



**ADDIS ABABA UNIVERSITY**  
**COLLEGE OF BUSINESS AND ECONOMICS**  
**DEPARTMENT OF ACCOUNTING AND FINANCE**

**DETERMINANTS OF NON-PERFORMING LOAN IN PRIVATE  
COMMERCIAL BANKS IN ETHIOPIA**

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**A THESIS SUBMITTED TO COLLEGE OF BUSINESS AND ECONOMICS  
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SCIENCE IN ACCOUNTING AND FINANCE PROGRAM.**

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**Addis Ababa: Ethiopia**

## **CERTEFICATE OF APPROVAL**

This is to certify that the thesis prepared by **Abebe Genbaw** entitled **Determinants of Non-Performing Loan in Private Commercial Banks In Ethiopia**”and submitted in partial fulfilment of the requirements for the degree of Master Science in Accounting and Financecomplies with the regulation of the College and meets the accepted standards with respect to originality and quality.

**Approved by Board of Examiners**

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## DECLARATION

I, undersigned, declare that the research entitled “**Determinants of Non-Performing Loan in Private Commercial Banks in Ethiopia** ”is my original work and that all sources of materials used for the study have been acknowledged. I have produced it independently except for the guidance and suggestion of my research Advisor Sewale (PHD). This study has not been submitted for any degree in this College or any other University. It is offered for the partial fulfillment of Master Science in Accounting and Finance.

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## Statement of Approval

This is to certify that Mr. Abebe Genbaw has completed a thesis entitled “**Determinants of Non-Performing Loan in Private Commercial Banks in Ethiopia** ” with my advice and follow up. I also approve that this work is appropriate enough to be submitted as a partial fulfillment of the degree of Master Science in Accounting and Finance.

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## List of acronyms

NPL	Non Performing Loans
KYC	Know Your Customer
BOA	Bank of Abyssinia S.C
AIB	Awash International Bank S.C
OIB	Oromia International Bank S.C
DB	Dashen Bank S.C
AB	Abay Bank S.C
BIB	Buna International Bank S.C
IMF	International Monetary Fund
NBE	National Bank of Ethiopia
FDRE	Federal Democratic Republic of Ethiopia
COOP	Cooperative Bank of Oromia
RQ	Research Questions
ACB	Automatic Clearing Bureau
PD	Probability of Default
LGD	Loss given default
EAD	Exposure at default
DBE	Development Bank of Ethiopia
ETB	Ethiopian Birr

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## ***Abstract***

*This study aims to assess determinants of nonperforming loans. The mixed research approach was adopted for this study. A survey was conducted among professionals working in private commercial banks in Ethiopia, all of whom held various credit-related positions, using a self-administered questionnaire.. This study has assessed the effectiveness of loan performance in terms of credit assessment; credit follow-up (monitoring), credit size, and collateral. The study used both primary and secondary data collection instruments, and 139 questionnaires were distributed to respondents. From these, 133 were returned in addition to that qualitative and quantitative research approach used. Stratified sampling methods were used, and the population into strata. After that, the researcher used a purposive sampling technique, and employees were selected. The researcher checked the reliability test, where the consistency of the questionnaire was evaluated over time by Cranach's Alpha (using SPSS version 27) to analyze the data gathered. The data was analyzed using the explanatory research design to see the relationships and effects between determinants and non-performing loans. Correlation and regression analysis was also used to see the relationships and effects between determinants and non-performing. And data was analyzed using inferential statistics and Pearson correlation. The Pearson correlation analysis result indicates all relationships between the independent variables (credit assessment, credit follow-up (monitoring), credit size, and non-collateral loan) and the dependent variable (non-performing loans) were positively and significantly correlated. The finding of this study shows that loans are affected by inadequate credit assessments, rapid growth in credit size, poor risk evaluations, weak follow-up and monitoring of loans, insufficient credit analysis, and a lack of adequate collateral. The researcher suggests that banks should be establish a strong credit process involving careful customer selection, thorough credit assessment, proper loan approval, proactive monitoring, adequate collateral, and clear loan procedures and all loan processes should be implemented free from any interventions.*

***Key words:*** *credit assessment, credit follow up & monitoring, credit Size, collateral and NPL.*

# CHAPTER ONE

## INTRODUCTION

### 1.1 Back ground of the study

Banks can be defined as intermediaries between depositors and borrowers in an economy (Heffernan 1996). Banks are one of the most important financial intermediaries whose primary function is to mobilize funds from surplus areas and pass them over (lend) to those who face shortages (deficits) (Sontakke and Tiwari, 2013). By its nature, banking faces a number of challenges. Within the internal and external business environment, the nucleus of banks is known for risks, which include credit risk, market risk, interest rate risk, default risk, operational risk, and exchange rate risk (Aruwa& Musa, 2014). Basically, banks operate with three basic objectives, which are profitability, growth of assets and customer base. Asset quality is an aspect of bank management that entails the evaluation of firm assets in order to facilitate the measurement of the level and size of credit risk associated with its operation. Asset quality is a micro prudential determinant of commercial banks' soundness and profitability. It relates to the left-hand side of the bank balance sheet and focuses on the quality of loans, which provides earnings for a bank.

Banks collect deposits from the public and secure funds from various sources those with surplus capital to provide loans to individuals and businesses in need of financing. As Goosen et al. (1999) explain, banks act as financial intermediaries, efficiently channeling funds from savers to borrowers to support economic activity. They earn income by lending at higher interest rates than they pay on deposits, with the difference known as the interest spread constituting their net income. Interest income thus forms the core of a bank's earnings. Ultimately, banks and financial institutions aim to generate profit and maximize shareholder value.

Financial system stability is one of the key fundamentals upon which economic growth has built. Financial sector in Ethiopia, like most developing countries is dominated by banking enterprises.

Banking sectors play a key role in the development of an economy. The development role undertaken by banking sector determines the step for development of economy. Hence, the stability of banking sector is a key for the development of an economy. The primary function of bank is mobilizing deposits from surplus units to deficit units in the form of loan and advances to

various sectors such as agricultural, industry, personal and governments. However, in recent times, the banks have become very cautious in extending loans due to non-performing assets (Sontakke and Tiwari, 2013).

According to Felix A. et al. (2008), credit creation is the main income-generating activity for the banks. However, this activity involves huge risks to both the lender and the borrower. The risk of a trading partner not fulfilling his or her obligation as per the contract on the due date or anytime thereafter can greatly expose the smooth functioning of a bank's business. The International Monetary Fund (IMF, 2008) defined a non-performing loan (NPL) as any loan in which interest and principal payments are more than 90 days overdue or more than 90 days' worth of interest has been refinanced. On the other hand, the Basel Committee (2011) defines non-performing loans as loans left unpaid for a period of 90 days. Non-performing loans refer to loans that are overdue by ninety days or more, or have stopped accruing interest..

NPLs are still a major concern for both international and local regulators. In this context, international regulatory and supervisory bodies (IMF, World Bank and BIS) to assess the strength of the banking industry in each country commonly use the aggregate rate of nonperforming loans. According to the Global Financial System Report (IMF, 2015), the aggregate rate of NPL (nonperforming loans) has been highly un-equal amongst member states, with crisis-hit countries suffering major increases in NPL ratios. At the end of September 2015, the two countries, which had to implement strict capital controls, Greece and Cyprus, reported NPL ratio of more than 40%. Bulgaria, Croatia, Ireland, Italy, Portugal, and Romania all reports gross NPL ratio with values ranging between' 10% to 20% over the period 2015 (Masnard et al., 2016).

According to NBE's (National Bank of Ethiopia) directive No SBB/43/2008 and international practice, the non-performing loan of any bank should be below 5% of its total outstanding loan. The published data from the NBE evidence discloses that many banks industry average of non-performing loan is below 5%.This shows that the industry average is below the set threshold amount. To date there is no bank crisis happened in Ethiopia due to non-performing loans, but there is an indicator of high NPL in the country, which may lead to that direction if not controlled on time (NBE, 2019/20).

Even though, the industry average ratio of non-performing loan is below the standard set by NBE, and there is no history of bankruptcy due to NPL in Ethiopia, it is however, increasing in value from time to time in Ethiopia. According to National Bank of Ethiopia's (NBE), report in 2019/20 there is continuous increments of non-performing loans in Ethiopia from time to time even though its average is below the set threshold value. The reason why is given by different banks vary according to their less quality asset performed, but in common, there are internal and external factors that cause it.

## **1.2 Statement of the Problem**

Banks play a dual role by offering financial intermediation services while also seeking to enhance profitability and maximize shareholder wealth. Among their core functions, lending is considered the most crucial method of fund deployment, as a significant portion of commercial banks' earnings is generated from loans and advances (Radha,). Lending is a major source of income and constitutes a significant portion of banks' assets, yet it remains one of the riskiest activities in the banking sector. Consequently, credit risk management is a crucial part of overall risk management in financial institutions. Among the various risks banks face, credit risk is considered the most important due to the significant impact loan defaults can have on profitability. Credit risk primarily arises from uncertainty about a borrower's ability to meet repayment obligations.

The global financial crisis and resulting economic downturn in developed countries led to increased loan defaults, creating serious challenges for banks. This highlights the need for continuous loan quality monitoring and early warning systems to detect potential financial distress. In developing countries, high and growing non-performing loans (NPLs) continue to pressure banks' balance sheets, potentially limiting their ability to lend (IMF Working Paper, 2013).

In Ethiopia's current political and macroeconomic shifts, including economic growth and exchange rate fluctuations, significantly impact non-performing loans (NPLs) in the banking sector. Political instability in especially recent civil war in Tigray, Amhara, Oromia region and inflation can negatively affect bank profitability and asset quality, potentially increasing

NPLs. Conversely, expansionary policies and efficient loan management can help mitigate credit risks. Since nonperforming loans had an adverse effect on the banking sectors' survival, the cause for NPLs should be given due consideration. Its causes are different in different countries that might be due to situational factors such as the level of economic condition in which the banking sectors are operating.

Gadise (2014) studied the determinants of non-performing loans (NPLs) in Ethiopian commercial banks and found that NPLs were generally decreasing. The loan to deposit (LTD) ratio had a positive effect on NPLs, while inflation had a negative but insignificant impact. ROE, capital adequacy ratio, and lending rate had a negative and significant effect on NPLs, whereas ROA and effective tax rate had a positive and significant impact. Habtamu (2015) focused on private banks and identified key internal causes of NPLs, including underdeveloped credit culture, lenient credit terms, misuse of funds, and shareholder interference. According to the findings of the study, the major factors affecting NPLs were underdeveloped credit culture, lenient credit terms and conditions, fund diversion for unintended purposes, and shareholder influences, which are bank-specific factors ascribed to the occurrence of loan default.

Many studies have investigated the causes of non-performing loans (NPLs) globally, research focusing on Africa and Ethiopia in particular is limited (Onsarigo et al., 2013). Notable Ethiopian studies by Daniel (2010), Geletta (2012), and Habtamu (2015) primarily examined macroeconomic factors, whereas Anisa (2015) and Mesay (2017) considered both macroeconomic and bank-specific factors using similar variables.

To the best of the researcher's knowledge, the specific causes of non-performing loans (NPLs) within Ethiopia's banking sector have not been comprehensively addressed. Key factors such as credit assessment and analysis, loan monitoring, bank credit size, credit management practices, and loan collateral have not been thoroughly explored. Moreover, apart from Mesay (2017), most studies rely on data collected prior to 2013, which fails to capture the current impact of various determinants and lacks the integration of insights from international experiences. Consequently, the contemporary factors influencing NPLs in Ethiopia's private commercial banks remain understudied. This knowledge gap, combined with the substantial risks posed by NPLs, provides the primary motivation for this research. Additionally, most prior studies used data collected

before 2015 and considered only a limited range of variables. According to Daniel (2010), Geletta (2012), and Habtamu (2015), key determinants of NPLs include return on equity (ROE), capital adequacy ratio, lending rates, loan-to-deposit (LTD) ratios, inflation rates, underdeveloped credit culture, lenient loan terms and conditions, misappropriation of funds, shareholder influence, and other factors.

Whereas, this study considers different bank-specific determinants such as, loan assessment, loan analysis, credit follow-up, size of bank loan, loan management practices, unfair competition among banks and other bank-specific factors. This study examines the causes of non-performing loans in Ethiopian private commercial banks by using both primary and secondary data with descriptive and inferential analysis. The study is trying to assess the determinants of nonperforming loans at private banks in terms of a particular study area by filling methodology and variable gaps that are not included in the previous study. This has created a significant knowledge gap, which is why the researcher is motivated to conduct a study on the causes of nonperforming loans at private commercial banks in Ethiopia.

In order to address the above stated problem the researcher raised the following research questions.

### **1.3 Research question**

#### **➤ What are Bank Specific Factors causing of Nonperforming Loans?**

- Is there a relationship between credit assessment and analysis with level of nonperforming loans?
- Does the follow-up and monitoring of credit determine the occurrence of non-performing loans?
- Does the size of credit affect the level of non-performing loans?
- How does collateralized lending affect non-performing loans (NPLs)?

### **1.4 Objective of the Study**

#### **1.4.1 General Objective**

The general objective of this thesis is to find the determinate of NPLs of private commercial banks in Ethiopia. Based on this general objective, the following specific objectives are

developing to analyze the stated problem.

#### **1.4.2 Specific Objectives of the study**

To determine the bank specific factors that cause of nonperforming Loans in private commercial banks in Ethiopia.

- To determine the relationship between credit assessment (analysis) and the level of nonperforming loans in private commercial banks in Ethiopia.
- To examine how credit follow up and monitoring affect Non-Performing Loans in Private Commercial Banks in Ethiopia.
- To determine how credit size affect non-performing loan in private commercial banks in Ethiopia.
- To determine the relationship between collateralized lending and non-performing loans in private commercial banks in Ethiopia.

#### **1.5. Scope of the Study**

This study focuses on examining the determinants of NPLs in private banks in Ethiopia. The study was conducted on the head office credit department of selected private commercial banks, namely Awash Bank, Bank of Abyssinia, Cooperative Bank of Oromia, Zemen Bank, Buna International Bank and Abay Bank. This study does not cover all commercial banks or the full range of financial institutions operating for the country. This limitation is due to several factors, including constraints related to time, cost, and the lack of available information.

#### **1.6. Significance of the Study**

The findings of this paper would have immense benefit to the bank's management to know the causes of NPLs of commercial banks, to give due attention and to pass timely decisions for further action. The study is important for policymakers, managers, and researchers to conduct continuous assessments on the causes and effects of NPLs on the performance of financial institutions and their impact on the economy as a whole. And identifying the main causes of NPLs in the banking sector, the findings of the research give important suggestions for managers and bank regulating authorities in dealing with NPLs management.

## **1.7. Limitations of the Study**

The causes of nonperforming loans originated from various problems. From these problems, the most dominant ones are owing to the nature of the subject area, i.e., excessive confidentiality on data of NPL and because of limited access; it was not easy to get all relevant information from respective banks except officially disclosed financial information. This study focuses only on the Bank specific factors due to time and finance constraint. In addition, as the data was collect from the private commercial banks Addis Ababa area branches including head office credit department; it is difficult to generalize the findings and apply for other banks.

## **1.8. Organization of the Study**

The study would l organize into five chapters. The first chapter includes background of the study, statement of the problem, research question, objective of the study, significance of the study, scope of the study, limitation of the study, and organization of the study. The second chapter presents theoretical and emphatically review of the related literature. The Third chapter deals with methodology of the study. The fourth chapter deals with data presentation and analysis. The fifth chapter deals with findings, recommendation and conclusion.

## **CHAPTER TWO**

### **REVIEW OF LITERATURE**

#### **2 THEOROTICAL REVIEW OF LITERATURE**

The banking sector is a cornerstone of economic development, playing a crucial role in mobilizing financial resources and directing them toward productive uses. By collecting deposits and extending credit, banks facilitate investment in the real sector, thereby stimulating business activity, employment, and overall economic growth. As Bagehot observed, banks enable the aggregation of capital for large-scale projects that individual investors could not finance on their own. Moreover, banks serve as the primary facilitators of financial transactions and are the leading source of debt financing in modern economies.

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

#### **2.1 Non-performing loans (NPL)**

Non-performing loans (NPLs) are typically defined as defaulted loans from which banks can no longer generate income. A loan is generally classified as non-performing when interest payments have not been made for 90 days or more, although the specific timeframe may vary across countries and financial institutions. Once loans are in default, banks are compelled to initiate recovery and securitization processes to minimize losses and reclaim as much value as possible (Ernst & Young, 2004). In contrast, impaired loans refer to credit facilities that have not yet matured but where there is significant uncertainty regarding the borrower's ability to meet repayment obligations. These loans are often not categorized as non-performing, and as a result, banks typically make minimal or no provisions for potential losses (Ernst & Young, 2004). Overall, non-performing loans represent credit exposures where borrowers frequently struggle to fulfill repayment terms, posing significant risks to a bank's financial stability and asset quality.

The term bad loan, as introduced by Basu (2003) is often used interchangeably with non-performing loans (*NPLs*) and impaired loans, as defined by Fofack (2005). Similarly, Berger and

DeYoung (1997) refer to such loans as problem loans. For the purposes of this study, these terms are used synonymously. However, there is no universally accepted definition of NPLs that applies across all economies (Hou, 2006; Gorter, 2002). Definitions and classifications vary significantly across jurisdictions, influenced by differences in regulatory frameworks, banking practices, and financial reporting standards. This lack of uniformity contributes to ambiguity and challenges in the assessment and management of NPLs (Hou, 2006).

According to the International Monetary Fund (IMF), a non-performing loan (NPL) is defined as any loan for which interest or principal payments are more than 90 days overdue; more than 90 days' worth of interest has been capitalized, refinanced, or delayed by agreement; or payments are less than 90 days overdue but are no longer expected to be received. In essence, an NPL is a loan that is either in default or is likely to default, with a reasonable expectation of non-repayment, even if it has not yet technically entered default (Smith, 2010). Banks generally aim to minimize non-performing loans due to the associated risk of loss, as the likelihood of recovering the full principal and especially the accrued interest significantly diminishes. These loans are also referred to as non-accrual loans or doubtful loans. While the specific criteria for classifying a loan as non-performing can vary across institutions and jurisdictions, the standard benchmark is that no interest or principal payments have been received for a period of 90 days (Smith, 2010).

As per NBE (2018), NPLs are defined as “loans or advances whose credit quality has deteriorated such that full collection of principal and/or interest in accordance with the contractual repayment terms of the loan or advances in question. Short term loans are NPLs when principal and/or interest is due and uncollected for 90(ninety) consecutive days or more beyond the scheduled payment day or maturity. Medium and long term loans are NPLs when principal and/or interest is due and uncollected for 12 (twelve) consecutive months or more beyond the scheduled payment day or maturity.

According to NBE (2018) directive, Ethiopian commercial banks are required to classify their loans as pass, special mention, substandard, doubtful and loss.

**Pass:** loans in this category are fully protected by the current financial and paying capacity of the borrower and not subject to any criticism.

**Special mention:** Short term loans past due for 30 days or more, but less than 90 days and medium and long term loans past due for 6 month or more, but less than 12 months.

**Substandard:** Short term loan past due for 90 days or more, but less than 180 days and medium and long term loans past due for 12 months or more, but less than 18 months

**Doubtful:** Short term loan past due for 180 days or more, but less than 360 days and medium and long term loans past due for 18 months or more, but less than 3 years.

**Loss:** Short term loan past due for 360 days or more, and Medium and long term loans past due for 3 years or more.

According to NBE (2018) directive, all Ethiopian commercial banks required holding provisions for each loans mentioned above so as to absorb the potential losses in their loans portfolio. The minimum provision requirements are mentioned below:

<b>Minimum provision</b>	<b>Minimum percentage</b>
<b>Pass</b>	<b>1%</b>
<b>Special mention</b>	<b>3%</b>
<b>Substandard</b>	<b>20%</b>
<b>Doubtful</b>	<b>50%</b>
<b>Loss</b>	<b>100%</b>

Among the above classified loans, the last three loans such as, substandard, doubtful and loss are considered as NPLs (NBE 2018). In fact, such types of classification under the NBE directive banks are required to hold 50% provision.

### **2.1.1 The Five C's of Credit**

The credit analysis process used by the earliest banks is largely unchanged from the procedures employed today (Caouette et al., 1998; Rose, 2002). The "five Cs" of credit character, capacity, capital, collateral, and conditions are recognized as the core principles of successful lending, having been established around fifty years ago. Initially, only character, capacity, and capital were considered, but collateral and conditions were later added to provide a more comprehensive view and deeper understanding of risk and the resulting credit decision (Beckman & Bartels, 1955; Reed et al., 1976; Sinkey, 2002). According to Murphey (2004a), these principles should form the foundation of every lending decision.

### **2.1.1.1. Character**

Character is a borrower's reputation and willingness to meet debt obligations. In evaluating character, factors such as trustworthiness, integrity, and honesty are considered, along with the borrower's credit history and the commitment of the business owners (Rose, 2000). A company's credit reputation, based on its past performance, is a critical indicator. A strong credit record is established through consistent and timely repayment of previous obligations (Rose, 2002; Koch & MacDonald, 2003). Character is often viewed as the most important yet most challenging aspect to evaluate (Koch & MacDonald, 2003). Bankers recognize the crucial role management quality plays in a company's success. Analyzing management's track record and capability is a key component of assessing character. The business's history and the experience of its leadership are essential factors in determining the likelihood of meeting financial commitments.

The assessment includes evaluating the qualifications, reputation, integrity, experience, and expertise of the management team in various areas such as finance, marketing, and labor relations (Sinkey, 2002; Nathenson, 2004). These factors can be regarded as a risk mitigates if a banker views these positively. Much of its success can attribute to competent leadership. Companies with strong and competent management teams tend to survive in an economic downturn. On the other hand, its owners generally manage privately owned companies. In this instance, succession planning must be in place, as the role of management remains vital to the success of the company (Koch & MacDonald, 2003).

### **2.1.1.2 Capacity**

Capacity refers to the business's ability to generate sufficient cash to repay the debt. An analysis of the applicant's businesses plan, management accounts and cash flow forecasts (demonstrating the need and ability to repay the commitments) will give a good indication of the capacity to repay (Sinkey, 2002; Koch & MacDonald, 2003).

To get a good understanding of a company's capacity evaluating the type of business and the industry in which it operates is also vital. It plays a significant role since each industry have influenced by various internal and external factors. The factors that form the basis of this

analysis includes: Type of industry, Market share, Quality of products and life cycle, whether the business is labor or capital intensive, the current economic conditions, seasonal trends, the bargaining power of buyers and sellers, competition and legislative changes (Koch & MacDonald, 2003; Nathenson, 2004). These factors lead the banker to form a view of the specific company and industry. The banker would regard this as a potential risk mitigate if he/she is confident about the company and industry and prospects for both appear to be positive.

### **2.1.1.3 Capital**

Capital represents the level of investment made by the business owners (Sinkey, 2002). Banks and financial firms generally expect owners to bear a fair share of the financial risk. While there are no strict rules, a debt-to-equity ratio of 50:50 is typically considered sufficient to reduce the bank's exposure, particularly when funding is unsecured and relies on the business's cash flow to repay the loan (Harris, 2003). Lenders favor a substantial equity contribution from the owner, as it reflects both a commitment to and confidence in the success of the business venture.

### **2.1.1.4 Condition**

Conditions are external circumstances that could affect the borrower's ability to repay the amount financed. Lenders consider the overall economic and industry trends, regulatory, legal and liability issues before a decision made (Sinkey, 2002). Once finance approved, it is normally subject to terms, covenants, and conditions, which have specifically related to the compliance of the approved facility (Leply, 2003). Banks normally include covenants along with conditions when credit facilities granted to protect the bank's interest. The primary role of covenants is to serve as an early warning system in loan agreements (Nathenson, 2004) and can be classified as either negative or positive (Sinkey, 2002). Negative covenants impose financial restrictions and forbid certain actions (Rose, 2000; Koch & MacDonald, 2003). Additionally, loan conditions usually require that all collateral and security related to the loan be properly arranged before any funds are disbursed.

### **2.1.1.5 Collateral (security of loan)**

Collateral consists of assets that a borrower pledges to a bank to reduce the bank's risk in the event of default (Sinkey, 2002). It represents something of value provided by the borrower to demonstrate their commitment to repaying the loan. Collateral serves as a secondary source of repayment, offering the bank a means to recover funds if the borrower fails to meet their obligations (Koch & MacDonald, 2003). Supporting this view, Rose and Hudgins (2005) define secured lending in banking as the practice where loans are backed by a pledge of the borrower's property such as a home or vehicle that can be sold to satisfy the debt if the lender defaults or loss and has no other means of repayment.

The primary purpose of security is to reduce the risk associated with lending by enhancing the lender's likelihood of recovering the amounts owed by the borrower. By providing collateral, borrowers increase their access to credit and often benefit from more favorable lending terms. The presence of security plays a significant role in the lender's decision to extend credit, typically resulting in larger loan amounts, longer repayment periods, and lower interest rates (Norton & Andenas, 1998, p. 144).

The security value of an asset is determined by its estimated sale value at the time it is sold (McManus, 2000). Banks assess the specific type of property to establish its market value for collateral purposes (Rose, 2000). In addition to physical collateral, a third party may provide a surety ship for the borrower's loan. If the borrower is unable to repay the loan, the bank can then demand repayment from the surety (Koch & MacDonald, 2003). It is common banking practice for banks to obtain surety ships from shareholders or directors when extending funds to a company (Rose, 2000; Vance, 2004).

The five C's of credit character, capacity, capital, collateral, and conditions are widely recognized principles in credit assessment. Commercial banks often develop their own qualitative credit risk assessment models to determine whether to extend credit to a particular business (Sinkey, 2002). Using credit information obtained about the borrower, banks conduct assessments through quantitative methods, qualitative models based on the five C's, or a combination of both. Based on this evaluation, credit sanctioning decisions are made. The following section explores the credit sanctioning and approval process in greater detail.

### **2.1.2 Credit Assessment and Analysis**

Credit analysis is a thorough evaluation of a business entity to determine its financial strength and assess the risks associated with lending to it. The primary purpose of credit analysis is to evaluate the borrower's creditworthiness by examining their ability to repay the debt. Effective credit analysts carefully consider both the positive and negative aspects of each credit request to make an informed lending decision.

Credit analysis is the first stage in crafting a financing solution tailored to the customer's specific needs. This process begins with a comprehensive understanding of the customer's requirements and financial capacity, ensuring that the proposed credit product aligns well with their situation. Serving as a vital safeguard, this analysis and assessment helps maintain the quality of credit extended and is considered a fundamental element of effective credit risk management.

Credit quality is a borrower's ability and willingness to fulfill the obligations associated with a granted loan. It also encompasses the likelihood of default and the expected recovery rate (Saunders & Cornett, 2003). Therefore, credit assessment involves evaluating the risks of lending by estimating the probability of default and potential recovery. Credit officers use credit analysis to assess a borrower's character, capital, capacity, collateral, and the economic cycle commonly known as the five C's (Strischek, 2000). A detailed discussion of this model is provided in the following section.

### **2.1.3 Credit Approval**

Extending credit requires strictly balancing risk limitation and profitability while maintaining a competitive position in a complex global market. To achieve this balance, banks follow a thorough credit approval process. Credit approval involves deciding whether to extend credit to a specific customer, which includes two main steps: gathering relevant information and assessing the customer's creditworthiness (Ross, Westerfield, & Jordan, 1999). As discussed in the preceding section, this process combines a subjective evaluation of the borrower's request with a quantitative analysis of the financial data provided. Each step of the credit approval process, along with its implementation, significantly influences the level of risk associated with extending credit.

The quality of the credit approval process relies on two essential factors: a clear and thorough presentation of the risks involved in issuing the loan, and a proper evaluation of those risks. Additionally, the overall effectiveness of the process depends on its efficiency. Due to the wide variation in borrower profiles, types of assets financed, and the complexity of credit products, a standardized credit risk assessment approach is not practical. Instead, the quality of credit approval, from a risk management standpoint, is measured by how precisely the credit risk exposure is identified and assessed. Credit risk can be divided into three primary components: Probability of Default (PD), Loss Given Default (LGD), and Exposure at Default (EAD) (Oesterreichische National bank, 2000; Bluhm, Overbeck, & Wagner, 2003).

### **Probability of Default (PD)**

The probability of default refers to the chance that a borrower will fail to meet repayment obligations over the term of the loan. Assessing this probability involves reviewing the borrower's current and projected capacity to make timely principal and interest payments.

### **Loss given default (LGD)**

Exposure at default is the magnitude or exposure that would have materialized in the event of a default. It addresses what fraction of the exposure has recovered through bankruptcy proceedings or through some other form of settlement in the event of a default. The loss given default is influenced by both the collateralized portion of the loan and the costs involved in selling the collateral. Therefore, the type and appraised value of the collateral are important considerations when designing loan approval procedures (ibid).

### **Exposure at Default (EAD)**

Exposure at default typically refers to the outstanding amount owed to the lender at the time of default. Along with the type of claim, the size of this exposure is a critical factor in the credit approval process (ibid). Once all relevant information has been collected, the lending institution must make a key decision to either approve or reject the credit application. Many financial managers use the "five C's of Credit" framework (Ross, Westerfield, & Jaffe, 1999) to identify and assess credit risks associated with potential loans before granting approval.

## **2.1.4 Loan monitoring and follow up**

Lending decisions are based on thorough credit risk analysis and an assessment of the borrower's creditworthiness. While a borrower's past performance and integrity provide useful indicators, they do not guarantee future repayment. Even loans granted on the basis of sound analysis may deteriorate if the borrower fails to meet the terms and conditions of the loan agreement. Therefore, effective follow-up and monitoring are essential components of credit management. Monitoring focuses on several key follow up types

### **Physical Follow-up**

Physical follow-up helps verify the ongoing existence and operation of the business, the condition of collateral assets, the accuracy of reported financial data, and the consistency of financial records with other documents such as tax filings and registration books. It also assesses the availability of raw materials, labor conditions, marketing challenges, frequent turnover of key staff, changes in management, and other relevant factors.

### **Financial Follow-up**

Financial follow-up is necessary to confirm that the assumptions made during the lending decision remain valid, both in terms of the borrower's operations and the external environment. It also ensures that the loan is being used for the intended purpose.

### **Legal Follow-up**

The aim of legal follow-up is to maintain the enforceability of the bank's legal rights at all times. This involves securing proper documentation, ensuring timely registration, and monitoring insurance coverage. Key aspects of legal follow-up include verifying that contracts are properly executed by authorized individuals, ensuring all documents are complete, obtaining renewal letters for security registrations before expiration (revival letters), updating loan or mortgage contracts promptly, and reviewing regulatory requirements, laws, and third-party claims.

### **2.1.5 Credit Size**

Rapid growth in loans and advances is widely recognized as a key driver of rising bad debts. Keeton (1999) establishes a clear link between non-performing loans (NPLs) and rapid, sustained expansion of loan portfolios. Analyzing U.S. banks from 1982 to 1996 using a vector auto regression model, Keeton identified that lenient credit terms and conditions significantly contributed to the increase in NPLs. To fuel loan growth, institutions may lower lending standards, reduce monitoring, and offer lower interest rates, creating conditions that increase the risk of loan defaults. However, the financial sector in developing countries such as Ethiopia differs markedly. Due to strong demand for credit, banks in these markets can expand lending without easing credit standards or compromising loan quality.

### **2.1.6 Credit risk Managements**

Loans represent an asset and source of income source for banks, yet they also constitute one of the riskiest areas in the banking industry. Moreover, bank credit plays a vital role in the economic growth of any country. It serves as the primary form of debt financing for a wide range of customers, including individuals, businesses, and corporations. The demand for credit varies across these different market segments. Additionally, banks often seek to expand their income base by using credit extension as an opportunity to cross-sell other fee-generating products and services when customers apply for credit facilities (Koch & MacDonald, 2003)

Credit risk remains the most significant risk assumed by banks, influenced by numerous factors affecting a borrower's ability to repay. This ability is closely tied to the overall economic conditions of a country. During favorable economic periods, repayment capacity tends to improve, driven by factors such as low interest rates, controlled inflation, and rising income levels. Conversely, adverse economic conditions tend to diminish borrowers' repayment ability.

Credit risk stems from the uncertainty surrounding counterparty's ability to fulfill its financial obligations. The growing diversity of counterparties from individual borrowers to sovereign governments and the increasing complexity of financial obligations, ranging from simple auto loans to sophisticated derivative contracts, have made credit risk management a central focus within the risk management practices of financial institutions (Basel Committee, 1999).

## **2.2 Empirical Literature Review**

### **2.2.1 Determinants of Nonperforming Loans**

The quality of banks' loan portfolios is a key factor in financial stability. Historical evidence indicates that a rapid accumulation of bad loans has been central to banking crises (Demirgüç-Kunt&Detragiache, 1998; González-Hermosillo, 1999). In recent years, the global financial crisis and the ensuing recession in many developed countries have led to increased defaults by households and firms, resulting in substantial losses for banks.

The literature reviewed focuses primarily on two broad categories of factors influencing nonperforming loans: macroeconomic factors and bank-specific factors. Studies conducted in the United States and globally support this conclusion. For example, Bercoff et al. (2002) analyzed the fragility of the Argentine banking system between 1993 and 1996, finding that nonperforming loans were influenced by both macroeconomic variables and bank-specific macroeconomic variables

#### **2.2.1.1 Macroeconomic Determinants of Nonperforming loans**

Over the past two decades, numerous researchers have examined the macroeconomic determinants of banks' loan quality. The literature on major economies consistently confirms that macroeconomic conditions significantly influence credit risk. Key studies have explored the relationships between macroeconomic variables such as GDP growth, inflation, real interest rates, and unemployment and loan performance.

Macroeconomic instability, especially high inflation, poses significant challenges for banks during loan appraisal. The viability of borrowers becomes uncertain amid unpredictable fluctuations in inflation rates, exchange rates, interest rates, and their individual components. Furthermore, asset prices tend to be highly volatile in such environments, making the future real value of loan collateral uncertain (Martin Brownbridge, 1998). Banks often struggle during periods of unexpected inflation surges or slowdowns, rising unemployment, and sudden declines in overall output and income

#### **2.2.1.2 Bank Specific Factors**

Macroeconomic factors, often considered exogenous forces affecting the banking industry, should not be viewed as the sole determinants of non-performing loans (NPLs). Instead, the intrinsic characteristics of the banking sector and the specific policy decisions made by individual banks particularly those aimed at enhancing efficiency and strengthening risk management play a crucial role in shaping the trajectory of NPLs. While relatively few studies have focused on the relationship between bank-specific factors and loan defaults, the literature addressing these determinants is reviewed in the following section.

### **Credit size Growth**

Studies consistently show a strong link between rapid credit growth and increased loan delinquencies. Keeton (1999), using data from U.S. commercial banks between 1982 and 1996 and employing an auto regression model, confirmed this association. Similarly, Sinkey and Greenwell (1991) found that excessive lending explains higher loan-loss rates in large U.S. commercial banks. Research on Spanish banks by Salas and Saurina (2002) also demonstrated that rapid credit growth correlates with rising non-performing loans (NPLs). Additionally, Bercoff, Giovanni, and Grimard (2002) identified asset growth as a significant predictor of NPLs. Weinberg (1995), analyzing U.S. data from 1950 to 1992, observed that lending expansions typically precede increases in loan losses. He suggested that risk-neutral lenders tend to increase lending during economic expansions due to improved expected returns on investments and loans. From a supply-side perspective, credit expansions are often driven by relaxed underwriting standards, while credit contractions reflect tighter lending criteria. Consequently, rapid loan growth is frequently associated with deteriorating loan performance due to these relaxed standards.

### **Weak Risk Assessment**

The borrower's ability to repay a loan is of paramount importance. Ideally, a loan should be self-financing, repaid from the cash flow generated by the borrower's use of the loan proceeds. While banks often require security such as guarantees or mortgages, the decision to grant a loan should primarily be based on a thorough analysis of the borrower's prospects, solvency, and the expected generation of repayment funds. However, many banks face challenges in effectively identifying, quantifying, and managing regional and industry-specific risks due to limited

historical data, decentralized information systems, and underdeveloped portfolio management capabilities. As a result, lending decisions often rely heavily on personal judgment, leading to weak management of concentration and systemic risks (Ning, 2007).

Non-performing loans often arise from compromised objectivity during credit appraisal and assessment. This issue is further exacerbated by weaknesses in accounting practices, disclosure standards, and the approval of additional loans without adequate evaluation. In many cases, assessments fail to adequately consider the borrower's current creditworthiness and the market value of collateral, making it difficult to identify deteriorating loans early (Paterson, 2004). Ultimately, lapses in risk assessment quality contribute significantly to the occurrence of non-performing loans.

### **Poor Loan Monitoring (Follow Up)**

Ongoing monitoring of loan quality, ideally supported by an early warning system to notify regulatory authorities of potential bank distress, is essential for maintaining financial stability and avoiding systemic crises (Agresti et al., 2008). In Ethiopia, banks are mandated by law and contractual agreements to continuously review their loan portfolios and regularly report to the central bank. However, the specific details such as how often borrower site visits are conducted, how loan utilization is verified, and other monitoring procedures are left to the discretion of each bank. These review obligations are legally supported by Article 5 of Directive No. SBB/43/2008.

In our society, there is often a greater emphasis on immediate consumption, leading borrowers to use funds for consumption rather than productive purposes when follow-up is not strict. This short-term mindset focused on today at the expense of tomorrow frequently results in financial difficulties later on (Shofiqul M., Chandra N., and Abdul Md., 2005). These causes and their consequences have been consistently identified across various global research studies over time. Notably, research conducted on this topic has confirmed that such behavior is a major reason for loan defaults at maturity (Shofiqul M., Chandra N., and Abdul Md., 2005).

### **Collateral**

Collateral includes both tangible and intangible assets, as well as personal guarantees, that a borrower offers to secure a loan and reduce the lender's risk in the event of default. It serves as

an alternative means for the creditor to recover the loan if the borrower fails to repay. Strong collateral not only mitigates credit risk but also enhances access to credit and can improve the terms and conditions of the loan. The type and value of the collateral play a critical role in the lender's decision regarding the loan amount, repayment terms, and applicable interest rate.

### **Lack of Exit Policies for strict admittance**

Driven by an excessive focus on expanding market share, many banks fail to establish detailed and stringent market entry policies. This weakens their first line of defense against risk and undermines the strategic function of such policies (Shofiquil Islam, 2005). During the pre-loan assessment phase, bank officers often place insufficient emphasis on verifying the authenticity and completeness of submitted documents. In many cases particularly with short-term credit there is a lack of clarity about the borrower's true intentions for using the loan. These reviews tend to be overly optimistic, with limited analysis of potential risks arising from changes in related factors. Moreover, market conditions are not thoroughly examined, and there is inadequate understanding of the borrower's operational and management practices. Risk reassessments are often superficial, and the risks associated with group clients and affiliated entities are not properly identified. As a result, inaccurate assessments fail to fully capture the true risk exposure, leading to loan deterioration at an early stage (Brownbridge, 1998).

### **Reduced attention to borrowers**

In the 1920s, researchers at Hawthorne Electric Company in the United States conducted a study to determine how changes in workplace conditions such as lighting, heating, and other environmental factors affected factory worker productivity. Surprisingly, productivity increased consistently throughout the study, even as lighting levels were adjusted from normal to dim to bright, and temperatures were raised and lowered. The researchers eventually concluded that it was not the physical changes that drove performance, but rather the workers' awareness that they were being observed and considered. This phenomenon, later termed the Hawthorne Effect, suggests that individuals tend to perform better when they feel they are receiving attention. Similarly, borrowers may also respond more positively and fulfill their loan obligations more diligently when they feel that banks are actively monitoring and supporting them (Shofiquil M., Chandra N., and Abdul Md., 2005)

### **Lenders lack plans to deal with risk**

Donor-funded credit programs are often designed without a clear focus on risk management. In the promotion of microfinance, there frequently appears to be no defined mission for addressing risk, nor an industry-wide strategy for mitigating it beyond maintaining strict internal controls. Much of the existing literature emphasizes outreach, typically measured by the number of borrowers served and the ability to cover administrative costs. However, the actual performance of micro-lenders remains uncertain, as many are currently buoyed by substantial donor funding support that sustains all but the most poorly managed institutions (Shofiqul M., Chandra N., and Abdul Md., 2005).

### **Rent-seekers capture the credit program**

Credit programs are often subject to various forms of rent-seeking, particularly when subsidies are involved. In some instances, this exploitation is overt for example, when funding patterns align with election cycles. A notable case was seen in Costa Rica, where crop credit insurance disbursements spiked during election years. Even more egregious was the situation in Mexico during the 1980s, where massive crop failures were routinely reported every six years, coinciding with elections, leading to equally massive indemnity payments. Similarly, in Bangladesh in 1991, a newly elected government declared that all agricultural loans below Tk. 5,000 would be forgiven, regardless of the lending institution. This blanket loan forgiveness significantly undermined repayment discipline and made the collection of small loans difficult for years afterward (Shofiqul M., Chandra N., and Abdul Md., 2005).

### **Interest rate**

Lending interest rates carry an implicit cost that directly affects the performance of credit issued by banks, with significant implications for the occurrence of non-performing loans (NPLs). Numerous studies on interest rates provide strong evidence highlighting the critical role of effective NPL recovery strategies in reducing the volume of NPLs. These strategies are essential not only for enhancing financial stability but also for preventing the emergence of financial crises.

### **Weak internal control**

Banks with no sound internal control system are facing great moral hazard risk, because of the

imperfect social credit environment and law environment. In addition, the customers' exit policies have not detailed too, which do not lead to enough exit management for customers. In the past, the setting of performance assessment

### **Weak risk consciousness**

Firstly, no established scientific development ideas, and lack notion of balance among risk, revenue and capital. There is no full consideration on possible loss of potential risk and having not realized business expansion, which are constrained by capital. Focusing on the possible revenue from business growth will lead to issue loans based on savings only and develop business blindly. Secondly, some relationship managers ignore the review on fundamental information, admittance conditions and collateral revaluation of customers, which impair the authenticity and reliability of pre-loan investigation information. Finally, some risks managers unduly rely on the materials provided by relationship managers and only review the written reports and financial reports, do not make risk review from the second angle objectively to damage the independence of review conclusions (Ning-ning G., 2007).

### **Implementation is faulty, and risk management is not throughout the whole process**

Pre-loan investigations and reviews are often neither thorough nor rigorous. In many cases, relationship manager's place limited emphasis on verifying the authenticity and completeness of supporting documents. The intended use of the loan particularly for short-term credit is frequently unclear, and overly optimistic assessments are made without properly analyzing the potential impact of changing economic or market conditions. Additionally, there is often a lack of in-depth market analysis, insufficient understanding of the borrower's operational and management capacity, and no comprehensive evaluation of future business prospects. Risk assessments are frequently inaccurate, failing to fully capture the exposure, and the risks associated with group clients and affiliated enterprises are not effectively identified. These shortcomings significantly increase the likelihood of credit default.

### **Weakness in post-loan management**

There are three major weaknesses in post-loan management: first, the inability to identify credit risk in a timely manner; second, the failure to take prompt action to recover or exit after risks are detected; and third, the loss of legal rights and interests during litigation. In Chinese banks, a

long-standing issue known as “emphasize loan, despise management” persists, characterized by minimal follow-up reviews of customers who have already received loans, lax monitoring of loan usage, and neglect of borrowers’ operational status even to the extent of losing track when enterprises relocate or cease to exist. Due to infrequent updates of management information, timely and accurate risk assessments of loans remain lacking.

For the sake of maintaining seemingly positive business growth indicators, business units often hesitate to exit from customers with high potential risk, opting instead to repeatedly renew or extend loans in the hope that defaults will be avoided. Exit strategies are generally simplified and passive, relying primarily on cash recovery, loan cancellation after verification, or accepting payment in kind. Furthermore, banks frequently lose their legal rights in litigation due to ineffective loan or collateral contracts, poor loan archive management, and neglect of timely legal action.

## **2. 3 Summary of literatures gap**

A review of the existing literature on non-performing loans (NPLs) highlights several gaps that merit further investigation. While numerous studies have examined both macroeconomic factors such as GDP growth, inflation, interest rates, and unemployment and bank-specific variables such as credit growth, risk assessment practices, and internal controls as key determinants of NPLs (Bercoff et al., 2002; Demirgüç-Kunt & Detragiache, 1998; González-Hermosillo, 1999; Keeton, 1999), the majority of this research is concentrated in developed economies or countries that have experienced significant financial crises. Consequently, there is a relative lack of empirical evidence from developing countries, including Ethiopia. This geographical imbalance presents a contextual gap, limiting the generalize ability of existing findings and underscoring the need for research focused on the dynamics of NPLs within less developed and emerging banking systems (Shofiqul et al., 2005). Additionally, while the reviewed studies often examine macroeconomic and bank-specific determinants in isolation, they rarely integrate these factors into a comprehensive framework that captures their interactive and combined effects on NPLs. This separation limits the understanding of how internal bank practices and external economic forces jointly influence credit risk (Sinkey & Greenwell, Salas & Saurina).

Another notable gap in the literature is the limited analysis of the operational mechanisms and specific risk management practices within banks. While many studies acknowledge weaknesses in risk assessment and credit monitoring, they often do so in general terms, without offering detailed examinations of how deficiencies in critical areas such as pre-loan due diligence, post-loan monitoring, and internal control systems directly contribute to deteriorating loan quality (Ning-ning, 2007; Paterson, 2004). Moreover, there is a shortage of empirical research addressing the influence of behavioral and institutional dynamics on loan performance. Factors such as the Hawthorne Effect, rent-seeking behavior and ineffective legal and regulatory frameworks remain underexplored in the context of their role in exacerbating loan defaults and non-performing loans (Shofiqul et al., 2005). This highlights the need for more nuanced studies that delve into the internal operational realities of banks and the broader institutional environment, particularly in developing economies.

Moreover, few studies provide detailed longitudinal or comparative analyses tracking NPL trends over time or across different regions. This gap restricts the identification of best practices in credit risk management and weakens the ability to generalize findings to broader contexts (Agresti et al., 2008; Beck et al., 2013). Lastly, while some studies note political interference and donor-driven credit initiatives as contributing factors to NPLs, there is insufficient empirical quantification of these effects, particularly in settings with strong government involvement in banking (Shofiqul et al., 2005).

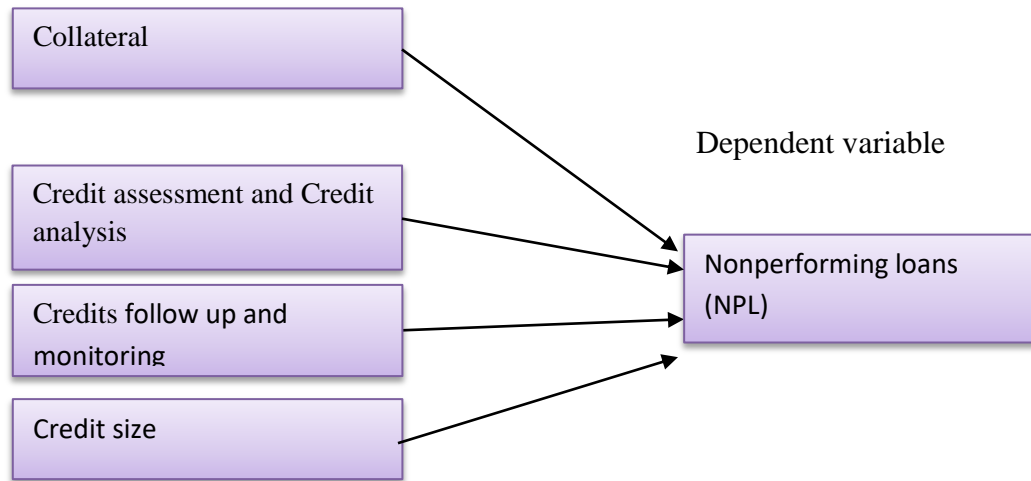
## **2.4 Conceptual frame work**

The main objective of this study was to examine the determinate of NPLs of selected commercial banks based on the objective of the study, the following conceptual.

Figure is framed .as the previous discussed in the related literature review parts; nonperforming loans are affected by bank specific factors. Further bank specific factors, credit assessment, loan collaterals, credit monitoring and size of credit of the bank are the major cause of affecting loan performance or directly to the occurrence of NPL. The independent variables are selected based on the statement of problems that, other researchers are not addressed.

**Figure 2.1**

Independent Variables



Source: developed for the study.

## **CHAPTER THREE**

### **RESEARCH METHDODOLOGY**

#### **3.1 Research philosophy**

Research philosophy is a belief about the way in which data about a phenomenon should be gathered, analyzed and used. The research philosophy of this study is mainly guided by a pragmatic approach because it deals with the facts and focuses on what works “rather than what might be considered absolutely and objectively true or real. When the researcher chooses this research philosophy, it is mostly determined for the research problem and in this research philosophy, the practical results are considered important.

#### **3.2 Description of the Study Area**

This study is intended to be carried out at private commercial banks. There are 31 private commercial banks in Ethiopia as of December 31, 2024 G.C. This research was intended to be carried out on the credit department employees of selected banks. The study was conducted on the head office credit department of selected private commercial banks, namely Awash Bank (AIB), Bank of Abyssinia (BOA), Cooperative Bank of Oromia (COOP), Zemen Bank, Buna International Bank (BIB), and Abay Bank.

#### **3.3 Research approach**

The mixed research approach was adopted for this study. Qualitative research approach was applied to explain the determinants of nonperforming loans in Ethiopian Private commercial banks to obtain a systematic sequence of information. On the other hand, quantitative research approach was used to provide numerical measurement and analysis of the magnitude, trends, and extent of the determinants.

#### **3.4 Research design**

The research designs for this study are explanatory research types to describe what it is or what the situation looks like based on the information, different facts, and factors regarding the

problem during the time of the study. In addition, explanatory research design to explain understands and predicts the cause-and-effect relationship between variables (independent variables) and dependent variables. The researcher utilized a combination of quantitative and qualitative research methods. Quantitative one is helpful in quantifying variables, which are gathered through closed-ended questions and interpreted in statistical data. Qualitative data acquired through semi-structured interviews was analyzed using content analysis contextually or qualitatively. Therefore, this study would focus on the determinants of NPL at private commercial banks of Ethiopia. This study used an explanatory and descriptive research design. This study is explanatory, as it aims to describe the situation of nonperforming loans within the study area and to identify the key issues related to the relationship/connection/ between the occurrence of Non-performing Loans and certain bank-specific determinants/ factors.

### **3.5 Target population**

Population refers to the entire group of individuals from which a sample is selected. The target population of the study is employees of the head office credit department of the selected 6 private commercial banks of Ethiopia, which are operating throughout the country, such as Awash Bank (AIB), Bank of Abyssinia (BOA), Cooperative Bank of Oromia (COOP), Zemen Bank, Buna International Bank (BIB), and Abay Bank (AB). Therefore, the researcher takes credit department employees from six selected private commercial banks, totaling 212 employees. From the total population, 139 samples were taken by using the sample size determination formula of Yemane (1967).

### **3.6 Sampling techniques and Sample size Determination**

The research focuses on clerical and permanent employees who are working at selected private commercial banks in Ethiopia under the Addis Ababa District. All banks are in the same banking industry, and they are in operation. Including state banks, there are thirty-one commercial banks in Ethiopia, and these commercial banks are categorized by generation. The stratified sampling method is used to select the employees within the selected banks. Stratified sampling is a type of sampling method in which the total population is divided into smaller groups, or strata, to complete the sampling process. The strata are formed based on their common characteristics in

the population data. Then, dividing the population into strata, namely 1st generation, 2nd generation, 3rd generation, and 4th generation, the researcher randomly selected the sample proportionally.

A first-generation bank of Ethiopia, born between 1971 and 2000, includes Awash Bank, Bank of Abyssinia, Dashen Bank, Hibret Bank, and Wegagen Bank. The second generation of Ethiopian banks, born between 2002 and 2008, includes Cooperative Bank of Oromia(COOP),Lion International Bank Zemen Bank (ZB), and Oromia International Bank (OIB). Third-generation banks of Ethiopia, born between 2009 and 2013,includes Buna International Bank (BIB), Abay Bank (AB), Berhan Bank (BB), Addis International Bank(AIB), DebubGlobalk (DBG), and Enat Bank(EB). The fourth generation banks in Ethiopia, born from 2014 up to now, include Tsehay Bank, Tsdey Bank, Ahadu Bank, Amara Bank, Zamzam Bank, Hijra Bank, GohBetoch Bank, Omo Bank, Sinqe Bank, Rammis Bank, Shebele Bank, Geda Bank, and Sidama Bank.

As noted by Kothari (2004), good sample design must be viable in the context of time and funds available for the research study. Besides, judgmental sampling offers the researcher to deliberately select items for the sample concerning the choice of items as supreme based on the selection criteria set by the researcher.

This study use Purposive sampling style. This sampling style is allows researchers to apply their judgment to select units that are most relevant to the study (Palinkas et al., 2015). In this case, selecting only private commercial banks in Ethiopia ensures that the sample is focused on entities that share similar operational contexts and regulatory environments, which enhances the internal validity of the findings (Etikan, Musa, & Alkassim, 2016).

Furthermore, the criterion based on the time of establishment and operation start is critical to capture banks with sufficient operational history, enabling the collection of comprehensive data on their credit sector performance. This approach is consistent with findings by Gentles et al. (2015), who argue that purposive sampling is particularly effective when researchers need to target participants who have extensive experience or information relevant to the study topic. By selecting banks with adequate data availability, the study mitigates the risk of incomplete or

unreliable data, which can be a limitation in studies relying on secondary financial records (Marshall, 1996).

Overall, the purposive sampling method, combined with these well-justified criteria, provides a purposeful and contextually appropriate framework to examine the credit sector in Ethiopia's private commercial banks. This approach resonates with previous empirical studies that recommend purposive sampling when the research goal is to understand a specific subset of a population in depth rather than to generalize to the entire population (Tongco, 2007).

Accordingly, from 31 commercial banks registered in the country as of June 2024 G.C., the researcher purposively selected 6 private commercial banks. The researcher selects two banks from each of the 1st-generation banks, 2nd-generation banks, and 3rd-generation banks, respectively, by random sampling techniques. Accordingly, data for this study were gathered from six private commercial banks operating in the country. Those selected banks are Awash Bank (AIB), Bank of Abyssinia(BOA), Cooperative Bank of Oromia(COOP),Zemen Bank, Buna International (BIB), and Abay Bank (AB). The fourth-generation Banks are Not Selected on Sample Size due to not being more experienced in the banking industry and lending services. Thus, as one can understand from the objective of the study, the researcher aimed to examine the determinants of nonperforming loans of private commercial banks in Ethiopia.

The relevant data for the study is used both primary and secondary data sources. Questionnaires would be used as a principal method of collecting data from primary sources, and books, magazines, annual reports, goggles, and financial statements would be used as secondary data sources. Secondary sources of data are important to achieve the third objective, i.e., trends of NPL in private commercial banks of Ethiopia.

To draw the sample from the population, by using the sample size determination formula of Yamane, (1967) will be use. The main reasons for using the Yamane formula over other methods or models include its ease of use, convenience, flexibility, accurate results, universal acceptance and a simplified formula that is easy to remember and apply.

$$n = \frac{N}{1 + N(e)^2}$$

**n=** Target Population Size, **n-** sample size, **e=** the acceptable sampling error

N = 240

e =0.05

$$n = \frac{212}{1 + 212(0.05)^2} \quad n = \frac{212}{1 + 0.53} = \frac{212}{1.53} = 139$$

No	Name of bank	No of Credit Dep't Employees at Head Office	Sample size
1	Awash bank	44	29
2	Bank of Abyssinia	42	27
3	Cooperative Bank of Oromia	38	25
4	Zemen Bank	20	13
<sup>5</sup>	Abay Bank	36	24
<sup>6</sup>	Buna International Bank	32	21
	<b>Total</b>	<b>212</b>	<b>139</b>

### 3.7 Sources of Data

To get relevant information, the study has employed a primary and secondary source of data. While the primary source of data gathered through questionnaire. It was filled by the clerical and permanent employee of the bank. It shows the opinions of the employees in regard to each question. The secondary sources of data emanate from the company credit policy and procedure documents, national bank directives, reports, process templates and magazines. In addition, relevant books, journals, empirical research, abstracts and articles that related to this study.

### 3.8 Data collection methods and type of Data

#### 3.8.1 Data Collection Procedure

In order to determine the determinant of nonperforming loan in Private commercial banks, data is gathered from both primarily and secondary sources to meet the objective of the study. The major instruments are used for data gathering with standardized questionnaires.

As suggested in Saunders, et al. (2009,) self-administered questionnaire provide reliable data. After the instruments validity and reliability is evaluate by the research advisor and experts who have knowledge on the subject matter; the distribution as well as the collection, conducting interviews and the explanation about questionnaire filling and convenience consolation have accomplished by the researcher so as to avoid contamination with the respondents and there by maintain data reliability.

### **Primary data collected through:**

**Questionnaire:** - the questionnaire was self-administered questions that mainly contain Likert scale as well as yes or no questions and contains open-ended questions. It is organized and arranged by taking specific objectives as systematic areas.

### **3.8.2 Instrument of data collection**

The instrument of data collection is survey questionnaire, which is adopted to studies and necessary modifications, were made to the objective

## **3.9 Data Presentation & Analysis Techniques**

After being meticulously coded and verified for consistency, the gathered data would be imported into the SPSS spreadsheet for additional examination. SPSS version 27 was used to conduct the analysis. The collected data analyzed by using qualitative and quantitative methods. In order to analyze qualitative data the researcher used narrative methods of analysis and in order to analyze quantitative data the researcher used descriptive statistics to systematically analyze. The data statistical software IBM SPSS version 27.00 was used. The data have been presented using tables, frequency and percentage. The analyzed data have been arranged by following the specific objectives of the study.

## **3.10 Reliability and Validity**

### **3.10.1 Validity**

Validity is the extent instrument (questionnaire) measures what it purports to measure. The validity of a measure refers to the extent to which the research findings accurately represent what the measuring instrument claims to measure. Validity, often called construct validity, refers to the extent to which a measure adequately represents the underlying construct that it is supposed to measure. For this research purpose, validity tests are checked regarding the questionnaire content, criteria and construct tests by piloting to make more accurate and meaningful results.

### **3.10.2 Reliability**

Reliability is concerned with the findings of the research and refers to the consistency of a measuring instrument (questionnaire). Reliability is internal consistency used to measure consistency between different items of the same construct. Cronbach's alpha is a reliability measure designed by Lee

Cronbach in 1951. Cronbach's alpha is a coefficient of reliability. It is commonly use as a measure of the internal consistency or reliability of a psychometric test score for a sample of examinees. One of the foremost commonly used indicators of internal consistency is Cronbach's alpha coefficient. According to Pallant (2005), the Cronbach's alpha coefficient of scales should be greater than 0.8 and 0.9 have good and excellent. Accordingly, it was affirmed that all the data reliable with Cronbach's Alpha result as bellow table.

**Table 3.1: Cronbach's Alpha Result**

Variables	Cronbach' Alpha	Number of Items
Credit Assessment	0.918	12
Loan monitoring and follow up	0. .927	5
Credit size	0. .865	5
Collateral	0. .885	5
NPL	0.870	4

### **3.11 Ethical consideration**

The study is conducts by considering ethical responsibility. This includes providing information to the respondents the purpose of the study and the use of the information as well. Information obtain is held in strict confidentiality by the researcher. Respondents' anonymity was keep so that participants would feel free and safe to express their ideas. Observation from employees log book was only used for the purpose of the research and the written

When the researcher performed the thesis, name and other identifying information were not use. The completed questionnaire were filed safely and were accessible only to the researcher and thesis advisor during the data analysis also the imputed data are directly obtained from the responses of the customer so that result of the study fully represents the determinates of NPL in private commercial banks in Ethiopia.

## CHAPTER FOUR

### DATA ANALYSIS, RESULTS AND DISCUSSION

#### 4. INTRODUCTION

This chapter deals with the presentation, analysis, and interpretation of data collected through questionnaires. It has four sections. In the first section, the background information of respondents with regard to gender, age, educational qualification, work experience, and current positions is dealt with. It gave a clear picture of the participants who filled out the questionnaires. In the 2nd section, the descriptive statistics of the study organized and summarized the data collected through questionnaires. In the 3rd section, the correlation analysis of the study measured the degree of association between different variables under consideration. In the 4th section, the regression analysis of the study tested the effect of independent variables on dependent variables. Only professional staff members who dealt with credit at six institutions received the questionnaire. These banks were chosen at random from among all Ethiopian private banks that are currently in operation.

For this study, 139 questionnaires were physically distributed to respondents. Of these, 133 questionnaires were collected, validated, and used for analysis. The data gathered were presented and analyzed using SPSS software version 27.

#### 4.1. Background Information of the Respondents

**Table 4.1 General Background Information of Respondent**

		Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Male	101	75.9	75.9	75.9
	Female	32	24.1	24.1	100.0
	Total	133	100.0	100.0	
Age	20-30	57	42.9	42.9	42.9
	31-40	42	31.6	31.6	74.4
	41-50	24	18.0	18.0	92.5
	>50	10	7.5	7.5	100.0
	Total	133	100.0	100.0	
Marital	Single	106	79.7	79.7	79.7

status	married	23	17.3	17.3	97.0
	Divorced	4	3.0	3.0	100.0
	Total	133	100.0	100.0	
Educational level	Diploma	10	7.5	7.5	7.5
	BA/MSc Degree	81	60.9	60.9	68.4
	MSc/MA degree	42	31.6	31.6	100.0
	Total	133	100.0	100.0	
work experiences related to bank lending	below 1 year	6	4.5	4.5	4.5
	1-5	58	43.6	43.6	48.1
	6-10	45	33.9	33.9	81.9
	Above 10 years	24	18	18	100.0
	Total	133	100.0	100.0	
job position	Credit Director	7	5.3	5.3	5.3
	Relationship Manager	40	30.1	30.1	35.4
	Credit Officer	53	39.8	39.8	75.2
	Credit Analyst	33	24.8	24.8	100
	Total	133	100.0	100.0	

Source: Own survey, 2025

It can be seen from Table 4.1 presented background information of the respondents. With gender distribution of the respondents, 75.9 % of them are males and the remaining 24.1% are females. The data on gender composition reflects a relatively balanced representation of employees, thereby facilitating the collection of perspectives from both male and female respondents. This can enhance the comprehensiveness and reliability of the data.

With regard to age distribution, 42.9% of the respondents are in the range of 20-30 years, 31.6% of the respondents are in the range of 31-40 years, 18.0% of the respondents are in the range of 41-50 years, and 7.5% of the respondents are in the range of above 50 years. This clearly showed that the majority of the respondents' age range is between 20 and 30 years, which is 42.9% of the total respondents. The predominance of younger respondents suggests openness to innovation in credit management. However, the inclusion of older, more experienced employees balances the dataset with traditional credit assessment insights, strengthening the study's validity.

A majority of respondents are single (79.7%), followed by married (17.3%) and divorced (3%). This trend may reflect a workforce that prioritizes career advancement over family commitments, which is common in younger and mid-level professionals. The prevalence of single employees may indicate higher flexibility and availability for professional responsibilities,

which could positively influence credit performance by ensuring greater commitment to workload.

The educational background of the respondents revealed that 30.8 % of the respondents are Masters (2nd Degree), 61.5% of the respondents are First Degree and 7.7% of the respondents are Diplomas. This clearly showed that majority of the respondents are first degree educational qualifications that are capable for all related loan operations. The educational profile supports the reliability of the study's findings, as respondents are likely to understand and apply core principles of loan performance, contributing to informed and credible responses. Based on the quality of their educational background, the research assumes that employees are familiar with the organization's mission, vision, and goals, and are therefore likely to contribute positively to its loan performance.

Regarding respondents' work experience in bank lending, 43.6 percent of the respondents had 1-5 years of working experience, 33.9 percent of the respondents had 6-10 years of lending working experience, and 18 percent of the respondents had above 10 years of lending working experience and the remain 4.5% of the survey response had less than 1 year of credit related working experience. The diverse range of work experiences enhances the depth and breadth of the data. Experienced respondents likely provide informed opinions on credit sector performance, while newer employees bring fresh perspectives on operational challenges. In addition to that the majority of respondents had extensive experience in bank credit operations contributed to the collection of high-quality data and it's protect loan performances.

With regard to current position of the employees survey result, 30.1 percent were relationship managers, 39.8 percent of the respondents were credit officers, 24.8 percent of the respondents were credit analysts, and the rest 5.3 percent were in credit director positions. This spread reflects a cross-section of operational and strategic positions within banks, aligning with empirical findings that loan performance is influenced by decisions made across hierarchical levels. The diversity of job positions ensures that the study captures a holistic view of credit operations. It also enhances the reliability of the findings, as both tactical (credit officers and analysts) and strategic (directors and managers) perspectives are considered.

## 4.2 Credit Assessment and Analysis

Table 4.2 Bank Factors that indicating relationship between Credit assessment and analysis with Non-performing loans.

No.	Description							Mean	Std. Dev
		Strongly Agree(5)	Agree (4)	Natural (3)	Disagree (2)	strongly Disagree (1)	Total		
1	Borrowers who are easily admitted typically default	53	36	8	14	22	133	3.63	1.49
		39.8%	27.1%	6%	10.5%	16.6%	100%		
2	Banks credit procedure are good and enough for loan operation	53	35	8	14	23	133	3.60	1.51
		39.8%	26.3%	6%	10.5%	17.4%	100		
3	The Know Your Customer (KYC) policy of banks plays a significant role in improving loan quality	65	35	11	6	16	133	3.95	1.35
		48.9%	26.3%	8.3%	4.5%	12%	100%		
4	Effective loan underwriting is essential for ensuring strong loan performance	54	35	14	14	15	133	3.76	1.36
		40.6%	26.3%	12%	10.5%	10.5%	100%		
5	Insufficient risk evaluation often contributes to loan defaults.	51	37	17	12	16	133	3.71	1.37
		38.3%	27.8%	12.8%	9%	12%	100%		
6	Credit assessments are free from any intervention	52	39	14	13	15	133	3.75	1.36
		39.1%	29.3%	10.5%	9.8%	11.3%	100%		
7	Economic and political conditions of the country have directly related to loan default	51	39	14	12	17	133	3.71	1.39
		38.3%	29.3%	10.5%	9%	12.8%	100%		
8	Loan with big interest rate leads to turn to NPL	51	44	12	9	17	133	3.77	1.36
		38.3%	33.1%	9%	6.8%	12.8%	100%		
9	Poorly negotiated credit agreements/terms often contribute to non-performing loans and increase the risk of default	46	35	15	21	16	133	3.56	1.41
		34.6%	26.3%	11.3%	15.8%	12%	100%		
10	Banks loan analysis's are qualified and skilled	52	36	12	16	17	133	3.68	1.42
		39.1%	27.1%	9%	12%	12.8%	100%		
11	Charging high loan interest rate is leads to loans default.	48	34	14	19	18	133	3.56	1.44
		36.1%	25.6%	10.5%	14.3%	13.5%	100%		
12	Rapid lending expansion results in a high volume of non-performing loans.	52	35	13	17	16	133	3.68	1.41
		39.1%	26.3%	9.8%	12.8%	12%	100%		

Source: Own survey, 2025

Table 4.2 Displays answers on variables that show how credit analysis and evaluation affect the incidence of nonperforming loans. Under credit assessment and credit analysis, there are 12 questions. All questions are an analysis of the following statement.

According to the above data, the level of response of easily admitted borrowers who usually default is the following. Out of 133 employees' respondents, 66.9 % of the respondents agree with the average response has a mean of 3.63 and a standard deviation of 1.49. While 27.1% of the respondents disagree, the remaining 6% of the respondents remain neutral. From the above respondent's viewpoint, Findings indicate that a significant proportion of respondents believe that borrowers who undergo a less rigorous admission process are more prone to loan defaults. This showed that borrowers admitted their methods had led to loan default.

On the second statement, the level of the respondent's responses on the bank's credit procedure is good enough for loan operation. Only 66.1 % of the respondents agree the average response has a mean of 3.60 and a standard deviation of 1.51. While 27.9% of the respondents disagree, the remaining 6% of the respondents remain neutral. This implies that the banks' procedures have a positive effect on the occurrence of loan defaults. This indicates that banks had good and strong credit procedures that minimized the risk of loan defaults.

Under the third statement, the above survey data shows responses on the level of agreement on the Know Your Customer (KYC) policy of banks leading to high loan quality: 75.2% of the respondents agree, 16.5% of the respondents disagree, and the rest, 8.3% of the respondents, don't know (neutral). The average response has a mean of 3.95 and a standard deviation of 1.35. Therefore, out of 133 respondents, 75.2% of respondents respond that having KYC ensures that banks accurately identify and verify the borrower's identity, financial background, and risk profile. This reduces the chance of lending to fraudulent or high-risk individuals, thereby improving overall loan quality. Depending on the respondents' responses, they agree that the bank's KYC policy in the selection of their borrower customers and having good loan assessments decrease the rate of loan defaults.

In the fourth statement 66.9% of the respondents agree on Effective loan underwriting is essential for ensuring strong loan performance, while 21% of the respondents disagreed and the remaining 12% of the respondents remained neutral. The mean value of the response has 3.76,

which has satisfactory value, with standard deviation of 1.36. This implies that a good loan underwriting ensures loan performance having a positive effect on loan performances and increases the quality of loan.

In the fifth statement with a satisfactory mean score of 3.71 and a standard deviation of 1.37, 66.1% of respondents agreed with the fifth statement, which states that inadequate risk assessment is thought to result in loan default. Twelve percent strongly disagreed, nineteen percent disagreed, and twelve and eight percent were neutral. Most respondents strongly concur that there is a chance that inadequate risk assessment may result in loan default. According to the respondents' results, nonperforming loans and loan defaults are generally caused by inadequate credit risk assessment and analysis.

In the sixth statement, 68.4% of the respondents agreed that the credit assessment practices are free from any intervention in the loan process, while 21.1% of the respondents strongly disagreed or disagreed with the same statement, and the remaining 10.5% of the respondents remained neutral. The mean value of non-performing loans with this statement is 3.75, which has a satisfactory value, with a standard deviation of 1.36. The result indicates that the banks' loan assessment intervention is having a positive relationship with loan performance. Bank loan management staff and other related bodies are free from any intervention to increase the loan quality.

In the seventh statement, 67.6 % of the respondents agreed with the statement that the economic and political conditions of the country are considered to analyze the credit related to non-performing loans, while 21.8 % of the respondents strongly disagreed or disagreed with the same statement, and the remaining 10.5% of the respondents remained neutral. The mean value is 3.71 with a standard deviation of 1.39. The above survey indicates that the economic and political conditions of the country are directly related to non-performing loans. So this implies the current county political and economic condition is the major reason for loan default.

In the eighth statement 71.4% of the respondents strongly agreed on large interest rates on loan statements result in non-performing loans, with mean values of 3.77, which has satisfactory value, with standard deviation of 1.36. While 19.6 % of the respondents strongly disagreed or disagreed for the same statement, the remaining 9% of the respondents remained neutral. Major respondents agree with the

statement that loan with big interest rate tend to turn to loan default. Regarding to the above view point big interest rate tend to turn to loan default.

In the ninth statement 60.9 % of the respondents agreed on the statement Poorly structured credit agreements are a major factor leading to loan defaults and the rise of non-performing assets with the mean value of 3.56, which has satisfactory value, with standard deviation of 1.41, while 27.8% of the respondents strongly disagreed or disagreed for the same statement, the remaining 11.3% of the respondents remained neutral. Depending on the above survey poorly understood credit terms) are leads to occurrences of loan default.

In the tenth statement 66.2% of the respondents agreed that Banks loan analysis's are qualification and skills are related to the occurrence of loan default, while 24.8%) of the respondents strongly disagreed or disagreed for the same statement, the remaining 9% of the respondents remained neutral. The mean value of is 3.68, which has satisfactory value, with standard deviation of 1.42. The majority of respondents concur that the likelihood of loan default is correlated with the qualifications and competence of bank loan analysts. This suggests that banks had qualified personnel to analyze loans and reduce the likelihood of loan default.

In the eleventh statement 61.7 % of the respondents strongly agreed or agree for the same statement on the response of those Loans with excessively high interest rates are more likely to become non-performing assets (NPLs). While 27.8% of the respondents strongly disagreed or disagreed for the same statement, while the remaining 10.5% of the respondents remained neutral. The mean value is 3.56, which has satisfactory value, with standard deviation of 1.44. The survey outcomes indicated that banks charging big interest rate leads to loan default or charging high interest rate is the one cause of occurrences of NPLs.

In the twelfth statement, 65.4 % of the respondents strongly agreed or agreed with the same statement on the response of assertion that the relationship between lending growth and the occurrence of large rates of NPLs. While 24.8% of the respondents strongly disagreed or disagreed with the same statement, the remaining 9.8% of the respondents remained neutral. The mean value is 3.68, which has a satisfactory value with a standard deviation of 1.41. With regard to the above response, major respondents agreed that the credit growth and occurrences of NPLs

were directly related. This means when credit volume/amount increases aggressively, it is directly related to the occurrences of NPLs.

### 4.3 Loan monitoring and follow up

Table4.1 Factors in the relationship between Loan monitoring (follow up) and Non-Performing Loans (NPLs)

	<b>Loan monitoring and follow up</b>	Strongly Agree(5)	Agree (4)	Natural (3)	Disagree(2)	Strongly disagree(1)	Total	Mean	Std. Dev
2.1	Strong loan monitoring and follow up insures loan performance	56	37	12	13	15	133	3.80	1.37
		42.1%	27.8%	9%	9.8%	11.3%	100%		
2.2	Loans that are poorly assessed and advanced may still perform well if they are properly monitored.	52	37	15	10	19	133	3.70	1.41
		39.1%	27.8%	11.3%	7.5%	14.3%	100%		
2.3	loan follow up is directly related to non-performing loans	53	41	12	10	17	133	3.77	1.38
		39.8%	30.8%	9%	7.5%	12.8%	100%		
2.4	Higher budget for loan follow up and controlling have lower non-performing loans	57	39	9	13	15	133	3.83	1.37
		42.9%	29.3%	6.8%	9.8%	11.3%	100%		
2.5	Banks made credit grading risk continuously and periodically	56	44	10	9	14	133	3.89	1.31
		42.1%	33.1%	7.5%	6.8%	10.5%	100%		

Source: Own survey, 2025

According to the above response 69.9% of the respondents (mean 3.80). Standard Deviation 1.37) agreed that strong loan monitoring and follow-up are believed to ensure loan performance. While 21.1% of the respondents strongly disagreed or disagreed with the same statement, the remaining 9% of the respondents remained neutral. From the above viewpoint, credit follow-up and monitoring are directly related to the performance of loans. This implies that strong loan follow-up and monitoring leads to or ensures loan quality.

The assertion that a poorly evaluated and advanced loan may perform well provided the loan is effectively monitored during selection was accepted by 66.9% of the respondents (Mean 3.70,

standard deviation 1.41). While 21.8% of the respondents strongly disagreed or disagreed with the same statement, the remaining 11.3% of the respondents remained neutral. With regard to the above response, major respondents agree that the poorly assessed and advanced loan's performance is related to loan performance.

However, 70.6 % of the employees survey response (mean 3.83, standard deviation 1.37) strongly agree or agree with the same statement that loan follow-up and monitoring are directly related occurrence of non-performing loans. While 20.3% of the respondents strongly disagreed or disagreed with the same statement, the remaining 6.8% of the respondents remained neutral. While 72.2% of employees result (mean 3.83, stand dev1.37) strongly agreed or agreed that banks with large loan follow up and monitoring budgets have fewer NPLs or higher loan monitoring budgets, which improves loan quality, 21.1% strongly disagreed or disagreed with the same statement, and 6.8% of respondents were neutral.

Regarding the correlation between the incidence of nonperforming loans and the risk of bank credit grade, 75.2% of respondents (Mean 3.89. The same assertions were either strongly agreed or agreed (standard deviation 1.37). While 17.3 % of the respondents strongly disagreed or disagreed for the same statement, while the remaining 7.5% of the respondents remained neutral. From the above survey result banks risk grading and non-performing loans are directly related.

### 4.3 credit Size

Table 2.4 Factors in the relationship between size of credit and Non-performing loans (NPLs)

	<b>Credit size</b>	Strongly Agree(5)	Agree (4)	Natural(3)	Disagree(2)	Strongly Disagree (1)	Total	Mean	Std. Dev
1	Aggressive lending leads to large NPL volume/ratio	45	47	12	17	12	133	3.72	1.29
		33.8%	35.3%	9%	12.8%	9%	100%		
2	Banks whose credit loan growth is rapid often experience a higher incidence of non-performing loans.	51	50	9	12	11	133	3.89	1.24
		38.3%	37.6%	6.8%	9%	8.3%	100%		
3	Banks higher risk appetite is the reason for loan Default	55	43	11	9	15	133	3.86	1.33
		41.4%	32.3%	8.3%	6.8%	11.3%	100%		
4	Having large number of borrowers causes loan default	54	44	14	9	12	133	3.89	1.26
		40.6%	33.1%	10.5%	6.8%	9%	100%		
5	Compromised integrity in lending leads to loan default	46	39	11	16	21	133	3.55	1.46
		34.6%	29.3%	8.3%	12%	15.8%	100%		

Source: Own survey, 2025

With regard to the relation between credit volume and occurrences of nonperforming loans, from the total respondents, 69.1% (mean 3.72. Standard Deviation 1.29) of the respondents agree that the loan performance is affected by the volume of credit growth. While 21.8% of the respondents strongly disagreed or disagreed with the same statement, the remaining 9% of the respondents remained neutral. The survey outcomes indicate that when banks' credit volume increases aggressively and they lend large amounts of loans to borrowers is directly affected (they have large amounts of nonperforming loans).

On the other hand 75.9 % ( Mean 3.89. Standard Deviation 1.24) of the respondents agreed that Banks with rapid credit expansion tend to face challenges such as deteriorating asset quality and greater exposure to loan defaults. While 17.3% of the respondents strongly disagreed or disagreed for the same statement, the remaining 6.8% of the respondents remained neutral. This implies that banks rapid credit growth is affected the level of loan performance.

The survey results indicate that approximately 73.7% of respondents (mean 3.86, standard deviation 1.33) agreed that a higher risk appetite in banks is linked to loan defaults. In contrast, 18.1% of respondents either disagreed or strongly disagreed with this statement, while 8.3% remained neutral. Based on these findings, it can be inferred that a bank's risk appetite is positively associated with the occurrence of nonperforming loans.

Almost 73.7% (mean 3.89). Standard Deviation 1.26) of the respondents agreed on the statement that having a large number of borrowers causes loan default, while 15.8% of the respondents strongly disagreed or disagreed with the same statement, and the remaining 10.5% of the respondents remained neutral. The result indicates that a number of borrowers have a huge level of nonperforming loans.

When we see the levels of respondents' responses on the relationship between compromised integrity in lending and loan/NPLs. Almost 63.9% (mean 3.55). Standard Deviation 1.46) of the respondents agree. While 27.8% of the respondents strongly disagree and disagree with the same statement, the remaining 8.3% of the respondents remain neutral. The result of the survey implies that compromised integrity has a positive relationship to loan performance.

**Table 4.3 Factors on relationship between collateralizing loans & occurrences of NPLs**

	Collateral	Strongly Agree(5)	Agree (4)	Natural (3)	Disagree (2)	Strongly Disagree(1)	Total	Mean	Std. Dev
1	Loans are secured by collateral not well	44	37	13	17	22	133	3.48	1.47
		33.1%	27.8%	9.8%	12.8%	16.5%	100%		
2	Collateralized loans help to protect loans default	60	36	14	7	16	133	3.88	1.36
		45.1%	27.1%	10.5%	5.3%	12%	100%		
3	Mostly non-collateralized loans are default	50	36	15	13	19	133	3.64	1.43
		37.6%	27.1%	11.3%	9.8%	14.3%	100%		
4	Bank has good collateral estimation procedure.	58	35	13	11	16	133	3.81	1.38
		43.6	26.3%	9.8%	8.3%	12%	100%		
5	Collaterals have enough insurance coverage.	61	37	9	10	16	133	3.88	1.38
		45.9%	27.8%	6.8%	7.5%	12%	100%		

Source: Own survey, 2025

According to the surveys, 60.9%, 72.2%, 64.7%, 69.9%, and 73.7% of the respondents agree or strongly agree that the relation between non-performing loans and loans Collateralized loans help to protect against loan default; non-collateralized loans are in default, and bank collateral estimation procedures and collateral insurance coverage respectively. At the same time mean values of 3.48, 3.88, 3.64,1, and 3.88, which are highly moderate values, have standard deviations of 1.47, 1.36, 1.43, 1.38, and 1.38, respectively. On the other hand, 23 %, 17.3%, 24.1%, 20.3%, and 19.5% of the respondents disagreed or strongly disagreed, respectively, and the remaining 9.8%, 10.5%, 11.3%, 9.8%, and 6.8% of the respondents affirmed to be neutral, respectively.

Depending on the above discussion, it can be concluded that a loan secured by collateral is the most important method to protect loan quality, which means collateralizing loans and the loan performance are directly related. Similarly, regarding the link between collateralized loans and loan defaults, the majority of respondents believe that collateralized loans provide protection against default. On the other hand respondent's response argument that most non-collateralized loans are in default. This implies that non-collateralized loans and loan performance are directly related. Therefore, banks are using collateral to secure loans in an effort to reduce the amount of non-performing loans (NPL). The above survey outcomes indicate that when banks' collateral estimation procedure and collateral insurance coverage are directly affected, loan performance.

**Table 4.4 Non-performing loans**

	<b>Non-performing loans</b>	Strongly Agree(5)	Agree (4)	Natural( 3)	Disagre e(2)	Strongly Disagree (1)	Total	Mean	Std. Dev
<b>1</b>	Loan assessment and credit analysis would directly related to non-performing loans(loan defaults)	58	33	11	15	16	133	3.77	1.41
		43.6%	24.8%	8.3%	11.3%	12%	100%		
<b>2</b>	Loan monitoring and follow up is positive related to occurrences of non-performing loans	59	38	8	11	17	133	3.83	1.40
		44.4%	28.6%	6%	8.3%	12.8%	100%		
<b>3</b>	Secured collateralizing loan are help to protect loans from loan default.	68	38	6	6	15	133	3.81	1.43
		51.1%	28.6%	4.5%	4.5%	11.3%	100%		
<b>4</b>	Size of credit have directly related to the occurrences of non-performing loans.	61	33	10	11	18	133	3.9	1.12
		45.9%	24.8%	7.5%	8.3%	13.5%	100%		

Source: Own survey, 2025

Based on the respondents' feedback, 68.4% (mean 3.77, standard deviation 1.41) believe that thorough loan assessment and credit analysis contribute to ensuring loan performance. On the other 23.3% of the respondents strongly disagree and disagree with the same statement, and the remaining 8.3% of the respondents remain neutral. The result of the survey implies that loan assessment and credit analysis are directly related to non-performing loans (loan defaults).

Approximately 73.7% of respondents (mean 3.83, standard deviation 1.40) agreed that loan monitoring and follow-up are directly related to the occurrence of nonperforming loans. Meanwhile, 21.1% disagreed or strongly disagreed with this statement, and 6% remained neutral. In summary, the findings suggest that effective loan monitoring and follow-up have a direct impact on loan performance. This indicates that banks implement stringent monitoring and follow-up practices to help ensure better loan outcomes.

When we see the levels of respondents' responses on the relationship between collateralizing loans and the occurrence of non-performing loans, from total respondents 79.7% (Mean 3.81) Standard Deviation 1.43) of the respondents agree. While 15.8% of the respondents strongly disagree and disagree with the same statement, the remaining 4.5% of the respondents remain neutral. The result of the survey implies that secured collateralizing loans help to protect loans from loan default.

The survey results concerning the relationship between size credit size the incidence of nonperforming loans from total respondents 70.7% (mean 3.90) Standard Deviation 1.12) of the respondents agree that the loan performance is affected by the size of credit. While 21.8% of the respondents strongly disagreed or disagreed with the same statement, the remaining 7.5% of the respondents remained neutral. The survey outcomes indicate that the size of credit is directly related to NPLs.

#### **4.6. Correlation Analysis**

Pearson Correlations are conceivably the most basic and most useful measure of association between two or more variables. It is number between -1 and 1 that measure strength and direction of the relation on the relation between two variables when one variable changes the other changes the same variable (Marczyk, et.al, 2005). Pearson correlation analysis was used

in this paper to provide evidence of association between the independent variables and dependent variable called Credit Assessment, Credit Follow Up (Monitoring), Credit Size, Collateral and Non-performing Loans. Pearson correlation coefficients reveal magnitude and direction of relationships either positive or negative and the intensity of the relationship. Another good overview of the data is a correlation Matrix, which gives an overview of what variables tend to go up and down together and in what direction. It's a good first past at relationships in data before delving into regression. Correlation refers to synonym for association or the relationship between variables. Correlation coefficient is a statistical measure of the degree to which change to the value of one variable predict change to the value of another. Higher correlation value indicates stronger relationship between both sets of data (Coetzee, 2003). In positively correlated variables, the value increases or decreases in tandem. Correlation coefficients are expressed as value between +1 and -1. A coefficient of +1 indicates a perfect positive correlation. A coefficient of - 1 indicates a perfect negative correlation. In negatively correlated variables, the value of one variable increases as the value of the other decreases.

**Table 4.5. Correlation Analysis**

Correlations		Credit Assessment	Credit Follow Up(Monitoring )	Credit Size	Collateral	NPL
Credit Assessment	Pearson Correlation	1	.476**	.298**	.659**	.767**
	Sig. (2-tailed)		.000	.001	.000	.000
	N	133	133	133	133	133
Credit Follow Up(Monitoring )	Pearson Correlation	.476**	1	.701**	.554**	.555**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	133	133	133	133	133
Credit Size	Pearson Correlation	.298**	.701**	1	.522**	.522**
	Sig. (2-tailed)	.001	.000		.000	.000
	N	133	133	133	133	133
Collateral	Pearson Correlation	.659**	.554**	.628**	1	.799**
	Sig. (2-tailed)	.000	.000	.000	.000	.000
	N	133	133	133	133	133
NPL	PearsonCorrelation	.767**	.555**	.529**	.799**	1

Source: Own survey, 2025

Accordingly, in this study correlation result is given on table 4.7 which shows the relationship between the independent variable and dependent variable Non performing Loans (NPL). To interpret the result it is better to see (Franzblu, 1985) definition which has five classical rules as shown below in interpreting the coefficient of correlation between those different variables.

- (r=0 to 0.20) indicates negligible or no correlation
- (r=0.2 to 0.40) indicates positive but low degree of correlation
- (r=0.4 to 0.60) indicates positive moderate degree of correlation
- (r=0.6 to 0.80) indicates positive and marked degree of correlation
- (r=0.8 to 1.00) indicates positive and high degree of correlation

That the Pearson correlation coefficients of all four independent variables are positively associated with each other and non-performing loans (NPL). The four independent variables' correlation coefficients range from 0.5 to 0.1. That means credit assessment, credit follow-up (monitoring), credit size and collateral have the highest correlation with non-performing loans. We are significant at the 0.01 level. Thus, the association between this independent variable and the dependent variable of performing loans can be considered as high and positive. Furthermore, the four independent variables were significantly correlated with each other. As indicated in the table above, four determinants were highly correlated with non-performing loans (.767\*\*)

## **4.7 Analysis of Inferential Statistics Results**

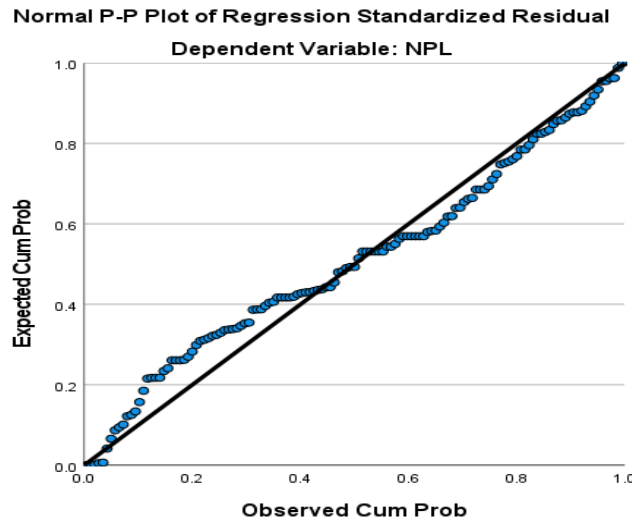
The studies tried to assess and see the relationship between the four independent variables and dependent variable. To this end, inferential statistics such, regression analysis, hypothesis testing and Mann-Whitney U test and Kruskal-Wallis test were employed. The results of such analysis are presented below.

### **4.7.1 Linearity Assumption Test**

Linearity defines the dependent variable as a linear function of the predictor (independent) variable (Balance, 2004). If the data are normally distributed then the data points was closed to the diagonal line. Linearity assumption was tested by producing scatter plots of the relationship between independent variable and the dependent variable. By visually looking at the scatter plot

produced by SPSS, the relationship between independent variable and the dependent variable found to be linear as shown in the figure below

**Figure 1 Linearity Assumption test**



Source: Own Survey, computed in SPSS, 2025

#### 4.7.2 Regression Analysis between determinants and Non-performing Loans

Regression is a technique that can be used to investigate the effect of one or more predictor variables on an outcome variable. That is, it allows us to make statements about how well one or more independent variables will predict the value of a dependent variable.

#### Model Summary

**Table 4.6 Regression Analysis Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.867 <sup>a</sup>	.751	.743	.61491

Source: Own Survey, computed in SPSS, 2025

a. Predictors: (Constant), Credit Assessment, Credit Follow Up(Monitoring), Credit Size &Collateral

b Dependent Variable: Non performing loan

Table 4. 8 clearly showed the value of R and R<sup>2</sup>. In this analysis, the value of R is 0.867a, which is a measure of the correlation between the observed values of independent variables (credit

assessment, credit follow-up (monitoring), credit size, and collateral) and the predicted value of the dependent variable (nonperforming loan).Whereas R-square ( $R^2$ ) is the proportion of variation in the dependent variable (non-performing loan) that is explained by the independent variables. It is expressed as a percentage. Hence, R-square = 0.751 implies that 75.1% of the variation in nonperforming loans can be explained by the four independent variables.

## 4.8 Regressions ANNOVA

**Table 4.7 Regressions Annova**

		ANOVA <sup>a</sup>				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	146.100	4	36.525	96.599	.000 <sup>b</sup>
	Residual	48.398	128	.378		
	Total	194.498	132			

Source: Own Survey, computed in SPSS, 2025

a. Dependent Variable: NPL(Nonperformance loan)

b. Predictors: (Constant), Credit Assessment, Credit Follow Up(Monitoring), Credit Size &Collateral

Table 4.9 showed whether the proportion of variance ( $R^2$ ) is significant. It also tells whether the four independent variables (Credit Assessment, Credit Follow Up (Monitoring), credit Size &Collateral) have a significant combined effect on dependent variable (Non-performance loan). Therefore, the table clearly showed the sig. (or p-value) is .000 which is below the .05 level; hence, we conclude that the independent variables (Credit Assessment, Credit Follow Up (Monitoring), credit Size &Collateral) have a significant combined effect on the dependent variable (Non-performance loan).

**Table 4.8 Regression Coefficients**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.092	.218		.423	.673
	Credit Assessment	.373	.054	.441	6.919	.000
	Credit Follow-up	.037	.068	.036	.542	.001
	Credit Size	.124	.082	.109	1.506	.135
	Collateral	.436	.077	.419	5.696	.000

Source: Own Survey, computed in SPSS, 2025

a. Dependent Variable: Non-performance loan

First Look at the Sig (P-Values). We can see that credit assessment (.000), credit follow-up (monitoring) (.001), credit size (0.135), and collateral (.000) are significantly related to nonperforming loans. Hence, both credit assessment and credit follow-up (monitoring), credit size, and collateral have 44.1 %, 3.6%, 10.9%, and 41.9% positive effects on nonperforming loans, respectively, with a significant relationship.

### Discussions of findings against the empirical literature

The findings of this study align with, expand upon, and, in some cases, challenge the empirical literature on the determinants of non-performing loans (NPLs), particularly in the Ethiopian context.

#### Credit Assessment and Analysis

The study demonstrated a strong association between poor credit assessment and NPL occurrences. Participants identified compromised integrity, fund diversion, and over/under financing as major causes of NPLs. These findings are consistent with Ning-ning (2007) and Paterson (2004), who emphasize that inadequate credit analysis contributes significantly to loan defaults. Similarly, Bercoff et al. (2002) found that poor risk evaluation and excessive risk-taking played a crucial role in Argentina's banking crises. Keeton (1999) also identified a direct link between inadequate risk assessments and higher loan losses, especially during rapid loan growth periods. The study's survey responses and interviews echo these themes, highlighting both technical and ethical failures in Ethiopian banks' credit assessment processes.

## **Loan Monitoring and Follow-up**

Findings from survey data indicate that compromised integrity in loan approval and monitoring processes is a major contributor to the rise in non-performing loans (NPLs). This aligns with the work of Shofiqul et al. (2005), who emphasize the detrimental impact of rent-seeking behavior and political interference on credit quality in developing economies. The study further identifies systemic governance shortcomings—such as weak internal controls, insufficient accountability, and the absence of a strong risk management culture as critical factors driving NPL accumulation. These findings underscore the urgent need for comprehensive institutional reforms that reinforce governance structures, enhance transparency, and promote a culture of accountability and sound risk management within the banking sector.

## **Credit Size (Lending Growth)**

Survey responses revealed that although aggressive lending practices and rapid credit growth were recognized as contributing factors to non-performing loans (NPLs), they were rated as less critical compared to weaknesses in credit assessment and loan monitoring. This finding offers partial support to Keeton (1999) and Salas and Saurina (2002), who emphasized the risks associated with rapid loan expansion. However, the results suggest that in the Ethiopian context, aggressive lending alone may not be the primary driver of NPLs. Instead, deficiencies in credit monitoring, assessment procedures, and broader governance issues appear to have a more immediate and pronounced impact on loan performance.

## **Collateral (Loan Security Management)**

A strong relationship between collateral quality and NPLs was identified, consistent with Brownbridge (1998), who emphasized the role of collateral as a safeguard, and Paterson (2004), who highlighted the need for sound collateral management. However, survey responses showed some disagreement on the role of collateral in preventing NPLs. This divergence likely stems from issues such as improper collateral valuation, weak legal enforcement, and limited insurance coverage (Shofiqul et al., 2005), which reduce the practical effectiveness of collateral in Ethiopia.

## **Macroeconomic and External Factors**

While survey participants mentioned macroeconomic and political factors, they were not prioritized as major causes of NPLs. This contrasts with Demirgüç-Kunt and Detragiache (1998) and Beck et al. (2013), who emphasized the role of macroeconomic stability and external shocks in influencing loan defaults. The Ethiopian context suggests that institutional weaknesses, such as regulatory enforcement gaps and operational failures, may overshadow macroeconomic variables in driving NPL levels.

## **Behavioral and Governance Factors**

Survey and interview data revealed that compromised integrity in loan approval and monitoring processes is a significant contributor to the rise in non-performing loans (NPLs). These findings align with Shofiqul et al. (2005), who identified rent-seeking behavior and political interference as major challenges affecting credit quality in developing economies. The study also highlights broader governance deficiencies such as weak internal controls, inadequate accountability mechanisms, and the absence of a strong risk management culture as critical factors contributing to NPL accumulation. These insights underscore the urgent need for institutional reforms that strengthen governance structures, enhance transparency, and promote operational integrity within the banking sector.

## **Operational Size and Ownership**

Contrary to the findings of Bercoff et al. (2002), this study did not identify a significant correlation between bank size measured by deposits, loan volume, or total assets and non-performing loan (NPL) ratios. Similarly, ownership type (state-owned versus private) was not found to be a determining factor in NPL performance. These results suggest that within the Ethiopian banking context, it is not the scale or ownership structure of a bank that primarily influences credit risk outcomes, but rather the effectiveness of operational practices, internal controls, and governance mechanisms. This highlights the critical role of institutional quality and managerial efficiency over structural attributes in managing loan portfolio performance.

## **Comparative and Contextual Insights**

This study offers a unique contribution by integrating multiple determinants credit assessment, loan monitoring, credit size, collateral, macroeconomic conditions, and governance into a contextualized framework tailored to the Ethiopian banking sector. In contrast to prior studies that often examine these factors in isolation (Salas & Saurina, 2002; Keeton, 1999), this research underscores their interrelated nature and combined impact within Ethiopia's specific institutional and economic environment. The findings reveal persistent procedural weaknesses in key areas such as enforcement, post-disbursement follow-up, and collateral management, highlighting the urgent need for localized strategies to effectively mitigate non-performing loans (NPLs). Moreover, qualitative insights from stakeholder interviews point to broader systemic challenges such as borrower knowledge gaps, entrepreneurship constraints, and policy and regulatory limitations that are insufficiently addressed in the existing empirical literature. These findings emphasize the importance of a holistic, context-sensitive approach to managing credit risk in developing economies.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Summary of Major Findings**

Investigating and identifying bank-specific factors that contribute to non-performing loans (NPLs) was the goal of the study. It was conducted on six private commercial banks in Ethiopia: Awash Bank (AIB), Bank of Abyssinia (BOA), Cooperative Bank of Oromia (COOP), Zemen Bank, Buna International Bank (BIB), and Abay Bank (AB). The findings indicate that various bank-specific factors contribute to the occurrence of NPLs in these institutions.

In respect of the factors that affect loan performance or the factors that affect the level of NPLs, they were identified by the subjective different survey question. Poor credit assessment and credit analysis, failed loan follow-up and monitoring, uncollateralized loans, large volume of credit size or aggressive lending, compromised integrity, and their knowledge limitation of banks are ascribe to the causes of loan default. The major finding of this study shows that loans are characterized by inadequate credit assessments, rapid growth in credit size, poor risk evaluations, weak follow-up and monitoring of loans, insufficient credit analysis and a lack of adequate collateral.

#### **5.2 Conclusions**

Commercial banks provide a wide range of financial services, with credit provision being one of their most vital functions. Lending is at the heart of banking operations and it must be guided by key principles such as safety, liquidity, efficient use of funds, profitability and investment diversification. Although loan processing procedures may differ slightly between banks, the general steps typically involve initial client discussions or interviews, site visits, credit application processing, collection of credit information, comprehensive credit analysis and appraisal, credit decision-making, contract signing, collateral registration (if applicable), and final fund disbursement. Despite these systematic processes, non-performing loans (NPLs) remain a significant challenge for the banking sector, necessitating vigilant monitoring and effective management.

A loan is classified as non-performing based on the length of delayed or missed repayments. According to the National Bank of Ethiopia's Directive No. SBB/90/2024 on Asset Classification and Provisioning, a loan or advance is deemed non-performing when its credit quality has declined to the point that full recovery of principal and/or interest according to the agreed repayment schedule is overdue by 90 consecutive days or more.

The primary goal of this research was to identify the bank-specific factors influencing non-performing loans. To address this broad aim, several specific research questions were formulated. The study employed a mixed-methods approach, distributing 150 questionnaires in person to bank employees. Of these, 133 completed questionnaires were collected, validated, and analyzed using SPSS software version 27. The research included both employee surveys and structured reviews of bank documents and reports. The survey indicated that 68.4 percent of respondents respond that the loan assessment and credit analysis are believed to ensure loan performance. While 73.7% of the respondents agreed on the statement that loan monitoring and follow-up are directly related to the occurrence of nonperforming loans, To that conclude the above discussion, loan follow-up and monitoring are directly related to loan performance. This implies that the banks have strict loan monitoring and follow-up to ensure loan performance.

Although 79.7 percent of the survey respondents believe that collateralizing loans can help prevent default by deterring borrowers from risking the loss of pledged assets, they remained neutral on whether collateralized loans perform better or whether non-collateralized loans are more likely to default .in addition to that 70.7 percent of the survey respondents believe that the size of credit is directly related to non-performing loans

Based on the respondent's viewpoint, the outcomes showed that factors affecting non-performing loans are poor credit assessment, rapid credit size growth, poor risk assessment, weak loan follow-up and monitoring, poor credit analysis and insufficient collaterals. So these determinants are the major factors that affected the loan performance.

### 5.3 Recommendation

After analyzing result obtained for responses to questioners gathered from the Bank employee and after findings and conclusions the researcher recommends the following which will be helpful for the organization

- The bank should deeply analyze and assess customer background, credit history, and source of loan repayment and follow up properly
- Banks should give full attention to loan customer selection by preparing strong and good loan procedures, and all loan processes should be implemented free from any interventions.
- Banks should Loans that were initially strictly assessed can still perform well if subject to thorough and ongoing monitoring
- Banks should establish a proactive monitoring and follow-up system to regularly assess loan performance and ensure the sustained viability of borrowers' operations.
- Banks should provide loan advisory services both before and after loan disbursement to enhance credit awareness among borrowers. Prior to disbursement, advisory services can help borrowers understand loan terms, repayment obligations and proper fund utilization. After disbursement, banks should follow up with borrowers to assess project implementation, review financial management practices, identify operational challenges and recommend appropriate corrective measures. This continuous engagement can improve loan performance and reduce the risk of default.
- The banks should deliver targeted training and development programs to credit operations staff to strengthen their competencies, improve decision-making, and enhance overall performance.
- The banks should request sufficient collateral when borrowers request loans and properly check the registration of collateral
- Banks should implement a clear policy framework and standardized procedures that effectively manage conflicts of interest, uphold ethical standards, and ensure robust checks and balances throughout the loan approval, processing, and implementation stages.

- To continuously assess loan performance and confirm the continued viability of borrowers' operations, banks should set up a proactive follow-up and monitoring mechanism.
- In order to properly handle conflicts of interest, respect moral principles, and keep the proper checks and balances in place during the loan approval, processing, and implementation stages, banks must put in place a clear policy framework and standardized procedures.
- Efforts should be made to develop a responsible borrowing culture among individuals, while also shaping the mindset of employees involved in credit operations to ensure they uphold integrity. It is essential to create an environment where these employees are free from internal and external pressures that could undermine their objectivity and ethical standards. By fostering accountability, transparency and professionalism, both borrowers and credit staff can contribute to a more stable and trustworthy credit system.

#### **5.4 Implication for Further Research**

The results of this study can be further utilized to suggest several directions for future research. A field study can focus on investigating on determinants of non-performing loan of private commercial banks in Ethiopia. Finally, more research on other Credit area is needed because this study has investigated a subset of the variables found to be important determinants. Other variables that may provide in credit practices influencing non-performing Loans in bank industry can be incorporated in other studies. Also the study topic at hand requires further research on the root-causes of the major determinants; such as lack of financial discipline and out-right-breach of contractual agreements from the side of borrowers. Future research could also examine the statistical relationship between Ethiopian nonperforming loans and all bank-specific characteristics.

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## Appendix



**Addis Ababa University**

**College of Business Economics**

**Department of Accounting and Finance**

### **Dear Respondents**

My name is Abebe Genbaw and I am now working with the research paper of the Masters of art in Accounting and Finance at Addis Ababa University College of business and economics.

This questionnaire is designed to collect data with the objective of assessing the Determinants of Non-Performing Loan of Private Commercial Banks in Ethiopia. Therefore, I would like to humbly ask you to take a few minutes out of your busy schedule to answer this questionnaire. I promise you that your responses to the questions raise in the questionnaire have been treated with strict confidentiality and have been used only for the purposes of this research.

In case you have any questions please call 0947546737 or email [abebeg1047@gmail.com](mailto:abebeg1047@gmail.com)

Thank you in advance

Abebe Genbaw

- Please answer by putting “√” in the box

Part One: General information

#### **1. Gender**

Male

Female

**2. Age**

20-30  31-40

3. 41-50  Above 50

**4. Marital status**

Single  Married  Divorced

**5. What is your current Educational Qualification?**

Diploma  BSC/BA Degree

MSC/MA Degree  Other \_\_\_\_\_

**6. Year of Experience**

Below 1 Year  5-10 Years

1-5 year  above 10 Years

**7. Position**

Credit Director  Credit Officer

Relationship manager  Credit analyst

**7. Do you think non-performing loan of the bank is associated with poor credit management?**

Yes  No

**8 How do you judge a bank credit management policy related with non-performing loan?**

Very good  Good  Fair

Poor  Very poor

**Part II:**

Please indicate on a five point of scale the extent to which you find the following statements important by ticking on the box in the column on a five-point scale the extent to which you are satisfied or dissatisfied with the following statements.

1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= strongly agree

### Credit Assessments and Analysis related questions

	Items	Response				
		<b>Strongly Agree(5)</b>	<b>Agree (4)</b>	<b>Neutral (3)</b>	<b>Disagree (2)</b>	<b>Strongly Disagree(1)</b>
9	Borrowers who are easily admitted typically default					
10	Banks credit procedure are good and enough for its operation					
11	The Know Your Customer (KYC) policy of banks plays a significant role in improving loan quality.					
12	Effective loan underwriting is essential for ensuring strong loan performance.					
	Insufficient risk evaluation often contributes to loan defaults.					
14	Credit assessments are free from any intervention					
15	Economic and political conditions of the country have directly related to loan default					
16	Loan with big interest rate leads to turn to NPL					
17	Poorly negotiated credit terms lead to NPL/loan default/					
18	Banks loan analysis's are qualified and skilled					
19	Charging high loan interest rate is leads to loans default.					
20	Rapid lending expansion results in a					

	high volume of non-performing loans.					
<b>Loan follow up and monitoring related questions</b>						
		<b>Strongly Agree(5)</b>	<b>Agree (4)</b>	<b>Neutral(3)</b>	<b>Disagree (2)</b>	<b>Strongly Disagree(1)</b>
21	Strong loan monitoring and follow up insures loan performance					
22	Loans that are poorly assessed and advanced may still perform well if they are properly monitored.					
23	loan follow up is directly related to non-performing loans					
24	Higher budget for loan follow up and controlling have lower non-performing loans					
25	Banks made credit grading risk continuously and periodically					
<b>Credit size related questions</b>						
		<b>Strongly Agree(5)</b>	<b>Agree (4)</b>	<b>Neutral(3)</b>	<b>Disagree (2)</b>	<b>Strongly Disagree(1)</b>
26	Aggressive lending leads to large NPL volume/ratio					
27	Banks whose credit growth is rapid often experience a higher incidence of non-performing loans					
28	Banks higher risk appétit is the reason for loan Default					
29	Having large number of borrowers causes loan default					

30	Compromised integrity in lending leads to loan default					
<b>Loan Collateral related questions</b>						
		<b>Strongly Agree(5)</b>	<b>Agree (4)</b>	<b>Neutral (3)</b>	<b>Disagree (2)</b>	<b>Strongly Disagree(1)</b>
31	loan are secured by collateral not well					
32	Collateralized loans help to protect loans default					
33	Mostly non- collateralized loans are default					
34	Bank has good collateral estimation procedure					
35	Collaterals have enough insurance coverage					
<b>Non-performing loans related questions</b>						
		<b>Strongly Agree(5)</b>	<b>Agree (4)</b>	<b>Neutral (3)</b>	<b>Disagree (2)</b>	<b>Strongly Disagree(1)</b>
36	Loan assessment and credit analysis would directly related to non-performing loans(loan defaults)					
37	Loan monitoring and follow up is positive related to occurrences of non-performing loans					
38	Secured collateralizing loan are help to protect loans from loan default					
39	Size of credit have direct related to the occurrences of non-performing loans					

**Thank You!!**

