy (Asmare. 2014). Commercial banks, which act as one of the key financial intermediaries and a main source of funding, dominate the banking industry in this process of funds mobilization (Heimdal& Solberg, 2015). They take the lion''s share of funds intermediation (lending process) within the industry, significantly contributing to economic development of a country through financial mobilization of investible resources.

The loan assets are the most dominant asset of the investible resources of commercial banks as account for approximately between 55% and 75% of the banks" total assets, representing the banks greater risk exposure (Musau, 2014). Most recently, due to increasingly uncontrolled nonperforming loan (NPL) assets, commercial banks have started become relatively very cautious in their course of advancing loans (Gezu, 2014)

According to Iftikhar (2015), accumulations of NPLs were precursor to the most recent worldwide financial crisis. In fact, NPL significantly contributed to the 2007/2008 global crisis in the financial issues that originated form the United States (US), characterized by very large increases in NPLs and deterioration of loan performance across countries (Muriithi, 2013).

Globally, the;2 crisis effect of NPL has shown a consistent pattern of NPL in both before and after the global financial crisis (Chimkono, Muturi & Njeru, 2016).

In the European countries, the NPLs are widespread up to a ratio of about 5.1% of total loans (Navaretti, Calzolari &Pozzolo, 2017) where Italy had the largest concentration of NPL, Greece and the highest NPL ratios of 46% and the Sweden had the lowest NPL ratios at 1%. Countries in East Asia as well as those in Sub Saharan African also faced crisis in their financial and banking sectors that was preceded by accumulation of NPLs (Vatansever & Hepsen, 2013).

In the African countries, poor banking credit assessment, ineffective loan monitoring, weak conditions of lending and poor terms of credit, high levels of lending, weak bank institutional capacity and compromised banking integrity have been found to lead to incidences of NPLs (Gezu, 2014).

In Ethiopia, Empirical study by Arega S. et.al (2016) revealed that poor credit assessment and credit monitoring are the major causes for the occurrence of NPL in DBE. Wakjira D. (2020) found that bankers'' incompetence, inadequacy of collaterals and lack of aggressive credit collection were found to highly affect the occurrence of NPLs. Negalign N. (2019) also indicated that the Bank specific factors include Bank size and performance, credit size, poor credit assessment, poor credit terms, lack of aggressive credit collection system, inadequate nature of collateral were identified as bank specific factors affecting NPLs. On the other hand unwillingness of borrower to pay back loan, customers funds diversion for unexpected purpose were identified as customer specific factors affecting NPLs.

According to directives of National Bank of Ethiopia "loans" or advances" means any financial asset of the bank arising from the direct or indirect advances by a bank to a person that are conditioned on the obligation of the person to repay the fund, either on a specified date or dates usually within interest (Directives of National Bank of Ethiopia SSB/43/2008).

Lending is not an easy task for banks because it involves risk of non-repayment which in banking terminology labelled as non-performing loans. Non- performing loans" means outstanding credit facilities that are past due for more than 90 days beyond the agreed-upon the repayment period, non-performing loans are loans that are ninety or more days delinquent in payments of interest and/or principal or loans categorized under substandard, doubtful and loss as groupings of unpaid loans (NPL). Non-performing loans are closely associated with banking crises. The reason given by

different banks vary according to their less quality asset performed, but in common, there are internal and external factors that cause it (Negalign, 2019).

Notably most empirical studies on factors influencing NPLs growth in Ethiopia banking industry were conducted in the Development and commercial banks, implying it vague on whether the same factors affect the Bank of Abyssinia. Therefore, there is need for adequate research of the factors affect NPLs to clear the uncertainty and suggest appropriate measure for controlling levels of NPLs across the commercial banking sector in the country. This study was attempted to identify factors affecting non-performing loans in Bank of Abyssinia.

#### 1.2. Statement of the Problem

Non-Performing Loan (NPL) has been crucial factor these days in terms of Banking sector sustainability and profitability. The economic development of a nation and stability of banking system are invariably interrelated. International experience shows that if NPA is not managed properly, it will lead to banking failures and nationwide financial fragility. Regular monitoring of loan quality is thus essential to ensure a sound financial system and possibly provides an early alarm to regulatory authorities of banking system (Prasanna et al., 2014).

The sustainability of the bank depends not only on domestic and foreign source of fund but also on its loan recovery rate too. The loan repayment performance of its clients should be effective so that the bank will be sustainable as a bank and will have a bankable asset quality. One of the measurements by which bank''s asset quality can be measured is the nonperforming loan ratio

(NPLs ratio). Hence, in order to get soft loan from its lenders, BOA's asset quality has to be regularly monitored and assessed.

When looking at the asset quality of Bank of Abyssinia, the average NPLs ratio for the last five years covering from 2015/2016 up to 2019/2020 was at 5.5 % (BOA Finical report, 2020). This clearly indicates that there is a problem in loan repayment as it is highly deviated from the accepted standard 5% of the total outstanding loan as per the BOA credit policy (Lending Manual) which forms part its strategic plan. The increasing level of non-performing loans may lead to very serious implications.

For instance, it discourages the financial institutions to refinance the defaulting client, which put the defaulters once again into vicious circle of low productivity. Even if default is random and influenced by unpredictable behaviours or it is influenced by certain factors in a specific situation needs an empirical investigation so that the findings can be used by any financial institutions to manipulate their credit program for the better.

Increasing level of non-performing loans may lead to very serious effects. For instance, it discourages the financial institution to refinance the defaulting client, which put the defaulters once again into vicious circle of low productivity. Therefore, an irregular investigation of the various aspects of loan defaults, source of credit, purpose of the loan, type of loan, and condition of loan provisions etc. are of utmost importance both for policy makers and the lending financial institutions. Even if default is random and influenced by unpredictable behaviour or it is influenced by certain factors in a specific situation needs an empirical investigation. Such close observations would aid all financial institutions to manipulate their credit program for the better Most of the default arose from poor management procedures, loan diversion and unwillingness to repay loans, etc (Negalign,2019).

Consequently, to reduce the default rate and to enhance the sustainability of the bank, it is imperative that identifying the various factors which significantly affect the loan repayment performance from both borrowers and lender side. Hence, this study aimed at identifying the factors that affect non-performing loans of Bank failures come with massive effects and costs not only to Banks but also to the economy as a whole. This, being the immediate reason of Banking crisis occurrences at various times indicates that assessment of non-performing loans and implementation of controlling mechanisms to avoid their occurrence is a continuous process which should be improved from time to time. However, credit risk management is indeed a very difficult and complex task in the financial industry because of the unpredictable nature of the macroeconomic factors coupled with various microeconomic variables which are peculiar to the banking industry or specific to a bank (Garr, 2013).

Consequently, to reduce the default rate and to enhance the sustainability of the bank, it is imperative that identifying the various factors which significantly affect the loan repayment performance from both borrowers and lender side.

There are researches regarding non-performing loan in Ethiopia made by Wondimagegnehu (2012) , Gadise gezu (2014) and Negalign (2019). Negalign(2019) was assessed all financial institutions to manipulate their credit program for the better Most of the default arose from poor management procedures, loan diversion and unwillingness to repay loans, of NPLs in countries with emerging economy like Similarly ,Wondimagegnehu (2012 was assessed factors affecting non-performing loan the case of all Ethiopian banks and founds that that poor credit assessment, failed loan monitoring, underdeveloped credit culture, lenient credit terms and conditions, aggressive lending.

Gadisa (2014) also focused on factors affecting non-performing loan the case of commercial banks by using panel data over the period 2002-2013 and founds that the study shows a down ward sloping of nonperforming loans for commercial banks in Ethiopia. The finding also revealed as loan to deposit ratio had positive whereas inflation rate had negative, but insignificant effect on NPLs of commercial banks in Ethiopia. Bank profitability measured in terms of return on equity, banks capital adequacy ratio and lending rate had negative and statistically significant effect whereas bank profitability measured in terms of return on statistically significant. Thus, the study did not focus on other variable like collateralized lending, banks size; borrowers" orientation and credit risk assessment. In addition the data of the study was before 10 years.

The rationale for undertaking this study was the previous studies did not focused on other variables like collateralized lending, banks size; borrowers" orientation and credit risk assessment and only focused on development and commercial bank of Ethiopia, not bank of Abyssinia. In addition the data of the study named Gadisa (2014) was used panel data which consists of time series and cross sectional data before 10 years and others studies also conducted before 3 years but currently the financial status in Ethiopia has dynamic and flexible from time to time., Wondimagegnehu (2012) also focused on commercial banks or all over banks in Ethiopia. Therefore, adequate researches have been made comprehensively to assess the determinants of Non-performing Loan in banking sector. Moreover, there is no studies conducted the factors that affect non-performing loans of Bank of Abyssinia (BOA) by using survey of specified target groups. In addition the variables used in the previous study like different forms. The average NPLs ratio OF BOA for the last five years was at

5.5% which is greater than 5% according to NBE requirement of NPL ratio. Then, from Bank of Abyssinia point of view it was the other motive to conduct factors affecting NPL. Therefore, the study

conducted Based on the above research gap aimed at identifying the factors that affect nonperforming loans of Bank of Abyssinia (BOA) in 2022.

#### 1.3. Research Question

This study was designed to answer the following research questions:

1). what are the major bank-specific factors affecting Non-performing loans of BOA?

2). what are the major borrower-specific factors that affect Non-performing loans of the BOA?

3).What policy measures must be undertaken by the bank"s management that would help improve the NPLs status of BOA?

## 1.4. Objective of the study

The objective of this study is divided into two main categories, that is; general objective and specific objectives as itemized here below.

#### 1.4. 1.General objective

The general objective of this study was to identify factors affecting non-performing loans in Bank of Abyssinia.

## 1.4.2. Specific objectives

Based on the above stated general objective the following specific objectives are drawn

1). To identify bank-specific factors affecting Non-performing loans of BOA

2). To determine borrower-specific factors affecting Non-performing loans of BOA.

3).To formulate policy measures the bank"s management that would help to improve the NPLs status of BOA.

#### 1.5. Hypothesis of the study

Regarding the factors affecting non-performing loans many studies try to confirm this factor either factors have positive or negative impact on NPL. Then, the hypothesis of this study supported by the following previous studies.

According to (Gaitho Edna, 2010), the causes of non-performing loans in Kenyan banks, he revealed that poorly valued collateral or difficulties in recovery are factors contribute to bad loans. Thus,

collateralized lending or collateral difficulties contribute to occurrence of non-performing loan, it is assumed for the first hypothesis of study.

• H1: Collateralized lending has a significant positive effect on Non-Performing Loan

According to (Teshome et.al,2010 )) indicated that, Lax procedures used for credit risk assessment, poor credit appraisal and delayed loan approval and poor credit risk assessment had direct or significant effect for the occurrences of non-performing loans in commercial banks.

• H2: credit risk assessment has a significant positive effect on Non- Performing Loan

According to Saurina (2002) are of the view that the loans are more secured if the banks keep a continuous check on the borrowers. Then, good credit monitoring contributes for security of loan, in this study it is assumed to the third hypothesis of study.

• H3: Credit monitoring has a significant positive effect on Non- Performing Loan

The Study conducted by Rajan and Dhal (2003) in India indicated that credit orientation significantly affects loan default. In addition (walelegn, 2012) confirms the relations between credit orientation and NPL in the survey indicates positive impact on NPL. Thus, borrowers" orientation taken as fourth variable which contribute on NPL positively.

• H4: Borrowers orientation has a significant positive effect on Non-Performing Loan (NPL)

Bank size- (Rajan and Dhal et.al, 2003) others indicated that banks size have significance on occurrence of NPL. Base on this study bank size has positive impact on the occurrence of NPL which is also taken as the fifth independent variable.

• H5: Bank size and performance has a significant positive effect on Non-Performing Loan (NPL)

In general, the above studies shows that Credit risk assessment, Credit monitoring, Collateralized lending, Credit orientation and Bank size are factors that affect Non performing loan positively.

# 1.6. Scope of the Study

Comprehensive understanding about an object of a study demands researching that object from every aspect and whole life and in every situation. However, in reality it's not possible to go through the width and breadth of every aspect of an object of a study. Rather researcher often set a scope for their study conceptually, methodologically and geographically.

Conceptually, the factors that affect Non-performing loans financed by the Bank of Abyssinia, Head office was studied by identifying some institution related factors like, Collateralized lending ,Credit Monitoring ,Credit assessment ,Credit Terms ,Bank size and performance and Borrower's Orientation variables be considered for this study .

Methodologically, the study used quantitative research approach. The rationale behind using approach is because of its most appropriateness to address the research questions by using quantitative data. The common technique of collecting quantitative data is the survey method. The major data collection instrument to collect data was questionnaire.

Geographically, the Bank of Abyssinia is a very large business organization owned by private shareholders having 625 branches. Both structurally and functionally the credit operations of the bank are coordinated from the central processing centres (CPCs) which are located in the head office. Since these credit CPCs are located in Addis Ababa, the researcher has explained the notion raised by focusing the CPCs.

# 1.7. Limitation of the Study

This study was faced some limitation for instance; the study scope limited to Bank of Abyssinia factors affecting NPLs, which is not inclusive enough to cover the entire banking industry or even the financial sector. So, it might have been difficult to generalize the study to the entire financial sector.

During survey of this study, the total questionnaire distributed to respondents was 72 and 65 returned, Even if, the response rate was higher this study did not cover 7 or 9.7 % of respondents data of credit department. This study focused on factors that affect Non-performing loans in the Bank of Abyssinia, Head office. In fact, the bank has 625 branches over in Ethiopia. To undertake the study on the bank level, it is difficult to cover due to time and financial constraints the study is limited to Bank of Abyssinia, Head office.

## 1.8. Significance of the Study

The finding of this study initiates the researcher for further studies. Last but not least, this study serves as a reference for other researchers in related area. Thus, it can minimize the literature gap in the area of study particularly in Ethiopia

The findings from the present study would importantly seek to contribute to the understanding and analysis of factors affecting non-performing loans and to set effective and efficient credit management tools in Banks.

The study further added new knowledge in the banking sector through revealing the relationship between bank specific factors/ borrower-specific factors and occurrences of NPLs in Bank of Abyssinia. Thus, it actively contributed the body knowledge of Ethiopian banking industry in the financial sector.

# 1.9. Definition of Operational Terms

The following are among the operational definition of the of the key terms used in this study

Borrower's specific factors:-These are factors affecting loan repayment behaviour of borrowers.

Bank specific factors: - These are factors affecting Lending behaviour of the Bank. Bank specific factors are variables that are under the control of the regulator or the bank management it consist of bank performance (proxy by ROE), liquidity risk, operational risk, credit risk, and corporate governance (Bedru, 2018).

Loan and advances: Any financial asset granted by banks to borrower on a contract of an obligation to repay the principal amount with usually its interest either on due date or on demand (NBE Directive, SSB/43/008).

Borrower: The one who borrows money from the lender -Bank (Wendemagegn, 2012) Lending: - Provision of loan by one party (Lender) to another party –Borrower (IBID)

# 1.10. Organization of the thesis

This research was organized into five chapters. Chapter one contains background of the study, statement of the problem, research objectives, and scope of the study. Chapter two provides a literature review informing the reader of what is already known in this area of study. Chapter three discusses the methodology employed in the study, including, research design, sample size and sampling technique, data source and collection method, procedure of data collection and method of data analysis. Chapter four is about data analysis and discussion of results. Finally, chapter five contains conclusions and recommendations.

# CHAPTER TWO LITERATURE REVIEW 2.1. Introduction

This chapter starts with presenting the overview of Concept of Bank Loans and Lending, the concept of Non-Performing Loans (NPLs), Classification of Non-Performing Loans (NPLs), Five C"s of Non-performing loans, Factors Affecting Non-Performing Loans(NPL), Strategies for recovery of non-performing loans and empirical studies (cross countries and single country) are reviewed by focusing on Factors Affecting of NPLs are presented.

#### 2.2. Theoretical Literature

#### 2.2.1. Concept of Bank Loans and Lending

Loans are the major single source of income for banks. Bank loan embroils personal relationships concerning the bankers and borrowers when it goes well till the end. It has a highest possibility of default risk than other bank assets. Loans yield the higher rate of return among bank assets in compensation for lower liquidity and higher risk (Thomas, 2006). A loan composition greatly varies among banks based on their size, location, trade area and lending experts (MacDonald, 2006).

According to Zewdu (2010), lending is the provision of resources (granting loan) by one party to another. The second party doesn''t reimburse the first party immediately there by generating a debt, and instead arranges either to repay or return those resources at a later date. Banks function as financial intermediaries, collecting funds from savers in the form of deposit and then supplying to borrowers as loans. Those functions benefit both the banks and the borrowers. Lending represents the heart of the industry and Loans are the dominant asset and represent 50-75 per cent to total amount at most banks, generate the largest share of operating income and represents the bank's greatest risk exposure (MacDonald, 2006) as cited in (Nkurranah 2014).

## 2.2.2. The concept of Non-Performing Loans (NPLs)

There is no specific definition of NPLs to be found in literature. Previous studies have defined NPLs according to their needs. As per Basel committee (2001) NPLs are defined as loans which are not paid and their overdue time period is 90 days after maturity date. Even if, it has no specific definition authors defined NPL as:

Non- performing loans (NPLs) are defined as defaulted loans which banks are unable to profit from (Patersson and Isac, 2004). According to the International Monetary Fund (IMF, 2009) a nonperforming loan is any loan in which interest and principal payments are more than 90 days overdue (IMF, 2009).

NPLs are also explained as ,"Loans or advances whom credit quality has deteriorated such that full collection of principal and interest in accordance with the loan or advances in repayment terms of the loan or advances in question" (NBE,2008).

They often refer to loans for a relatively long time without generating income. That is the principal and / or interest on these loans that have been left unpaid for at least 90 days. Typically, a large number or percentage of bad loans are often associated with bank failures and financial crises in both developing and developed countries (IMF, 2009).

Non-performing loan is derived from the inside and outside factors of the bank. However, in this research, it is limited by internal factors that affect the loans. So, the important aspect is how the board of executives and managers need to have a way of effectively managing the loan portfolio in the asset portfolios of the bank. In this study, non-performing loan is understood as a loan overdue for several months or a loan that fails to pay interest and principal. That may be the result of economic difficulties

and non-performing loan is an indicator shows the borrower's ability be unable to repay the loan. Nonperforming loan is a burden for both lenders and borrowers (Balgova et al., 2016).

Non-performing loans (NPL) by Riyadi (2006) can be measured by looking at the ratio between nonperforming loans to total loans granted by banks. The greater the level of NPL, indicating that the bank is not a professional in the management of credit, as well as providing an indication that the level of risk on bank lending is quite high. The calculation of non-performing loans are as follows:

NPL= <u>Non-Performing Loans</u>  $\times 100$ 

Total Credit

#### 2.2.3. Classification of Non-Performing Loans (NPLs)

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

#### (A) Special Mention

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

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

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

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

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

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

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

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#### (B) Sub-standard

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

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

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

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

2. The debt exceeds the borrower's approved limit for 90 (ninety) consecutive days or more, but less than 180 (one hundred eighty) days; or

3. Interest is due and uncollected for 90 (ninety) days or more, but less than 180 (one hundred eighty) days; or

4. For overdrafts, the account has been inactive for 90 (ninety) consecutive days or more, but less than 180 (one hundred eighty) days; or the account fails to show Five to nineteen percent of the approved limit debit balance at least once over 360 days preceding the date of loan review. In addition to the above NBE directive no SBB/43/2008 categorized the following nonperforming loans and advances as substandard:

1. Renegotiated term loans unless equivalent of all past due interest is paid by the borrower in cash at the time of renegotiation and the following payments are made by the borrower on a consistent and timely basis in accordance with the restructured terms of the loan or advance:

a. In the case of term loans with monthly or quarterly instalment repayments, at least 3 (three) consecutive repayments;

b. In the case of loans with semi-annual instalment repayments, at least 2 (two) consecutive repayments;

c. In the case of loans with annual instalment repayments, at least one repayment; 2. Renegotiated non-performing overdraft facilities unless equivalent of all past due interest is paid by the borrower in cash at the time of renegotiation and the account shows at a minimum a nil balance at least once or a turnover rate of once the approved limit.

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3. Renegotiated non-performing merchandize loans unless physical inventory of the merchandize taken by the bank at the time of renegotiation shows that the outstanding principal loan and interest thereof are fully covered and the safety margin determined following the inventory is at least not lower than the margin stated in the loan contract entered into by the bank and the borrower at the time of initial extension of the loan.

#### (C) Doubtful

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

a) Loans or advances with pre;2-established repayment programs: past due 180 (one hundred eighty) days or more, but less than 360 (three hundred sixty) days;

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

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

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

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

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

#### (D) Loss

NBE directive no SBB/43/2008 classified the following non-performing loans and advance as Loss: a. Non-performing loans or advances with pre-established repayment programs past due to 360

(three hundred sixty) days or more;

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

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

2. The debt exceeds the borrower's approved limit for 360 (three hundred sixty) days or more; or

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

# 2.2.4. Five C's of Non-performing loans

As noted by (MacDonald, 2006), there are five C<sup>\*</sup>s considered as bad credits which represent the disputes used to guard against/avert bad loans. These are as follows:

**Complacency:** refers to propensity to which one assumes that things were good in the past, so they will be good in the future. For instance, Supposing the past loan settlement success since things have incessantly worked out previously.

**Carelessness**: indicates the poor endorsing typically showed by scant loan documentation, lack of upto-date financial information or other relevant information in the credit records, and lack of protective arrangements in the loan agreement. Each of these makes it hard to monitor a borrower`s improvement and detect problems before they are uncontrollable.

Communication ineffectiveness: failure to visibly communicate the bank's objectives and policies. This is when loan delinquency can arise. Therefore, the bank management need to clearly and effectively communicate and impose the loan policies and loan officers should make the management conscious of specific problems with existing loans as soon as they appear.

**Contingencies:** refers the lenders` tendency to play down/ignore circumstances in which a loan might be default. It focuses on trying to make a deal work rather than identifying down side risk. **Competition:** involves following the competitors` action rather than monitoring the bank`s own credit standards. Banks, however, still have required expertise, experiences, and customer focus to make them the preferred lender for many types of loan. Lending is not just a matter of making loan and waiting for repayment. Loan must be monitored and closely supervised to prevent loan losses,

#### 2.2.5. Factors Affecting Non-Performing Loans (NPL)

#### 2.2.5.1. Bank Specific Factors

#### A. Collateralized lending and NPLs

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 can 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. Mamuye (2015) stated that the probability of NPL is high when the bank lends by owning collateral as compared to non-collateral lending. Similarly, Wondemagegn (2012), stated that collateralizing loan protect loan default as the same time a bank granted a loan without sufficient collateral coverage the chance to be deflated of a loan is high compared to non-collateralized loans.

#### B. Credit Monitoring and NPLs

The banks, which incur more expenses on monitoring and assessing the borrowers, are less efficient in financial operations but these banks have lower NPLs (Hughes et al, 1996). Various studies show that state-owned banks are less efficient because they concentrate more on monitoring the NPLs. Salas and Saurina (2002) are of the view that inefficient bank management causes NPLs. The loans are more secured if the banks keep a continuous check on the borrowers. The banks need to give their borrowers full attention, so they are not relaxed at any stage about repayment of their loans. It has been seen that less monitoring of borrowers lead to NPLs (Agresti et al, 2008).

There are evidences in literature about poor monitoring, on the part of the banks, to be the main bankspecific factors behind creating NPLs. The banks carry on these practices in order to increase profit (Agresti et al, 2008) for US & (Salas and Saurina, 2002) for Spain. There are also some other features present in them as inadequate monitoring system. The study of Omar (2009) showed that banks are nationalized in the 1970s by the government. The state-owned banks possess 88% to 96% of NPLs in the whole banking sector. Due to this poor performance, government reconsidered its thinking. The reforms of 1991 allowed private banks operations in Pakistan. During 1997-2001 the private-owned banks become more strengthened when further reforms are structured to build an extensive and competitive environment.

#### C. Credit assessment and NPLs

A weak credit assessment can also play a role in increasing NPLs. The repute of borrowers to repay loan and the market value of securities are not adequately assessed while giving loans which become key reasons behind NPLs (Petersson, &Wadman, 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. This causes NPLs to grow at even a higher pace. Teshome (2010) indicated that, Lax procedures used for credit risk assessment, poor credit appraisal and delayed loan approval and poor credit risk assessment had direct or significant effect for the occurrences of non-performing loans in commercial banks.

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).

#### **D.** Bank size and NPLs

Rajan& Dahl (2003) in their study of commercial banks in India they used panel regression analysis. Their study also indicates that bank size has significance on occurrence of NPLs. Sala &Saurina (2003) indicated that bank size is among the factors that explained variations in NPLs for Spanish banks. Besides, Bikker& Hu (2002) also shows that bank size is significantly related rate of occurrence of loan default.

# 2.2.5.2 .Borrower Specific Factors

# A .Borrower's Orientation and NPLs

There is strong relation between borrowers" culture/orientation and occurrence of nonperforming loans. Therefore, borrower's orientation/culture is one of the causes for loan default. Moreover, high

interest rate also causes for the occurrence of nonperforming loans. Both lenient/lax credit terms & difficulty in understanding credit terms leads to loan default. Similarly, poorly negotiated credit terms lead to nonperforming loans (Arega, et.al2016).

# 2.2.6. Strategies for recovery of non-performing loans

Masoom (2013) contended that under the present overall socio economic dynamics the banks should prioritize to extend purpose-oriented credit facilities with required security/collateral support as their policy priority since diversion of fund is one of the identified causes of loan default. So it becomes of imperative need to keep a close watch on the borrower's business operations and the movement of its financial indicators in an empirical manner. Banks have to play the role of business partner rather than a conventional lender. A bank has to ensure that utilization of credit is in accordance with the purpose for which it is lent i.e. end use of the lending has to be ensured. The bank has to monitor the performance of the borrowing unit to verify whether the assumptions on which the loan was sanctioned continue to hold good with regard to operation and environment. It is also to be observed whether the promoters are adhering to the terms and conditions of sanction and this is done by devising a mechanism for obtaining at regular intervals from the borrowing units. The bank will review the performance of the unit from the broader perspective for having better insight, so that they can extend meaningful advice to the promoters for overcoming any business hurdles. It is an admitted fact that a bank's financial health is largely dependent upon the extent and size of performing assets. Credit losses are equivalent to capital losses. An increase in non-performing loan (NPL) has the multipronged adverse impacts on bank's balance sheet having consequential effect of erosion of capital impairing earning streams, profitability, liquidity and solvency. Any compromise with the quality of assets at the sanctioning process will be a contributing factor towards enhancement of NPLs. The bank management has no 36 choice but to stay focused on the issue of keeping credit portfolio performing to the maximum extent. Other strategies include the formulation of a well-structured NPLs management strategy covering following areas;

- a) No compromise with due diligence in the sanctioning process. Keeping in mind "prevention is better than cure.
- b) Action plan for potential NPLs;

c) Identification of highly risk sensitive borrowers in the credit portfolio

d) Identification of geographical area-wise risk sensitivity;

e) Targeting high value end NPL accounts;

f) Prompt action on credit reports; and

g) Capacity building of officers and executives in the recovery department

# 2.2.7. Empirical Studies

This section presents evidence which identify the major factors of nonperforming loans. Many researchers have conducted a lot of study on determinants of nonperforming loans (NPLs), due to its significance for the bank's failure. Accordingly, in the section, presents factors affecting nonperforming loans in Ethiopia and other countries.

#### 2.2.7.1. Related Literature Review in Ethiopian case

Arega S, et.al (2016) investigated the Factors Affecting Non-Performing Loans: Case Study on Development Bank of Ethiopia Central Region, the result of the study showed that poor credit assessment and credit monitoring are the major causes for the occurrence of NPL in DBE. Credit size (includes aggressive lending, compromised integrity in approval, rapid credit growth and bank"s great risk appetite); high interest rate, poorly negotiated credit terms and lenient/lax credit terms, and elongated process of loan approval were bank specific causes for the occurrence of nonperforming loans.

Negalign (2019) Factors Affecting Non-Performing Loans in Commercial Banking Sector: A Comparative Study of Public and Private Banks A Case Study of Commercial Bank of Ethiopia and Dashen Bank District in Southern Region of Ethiopia, the results of the study indicated Bank specific factors include Bank size and performance, credit size, poor credit assessment, poor credit terms, lack of aggressive credit collection system, inadequate nature of collateral were identified as bank specific

factors affecting NPLs. On the other hand unwillingness of borrower to pay back loan, customers funds diversion for unexpected purpose were identified as customer specific factors affecting NPLs

Sirak (2016) in his study the Factors Affecting Non-Performing Loans: In Case of Commercial Bank of Ethiopia, the results obtained from regression output indicated that among the studied variables, loan to deposit ratio; financial performance measured in terms of return on equity; and capital adequacy were found to be statistically significant determinant of NPLs. On the other hand, loan growth, cost efficiency and bank size were statistically insignificant in affecting NPL. The findings from the interview result indicates that, variables such as poor credit risk assessment, focusing on collateral based lending, poor loan monitoring and follow-up, poor banker's skill in dealing with lending matters, undiversified loan products, short loan life and lack of credit advisory practices were also the bank specific factors that affect NPLs of CBE

Wakjira (2020) in his study the Factors affecting non-performing loans in Ethiopian Banking sector Specific case of commercial Bank of Ethiopia, As per the findings of the study bankers" incompetence, inadequacy of collaterals and lack of aggressive credit collection were found to highly affect the occurrence of NPLs. In addition borrower's culture/orientation which is the dimension used for measuring customer specific also has a positive and significant effect on the occurrence of NPLs in the bank.

# 2.2.7.2. Related literature review in other countries case

Prasanth et.al (2020) studied Factors Affecting Non Performing Loan In India, the findings reveals that, variables for example poor credit risk evaluation, concentrate on collateral based lending, poor loan monitoring and follow-up, poor banker's ability in commencing with lending matters, undiversified loan products, short loan life and lack of credit advisory practices were also the bank specific factors that affect NPLs

Suryanto (2015) in his study Non Performing Loans on Regional Development Bank in Indonesia and Factors that Influence, the results showed that the NPL BPD 2:14% average is still within the tolerance limits set by Bank Indonesia. Variables that significantly affect the NPL is the level of

efficiency of banks, mortgage interest rate and liquidity of banks. While the variable size of the bank and Modak adequacy ratio has no significant effect on the level of NPL.

Martha (2017) conducted a study to examine the factors that affects non-performing loans in KCB Bank Kenya Limited ,the study found out that interest rate significantly influence non-performing loans whereas credit size, bank size, gender and age did not significantly influence non-performing loans in KCB bank

Fred A. (2015) in his study the effects of selected Bank Specific factors on Non -Performing Loans amongst Commercial Banks in Kenya ,the findings indicate that 15.6 percept of variations in bank NPL levels is explained by variations in the bank specific characteristics. Specifically, there is a negative relationship between bank size, asset quality and levels of bank NPLs. There is also a positive relationship between liquidity, operational cost efficiency, earnings ability and levels of NPLs.

Carlo M. (2013) have identified the Factors affecting non-performing loans in Banking industry: A case of KCB Bank (Tanzania)Limited; Morogoro and Msimbazi Branches, the findings showed that, diversion of funds for unnecessary expansion of business and speculations leading to investing in high risk assets to earn high income(70%) and legal environment which reflects the availability or non-availability of foreclosure laws and ownership rights for both domestic and foreign investors(75%) have been factors influencing NPLs.

Shakeel ,et al. (2021) have examined the impact of Bank Specific and Macro-Economic Factors on Non-Performing Loans in the Banking Sector: Evidence from an Emerging Economy, the result showed that credit growth, net interest margin, loan loss provision, and bank diversification significantly increase NPLs, while operating efficiency, bank size, and ROA lower NPLs. In addition, higher interest rates, exchange rates, and political risk significantly increase NPLs, while GDP growth decreases NPLs

Meseret (2018) has examined the factors affecting non-performing loans in Ethiopian commercial banks, the finding of the study shows that the trend analysis of dependent and independent variables are downward sloping and NPLs level indicates above the threshold of NBE rules. The regression result shows the determinant variables are a significant relationship with NPLs.

Uma et al. (2017) studied on the Factors Influencing Non-Performing Loans in Commercial Banks: The Case of Banks in Selangor, the finding revealed that Non-performing loan has a weak relationship with the standard of living, consumer income, and economy of the country; however it has a moderate relationship between the bank interest rate.

Nasieku (2014), to analyzed Factors affecting non-performing loans: A case study of Commercial Bank of Africa –CBA (Kenya), the finding that prevailing economic conditions were the major economic factor affecting the levels of NPLs. The proportion of the respondents who answered in favour of the economic conditions stood at 41.7% compared to 14.6% who felt hat real GDP was the major factor affecting NPLs. On the bank-specific factors affecting NPLs, the highest proportion of the respondents 26% indicated that bank ownership was the major cause of NPLs compared to 10.4% who considered poor loan monitoring/follow-up as the major bank-specific cause of NPLs. The study also found that effective risk assessment was considered as the major remedial strategy of dealing with NPLs. According to the study findings 47.9% of the respondents indicated that effective risk assessment was the major remedial mechanism of dealing with NPLs while6.3% felt that increased budgetary allocation for loan monitoring was the major remedial strategy of dealing with NPLs. Mahyoub & Mohd (2021) investigated that the Factors influencing non-performing loans: empirical

evidence from commercial banks in Malaysia. Research Journal of Business and Management (RJBM), Vol.8 (3), 160-166The finding reveals that capital adequacy ratio is a significant factor in influencing the sample banks" level of non-performing loans. All other bank-specific factors employed in the analysis were found to be insignificant. In addition, based on the results provided by real gross domestic products and inflation, we can conclude that economic situation does not impact the non-performing loans level of the sample commercial banks.

AyuRetnowati & Prabowo (2020) investigated the Factors Affecting Non-Performing Financing at Islamic Commercial Banks in Indonesia; the results show that the inflation, GDP, and FDR variables do not significantly influence NPF. BOPO variable has a positive and significant influence to NPF. CAR variable has a negative and significant influence to NPF. The conclusion shows that the inflation, GDP, and FDR variables do not significantly influence NPL. Variables of BOPO and CAR have significant influence to NPL.

Prasanthet al. (2020) investigated the Factors Affecting Non Performing Loan In India, the findings reveals that, variables for example poor credit risk evaluation, concentrate eon collateral based lending, poor loan monitoring and follow-up, poor banker's ability in commencing with lending matters, undiversified loan products, short loan life and lack of credit advisory practices were also the bank specific factors that affect NPLs.

William and Clement (2020) Analysed on Influence of Bank Specific Factors on Non-Performing Loans among Commercial Banks in Kenya, the study revealed that the average level of NPLs among Kenyan commercial banks is higher than the threshold of 5% signalling a serious NPLs problem amongst commercial banks in the country .The study concludes that at 5% level of significance; interest rate spread has positive significant influence on NPLs; operating efficiency is directly proportional to non -performing loans and it has a moderate positive significant Influence on the non-performing loans among commercial banks in Kenya; liquidity ratio has a negatively low significant relationship with non- performing loans.; and return on assets has a negative significant influence on NPLs among commercial banks in Kenya. ROA has a negative impact.

Kiran et al. (2017) investigated the Reasons and the Effects of Non-Performing Loans in the

Banking Industry of Pakistan, the result shows no significant relation of GDP, Interest rate and improper lending disbursement to agriculture sector with NPL however there is a significant association of Credit appraisal with NPL

Ilyas, et al. (2015) Quantitative study of bank-specific and social factors of non-performing loans of Pakistani banking sector, the results showed that various bank-specific factors like credit assessment, credit monitoring and rapid credit growth have significant effect on Non-Performing Loans, whereas interest has a weak significance on NPLs. The social factors including political interference and bankers" incompetence have significant effects on NPLs and these have been important factors in explaining the Non-Performing Loans. This ground-breaking work on Non-Performing Loans and its factors will not only help the entire Pakistani banking sector to control Non-Performing Loans but also its results can be generalized on other countries as well.

The literature review implies that Non-performing loan of banks both foreign and Domestic banks especially commercial bank of Ethiopia have different variables that affect the occurrence of Nonperforming loan. Among the variables or factors that expressed in the literatures were categorized

as borrowers" specific factor, bank specific factor and social specific factors. Moreover in the previous studies variables commonly used in Ethiopian and other countries banks were poor credit risk evaluation, collateral based lending, poor loan monitoring and follow-up, poor banker's ability and bank size.

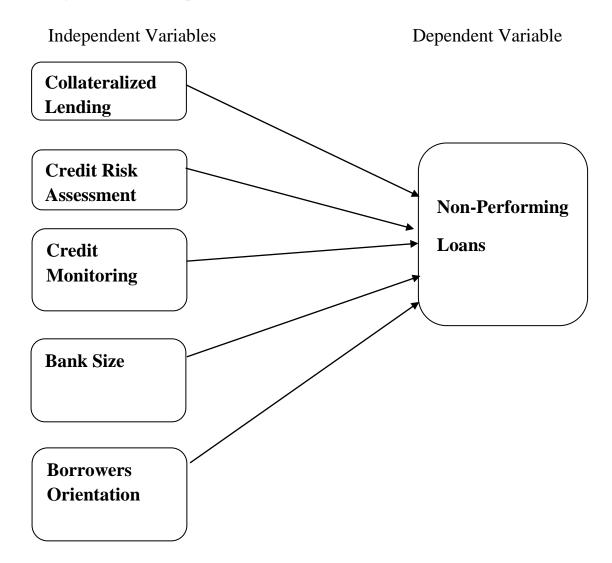
In Ethiopia Case bank specific factors are major cause especially poor credit assessment and credit monitoring are the major causes for the occurrence of NPL.

The gap of the literature was each factors had different effect either or negative, positive against Nonperforming loan. In addition impact and significance of the variables were not consistent from throughout banks.

#### 2.2.8. Conceptual Framework

From the literature review, discussed above, the researcher constructed the following conceptual framework to summarize the main focus and scope of this study in terms of dependent and independent variables included. Therefore, based on the above literature conceptual frame work of the study constructed and categorized as dependent variable and independent variables as follow.

Figure .1.2. Conceptual Framework



# CHAPTER THREE

# **RESEARCH METHODOLOGY**

# 3.1. Introduction

This chapter presents details of the research methodology. This includes research design, data type and source, sampling method and size, procedure for data collection, method of data collection and data analysis.

#### 3.2. Research Site /study area

The area of this study was conducted on factors that affect Non-performing loans in the Bank of Abyssinia, Head Office. Like other business activities, bank strives to make profit and grow. Presently BOA headquarters 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. Therefore, the study was conduct in consultation with staff involved in credit operations at head offices level.

#### 3.3. Research Approach

The current study was used a Quantitative approach to answer the specific objectives of the study. The questionnaire was asked respondents about their opinion towards the factors that affect Nonperforming loans. A quantitative research approach should be adopted for this research involving a selected number of employees to answer the questionnaire to be designed to collect the data. This approach was selected because it enables to provide reliable data which can potentially serve as a ground to make a decision

#### 3.4. The Research Design

The essential point of this examination was examine the factors that affect Non-performing loans in Bank of Abyssinia with a specific end goal to achieve the objective, explanatory and descriptive type of research design was employed. This type of research design helps to identify and evaluate the causal relationships between the different variables under consideration (Creswell, 2009). So, the explanatory and descriptive research design was employed to examine the relationship of the dependent and independent variables.

#### 3.5. Target Population

As it is mentioned earlier, the study was focused on the factors that affect Non-performing loans in Bank of Abyssinia ,Head office. The research was conducted in all staff members of credit department (Credit Director, Loan Officer, Credit Analyst, Loan Recovery Officer, Loan Monitoring Officer) who were engaged in credit area of Bank of Abyssinia, Head office as a total of 72 numbers of employees (as of March1,2022) as per the report of BOA Human resource Department.

The quantitative data types with primary sources of data were employed in this study. To obtain data from every credit employees, Census were adopted to collect primary sources of data.

## 3.6. Sources of data

With regard to the sources of data, the study was used both primary and secondary sources of data. As the study mainly focuses on human aspect, primary data is the main source of data. Primary data was collected from a sample of employees of the credit department through closed ended questionnaires about the factors that affect Non-performing loan .Secondary data was obtained from different documents of the organization and related literatures such as desktop researches, books, articles, journals and variety of websites as well as the other optional sources of the proposed study.

#### 3.7. Data Collection Procedure and tools

The questionnaire is one of the main tools for collecting data from respondents in the study. The primary data collection instrument was closed ended Questionnaire the questionnaire has divided in to three parts.

The first part of the questions are designed to get information on the demographics of the respondents or respondent profile such as sex, age, marital status, level of education and years of experience in the bank

The second part respondents were requested to respond their level of agreement towards the thirty four (34) statements constructed to show items of Factors Affecting Non-Performing Loans using a five-point Likert type scale ranging from 1 (strongly agree with the statement) to 5 (strongly disagree) for each of the statements.

The third part of question six (6) items related to Non-Performing Loans .The questionnaires were developed using a five-point Likert type scale ranging from 1 (strongly agree with the statement) to 5 (strongly disagree) for each of the statements

3.8. Validity of the Questionnaires

Validity refers to the degree to which research instrument measures what it is supposed to. It also refers to the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration. However, an instrument cannot measure the attribute of interest if it is unpredictable, inconsistent, and inaccurate. According to LoBiondo-Wood and Haber (2006), there are three major kinds of validity including content, criterion-related, and construct validity. For this study, face-to-face communication, criterion-related, and construct validity were used to assess the validity of the instrument.

## 3.9. Reliability of the Questionnaires

Reliability is the degree to which the measure of a construct is consistent or dependable. In other words, if we use this scale to measure the same construct multiple times do we get pretty much the same result every time, assuming the underlying phenomenon is not changing According to (Bhattacherjee, 2012) internal consistency is a measure of consistency between different items of the same construct. Hence, the study used a multiple –item measurement scale internal consistency method should be applied to the study. Cronbach alpha with acceptable cut off points 0.7 demonstrate that all attributes are internally consistent the reliability test for the instrument used for the study was conducted using SPSS the results shows that the items used are reliable.

As sited from Meron (2015) coefficient alpha ranges in value from 0 meaning no consistency to 1 meaning complete consistency (all items yield corresponding values). Generally speaking, scales with a coefficient between 0.80 and 0.95 are considered to have very good reliability. Scales with a coefficient between 0.70 and 0.80 are considered to have good reliability, and value with a coefficient between 0.60 and 0.70 indicates fair reliability. When the coefficient is below 0.6, the scale has poor reliability (Zikmund et al, 2010).

S/n	Section	No. of Items	Alpha Value
1	Collateralized Lending	7	.846
2	Credit Risk Assessment	8	.709
3	Credit Monitoring	7	.710

Table-3.1: Alpha Coefficient for Each Section of Questionnaire

4	Bank Size	6	.739
5	Borrowers Orientation	6	.673
6	Non-Performing Loan	6	.777

Source: Source: Computed from data survey, 2022

Using Cronbach''s coefficient, internal consistency for independent and dependent Variable was estimated as 0.846 for Collateralized lending, 0.709 for Credit Risk Assessment, 0.710 for Credit Monitoring, 0.739 for Bank Size and 0.77 for Non-Performing Loan. In addition, Borrowers Orientation has alpha coefficient of 0.673 which is nearly 0.7. Usually a reliability coefficient of .70 or higher is considered acceptable in most social science research (Biljana &J usuf, 2011). From the above table the reliability values for all variables are above or nearly 0.7. Thus, it can be concluded that the measures used in the study or consistency and reliability of a questionnaire of the study was valid.

#### 3.10. Method of Data Analysis

The quantitative data that was collected and processed using Statistical Packages for Social Science (SPSS) software 26 and the data analysed through the descriptive and regression analysis procedures.

For descriptive analysis table and percentage were used to analyse the data. Besides, results of the descriptive statistics such as mean, standard deviation, minimum and maximum values were reported to describe the characteristics of variables under investigation. Furthermore, various diagnostic tests such as Normality, Heteroscedasticity and Multicolinearity test were conducted to decide whether the model used in the study is appropriate and to fulfil the assumption of classical linear regression model. Thus, in order to examine the possible degree of Multicolinearity among variables variance inflation factor and correlation matrixes were used.

Finally, Regression analysis was carried out to determine the relationship between the independent variables and the dependent variable

## 3.11. Model Specification

This study was used multiple linear regression analysis, it helps to simultaneous analysis of more than two variables) is very important in operations management (Hue, 2015). Multiple regression analysis is used to predict the changes in the dependent variable in response to changes in the several independent variables. The multiple regression analysis was used to test the relationships between the constructs based on the hypothesized model indicated above.

Multiple regression is a flexible method of data analysis that may be appropriate whenever a quantitative variable (the dependent or criterion variable) is to be examined in relationship to any other factors (expressed as independent or predictor variables). Relationships may be nonlinear, independent variables may be quantitative or qualitative, and one can examine the effects of a single variable or multiple variables with or without the effects of other variables taken into account (Laxmi, et al, 2018) .Thus, multiple regression enable to estimate regression results more than two explanatory variables, five independent variables were used in this study. Therefore, the model of the regression analysis was specified as follows:

#### *Y*=*a*+*b*1*X*1+*b*2*X*2+*b*3*X*3+*b*4*X*4+*b*5*X*5+e

In the above equation, a=intercept b1, b2, b3, b4,

b5=coefficients of explanatory variables

Y = Non-Performing Loan
X1 = Collateralized Lending
X2 = Credit Risk Assessment
X3 = Credit Monitoring
X4 = Borrowers Orientation X5
= Bank Size

e: the error term, it can consider all other factors

## 3.12. Description of variables

#### **Dependent variable**

**Nonperforming loans**- NPLs are loans that are outstanding both in its principal and interest for a long period of time contrary to the terms and conditions under the loan contract. Any loan Facility that is not up to date in terms of payment of principal and interest contrary to the terms of the loan agreement is NPLs. Thus, the amount of nonperforming loan represents the quality of bank assets (Tseganesh, 2012).

#### **Independent Variables**

**Bank size**- Bank size is an important indicator in measuring assets of a bank. Company size can be measured by total assets (Barus and Erick, 2016). With large assets, banks have large volumes of credit to distribute and subsequently reduce the interest rate.

**Collateralized lending**- According to Koch & MacDonald (2003) 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. Then, collateral lending is bank holds asset as a guarantee so as to mitigate borrowers repayment of a loan

**Credit Risk assessment-** credit risk analysis is a form of analysis performed by a credit analyst to determine a borrower's ability to meet their debt obligations. The purpose of credit analysis is to determine the creditworthiness of borrowers by quantifying the risk of loss that the lender is exposed to (https://corporatefinanceinstitute.com/resources/knowledge/credit).

**Credit monitoring** - Credit Monitoring can be defined as a supervision of a loan account on an ongoing basis keeping a continuous watch / vigil over the functioning of a borrowers unit to confirm that the account conform to the various assumptions made at the time of sanction. If nother words credit monitoring is to maintain asset quality of the Bank

(https://bankingdigests.com/wp-content/uploads/2020/04/Credit-Monitoring) Borrower orientation- Black and Strahan (2002) bank orientation issue exploring an alternative measure of local credit availability. bank orientation correspondence on the transfer of information and the availability of credit.

#### 3.13. Ethical Consideration

The informed consent of all participants obtained before starting the study. Respondents would be given a clear explanation about the nature of the study and advised that they are free to withdraw from the study any time. In addition participants informed about data collecting procedure. The anonymity of the subjects is protected and guaranteed by preventing to write their names and providing clear instruction. Furthermore, the information obtained thorough the aforementioned procedure is only used for the research purpose and the confidentiality maintained.

# **CHAPTER-FOUR**

# DATA PRESENTATION, ANALYSIS AND INTERPRETATION

#### 4.1. Introduction

The previous chapters presented the introduction, literature review and the research Methodology to be followed. This chapter presents results relating to the factors affecting NPLs in Bank of Abyssinia.

The chapter presents the descriptive statistics results of the study variables. In addition, the chapter presents different diagnostics test results. Then, the chapter presents results of the correlation and regression analysis and discusses the results.

# 4. 2. Response Rate

The questionnaire was distributed among bankers which related to the credit department including loan officers, relationship managers, credit managers, credit directors and recovery officers in BOA. The questionnaire was physically distributed to72 employees which related with credit department. Out of 72 questionnaires 65 were completed and returned. So, the overall response was 90.28 % which is impressive if we see it in the context of the research. (see Table 4.1. below). As a result, the analysis is made on the valid number of responses.

Table4.1.Survey Response Rate

Sample size	72
Completed and returned questionnaires	65
Response rate	90.28

Source: Source: Computed from data survey, 2022

# 4.3. Analysis of Questionnaire Data

## 4.3.1 Demographic Characteristics of the Respondent

The demographic Characteristics of the respondents of the study presented in the following sections to give information about the profile of the respondents to readers of this research.

			Percentage	
	Measurem ent		Valid %	Cumulative %
Item		Frequency		
Sex	Male	41	63.08	63.08
SCA	Female	24	36.92	100

Table 4.2: Frequency Distribution-sex Respondents

Total	65	100	-

As shown in Table4.2, out of 65 respondents, the male respondents are 41 (63.08%) while their female counter parts 24 (36.92%). This shows that credit departments of most of the employees are dominated by male officers. Therefore, it can be inferred that the banks prefer male staff while giving jobs related to loan advancement.

Table 4.3: Frequency Distribution-Age Respondents

			Percentage	
Item	Measurement	Frequency	Valid %	Cumulative %
Age	21-30	37	56.92	56.92
	31-40	19	29.23	86.15
	41-50	8	12.31	98.46
	More than 50	1	1.54	100
	Total	65	100	-

Source: Computed from data survey, 2022

Table 4.3 presents the age distribution of the respondents. The age distribution of respondents showed that the majority of the respondents 37 (56.92%) were from 21 to 30 years old, 19 (29.23%) were from 31 to 40 years old, 8 (12.31%) were from 41 to 50 years old and 1 (1.54%) were over 50 years old. So the fact that the majority of the employees in BOA belong to the most active and energetic age group is encouraging.

			Percentage	
Item	Measurement	Frequency	Valid %	Cumulative %

Marital Status	Single	21	32.30	32.30
	Married	42	64.62	96.92
	Separated	2	3.08	100
	Total	65	100	-

Table 4.4: presents the marital status of the respondents. Of the total 65 respondents, 21 (32.30%) were married, 42 (64.62%) were single and 2 (3.08%) were separated

	Magazit	Frequenc y	Percentage	2
Item	Measurement	5	Valid %	Cumulative %
Educational Level	First Degree	44	67.69	67.69
	Second degree	21	32.31	100
	PhD	-	-	-
	Total	65	100	-

Table 4.5: Frequency Distribution- Educational Level Respondents

Source: Computed from data survey, 2022

Table 4.5 presents the educational level of the respondents. Of the total 65 respondents, 44(67.69%) respondents were university degree graduates, 21 (32.31 %) have Master's degree, and no PhD .Depending on the respondents' response of education levels the distribution showed the majority of the bankers have Universities degree related to credit department are highly qualified.

 Table 4.6: Frequency Distribution- Working Experience Respondents

			Percentage	
Item	Measurement	Frequency	Valid %	Cumulative %
	1–5years	42	64.62	64.62
	6–10years	20	30.76	95.38
Working	11–15years	3	4.62	100
Experience	15 years & above	-	-	-

Total	65	100	-	
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Table 4.6 summarizes the years of service of the respondents in BOA. The majority of the respondents had between 1-5 years of experience in their current Bank representing 42 (64.62%) of the total sample, 20 (30.76%) of the respondents served for 6–10 years and 3 (4.62%) for 11to 15 years.. So, based on the data obtained most of the BOA of the employees in the credit Department served 1-5 years.

## 4.4. Descriptive Statistics.

This section presents the descriptive statistics of dependent and explanatory variables used in this Stud. The dependent variable used in this study was NPL while explanatory variables are CL, CRA, CM, B0 and BS.

	N	Minimum	Maximum		
	Statisti				
	с	Statistic	Statistic	Mean	Std.Dev.
NPL	65	1.67	4.83	3.7307	.7486
CL	65	1.71	4.71	3.2813	.5691
CRA	65	1.63	4.88	3.2019	.8195
СМ	65	1.49	5.00	2.7142	.9878
BO	65	1.50	5.00	3.1435	1.1031
BS	65	1.50	5.00	3.1102	.9679
Valid N	65				
(listwise)					

Table .4.7. Results of Descriptive Statistics

Source: Computed from data survey, 2022

The above table 4.7 indicates that the mean value of NPL is 3.73%, which ranges from minimum 1.67% to maximum 4.83%, the average value of collateral lending 3.28% with ranging from 1.71% to 4.71% which deviates 0.56% from its mean. Among the independent variables collateral lending and bank size has the largest mean 3.28% and the lowest mean 3.11% respectively. It implies that the higher the mean score the higher expectation and vice versa.

Regarding standard deviation it is is a measure of how dispersed the data is in relation to the mean. Then, Collateral Lending has lowest standard deviation 0.8 than others variable it means data are clustered around the mean, and high standard deviation 1.1 of Borrowers orientation indicates that data are more spread out. Therefore, Except borrowers" orientation the standard deviation (SD) of Bank and Borrower specific factors constructs is less than one; this implies that the variations in respondents" opinion/view concerning determining variables of NPLs in the Bank of Abyssinia is small.

## 4.5. Test for the Classical Linear Regression Model (CLRM) Assumptions

In maintaining the validity and robustness of the regression model, the study tested the data to satisfy basic assumption CLRM (Brooks, 2008). On satisfying assumptions, then all available information is considered as used in the model. However, violation of these assumptions implies that some data is left out of the model. In order to check the validity of statistical results diagnostic checks or tests were applied. Then, in this section the study tested for; multicollinearity, Normality and heteroscedasticity test to ensure quality of the Econometric model.

## 4.5.1. Multicollinearity Tests

The term Multicolinearity indicates the existence of exact linear association among some or all explanatory variables in the regression model. When independent variables are multi collinear, there is overlapping or sharing of predictive power. Thus, if multicolinearity is perfect, the regression coefficients of the independent variables are undetermined and their standard errors are immeasurable (Gujarati, 2004).

Table .4.8. Results of Multicollinearity Tests

		Collinearity Statistics
Variables	Tolerance	Variance Inflation Factor ( VIF)
(Constant)	.784	1.275
Collateralized lending	.569	1.758
Credit risk assessment	.206	4.854
Credit monitoring	.384	2.605
Borrowers orientation	.156	6.406
Bank size	.784	1.275

According to (Gujirat ,2004) If VIF of a variable exceeds 10 and the tolerance level closer to zero shows the greater degree of collinearity of the variable with other regerssors, On the other hand ,the closer tolerance is to 1 and VIF Less than 10 shows no multicollinearity problem. Then, Multicollinearity occurs when IVs are highly correlated with one another that they share the same information. Thus, the multicollinearity problem reduces the individual IVs" predictive power.

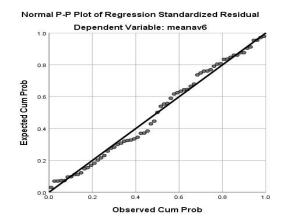
Based on the results of multicollinearity test as seen in Table 4.1.3 it can be concluded that there is no correlation between independent variables in the regression model or multicollinearity problem does not occur. This conclusion was drawn because the tolerance values for the models for all independent variables are CL, CRA, CM, BO, BS were greater than 0.1 or closer to 1 whereas VIF of all independent variables values were smaller than 10 which implies that no multicollinearity in the model.

#### 4.5.2. Normality Test

One of the assumptions of classical linear regression model (CLRM) is the normal distribution of the residual part of the model. As noted by Gujarati (2004), OLS estimators are BLUE regardless of whether the disturbances are normally distributed or not. If the disturbances (ui) are independently and identically distributed with zero mean and constant variance and if the explanatory variables are constant in repeated samples, the OLS coefficient estimators are asymptotically normally distributed with means equal to the corresponding coefficients.

The histogram of residuals allows us to check the extent to which the residuals are normally distributed. The residuals histogram in shows below a fairly normal distribution and all the variables are positively skewed which is more of approached to normal distribution (APPENDEX C).

Figure: 4.2 Histogram Normality test



Source: Computed from data survey, 2022

Based on the above plot we can see that the existing points always follow and approach the diagonal line .Thus, it can be conclude that the residual value is normally distributed so that the regression analysis procedure has been fulfilled. Thus, the normality of residuals assumption is satisfied.

#### 4.5.3. Hetroscedasticity Test

In the classical linear regression model, one of the basic assumptions is Homoskedasticity assumption that states as the probability distribution of the disturbance term remains same for all observations. That is the variance of each i u is the same for all values of the explanatory variable. However, if the disturbance terms do not have the same variance, this condition of non-constant variance or nonhomogeneity of variance is known as heteroscedasticity (Bedru and Seid, 2005).

Thus, heteroskedasticity results in an unequal scatter of the residuals (also known as the error term).

Accordingly, in order to detect the heteroscedasticity problems, Breusch-Pagan or Cook Weisberg test was utilized in this study. This test states that if the p-value is significant at 95% confidence interval, the data has heteroscedasticity problem, whereas if the value is insignificant the data has no heteroscedasticity problem or the variance of each error terms are homoscedastic.

Thus, if the test statistic has a p-value below an appropriate threshold (p < 0.05) then the null hypothesis of homoskedasticity is rejected and heteroskedasticity assumed and vice versa. For this study, the Breusch-Pagan test p value is 0.499 which is greater than 0.05 and insignificant. As the result, the null hypothesis of the presence of hetroskedsticity is failed to reject and conclude that there is no heteroscedasticity problem (APENDDEX B).

#### **4.6.** Correlation analysis

To find out the relationship between Explanatory variable and NPL, Pearson''s correlation coefficient (r) which measures the strength and direction of a linear relationship between two variables is used. Values of Pearson''s correlation coefficient are always between -1 and +1. A correlation coefficient of +1 indicates that two variables are perfectly related in a positive sense; a correlation coefficient of 0 indicates that there is no linear relationship between the two variables. A low correlation coefficient 0.1-0.29 suggests that the relationship between two items is weak or non-existent. If r is between 0.3 and 0.49 the relationship is moderate. A high correlation coefficient i.e. > 0.05 indicates a strong relationship between variables. The direction of the dependent variable's change depends on the sign of the coefficient. If the coefficient is a positive number, then the dependent variable will move in the same direction as the independent variable; if the coefficient is negative, then the dependent variable will move in the opposite direction of the independent variable. Hence in this study both the direction and the level of relationship between the Explanatory variable and NPL are conducted using the Pearson''s correlation coefficient. The table below presents the result of the correlation analysis made using bivariate correlation.

The study Indicates that explanatory variable such as Collateralized lending, Credit risk assessment, Credit monitoring, Borrowers orientation and Bank Size have positive association with Nonperforming Loan, each factor of explanatory variable is positively correlated to NPL. The correlation between Collateralized lending is 0. 389, Credit risk assessment is 0. 750, Credit monitoring is 0. 115, Borrowers orientation is 0. 177, Bank Size is 0. 25 5and NPL which are all positively correlated with at 1% he significance level (APENDDEX C).

#### 4.7. Regression Analysis

Regression analysis was employed to examine the association between service quality dimensions and customer satisfaction. It is a constructive statistical technique that can be used to analyse the association between dependent and independent variables.

#### 4.7.1. Regression analysis between dependent and independent variables

The Regression analysis between dependent and independent variables explained with Coefficient of determination. The coefficient of determination (R2) essentially measures how far the model's ability to explain the variation of the dependent variable. The coefficient of determination is between 0 and 1. A small Adjusted R2 value means that the ability of the independent variables in explaining the variation of the dependent variables is very limited (Gujarati, 2004). Then, to analyse the regression, model the SPSS output of the data has been summarized as follows

Table 4.9.Model Summary

Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R	Std. Error of the
			Square	Estimate
1	.849 <sup>a</sup>	.720	.697	.41233

Source: survey outcome and own computation (2022)

Table 4.16, it shows that, R square also plays an important role in the model summary. The word R here can be defined as the strength of the relationship between the forecast and outcome from this research study measured. Based on the above table, it shows that the R square is 0.720 or 72.0 percent. It indicates that 72.0% of the variation in the non-performing loan is explained by the independent variables (Collateralized lending, Credit risk assessment, Credit monitoring, Borrowers orientation and Bank Size). Hence, the remaining 28.00 percent is unaccounted for, which could be due to other variables which are not involved in this research study

Table 4.17. ANOVA<sup>a</sup>

		Sum of				
Mod	lel	Squares	Df	Mean Square	F	Sig.
1	Regression	25.841	5	5.168	30.398	.000 <sup>b</sup>
	Residual	10.031	59	.170		
	Total	35.872	64			

Source: survey outcome and own computation (2022)

The F statistical test basically shows whether all the independent or independent variables entered in the model have a joint influence on the dependent variable. ANOVA table 4.17 shows a significant value (p-value < 0.05) which implies the entire model has acceptable goodness-of-fit. At the same time, it also means that at least one of the independent variables (Collateralized lending, Credit risk assessment, Credit monitoring, Borrowers orientation and Bank Size). is able to significantly influence the dependent variable (non-performing loan). The coefficient table provides the details of significance levels of each variable.

As it has been previously discussed in methodology section the model of the regression analysis was presented as Y=a+b1X1+b2X2+b3X3+b4X4+b5X5+e where, Y=NPL(Non-Performing Loan), b1-b5 coefficient of independent variables ,X1,X2,X3,X4,X5 represents CL(collateralized lending),CRA(credit risk assessment),CM(credit monitoring),BO(borrowers orientation) and BS(bank size) ,respectively and e denotes error term.

			Standardized		
	Unstandardize	d Coefficients	Coefficients		
Model	В	Std. Error	Beta	Т	Sig.
1 (Constant)	.852	.392		2.172	.034
CL	.244	.102	.185	2.382	.020
CRA	.809	.083	.885	9.700	.000
СМ	352	.115	464	-3.059	.003
BO	.133	.075	.197	1.770	.082
BS	.008	.135	.010	.060	.953

Table 4.11. Estimated Unstandardized and Standardized Regression Coefficient

Source: survey outcome and own computation (2022)

There for, table 4.18 shows that the regression equation of the model is generated as follow:

From table 4.18 the interpretation of independent variables and statistical results as follow:-

The "sig" column shows significance level of variables with whether they are important or not. According to (Gujarati, 2004) in statics, when we reject the null hypothesis, we say that our finding is statically significant. On the other hand, we do not reject the null hypothesis; we say that our finding is not statically significant. The significance value should be less than 0.05 whereas the insignificance value is greater than 0.05.

From the above table 4.18 imply that CL/Collateralized lending/ is positive and significant at 5% level. Consequently, the null hypothesis is rejected. In addition, Collateralized lending has the largest (2.44) coefficient of the variable than other independent variables it also informs that it has greatest and positive impact on NPL than other IVs.

The other variable CRA is positive and significant at 1% level because it has smaller significance value. Then, the null hypothesis is rejected. CRA has positive relationship with the dependent variable NPL. The result implies that Poor credit analysis is related to poor credit assessment which indicates that the causes for the occurrences of non-performing loans.

The study result with related to explanatory variables CM has a negative relationship with NPL and statically significant at 5% level, concludes that we reject the null hypothesis. It implies that even if the credit monitoring is statically significant it has negative relationship with the dependent variable NPL. The results also indicate that credit monitoring inversely affects the occurrence of NPL and survey also indicates that if banks spend more on monitoring the loans then it is not guarantee that level of NPLs may decrease.

BO/borrowers orientation and BS/bank size/ are positive and insignificant because the p-value of each variable is 0.82 and 0.953, respectively which is larger than 0.05. Therefore, it can be conclude that the variables have positive relationship with NPL but the null hypothesis is fail to reject. Thus, the study found that Borrowers Orientation and bank size less important or did not provide sufficient evidence to conclude that have effect exists on NPL.

Table 4.12.Summary of Hypothesis Results

This sub-topic summarizes each of hypotheses stated in Chapter 1. The results are displayed in the table below

					null hypotheis
Hypothesis	Statements	Coefficient	T- statistic	PValues	Results
H1	Collateralized lending has a significant positive effect on Non Performing Loan (NPL)	.185	2.382	.020	reject the null hypotheis
H2	Credit risk assessment has a significant positive effect on Non Performing Loan (NPL)	.885	9.700	.000	reject the null hypotheis
Н3	Credit monitoring has a significant positive effect on Non Performing Loan (NPL)	464	-3.059	.003	reject the null hypotheis
H4	Borrowers orientation has a significant positive effect on Non Performing Loan (NPL)	.197	1.770	.082	Fail to reject the null hypotheis
Н5	Bank size has a significant positive effect on Non Performing Loan (NPL)	.010	.060	.953	Fail to reject the

# **CHAPTER-FIVE**

# SUMMARY OF FINDING AND RECOMMENDATIONS

# 5.1. Introduction

The main objective of this research was to identify the factors that affect NPL in Bank of Abyssinia (BOA). In the previous chapter, analysis and interpretation of the study was made based on the data

obtained through questionnaire with especially from credit department of BOA. Based on the data analysis and interpretation, the finding, the conclusion and the recommendations of the study were made as follows.

## 5.2. Summary of Findings

Based on the data, analysis and interpretation made in the previous chapter the major findings are summarized as follows:

- The study found that Collateralized lending and Credit Risk Assessment had positive effect but Credit monitoring has negative effect on Non-performing Loan while Borrowers orientation and Bank size had not effect on Non-performing Loan.
- The result shows that adequate nature of collateral commercial (business) commercial (business) collateral and collateral location is reason for inadequate nature of collateral which causes loan default.
- Poor credit analysis and Poor credit risk assessment is related to poor credit assessment this indicates the causes for the occurrences of non-performing loans. The result also showed that a loan is poorly assessed directly affects the occurrence of NPLs.
- Due to proper education in the business area and sufficient supervision from the bank and market conditions are the major problems in the BOA customer's willingness of borrower to pay back the loans with in the deadlines.
- As per the descriptive statistics of the variables, the existing level of Collateralized lending shows a high level of mean value indicating that there is a higher level of Collateralized lending in BOA. However, Borrowers orientation, Credit risk assessment and Bank size and performance of BOA found at a lower level.

#### 5.3. Conclusion

The aim of this study was to identify the factors affecting Non-performing loans in Bank of Abyssinia. The study tried to find out both bank borrower and customer specific determinates of non-performing loans. Among the bank specific factors, the study found that the credit assessment of the BOA is the major cause. The result depicts that weak credit risk management and easily admitted borrowers cause occurrences of NPL under credit assessment. This implies that the BOA has been poorly assessing borrower's credit worthiness, ability to repay a loan and the risk associated with the loan.

Poor credit assessment due to weak credit analysis and poor credit risk assessments and Poor Credit terms and condition due to; lenient/lax credit terms, poorly negotiated credit terms and borrowers default due to lack of well understanding the credit terms.

The study result with related to explanatory variables CM has statically significant but a negative relationship with NPL Then ,credit monitoring inversely affects the occurrence of NPL and survey also indicates that if banks spend more on monitoring the loans then it is not guarantee that level of NPLs may decrease.

BO/borrowers orientation and BS/bank size/ are positive and insignificant and the study found that Borrowers Orientation and bank size less important or did not provide sufficient evidence to conclude that have effect exists on NPL.

#### 5.4. Recommendations

On the basis of the analysis and findings derived and conclusions drawn with regard to the antecedents of employee turnover intention, the following recommendations are made with the hope that implementation would reduce the problem identified

- Loan granting is a very risky business unless the risk associated with it properly identified and mitigated. In order to protect the occurrence of loan default, the bank should adapt preand post-credit risk assessments.
- The Bank needs to ensure that borrowed funds are being used for the intended purpose through enhanced timely credit monitoring after the loan is being disbursed. should prevent a sharp build-up of NPL in the future by ensuring that;- Avoiding excessive lending, Maintaining high credit standards/terms

- The Bank Closely monitor the rate of credit growth to prevent aggressive lending. Should consider some ways of controlling the chances of NPLs with how costumers repay loans before providing them with new loans.
- The Bank ensure the following of the adequate monitoring system which should start before giving loans by identifying the status of a borrower and should continue until and unless the loan is matured
- The Bank should realize that before monitoring of loan, its adequate assessment is necessary. Therefore, latest assessment procedure should be adopted on selection of customers, credit analysis and sanctioning process
- The Bank should follow a balanced policy between profit maximization and risk taking. It should be ensured that bank may not enter in an unhealthy and unnecessary risky competition.
- The Bank should be properly supervised and guided about the regulations in loan disbursement process by NBE of policies that govern bank loans.

## 5.5. Areas for further research

This study tries to identify both bank borrower specific factors affecting nonperforming loans in BOA using selected variables. However, there are so many variables that were not included in this study. Thus, future researchers may be interested in validating the consistency of the result and provide supplementary results for this by including macroeconomic factors affecting nonperforming loans.

# REFERENCES

Agresti, A.M., Baudino, P., & Poloni, P., (2008). The ECB and IMF Indicators for the Macroprudential Analysis of the Banking Sector: European Central Bank

Alexandri, M. & Santoso, T. (2015), Non Performing Loan: Impact of Internal and External Factor (Evidence in Indonesia).International Journal of Humanities and Social Science Invention. 4 (1).p.87-91.

Asari, F., Muhamad, N., Ahmad, W., Latif, N., Addullah, N., &Jusoff, K. (2011). An Analysis of Non-Performing Loan, Interest Rate and Inflation Rate Using Stata Software. World Applied Sciences Journal, 12, 41-48

Asmare. A. (2014). Determinants of banks interest rate spread: an empirical evidence from Ethiopian commercial banks (Master"s thesis, University Addis Ababa, Addis Ababa, Ethiopia).

AyuRetnowati and Prabowo YudoJayanto (2020) Factors Affecting Non-Performing Financing at Islamic Commercial Banks in Indonesia, Accounting Analysis Journal 9(1) 38-45,

Basel Committee. (2001). Sound Practices for the Management and Supervision of Operational Risk. Basel Committee on Banking Supervision

Balgova, M, M Nies and A Plekhanov (2016) "The economic impact of reducing Benedict Anayochukwu 2016, s the Impact of Non-Performing Loans on the Performance of Selected Commercial Banks in Nigeria Research Journal of Finance and Accounting, Vol.7, No.16,nonperforming loans", EBRD Working Paper, 193.

Badrul A. (2018) the influence of bank specific factor and macroeconomics factor on bank performance of american express in united states Bin Muhammad School of Economic, Finance and Banking, Universiti Utara Malaysia

Barus, A.C., and Erick. (2016). Analisis Faktor-Faktor yang Mempengaruhi Non Performing Loan Pada Bank Umum di Indonesia. Jurnal Wira Ekonomi Mikrosil Volume 6 Bhattacherjee, A. (2012) social science research: principles, methods, and practices 2nd ed, A free textbook published under the Creative Commons Attribution 3.0 License The Global Text Project is funded by the Jacobs Foundation, Zurich, Switzerland

Black, S. E., and P. E. Strahan (2002), "Entrepreneurship and Bank Credit Availability", Journal of Finance

Boudriga, A., Taktak, N. B., & Jellouli, S. (2009b). Banking supervision and nonperforming loans: a cross-country analysis. Journal of financial economic policy, 1(4), 286-318

Carlo Msigwa,2013, Factors affecting non-performing loans in Banking industry: A case of KCB Bank (Tanzania)Limited; Morogoro and Msimbazi Branches,MzumbeUniversity ,unpulished MBA thesis

Chimkono, E. E., Muturi, W. & Njeru, A. (2016). Effect of non-performing loans and other factors on performance of commercial banks in Malawi. International Journal of Economics, Commerce and Management, IV (2), 549 - 563.

Espinoza, R. A., & Prasad, A. (2010). Nonperforming loans in the GCC banking system and their macroeconomic effects: International Monetary Fund.

Fred Awuor (2015) the effects of selected Bank Specific factors on Non Performing Loans amongst Commercial Banks in Kenya ,University of Narobi ,Unpublished MBA thesis

Gezu, G. (2014). Determinants of nonperforming loans: Empirical study in case of commercial banks in Ethiopia (Master<sup>\*\*</sup>s thesis, Jimma University, Jimma, Ethiopia)

Gaitho, E. (2010); cases of nonperforming loans in commercial banks in Kenya banks. University of Nairobi,Kenya. Unpublished.

Ghasemi, A. & Rostami, M. (2016). Determinants of interest rate spread in banking industry. Ecoforum, 5(1), 320-331.

Hughes, J. P., Lang, W., Mester, L. J., & Moon, C.-G.(1996). Efficient banking under interstate branching. Journal of Money, Credit and Banking.

]Iftikhar, S. F (2015). Financial reforms and financial fragility: A panel data analysis. International Journal of Financial Studies, 3, 84-101. Retrieved from www.mdpi.com/journal/ijfs.

Ilyas, M., Ul Hassan, H., & Abdul Rehman, C. (2015). Quantitative study of bank-specific and social factors of non-performing loans of Pakistani banking sector. International Letters of Social and Humanistic Sciences, 43, 192-213.https://doi.org/10.18052/www.scipress.com/ILSHS.43.19

Jiménez, G., Ongena, S., Peydro-Alcalde, J. L., &Saurina, J. (2007). Hazardous times for monetary policy: what do twenty-three million bank loans say about the effects of monetary policy on credit risk?: Centre for Economic Policy Research.

Kiran Azeem, Fatima Aziz Warraich, Khadim, Noorulain Zahoor and Zoha Ashraf (2017) Reasons and the Effects of Non Performing Loans in the Banking Industry of Pakistan, European Journal of Business and Management, Vol.9, No.4, .

Keeton, W. R. (1999). Does faster loan growth lead to higher loan losses? Economic ReviewFederal Reserve Bank Of Kansas City, 84, 57-76.

Koch TW & Scott MacDonald S. (2003). Bank Management, 5th edition. Ohio: South-Western Thompson Learning.

Laxmi, Koju. Ram, Koju. And Shouyang, Wang. (2018). Macroeconomic and Bank-Specific Determinants of Non-Performing Loans: Evidence from Nepalese Banking System, Journal of Central Banking Theory and Practice, 2018, 3, pp. 111-138,

Louzis, D.P., Vouldis A. & Metaxas V. (2011), Macroeconomic and bank-specific determinants of non-performing loans in Greece: A comparative study of mortgage, business and consumer loan portfolios. Journal of Banking & Finance.1 (2).p.1-16.

Martha Nyaliet(2017) the factors that affects non-performing loans in KCB Bank Kenya Limited ,the Catholic University of Eastern Africa, ,MBA, Unpublished master thesis

Mamuye, A. (2015). Determinants of Non performing loans: case study on Development Bank of Ethiopia.

MeseretAmsalu(2018) factors affecting non-performing loans in Ethiopian commercial banks, St.Mary's University ,unpulished MBA thesis

Macdonald, S. S. (2006). Management of Banking; 6th edition

Mahyoub, M., Mohd Said, R. (2021). Factors influencing non-performing loans: empirical evidence from commercial banks in Malaysia. Research Journal of Business and Management (RJBM), Vol.8(3), 160-166

Muriithi, M. W. (2013). The causes of non-performing loans in commercial banks in Kenya (Masters Project, University of Nairobi, Nairobi, Kenya)

NBE (National Bank of Ethiopia) (2008): Conference Proceedings on National Payment System: Asset Classification and Provisioning Directive No.SBB/43/2008. National Bank of Ethiopia, Addis Ababa ,Ethiopia

Navaretti, G. B., Calzolari, G.&Pozzolo, A. F. (2017). Non-Performing loans. Getting rid of NPLs in Europe. European Economy. Retrieved from www.european-economy.eu

Nkurrunah, N. (2014). Factors Affecting Non-Performing Loans: A Case Study of Commercial Bank of Africa – CBA (Kenya), Published MBA Project by United States International University-Africa.

Negalign Nigatu (2019) Factors Affecting Non-Performing Loans in Commercial Banking Sector: A Comparative Study of Public and Private Banks A Case Study of Commercial Bank of Ethiopia and Dashen Bank District in Southern Region of Ethiopia, Research Journal of Finance and

Accounting, Vol.10, No.3, NBE, 2008, Asset classification and Provisioning Directive No. SBB/43/2008.National Bank of Ethiopia, Addis Ababa Ethiopia

Prasanna, P.K., Thenmozhi, M., & Rana, N. (2014). Determinants of non-performing advances in Indian banking system. Banks and Bank Systems,9(2), 65-77.

Petersson, J., &Wadman, I.(2004). Non Performing Loans-the markets of Italy and Sweden Petersson Jessica and WadmanIsac (2004): Non Performing Loans - The Markets of Italy and Sweden, Published Thesis (MSc

Rajan, R., & Dhal, S. C. (2003). Non-performing loans and terms of credit of public sector banks in India: An empirical assessment. Occasional Papers, 24(3), 81-121.

Arega Seyoum, Hanna Nigussie and Tadele Tesfay (2016) the Factors Affecting Non-Performing Loans: Case Study on Development Bank of Ethiopia Central Region ,International Journal of Scientific and Research Publications

Riyadi, Selamet.( 2006) Banking Assets and Liability Management (EdisiKetiga). Jakarta: Lembaga Penerbit FEUI

R.R. Paul (2003), Money banking and international trade, 5thedition, IndiaS.Prasanth, P.Nivetha, M.Ramapriya, S.Sudhamath(2020, ) Factors Affecting Non PerformingLoan In India, international Journal of Scientific & Technology Research,

Šarlija, N., &Harc, M. (2012). The impact of liquidity on the capital structure: a case study of Croatian firms.

Business Systems Research, 3(1), 30-36

Salas, V. & Saurina, J. (2002). Credit Risk in Two Institutional Regimes: Spanish Commercial and Savings Banks. Journal of Financial Services Research, 22(3), 203-224.

SirakAynalem,(2016) Factors Affecting Non-Performing Loans: In Case of Commercial Bank of Ethiopia, Mekelle University, un published MBA thesis

Shakeel Ahmed, M. Ejaz Majeed, EleftheriosThalassinos, and Yannis Thalassinos (2021) the Impact of Bank Specific and Macro-Economic Factors on Non-Performing Loans in the Banking Sector:

Evidence from an Emerging Economy, Journal of Risk and Financial Management Rajan, Rajiv & Sarat C. Dhal.2003. Non-performing Loans and Terms of Credit of Public Sector Banks in India: An Empirical Assessment. Occasional Papers, 24:3, pp. 81-121, Reserve Bank of India.

Salas, Vincente & Jesus Saurina .2002. Credit Risk in Two Institutional Regimes: Spanish Commercial and Savings Banks. Journal of Financial Services Research, 22:3, pp. 203-224

Suryanto(2015) Non Performing Loans on Regional Development Bank in Indonesia and Factors that Influence, Mediterranean Journal of Social Sciences, Vol 6 No 4

Sinkey, J. F. (1992). Commercial bank financial management in the financial services industry: Macmillan New York, NY

S.Prasanth, P.Nivetha, M.Ramapriya, and S.Sudhamathi (2020)Factors Affecting Non Performing Loan In India, International Journal of scientific and technology research Volume 9.

Teshome, D. (2010): non-performing loans and its Management in commercial bank in Ethiopia a case Dashen Bank Mekelle area bank. Mekelle University June, 2010, Mekelle,

Ethiopia.Unpublished.

Tseganesh Tesyaye (2012) Determinants of Banks Liquidity and Their Impact on Financial Performance: Published thesis (MSc), University Addis Ababa, Ethiopia

Tiwari, C., &Sontakke, R. N. (2013). Trend Analysis of Non-performing Assets in Scheduled Commercial Banks in India . International Journal of Application or Innovation in Engineering & Management

Thomas, L. B. (2006). Money Banking and Financial Markets.pp 211

Zewdu, S. (2010). Impact of reducing loan by Ethiopian banks on their own performance; published thesis (MSc), University of South Africa

Uma Murthy, Naail Mohammed Kamil, Paul Anthony Mariadas&DilashenyiDevi(2017) Factors Influencing Non-Performing Loans in Commercial Banks: The Case of Banks in Selangor international Journal of Business and Management; Vol. 12, No. 2,

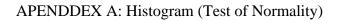
Vatansever, M. & Hepsen, A. (2013). Determining impacts on non-performing loan ratio in Turkey. Journal of Finance and Investment Analysis, 2(4), 119-129

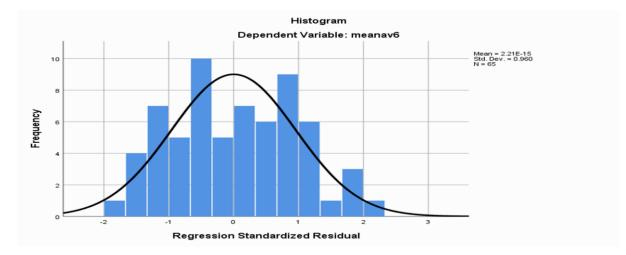
WakjiraDejene (2020) the Factors affecting non-performing loans in Ethiopian Banking sector : Specific case of commercial Bank of Ethiopia, St. marry's University unpublished MBA thesis

WilliamAbungu andClementO.Olando, (2020) Analyzed on Influence of Bank Specific Factors on Non-Performing Loans among Commercial Banks in Kenya,Advances in Economics and Business8(3): 105-121

Wondemagegn, N. (2012). Determinants of Non-Performing Loans: The case of Ethiopian Banks." University of South Africa.

# APPENDICES





Source: Computed from data survey, 2022

APENDDEX B: Breusch-Pagan test of Heteroscedasticity

	Sig
Breusch-Pagan test	.499 <sup>b</sup>

Source: Computed from data survey, 2022

			Correlations					
		CL	CRA	CM	BO	BS	NPL	
CL	Pearson	1						
	Correlation							
	Sig. (2-tailed)							
	Ν	65						
CRA	Pearson	.165	1					
	Correlation							
	Sig. (2-tailed)	.190						
	Ν	65	65					
СМ	Pearson	242	.538**	1				
	Correlation							
	Sig. (2-tailed)	.053	.000					
	N	65	65	65				
BO	Pearson	266*	.393**	.703**	1			
	Correlation							
	Sig. (2-tailed)	.032	.001	.000				
	N	65	65	65	65			
BS	Pearson	143	.598**	.882**	.768**	1		
	Correlation							
	Sig. (2-tailed)	.256	.000	.000	.000			
	N	65	65	65	65	65		
NPL	Pearson	.389**	.750**	.115	.177	.255*	1	
	Correlation							
	Sig. (2-tailed)	.001	.000	.363	.158	.040		
	N	65	65	65	65	65	65	

# APENDDEX C: Pearson Correlation Analysis

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

# ST. MARY"S UNIVERSITY SCHOOL OF GRADUATE STUDIES MASTERS OF BUSSINESS ADMINSTRATION

Questionnaires was filled by Employees of the credit department of the Bank of Abyssinia

Dear respondents:

The purpose of this questionnaire is absolutely for academic purpose as a prerequisite for Masters of Business Administration(MBA) and it is designed for preparing a thesis on the title "factors affecting non-performing loans in case of the Bank of Abyssina". The outcome of the study will be used in order to suggest possible solutions for problems identified while conducting the study. Please take a few minutes to fill out this questioner. I assure you again that, all your responses will be kept in absolute confidentiality and you will not be held responsible for the research outcome. Therefore, your genuine, frank and timely responses are quite vital to determine the success of this study. So, I kindly request your contribution in filling the questionnaire honestly and responsibly.

#### **General Direction**

- $\blacktriangleright$  There is no need of writing your name.
- To make the research more valid and reliable, your genuine responses are highly vital.

I thank you very much in advance for your cooperation and for sacrificing your Invaluable time.

General Instructions: Please Put ( ) Mark in the box provided next to each choice Part-I: Demographic Information of Respondents

1. Sex: Male  $\square$ Female 2. a) $\Box$  Less than  $\Box 21$  b).21-30 c) 31-40  $\Box$  d)  $\Box$  41-50 e) More than  $\Box 50$ Age: 3.Educational Level: a) Diploma or certificate D b) First Degree C. Second degree  $\Box$ D. PhD 4. Marital Status: a) Single  $\Box$  b) Married  $\Box$  c) Separated d) Divorce  $\Box$  e) Widowed  $\Box$ 5. How long have you been employed at this Bank?

A. Less than 1 year	□ B. 1 y	ear – 5 years □	C. 6 years – 10 years	
D. 11 years – 15 longer	□ years	E. 16 years – $\Box$	20 years F. 21 years or	

Part-II: Question related to factors affecting NPLs

A. Question related to collateralized lending

No	items	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
1	My bank provides loan to customer with strong					
	collateral					
2	Collateralizing loans helps the bank to secure its					
	loans					
3	The bank can seize the collateral to recoup its losses					

4	Loans that are secured by collateral typically have			
	lower interest rate than unsecured loans			
5	The type of collateral is predetermined based on type			
	of loan			
6	Our bank makes continuous follow up on the			
	collateral			
7	Secured loans are less risky to the lenders			

## B. Question related to credit risk assessment

No	Items	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
1	Borrowers are usually easily admitted.					
2	Know Your Customer (KYC) policy of banks is strongly applicable					
3	Our banks loan underwriting clear and strong					
4	My bank strong risk assessment would lead us to be secured					
5	Our bank assess the overall ability of borrowers for repayment					
6	Our bank considers the five 5cs during credit risk assessment					
7	Lax procedures used for credit assessment contribute to our failure					
8	Our bank client business experience is considered before loan processed					

C. Question related to credit monitoring

Ν	Items	Strongly	Disagree	Neutral	Agree	Strongly
0		disagree (1)	(2)	(3)	(4)	agree (5)
1	Our bank follows Strict monitoring which could ensure its loans					
2	Poorly assessed and advanced loans may perform well if properly monitored					

3	Credit monitoring helps our bank to track our customer's credit report and credit scores.			
4	Our Bank sets higher budget for loan monitoring and			
	follow ups			
5	Our bank primarily use loan follow up to guard			
	against identity theft			
6	Our bank follows aggressive credit monitoring to			
	notify change to credit activity of customers			
7	Our banks undertake comprehensive follow ups on			
	tracking credit scores ,keeping customers up to date			
	and indicate early warning of theft and fraud			

# D. Question related to borrower"s orientation

N o	items	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
1	Our bank carefully investigates borrower"s					
	philosophy and attitude towards loans.					
2	Our bank responds to customers basic emotional					
	needs in lending process					
3	The bank makes sure the customers understand the					
	loan process, from considering whether to borrow to					
	obtain and paying it off					
4	The language customers use to discuss borrowing					
	and taking loans is carefully considered in lending					
	process.					
5	Influences and influencers around borrowing and					
	taking loans is considered					
6	Who do customers trust in the lending process and					
	what creates their trust is significant					

E. Question related to Bank size and performance

N o	items	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
1	With growth in banks size comes growth on NPL					

2	Aggressive lending leads to large NPL volume/ratio			
3	Rapid credit growth leads huge NPL level			
4	The Bank"s great risk appetite is cause for NPL			
5	Compromised integrity in lending leads to loan			
	default			
6	Having large number of borrowers causes loan			
	default			

Part-III: Question related to NPLs

No	items	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly agree (5)
1	My bank is successful in managing non-performing loans					
2	Nonperforming loans are major problems in my bank					
3	Nonperforming loans contribute for the emergence of other problems in my bank					
4	My bank has set clear strategy for dealing with nonperforming loans					
5	Everyone in my bank is responsible and committed to					
	deal with NPL					
6	My bank is aware of causes and effects of nonperforming loans					

Thank you for your cooperation!