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Addis Ababa University

College of Business and Economics

Department of Accounting and Finance

Causes of Non-Performing Loan in Ethiopian Commercial Banks: The case of some selected commercial banks.

A Thesis Submitted in Partial Fulfillment of the Master of Science in Accounting and Finance Degree Requirements

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Feb, 2022
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DECLARATION

I, Adino Andargie, hereby declare that the research work entitled “Causes of Non-performing loan in Ethiopian commercial banks – a case of some selected commercial banks” Submitted by me for the award of degree of Master Science in Accounting and finance at Addis Ababa University at Addis Ababa, Ethiopia is prepared with my own effort. I have made it independently with the close advice and guidance of my advisor.

Signature: _____

Adino Andargie

Addis Ababa, Ethiopia

March, 2022

DEDICATION

This research work is dedicated to my Mother: W/ro Atsede Fentaw; My Father: Ato Andargie Demissie and my dearest wife: Genet Mengesha.

An act of goodwill is revealed with a positive remark of appreciation. There is nothing more motivating in doing good and performing to the best of your abilities than the knowledge that your efforts paid with a sincere nod. The only option is a word of thank you. With the stream of unpleasant headlines all-around, your activity is desirable and highly pleasing for me, as a professional and personal view of my attitude, being at the receiving end of something is a meaningful deserves and heartfelt as well as sincere gratitude. Hopefully my Letter of thanks and appreciation will takes a special intensive force of golden opportunities which could break dawn obstacles that will affect our long journey.

Thank you!

Adino

CERTIFICATION

This is to certify that this thesis entitled “Causes of Non-performing loan in Ethiopian commercial banks: The case of some selected commercial banks” submitted in partial fulfillment of the requirements for the award of the degree of Master of science in Accounting and finance to the College of Business and Economics, Addis Ababa University, through the Department of Accounting finance, done by Mr. Adino Andargie ID No. GSE/0313/12 is an authentic work carried out by him under my guidance. The matter embodied in this thesis has not been submitted earlier for award of any degree or diploma to the best of my knowledge and belief.

Advisor: Habtamu Berhanu (PhD) _____ Date _____

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College of Business and economics

Department of Accounting and finance

This is to certify that the thesis prepared by Adino Andargie, entitled: Causes of Non-performing loan in Ethiopian commercial banks: The case of some selected commercial banks submitted in partial fulfillment of the requirements for the Degree of Master of Science in Accounting and Finance complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

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ACKNOWLEDGEMENT

In the beginning, I thank to Almighty God, son of Virgin Marry for his Mercy and blessing all the time and giving me the strength to accomplish this research work.

I would like to thank Dr. Habtamu Berhanu, my advisor, for his unwavering support and assistance, valuable comments and guidance.

My special thanks is also inevitable to my dearest wife, Genet Mengesha, for her patience and moral support, thus I can focus on my study and work at a time.

Lastly but not least, I would also like to thank and acknowledge the contributions of employees of all the sample banks and for their valuable help, encouragement and for creating conducive environment during data collection time and to all my friends for their moral support.

Finally, I'd like to express my gratitude to Ato Biniyam Abebe for his statistical support.

Table of Contents	PAGES
DECLARATION	i
DEDICATION.....	ii
CERTIFICATION.....	iii
ACKNOWLEDGEMENT.....	v
I. List of Tables.....	viii
II. ABBREVIATION.....	ix
<i>ABSTRACT</i>	x
CHAPTER ONE.....	1
1. INTRODUCTION	1
1.1. Back Ground of the study	1
1.2. Background of Banking Industry in Ethiopia	2
1.3. Statement of the problem	4
1.4. Research Questions (RQ).....	6
1.5. Objectives of the study.....	6
1.5.1. General objective	6
1.5.2. Specific objectives	6
1.7. Scope and limitation of the study.....	7
1.8. Organization of the study.....	7
1.9. Definitions of Terms	8
CHAPTER TWO	9
2. LITERATURE REVIEW	9
2.1. Theoretical review of Banking.....	9
2.1.1. Credit Methodology	10
2.1.2. Credit Assessment.....	10
2.1.3. Credit appraisal	11
2.1.4. Credit Approval.....	11
2.1.5. Supervision and Follow-up	11
2.1.6. Banking Risks	11
2.1.7. Credit risk.....	12
2.1.8. Banks Credit Risk Management system	13
2.1.9. Risk identification.....	13
2.1.10. Risk measurement/assessment	13

2.1.11. Risk treatment/control.....	13
2.1.12. Risk Monitoring	13
2.2. EMPIRICAL LITERATURE REVIEW	15
2.2.1. Related Literature review in other countries case.....	15
2.2.2 Related literatures in Ethiopian case	27
2.3. Conceptual Framework.....	30
2.4. Knowledge gap	31
CHAPTER THREE.....	33
3. Methodology of the Study.....	33
3.1. Research Design and Approach	33
3.2. Population, Sampling and sample size.....	33
3.3. Methods of Data Collection	33
3.3.1. Questionnaires.....	33
3.3.2. Interview	33
3.3.3. Secondary Data	34
3.4. Data Analysis	34
3.5. Reliability and validity.....	34
3.6. Ethical Consideration.....	34
CHAPTER FOUR.....	35
4. Data analysis and interpretations.....	35
4.1. BACKGROUN OF RESPONDENTS	35
4.2. Determinants /causes of non-performing loan	37
4.2.1. Bank specific causes of loan default	37
4.2.2. BORRROWER SPECIFIC FACTORS	44
CHAPTER FIVE	53
5. CONCLUSION, RECOMMENDATION AND FUTURE RESEARCH DIRECTIONS	53
5.1. CONCLUSION.....	53
5.2. RECOMMENDATION	54
5.3. FURTHER RESEARCH IMPLICATION.....	55
REFERENCES	56
Appendix	61
Questionnaire.....	61

I. List of Tables

1. Table 4.1 job family (position) of respondents. -----38

2. Table 4.2 experience of respondents in the banking industry-----39

3. Table 4.3 experience of respondents in the credit process-----39

4. Table 4.4 the relationship of banks risk appetite and non-performing loan. -----40

5. Table 4.5 the relationship of banks over trading/financing and non-performing loan -----41

6. Table 4.6 the relationship of portfolio diversification and non-performing loan-----41

7. Table 4.7 the relationship of excessive dependent on collateral than business viability and non-performing loan-----42

8. Table 4.8 the relationship of credit analysis and approval process with non-performing loan-----43

9. Table 4.9 the relationship of banks’ credit policy ignorance and non-performing loan-----43

10. Table 4.10 the relationship of bankers’ lacks of integrity and non-performing loan -----44

11. Table 4.11 the relationship of Admitting borrowers and non-performing loan-----44

12. Table 4.12 the relationship of bankers’ bans completion in recruiting customers and non-performing loan-----45

13. Table 4.13 the relationship of poorly negotiated and lax credit terms and non-performing loan-----42

14. Table 4.14 the relationship of follow up and monitoring with non-performing loan-----46

15. Table 4.15 the relationship of capacity limitation of credit performers and non-performing loan-----46

16. Table 4.16 the relationship of fund diversion and non-performing loan-----47

17. Table 4.17 the relationship of bankers’ lacks of integrity and non-performing loan-----47

18. Table 4.18 the relationship of intentional defaulters and non-performing loan-----48

19. Table 4.19 the relationship of poor business/working capital management and non-performing loan-----48

20. Table 4.20 the relationship of political and civil unrest with non-performing loan-----49

21. Table 4.21 the relationship of black listing of defaulters and non-performing loan-----49

22. Table 4.22 the relationship of credit culture of a society and non-performing loan-----50

23. Table 4.23 the relationship of market problem and inflation with non-performing loan-----50

24. Table 4.24 the relationship of GDP growth and non-performing loan-----51

25. Table 4.25 the relationship of shortage of rainfall and non-performing loan-----52

26. Table 4.26 the relationship of natural disaster, flooding, drought, volcanic eruption in the low land and non-performing loan. -----52

27. Table 4.27 the relationship of Absence of improved technology to support and control environmental happenings and non-performing loan-----53

II. ABBREVIATION

AIB	Awash international bank
BOA	Bank of Abyssinia
CBE	Commercial Bank of Ethiopia
CPF	consumer price index
CEE	central and eastern Europe
CBO	cooperative Bank of Oromia
DB	Dashen Bank
ER	exchange rate
FDI	Foreign Direct Investment
FDRE	Federal Democratic Republic of Ethiopia
FGD	Focus Group Discussion
GDP	Gross Domestic Product
IMF	International Monetary Fund
KYC	Know your Customer
LAT	Loan Approval Team
NIM	Nib International Bank
NPL	Non-performing loan
NBE	National bank of Ethiopia
M2	Money Market
ROE	Return on Equity
TB	Treasury Bill
UB	United Bank
WB	Wegagen Bank
ZB	Zemen Bank
PESTLE	Political, economic, social technological legal and environmental

ABSTRACT

The purpose of the study was to understand the causes of non-performing loans in Ethiopian commercial banks, with a focusing on some selected commercial banks. Descriptive research design and mixed (qualitative and quantitative) research approach were used. The researcher has purposefully targeted nine commercial banks in Ethiopia for the study's convenience. The data was gathered from a total of 90 respondents who were selected at random and additional 15 key informants were selected purposefully. The data collected from respondents and secondary data were analyzed quantitatively and the data from the interview was analyzed qualitatively. Following this the researcher classified the factors in to three sub determining factors namely, bank specific factors, borrower specific factors and external (socio-cultural, economic, political, legal and environmental) factors. As the finding indicates, the bank specific factors include, higher risk appetite, over trading /financing, poor portfolio diversification /excessive lending to certain sector/region or product, excessive dependent on collateral than viability of a business, absence of due care /analysis and approval process not being prudent, ignorance of the bank's credit policy, requirements due to management's or customer's pressure, incomplete documentation, fraud and forgery, easily admitting/recruiting borrowers, unfair bank competition in recruiting customers rather than setting own credit standard, poorly negotiated credit terms, conditions and lax credit terms, absence of follow up, support and monitoring to check early symptoms and credit performers' capacity limitation (poor credit appraisal, failed to detect possible credit risks). The study also showed, in the umbrella of borrower specific factors, fund diversion (not using the fund for the intended purpose), business failure, some customers' intentional default (willful default), poor business and/or working capital management. Lastly other major causative factors under external factors were indicated in the finding like, political & civil unrest, restrictive laws in certain sectors, capacity limitation of supervisor's organization and intervention of external body in credit decision, absence of black listing of defaults at national level, bad credit culture and deteriorating integrity in as society, society's culture one does not buy foreclosed property of others, inflation and deflation, market problem (for both input and out puts), price escalation of inputs, shortage of rain fall, natural disaster, flooding, draught, volcanic eruption in the low land and absence of improved technology to support and control environmental happening.

Key words:

Non-performing loans, NPL, loan default.

Bank specific factors, borrower specific factors, and external (PESEL) factors.

CHAPTER ONE

1. INTRODUCTION

1.1. Back Ground of the study

Non-performing loans are one of the primary causes of financial institution failure, which ultimately harms the entire economy (Hou, 2007, cited on Birtukan, 2014). Given these realities, controlling non-performing loans is critical for the country's economic growth; otherwise, resources will be diverted to unprofitable projects and sectors, compromising not just financial stability but also economic growth. In order to control the non-performing loans, it is necessary to understand the root causes of these non-performing loans in the particular financial sector.

According National Bank of Ethiopia directive (SBB/69/2018) loan which has in default for 90 days or 3 month called Nonperforming loans (NPL's), these loans caused by nonpayment or failure in payment, although it relies on the agreement. Continuously increasing figures in nonperforming loans bringing threats in Banking Sector. The Banks are part of financial institutions; it's their function to provide funds against of collateral or non-collateral security which conversion of assets from excess to shortage of amount in economy. It is risky in treating or dealing effectively to accomplish their task, which is task oriented. Although cash is a part of an assets, when cash or loan could not be covered, then it effects on liquidity risk and credit growth, which puts the bank into trouble. The high borrowers or long terms borrowers are expected to be defaulters, so the long term or big borrowers should be treated carefully (Birtukan, 2014).

Conventional Banks are constantly failed in decreasing insufficient performance which is imagined or observed by remarkable business and extraordinary trouble that happens. Customers get dissatisfy while communicating the information during the request or claim that pressurize the recital or routine of the bank. Correct information should be provided by the customer while submitting loan request. The procedure or process of granting loans is a tough step, so the bank should take this step carefully. The management should be highly effective during operations all the activities should be performed with proper documentations and according to the agreement with respect to reach competence. In addition, the government of the country should create favorable environment to minimize the macro economic problems

that affect nonperforming loans of banks to strengthen the nation's economic development and sustainability of the financial institutions like banks (Likawunt, 2018).

The country's resources are becoming increasingly clogged by ineffective/problem projects as a result of the rising trend of nonperforming loans, lowering government revenue in terms of profit tax, currency exchange generation, job creation, forward as well as backward linkage, knowledge transfers, and the country's growth and transformation plan. Furthermore, the investor's profitability, bank performance, and long-term viability are all affected (Wondimagegnehu, 2012).

The main financial institutions in Ethiopia that are affected by this problem are banks and microfinance institutions, with a rising prevalence of non-performing loans over time. According to Proclamation No.592/2008, foreigners are not permitted to own or manage banks in Ethiopia (FDRE, 2008).

The reasons for loan default vary by country and have a multifaceted nature in both emerging and industrialized countries. There are numerous reasons why loans fail to perform in theory. Some are bank specific factors like aggressive lending, Bankers lack of integrity, over trading/lending. Some others may be Company/borrower specific lending like fund diversion, business failure, bad management and external factors like poor credit culture, capacity limitation of supervisory organ, Defaults not being blacklisted, macroeconomic considerations Weak economic circumstances, high real interest rates, inflation, flexible credit terms, credit direction, high credit growth, and risk appetite are all factors to consider, poor monitoring and other related macroeconomic problems (Keieso et al, 2011). Therefore this study was conducted in order to identify and indicate the factors that causes of non-performing loans in commercial banks in Ethiopia.

1.2. Background of Banking Industry in Ethiopia

Modern banking in Ethiopia began in 1905 with the Bank of Abyssinia, a private enterprise managed by the Bank of Egypt, thanks to an agreement signed between Emperor Minilik II and Mr. Ma Gillivray, a representative of the British-owned National Bank of Egypt. It was liquidated and replaced by the Bank of Ethiopia, which served as the country's central bank until the 1936 Italian invasion. Bank of Italy banknotes served as legal money under the Italian occupation. Ethiopia was temporarily a member of the East Africa Currency Board during the British mandate. The State

Bank of Ethiopia was established in 1943, with two sections handling the responsibilities of an issuing bank and a commercial bank, respectively. The Commercial Bank of Ethiopia (the governing and issuing bank) and the National Bank of Ethiopia (the governing and issuing bank) were established in 1963 to formally separate these roles. Between 1974 and 1974, several other financial institutions arose, including government institutions such as the Agricultural and Industrial Development Bank (established primarily to finance state-owned enterprises), the Ethiopian Savings and Mortgage Corporation, and the Imperial Savings and Home Ownership Public Association (all of which were established to finance state-owned enterprises) (which provided savings and loan services). Among the largest private commercial institutions, the Addis Ababa Bank, the Banco di Napoli, and the Banco di Roma, many of which were foreign-owned, were the Addis Ababa Bank, the Banco di Napoli, and the Banco di Roma. However, the socialist regime's (the Dergue regime's) nationalization of private investments hindered the banking industry, leaving only three government banks: The State Bank of Ethiopia, the Commercial Bank of Ethiopia, and the Agricultural and Industrial Development Bank. When the socialist dictatorship was deposed in 1991, this was overturned.

The EPRDF announced a liberal economic structure after overthrowing the Dergue dictatorship in 1991. The 1994 Monetary and Banking Proclamation established the National Bank of Ethiopia (NBE) as a separate judicial institution from the government and stated its main functions. The Monetary and Banking Proclamation No.83/1994 and the Licensing and Supervision of the Finance Industry Proclamation No.84/1994 provided the legislative framework for investment in the banking sector (www.nbe.gov.com). After the proclamation of 1994, the first private bank, Awash International Bank was established in 1994 by 486 shareholders paving a way to the establishment of related private banks such as Dashen Bank (1995), Abyssinia Bank (1996), Wegagen Bank (1997), United Bank (1998), Nib International Bank (1999), Cooperative Bank of Oromia (2004), Lion International Bank (2006), Oromia International bank (2008), Zemen Bank (2006), Buna International Bank (2009), Birhan International Bank (2009), and others.

1.3. Statement of the problem

Most financial institutions' loan portfolios are their major operating assets and source of revenue. However, some of the loans given out become non-performing and adversely affect the profitability and overall financial performance of the lending institutions. Because deposits account for more than 85 percent of a bank's liability, the banking industry is extremely sensitive (Wondimagegnehu, 2012). Banks use these deposits to extend credit to their customers, which is a revenue-generating activity for most institutions. The Banks are exposed to a high default risk as a result of this credit generation process, which could result in financial difficulties, including bankruptcy. Interest income and interest expense are the main determining factors for the profitability of private banks in Ethiopia (Yigremachew, 2008). The link between credit risk and business profitability may appear to be conscience: the more commercial banks expose themselves to credit risk, the more unpaid loans accumulate, meaning that these loan losses have resulted in reduced bank returns. The aggregation of non-performing loans due to a lack of appropriate credit risk management would have a significant negative impact on bank performance and the economy as a whole. Loans are a nasty business, despite the fact that they represent a major source of income for banks and one of their most valuable assets. That is also why observing the bank specific and borrower specific factors/causes of bad loans and external (macroeconomic and socio-cultural) issues before extending or providing loans & advances an important issue. Indeed, credit risk is seen as the most dangerous of all the threats that banks face, as bad debts would diminish the bank's profit margin. It is important to note that credit risk arises from a loss of trust in a counterparty's capacity to meet its obligations for a variety of reasons, which can lead to loan quality degradation. The decline of bank loan quality is one of the main causes of financial instability. The health of a bank's portfolio is influenced by the health of its borrowers; bankruptcies wreak havoc on the financial industry in many countries (Alemu, 2011). A healthy financial system demands, among other things, a low level of non-performing loans, which allows a country to prosper economically.

As per the National Bank of Ethiopia Annual reports shows, the amount of non-performing loans is becoming beyond thresh holed level of nonperforming loans, 5 % seated by national bank of Ethiopia. As Lending is the primary component of bank activity to make profit; this problem has great impact on the banks sustainability and it is crucial for every bank to identify

the causes of bad loans, and to manage such poor loans so that their influence on the bank's performance is minimized. It will boost their profitability and sustainability in the future if it is correctly managed. If banks fail to do so, their performance and profitability will be compromised. (Alemu, 2011).

Bank failures, financial crises, and macroeconomic issues are all linked to high levels of non-performing loans. The failure of one bank might trigger a run on other banks, which would spread throughout the financial industry and to other parts of the world. Regular monitoring of loan quality, possibly with an early warning system capable of notifying regulatory authorities of approaching bank stress, is necessary to ensure a healthy financial system and avoid systemic catastrophes. There have been very few scholarly works undertaken in the Ethiopian banking business in this regard. Wondimagegnehu (2012), Zelalem (2013), Gadise (2014), and Anisa (2015), for example, are notable. Wondimagegnehu (2012) used a questionnaire to identify bank specific factors that determine NPLs in the Ethiopian banking sector. Poor credit assessment, performed poorly loan monitoring, poorly developed credit culture, flexible loan terms and conditions, aggressive lending, compromised integrity, inadequate administrative frameworks, unfair business practices among banks were among the factors identified. He failed to address other bank specific factors like dependency on collateral, banks risk appetite, diversification. Zelalem (2013), on the other hand, investigated the macroeconomic and bank-specific causes of NPLs in Ethiopian banks using a mixed research technique. Among the bank-specific variables examined, the study discovered that loan growth, profitability, and productivity improvement are the most relevant and statistically significant variables affecting NPLs. But he failed to detect external factors other than macroeconomic issues. Sirak (2016) Variables such as poor credit risk assessment, focusing on collateral and cash flow based lending, poor loan monitoring and follow-up, poor banker's skill in dealing with lending matters, undiversified loan products, short loan life and lack of credit advisory practices, providing unreliable information and previous financial performance by the borrower, using the loan for unintended purposes that are undesirable from the banks' point of view, lack of borrowers credit worthiness, willful default by the borrowers and borrowers poor credit knowledge and orientation were found to be the most important bank specific factors that affect NPLs. Gadise (2014) investigated the macroeconomic and bank-specific variables of NPLs in Ethiopian banks using a quantitative research approach and secondary data. Return on equity

and capital adequacy ratio have statistically significant effects on NPLs, according to the study. Anisa (2015) revealed that financing costs, loan-to-deposit ratios, and lending interest rates all had a positive and significant influence on bank NPLs in a study based on secondary data. Despite the fact that the research has certainly aided the field, there is still a research vacuum to be filled. Despite that a lot of bank-specific attributes, Anisa (2015) utilized secondary data from other banks (cost efficiency, deposit rate, loan to deposit ratio and lending interest rate). Other measures, such as return on equity and credit growth rate, might help determine a bank's nonperforming loan percentage (NPL). Furthermore, during the loan process, Zelalem (2013), Gadise (2014), and Anisa (2015) disregarded the credit performers' capacity. As a result, credit performer competence and knowledge should be considered and researched. Although some researchers disagree, Gadise (2014) contends that inflation has no effect on NPL and that raising the lending rate reduces the amount of NPL. The aforementioned facts and inferences, as well as the research gap identified above, need a study to completely comprehend the major drivers that influence non-performing loan in Ethiopian commercial banks.

1.4. Research Questions (RQ)

In order to meet the research objectives, the researcher has developed the following research questions.

- 1) What are the key bank specific causes of non-performing loans in commercial banks?
- 2) What are the most crucial borrower-specific factors in non-performing loans?
- 3) What are the external factors that triggers nonperforming loans?

1.5. Objectives of the study

1.5.1. General objective

The study's overall task is to identify the factors of non-performing loans in Ethiopian commercial banks, with a focus on some selected commercial banks.

1.5.2. Specific objectives

1. To identify bank specific causes of non-performing loan in Ethiopian commercial banks
2. To identify borrower-specific causes that contribute to commercial bank non-performing loan.
3. To examine what external factors have an impact on non-performing loans in commercial banks.

1.6. Significance of the study

This study assists Ethiopian banks in general in gaining insight into what it takes to improve loan quality and examining its banking supervisory policy relevant to ensuring asset quality in banks. Furthermore, the research would add to the existing body of information about the reasons of non-performing loans and encourage further research across the board for all institutions.

In addition, this study will be significant to the Banks, to detect and identify the major bank specific, borrower specific variables and external factors which contribute for bad loans. The research will enable the banks to find the right strategy to overcome the causes and the possible actions to be taken to sustain their profitability, sustainability and support the country's Growth. Understanding the causes of non-performing loans helps the country to fully exploit the benefits from the banking sector that is essential for sustainable economic growth. The outcome of this study will provide useful inputs in the formulation of macro-economic policies of the country, formulate credit procedures of banks and will help policy makers (supervisory organ) and related bodies to take appropriate measures to remove the obstacles and able to fully utilize the benefits of the sector.

1.7. Scope and limitation of the study

This study was limited to causes of non-performing loan in some selected commercial banks. It will focus on the bad loans, which are the loans that are unable to be paid back to the bank by the customers.

Due to the confidential policy of banks, access to customer and banks information, except officially disclosed financial information, was not possible. The study was also limited to bank employees' and officials' personal perception and officially disclosed financial data of banks. The study was limited to some selected commercial banks and not included other governmental and private banks.

1.8. Organization of the study

The study is organized into five chapters in terms of structure. The study's background, problem of statement, research questions, purpose of the investigation, significance of the study, scope of the study, and limitation of the study are all covered in the first chapter. The review of related literatures were offered in the second chapter. The third part covers research technique,

while the fourth chapter covers data analysis and interpretation. Finally, the study's conclusion and recommendations are discussed in the fifth chapter.

1.9. Definitions of Terms

Credit analysis is a thorough examination of a company's or organization's creditworthiness, as well as a strategy for identifying potential funding risks and assessing the company's ability to repay debt of any sort.

Nonperforming loans are bad loans which their quality has deteriorated to the point where full collection of the outstanding balance in accordance with the agreed up on terms and conditions is in doubt; or when principal and/or interest is due and uncollected for 90 (ninety) days or more beyond the scheduled payment date or maturity (NBE Directive, SSB/69/2018).

The possibility that a financial contract will not be completed as agreed is referred to as credit risk. Counterparty risk refers to the risk that an asset's counterparty will default.

Borrower: a person who borrows money from a lender (Bank).

Lending is defined as the provision of resources (granting a loan) by one party to another.

CHAPTER TWO

2. LITERATURE REVIEW

2.1. Theoretical review of Banking

Banks are financial institutions that are founded to lend, borrow, issue, exchange, and take deposits, safeguard, or handle money in accordance with a country's laws and guidelines. Credit provision is the major product that banks supply to potential business owners as a main source of income among their activities. Commercial banks lend money to a wide range of people for a variety of reasons. Bank credit is the principal source of debt financing for the majority of customers, and quality loans are the most profitable assets for banks. Extending loans to firms and individuals, like any investment, entails taking a risk in order to gain a high return. Loan interest, fee income, and investment income from fresh deposits are all sources of income. Banks often use loans to promote other fee-generating services to its customers. Credit risk is the most commonly anticipated risk.

Loan defaults can be caused by a variety of situations. Because of general economic circumstances, an entire sector, such as power, farming, or real estate, can collapse. Technological changes, labor disputes, change in consumer preferences, and poor management can all cause company-specific issues. As personal income increases and falls, individual borrowers find that their ability to repay closely follows the business cycle. As a result, loans as a group have the highest charge-off rates among bank assets, prompting banks to set aside significant reserves to cover expected losses. Banks act as mediators, collecting money from those who have it and lending it to those who require it for investment. One way banks contribute to economic growth is through making loans to borrowers. The banking business revolves around lending. Loans are the most prevalent asset in most banks, accounting for a larger percentage of total assets, generating the majority of operational revenue, and exposing the bank to more risk (Mac Donald and Koch, 2006). Furthermore, it contributes significantly to any country's prosperity by acting as the primary middleman between depositors and those in need of funding for viable enterprises (creditors), ensuring that the money in the economy is always put to good use. The importance of banks in any country's economy cannot be overstated. They operate as a middleman, collecting money from those with excess and lending it to those who need it for their investments. Providing loans to borrowers is one way that banks contribute to economic growth. The banking industry's lifeblood is lending. Most banks' most

valuable asset is loans, which account for 50-75 percent of total assets, generate the majority of operational revenue, and expose the bank to greater risk (Mac Donald and Koch, 2006). Furthermore, it makes a significant contribution to any country's progress by acting as the principal middlemen between depositors and those in need of funds for feasible initiatives (creditors), making sure that the money in the economic system is put to better use at all times. As a result, properly managing loans has a favorable impact not just on the performance of banks, but also on the performance of borrowers and the country as a whole. Failure to manage loans, which account for the majority of a bank's assets, will almost certainly result in a high percentage of non-performing loans.

2.1.1.Credit Methodology

Every bank activity has its own process to approve loans to its customers in most cases to provide loans Banks have two Major process, these are, accepting credit request, consulting and collecting required documents in one wing and credit assessment and appraisal in the other wing to avoid the conflict of interest and used for check and balance of each loan provision.

2.1.2.Credit Assessment

Banks accepts applications from both recruited and walk-in customers if they fulfill the Bank's loan requirements. The Credit Process mainly focus on recruiting customers by attracting and persuading potential applicants using appropriate means of communication. This requires the understanding of the strategic and operational plan of the Bank and identifying the sources of such potential customers. It is also important to promote the Bank's services, offer options of model bankable projects and encourage potential investors to apply for credit. The Credit Process and/or branch offices should select potential customers applying for project financing based on the eligibility criteria and checklists for customer requirements:

Due diligence or KYC (Knowing your customer) assessment will be undertaken by the Bank to identify the integrity of the borrower. This is done to protect the Bank from entering into relationships with inappropriate borrowers and to check the borrower's credit worthiness. This requires knowledge of gathering and evaluating KYC information of the applicant in compliance with the due diligence assessment guidelines and formats of the banks' and the requirements of the *NBE Directive No SBB/46/2010*.

2.1.3.Credit appraisal

An appraisal is a thorough and methodical examination of all aspects of a proposed project. After a project has been prepared, it is generally appropriate for a critical review or an independent appraisal to be conducted. This provides an opportunity to re-examine every aspect of the project plan to assess whether the proposal is appropriate and sound before large sums are committed.

That is why project appraisal and working capital support are usually seen as a major activities of lending institutions while project feasibility study/business plan is normally undertaken by project promoters/consultants.

2.1.4. Credit Approval

Once loan applications for financing of development projects are received and screened for appraisal by the Credit Process/branches, the Projects Appraisal Sub-Process/regional appraisal teams appraise the project; it needs to be decided upon by the Loan Approval Team/regional approval teams. The LAT (loan approval team) is to make decisions on the approval or rejection of the loan

2.1.5. Supervision and Follow-up

On-site and off-site supervision methods are used by banks for project supervision and follow-up. The goal of follow-up is to make sure that the initiatives that have been funded are properly implemented and operational. It also facilitates in the technical assistance and support as needed.

2.1.6.Banking Risks

Risk management is a central regulation in any financial institution that incorporates all acts that govern its risk profile. It entails risk identification, measurement, monitoring, and management. Risk-taking is ingrained in the banking industry, and earnings are a component of the payoff for effective risk-taking. Excessive and poorly managed risk, on the other hand, might result in losses, threatening the bank's long-term viability. Risk in a banking organization refers to the likelihood that the outcome of an occurrence could bring adverse impacts on the institution's capital, earnings or its viability. Such outcomes could either result in direct loss of

earnings and erosion of capital or may result in burden of restriction on the bank's capability to meet its business objectives and to execute its strategies successfully. It is envisaged that it will ensure that the bank's risks are justified. When risks are understandable, measurable, controlled, and within the bank's capacity to endure negative outcomes, they are considered justifiable. Sound risk management systems enable the bank to take calculated risks, minimize risks when necessary, and plan for a future that cannot be forecast with absolute certainty.

Banks must have a thorough risk management strategy (with oversight from the board and senior management) in place to identify, evaluate, monitor, control, or mitigate any material risks, as well as review their overall capital sufficiency in relation to their risk profile. Whilst the types and degree of risks in an organization may be uncovered depend upon many factors such as its size, complication, business activities, and amount etc. The most common risks the bank faces, namely: Credit Risk, Liquidity Risk, Interest Rate Risk, Foreign Exchange Rate Risk and Operational Risk. But credit risk has effect/relation on/with the other risks directly or indirectly.

2.1.7.Credit risk

The risk that a bank's borrower or counterparty may fail to meet its obligations in line with agreed terms is known as credit risk. It is the most significant risk that banks and banking systems confront, and it requires full management attention and proper administration.

Credit risk arises any time bank funds are extended, committed, invested, or otherwise exposed, whether reflected on or off the balance sheet;

From several factors such as weak or nonexistent credit standards for borrowers, poor loan portfolio management, individual borrowers' ability to repay, general economic conditions, specific events, and from local, regional or national causes.

Credit risk is the single most important element affecting a bank's and the financial system's overall stability. Banks must manage credit risk across the board as well as risk associated with specific credits or transactions. Over time, poor credit risk management techniques and terrible credit quality have remained the primary drivers of bank collapse and banking crises around the world.

2.1.8. Banks Credit Risk Management system

Risk management is a regulation at the nucleus of each banking organization and incorporates all the activities that have an effect on its risk profile. It involves launch the contexts, identification, measurement; monitoring and controlling risks.

2.1.9. Risk identification

The first stage in mitigating a potential risk is to identify risks once the context has been established. Events that, when triggered, produce issues are referred to as risks. As a result, risk assessment can begin with the source of the problem or with the problem itself. Risk should be identified on an ongoing basis, and risk should be understood at both the transaction and portfolio levels. Brainstorming, questionnaires, business studies, audits, and inspections are some examples of identifying risks strategies.

2.1.10. Risk measurement/assessment

Once the risks associated with a particular activity have been identified, the next step is to measure the significance of each risk. Each risk should be viewed in terms of its three dimensions: size, duration and probability of adverse occurrences.

2.1.11. Risk treatment/control

After measuring the significance (severity and probability of occurrence) of risks, it is important to design mechanisms to mitigate their adverse effect. Strategies of risk treatment include:

➤ Avoiding the risk- This entails not engaging in risky behavior; Transferring the risk to another party- This entails convincing another party to accept the risk, typically through the purchase of insurance policies or the use of hedging financial instruments; Reducing the negative impact of the risk- This entails putting in place mechanisms that may mitigate the severity of the loss; Accepting risks- This entails accepting the loss when it occurs.

2.1.12. Risk Monitoring

Results of past practice, experience and actual loss should be reviewed and evaluated to update the risk management framework accordingly. This is important to evaluate whether the

previously selected risk management strategies and systems are still applicable and effective for the changing environment.

2.1.13. NPL criteria according to the National Bank of Ethiopia's directive (NBE)

Directives given in regard to non-performing loans are classed based on the following criteria, according to Ethiopia's national bank.

I. If the principal and/or interest is due and unpaid for 90 days or more beyond the due date or maturity date, the loan or advance is nonperforming.

II. Non-performing loans and advances are those that do not have a pre-determined repayment plan and stay unpaid for 90 days or more after the due date or maturity date.

The debit exceeds the borrower's authorized limit for 90 days or longer. Interest is due if you owe money and haven't received it in 90 days or longer.

The account has been dormant for 90 days and/or the deposit is insufficient to cover the interest capitalized during that time in the case of an overdraft.

The total principal balance of any outstanding loans or advances that exhibit the characteristics indicated in I and II are termed nonperforming (NBE, 2002).

The regulation also states that banks must classify loans and advances into one of five categories, depending on whether they have pre-determined repayment schedules or not.

1. Pass: These loans are completely protected by the borrowers' current financial and repayment capacities, and they are not subject to examination. This category includes any loan or advance, or portion thereof, that is fully secured by cash or cash substitutes, both in terms of principal and interest, regardless of past due status or other adverse credit factors.
2. Special Mention: Any loan or advance that has been past due for at least 30 days but not more than 90 days.
3. Substandard: A non-performing loan or advance that has been past due for 90 days or more but less than 180 days is classed as substandard.
4. Doubtful: Non-performing loans or advances that have been past due for 180 days or more but less than 360 days are classified as questionable.
5. Loss: Non-performing loans or advances that are 360 days or more past due are classified as losses.

2.2. EMPIRICAL LITERATURE REVIEW

2.2.1. Related Literature review in other countries case

In a study of the drivers of non-performing loans in Nigeria Akinlo and Emmanuel (2014), discovered that, in the long run, economic growth is negatively associated to nonperforming loans. On the other side, unemployment, private sector credit, and the exchange rate all have a positive impact on nonperforming loans in Nigeria. In the short run, private sector credit, currency rate, lending rate, and stock market index are the most important elements affecting non-performing loans.

Badar and Yasmin (2011) prove that, there is long run relationship with in Nonperforming Loans and the macroeconomic indicators of Consumer Price Index (CPI), Exchange Rate (ER), Gross Domestic Product (GDP), Money Supply (M2) and Treasury Bill Rate (TB).

Ahmad and Bashir (2013) in research of Explanatory Power of Macroeconomic Variables as Determinants of Non-Performing Loans: Evidence from Pakistan found that, GDP growth, inflation rate, CPI, exports and industrial interest rate are significantly associated with NPLs, whereas unemployment, real effective exchange rate and FDI) are insignificantly associated with NPLs.

According to the subjective question, the most common factors indicated to cause the occurrence of nonperforming loans include fund diversion, over/under financing, compromised integrity, credit operators' capacity limitations, business failures, willful default, poor portfolio diversification, and changing policy environment. Furthermore, responders from both private and government-owned banks have a lot in common (W.N. Geletta, 2012). Accordingly poor credit assessment caused by credit operators' capacity limitations, institutional capacity limitations, and a lack of national data for project financing led to the creation of terms & conditions which were not functional and/or not properly discussed with borrowers, resulting in loan default. Furthermore, regardless of the fact that credit monitoring and follow-up play a vital role in assuring loan collection, inadequate credit monitoring and follow-up has been connected to sick loans. Over financing due to poor credit evaluation and weakened credit operator integrity were additional factors in NPL occurrences, according to the study. In fact, defaults were linked to incidents of underfunding credit requirements, which resulted in a lack of operating capital or the inability to reach anticipated targets.

Selma and Jouini (2013) by using the method of panel data on Micro and Macro Determinants of Non-Performing Loans, they found that, problem loans vary negatively with the growth rate of GDP, the profitability of banks' assets and positively with the unemployment rate, the loan loss reserves to total loans and the real interest rate.

Credit Orientation/Culture and NPLs, as well as the country's socioeconomic underdevelopment, which is also linked to limited access to formal banking, as seen by a larger bank branch to population ratio (NBE, 2011), indicate that Ethiopia's credit culture is still developing. That was also why Ethiopian banks had a disproportionately high nonperforming loan (NPL) ratio. "Either a borrower or a lender might die," says an Ethiopian adage, implying that a borrower should not bother repaying debts. As a result, cultural development has a significant impact on loan performance.

According to the study, 87.4% of respondents agree that lenient / lax credit terms induce loan default. Poor assessment is due to credit operators' capacity limitations. A superficial assessment would fail to accurately identify the loan's terms and conditions. This could indicate that the loan was not disbursed on time, that the grace period was not properly given, or that the repayment amount was set incorrectly without taking into account the cash flow. Either of them, or something linked to them, would result in poor loan performance. As a result, failing to include acceptable terms and conditions could result in loan default (W.N. Geletta, 2012).

According to several studies, high-interest loans are much more likely to default. One argument might be that the levied interest rate is lower when compared. According to NBE (2011), the price index for non-energy commodities was 29 percent higher at the start of 2011 than a year earlier, despite the fact that the average loan rate in 2010/11 was just 12.25 percent. However, if a company has a high profit margin, interest payments on loans may not be a problem, resulting in loan default (W.N. Geletta, 2012). Fund diversion for unintended purposes, over/under financing, unfair competition among banks, compromised integrity, willful default, inadequacy institutional competency, credit operators' low level of competence, borrowers' skill gap, and policy environment (supervisory) are some of the factors that contribute to the occurrence of NPLs (W.N. Geletta, 2012).

Non-performing loans are dangerous not only for a country's economy, but for the entire world, as we have seen with the financial crises caused by these loans in East Asian countries, America, and Sub-Saharan Africa. Therefore, it is the need of the era to identify the factors that

cause non-performing loans, as researchers believe that once we identify these factors, we will be able to make policies to prevent future occurrences of these loans (Adebola et al, 2011).

Regarding economic factors causing non-performing loans in the Banking sector of Pakistan since 2006, all hypotheses were accepted, and correlation and regression data analysis revealed that Interest Rate, Energy Crisis, Unemployment, Inflation, and Exchange Rate have a significant and positive relationship with non-performing loans, whereas GDP growth has a significant and negative relationship with non-performing loans. The main causes of non-performing loans in Pakistan include poor energy sector performance and weak economic settings/conditions (Muhammad and colleagues, 2012).

Since 2006, Pakistan has been experiencing an energy crisis, with the majority of industrial units becoming sick or closing, resulting in a large number of non-performing loans. Since 2006, the majority of bad loans have been caused by the country's severe energy crisis; the energy crisis not only reduces unit output, but it also affects the borrower's debt service ability, as alternative energy sources are very expensive, resulting in high production costs (Muhammad et al, 2012).

Unemployment is the other factor which has caused a huge volume of non-performing loans especially in the consumer financing. If a person has no source of income and cannot afford to buy food, how can we expect him to make his loan installments on time? This is why Pakistan's consumer sector has a large number of non-performing loans. If the unemployment problem is solved and people are given jobs and other sources of income, it can have a positive impact on product demand because increased unemployment in the economy has a negative impact on product demand, which in turn has a negative impact on firm production/sales, which leads to a Revenues are down, and the company's financing condition is shaky (Muhammad et al, 2012).

Makri et.al (2014) Use a dynamic panel framework covering the period 2000–2008 to investigate the determinants of NPLs of 17 countries of the Eurozone. The authors document how the capital ratio, ROE public debt, GDP, and unemployment, influence the dynamic of NPLs. Regarding the Greek banking system, Konstantakis et al. (2016), by vector error correction model (VECM), figure out the key role played by public debt on NPLs pattern. This suggests how the Greek fiscal problems during the sovereign debt crisis are associated with the NPLs boost. Anastasiou et al. (2016) conduct an investigation on the Euro area banking system

for the period 1990Q1–2015Q2. By GMM estimations, the authors find that ROA and ROE negative affect the NPLs, as well as the GDP growth and public debt. Moreover, they evidence a significant positive coefficient for the unemployment rate. Similar results are highlighted by Anastasiou et al. (2019) and Bussoli et al. (2020). In particular, Anastasiou et al. (2019), using a fully modified ordinary least squares (FMOLS) model and a Bayesian panel-integration vector auto regression framework, evidence the importance of banking market fragmentation within Eurozone countries. In fact, the analysis highlights the negative effect of austerity policies on periphery countries, namely a positive effect on NPLs.

Kjosevski et al. (2019) utilize a multivariate Autoregressive Distributed Lag (ARDL) model to study the bank-specifics and macro determinants to enterprises and households in the Republic of Macedonia. Their results support the notion that macroeconomic factors such as GDP growth and unemployment rate impact the level of NPLs. In addition, bank-specific variables such as profitability, business, and household loan growth have a negative effect, while bank solvency positively affects the NPLs. Focusing on the banking system of Bangladesh, Zheng et al. (2020) document the strong relationship between macroeconomic environment and credit risk.

Commercial banks must take into account the home economy's foreign competitiveness because this may affect borrowers from major export-oriented sectors' ability to repay their loans, resulting in a rise in non-performing loans. Given the fact that loan delinquencies are expected to be higher during periods of economic depression, these lending institutions should also consider the performance of the actual economy when granting loans. Finally, he stated that banks should assess their loan interest rates on a regular basis because banks that raise their real interest rates have greater loan delinquencies. The Bank of Guyana should also expand its monitoring framework to include macroeconomic prudential indicators such as GDP and real exchange rate when assessing the stability and soundness of the banking system (Tarron, 2004).

Dynamic panel data methods were used to examine the determinants of non-performing loans (NPLs) in the Greek financial sector, according to a study published in September 2010 by Dimitrios P. Louzis, Angelos T. Vouldis, and Vasilios L. Metaxas on Macro - economic factors and bank-specific determinants of non-performing loans in Greece. The real GDP growth rate, the unemployment rate, and lending rates, among other macroeconomic variables, were found to have a substantial impact on the number of NPLs. Furthermore, bank-specific variables such

as performance and efficiency indicators were found to have greater explanatory power when added to the baseline model. Providing support to the 'poor management' hypothesis relating these indicators to management quality. The quantitative effects of the main NPL drivers fluctuate significantly depending on the loan type, according to empirical findings. The research's conclusions have a number of regulatory and policy consequences. Performance and inefficiency measures, in particular, may act as leading indications of future problem loans, according to studies. This means that regulators may use these metrics to spot banks that are seeing an increase in nonperforming loans. In order to avoid future financial instability, regulators should place a higher emphasis on banks' risk management systems and processes (Louzis and colleagues, 2010).

Based on banks supervision and nonperforming loans: a cross-country analysis, Boudriga et al, (2006) established an empirical technique to investigate the bank industry characteristics and supervisory drivers of NPLs on a cross-country basis. The impact of successful regulation execution was measured using interactions of three institutional factors (corruption, democracy, and rule of law) with each of the supervisory proxies. In contrast to previous research, this study includes interaction terms among political and business environment variables, as well as each of the supervision variables, to assess their impact on bank credit exposures.

They discovered that there is substantial evidence on the link between NPLs and bank specific characteristics using aggregate data from 59 countries for the period 2002-2006 using robust econometric approaches. Higher CARs and provisioning ratios, in particular, are inversely related to the number of troubled loans. Even when the sample is divided into developing and developed countries, the results remain consistent. Report on the positive effects of private ownership, international participation, and bank concentration on bank sector stability. Foreign entry, on the other hand, is said to worsen financial institutions' credit vulnerability in developed countries. They argue that foreign banks and investors, in comparison to local banks, take on greater risks as a result of aggressive commercial methods when entering domestic markets. Only financial development explains the level of NPLs among the control variables. In industrialized countries, however, economic conditions have little impact on bank credit decisions. Economic cycles appear to be important only in emerging countries. Finally, consider how effective the supervisory system is in reducing credit risk exposures. Our findings show

that there is no evidence of a link between government monitoring and problem loans. This adds to the mounting evidence that such gadgets are ineffective (Boudriga et al, 2006).

The results, however, are hampered by the fact that the measures adopted are limited to legislative powers. As a result, they do not address the issue of effective supervisory reform implementation. Introduce three interactions utilizing the level of corruption, the degree of political openness, and the rule of law to study this channel. All of these factors are anticipated to have an impact on regulatory efficacy. This study contradicts the notion that market discipline leads to improved economic outcomes and a decrease in the number of issue loans. The argument is based on the fact that the number of issue loans has no relationship with the variable private monitoring. Using various specifications, the coefficients were never entered in a significant way (interaction terms and subsamples of developed and developing nations). Furthermore, all regulatory devices have a negative impact on problem loans or do not significantly improve credit risk exposures in nations with inadequate institutions, a corrupt business environment, and insufficient democracy. The findings of the developing countries panel back up these assertions. Furthermore, the variable supervisory power has a positive link with the level of nonperforming loans, according to the coefficient estimate. Giving central bankers more power, according to our findings, is detrimental for financial stability in developing countries. First, higher CARs results in less credit exposures. Second, more developed financial systems experience improved stability. As a result, international authorities must continue to strive for better financial development. Third, private ownership and foreign interaction ensure healthier financial institutions in fewer developing economies. Despite the absence of proof of causation, the findings show that foreign participation is critical in reducing credit exposure for financial institutions. In industrialized countries, however, foreign entry resulted in more problematic loans. Finally, in countries with weak institutions, enhancing the legal system, establishing institutions, and increasing transparency are all effective approaches to reduce credit risk exposure (Boudriga et al, 2006).

Beck et al (2013) Based on the econometric analysis of the empirical determinants of NPLs presented in their paper suggests that real GDP growth was the main driver of non-performing loan ratios during the past decade. As a result, a drop in global economic activity poses the largest risk to bank asset quality. At the same time, other factors in nations with particular

vulnerabilities may have a detrimental impact on asset quality. In countries where unhinged borrowers are financed in foreign dollars, exchange rate depreciation, in particular, could contribute to an increase in nonperforming loans (approximated by international claims which are mainly denominated in foreign currencies). A drop in stock prices, according to the study, has a negative influence on bank asset quality, especially in countries whose stock markets are large in comparison to GDP.

These dangers have recently manifested to some extent. The depreciation of local currencies in Central, Eastern, and Southeast Europe against the Swiss Franc and, to a lesser extent, against the euro has already affected asset quality, as seen in Poland, Hungary, and Croatia, where lending in these currencies is widespread. The worldwide stock market downturn in 2011 is expected to have a negative influence on bank asset quality, particularly in developed economies with large stock markets. In terms of macro prudential policy, the paper's results indicate that decision makers should consider including currency fluctuations, stock prices, and interest rates consistently in "microeconomic tests" – which normally underpin situations for a rise in NPLs with an underlying economic scenario for real GDP – as well as their impact on asset quality. They clearly point to a problem with macroeconomic modeling, which commonly ignores asset prices and (endogenous) exchange rates. Because the influence of exchange rates and stock prices at same time is difficult to account for, (advanced) economies might want to compare their NPL models to our criteria, which include stock prices but not the currency rate. Our parameters that exclude share prices while allowing the exchange rate to play a role (through both the competitiveness and the balance sheet channels) are expected to be more suitable for emerging countries with less developed capital markets and greater exchange rate vulnerability. In terms of monetary policy, central banks should consider the significant impact of lending interest rates on bank asset quality not only because of the possible negative impact on financial stability, but also because systemic banking crises frequently result in economic contractions due to negative feed-back consequences between the financial and real economies. As a result, such crises may result in deflation, which is incompatible with the medium- to long-term goal of price stability (Beck et al, 2013).

(Vogiazas and Nikolaidou (2011)'s findings have numerous policy and regulatory significance. In particular, the macroeconomic relevant factors revealed could be used as early warning

indicators of credit risk deterioration. Legislators should keep an eye on neighboring nations' macroeconomic prospects as well as the potential of contagion from Greek banks' subsidiaries in Romania because most SEE economies rely largely on the financial sector for growth.

Jakubík and Reininger (2013) the report proposes a macro-model that explains the economy's evolution, as well as the CESEE countries' high aggregate nonperforming loan ratio. Shows how the development of both the local and foreign components of aggregate demand, i.e. domestic and foreign demand, might effect NPL growth. The empirical findings also suggest that stock prices have a delayed effect on NPLs. Stock indices serve as leading factors for financial and economic events that have a direct impact on the NPL ratio, and they may also capture influences not captured by the model. Stock indices could potentially indicate a direct effect mediated by the value of loan collateral. Because stock exchange markets play a smaller role in CESEE than in advanced economies, the transmission mechanism may not work through wealth effects among borrowers or the reduced ability to finance fresh equity offerings. Furthermore, the findings support Beck et al (2013)'s conclusion that a local currency's depreciation can have a significant negative influence on the quality of a bank's assets. The extent of this impact is determined by the proportion of foreign currency loans in total loans; statistics on this proportion were readily available for the nations studied, and thus could be paired with exchange rate changes to create a meaningful and relevant explanatory variable. As has been repeatedly emphasized in various recent studies and policy discussions, the influence of the private credit-to-GDP ratio indicator appears to be significant for explaining the evolution of banks' asset quality (Borio, 2012).

The study Espinoza and Prasad (2010) attempted to determine the determinants of NPLs in the GCC banking sector using a bank-by-bank panel dataset using fixed effect, difference GMM, and System GMM models. The empirical data support the idea that both macro- and bank-specific factors influence the level of nonperforming loans. In particular, there was strong evidence of a significant negative relationship between real (nonoil) GDP and nonperforming loans. The study also discovered that bank nonperforming assets are affected by global financial market circumstances (NPLs). This means that regulators and central banks in the Gulf Cooperation Council (GCC) must exercise caution when it comes to increasing nonperforming loans (NPLs) during periods of low growth and credit constraints.

Efficiency and previous balance sheet expansion were revealed to be key bank control factors. The study used a panel VAR to estimate the impact of rising NPLs on the real economy. The model demonstrates that there is a significant, albeit short-lived, feedback effect on non-oil growth in the GCC, with a semi-elasticity of around 0.4. These conclusions, however, are based on research done when the region was free of systemic banking problems. Because the feedback effect is likely to be nonlinear, costs could increase once NPLs surpass a particular threshold. Policymakers in the GCC should keep a careful eye on the evolution of default in bank loan books as a result of the model. The conclusions of the study have implications for future financial system regulation and oversight in GCC countries. In the context of their exchange rate pegs, a stronger focus on macro prudential regulation, particularly capital and liquidity buffers, as well as countercyclical provisioning, could help mitigate the impact of macroeconomic risks on the banking system and the feedback effects of credit risks on the economy.

Saba et al (2012) tried to determine the factors of nonperforming loans (NPLs) in the US banking system. The empirical findings confirm the hypothesis that macroeconomic parameters such as the interest rate and real GDP per capita are linked to the rate of nonperforming loans. Based on their statistical study designs, different studies yield different variables. This transformation, however, is dependent on situational elements like as country-level factors, bank-level factors, and legal and regulatory framework characteristics. According to a study, while making loans in the United States, banks should consider Real GDP per Capita. According to correlation, Real GDP per capita has the strongest (68%) association with the NPL rate. Other factors have significant relationships of 40.7% (Interest Rate) and 28.1% (Total Loans). It is evident from the regression analysis that there is good multiple correlation (76.8%) between these variables. Coefficient of determination is 58.9%. It means that 58.9% changes in the NPLs rate can be predicted by the chosen independent variables.

Makri (2013) in his study, identify factors that influence the rate of nonperforming loans in the Euro zone focused on precise period. He discovered high relationships between NPL and numerous macroeconomic and bank-specific characteristics using aggregate data from 14 countries from 2000 to 2008 and the difference GMM estimation method. It is important to note that, to our knowledge, this is the first empirical study in the Eurozone that examines possible

macroeconomic and bank-specific causes of nonperforming loans ratio using aggregate level data. According to the available literature, aggregate data is preferred since it significantly minimizes the probability of sample non-representatives. The rate of non-performing loans from the previous year, the capital ratio, and the return on equity (ROE) all appear to have a significant impact on the non-performing loans rate, which is consistent with the literature. At the same time, public debt, GDP, and unemployment appear to be three additional macroeconomic factors that influence the NPL index, indicating that the Euro zone's economic health is closely linked to loan portfolio quality.

Baholli et al (2015) discovered that the Real Interest Rate (KR) has a favorable impact on NPL growth, while the Nominal Interest Rate (NINT) has a negative impact on NPL fluctuations, the Nominal Interest Rate (NINT) has a positive impact. Furthermore, GDP has a negative effect on bad loan levels, with NPL levels falling as GDP grows, indicating stronger business performance. As a result of this performance, their payment capabilities improve. The credit-to-economy ratio measures the proportion of total credit to GDP; as lending increases, so does the chance of NPL growth. When an economy has a high level of credit, economic crises will force enterprises to face liquidity issues.

Vogiazas and Nikolaidou (2014) The credit risk of the Romanian banking system is influenced by macroeconomic variables such as construction and investment spending, inflation and unemployment rates, the country's foreign debt to GDP and M2, as well as Greek-specific characteristics, according to empirical research. However, when Romanian bank-specific variables, financial markets, and interest rate indicators were added to the baseline model, they were discovered to have limited explanatory power.

According to Abdelhameed and Abdelaziz (2015) Inflation has a negative impact on NPLs, according to the findings of those research, Regardless of the fact that improving macroeconomic and financial conditions appear to be negatively impacting NPL levels. According to the statistics, the global financial crisis had a detrimental impact on the number of nonperforming loans (NPLs). The findings on household consumption are equivocal, with a negative impact in non-petroleum nations but a positive one in petroleum countries, whereas increasing government spending is linked to reduced NPL levels in both sets of countries. Furthermore, an increase in total debt burden has a positive impact on the amount of bad loans,

whereas in petroleum-producing countries, expanded monitoring policies and improved terms of trade have a significant negative impact on NPLs, but this effect is less noticeable in non-petroleum-producing countries.

According to Selma and Jouini (2013), from 2004 to 2008, they examined a sample of 85 banks from three countries (Italy, Greece, and Spain) to try to figure out what generates nonperforming loans. In their analysis, they used both macroeconomic and bank-specific data. Specific factors such as return on assets, change in loans, and loan loss reserves to total loans ratio (LLR/TL) were calculated using macroeconomic indices such as GDP growth, unemployment rate, and real interest rate. They discovered that problem loans are negatively associated to GDP growth, bank profitability, and the real interest rate, while being positively related to unemployment, loan loss reserves to total loans, and the real interest rate, using the panel data technique.

Elisabeta (2012) ‘‘Macroeconomic Factors Affecting Credit Risk He observed a negative association among delayed GDP growth and the rate of non-performing loans, as well as a good relation between unemployment and the rate of non-performing loans, in his study of non-performing loans in Central and Eastern Europe. For nonperforming loans rate, relevant lagged unemployment rate variables include 6-month EURIBOR, 6-month interest rate, and policy interest rate. Economic growth, he demonstrated, operates as a source of wealth and enhances the borrowers' ability to service their debt, as GDP growth was proven to be significant in his study for the evolution of non-performing loans rate. The repayment source is fundamental for loan quality, unemployment rate having a substantial impact on non-performing loans rate level and there is a prolonged effect of macroeconomic variables on non-performing loans, lagged variables being significant.

Louzis et al. (2011) Researchers investigated the causes of nonperforming loans in the Greek banking system using dynamic panel data approaches. Macroeconomic variables such as real GDP growth, unemployment, loan rates, and public debt all had a substantial impact on NPL levels, they discovered. Furthermore, integrating bank-specific factors in the baseline model, such as performance and efficiency, gives extra explanatory power.

KARICA* (2013) conducted an econometric analysis of the empirical determinants of NPLs shows that over the last five years, real GDP growth has been the key driver of rises in the NPL

ratio in Central and Eastern European countries. The explanatory variable's coefficient is economically significant, indicating that the downturn in economic activity has had a considerable impact on the region's financial stability. Because rising inflation rates are expected to lead to greater NPL ratios, central banks in the CEE area face an unpredictable consequence (in terms of NPLs) while attempting to boost growth. On the one hand, central banks can use expansionary monetary policy to aid the recovery of the economy (resulting in reduced NPL levels), raising GDP and aggregate demand to a certain extent. However, this would result in a considerable increase in inflation rates, which would, predictably, lead to an increase in NPL ratios. The region's inflation rates, on the other hand, have been continuously low, which is, of course, tied to each country's general economic situation.

Furthermore, the study reveals that in Pakistan, variations in GDP weighted average lending rate, loan maturity length, capital adequacy ratio, and credit deposit ratio can affect bank nonperforming loans. In Pakistan's banking sector, GDP growth rate, loan maturity time period, capital adequacy ratio, and credit deposit ratio have all been found to be negatively associated with NPLs. In Pakistan, the weighted average lending rate shows a positive relationship with nonperforming loans. Banks can review their lending policies based on predicted fluctuation in various key indicators of nonperforming loans in Pakistan to combat the rising trend of bad loans.

Olaya (2012) for the period January 2004 to March 2012, they looked into the macroeconomic factors of non-performing loan indices in Spain and Italy. The percentage of problematic loans compared to the total number of loans is known as the NPL ratio. Macroeconomic variables included credit growth, wage growth, inflation, unemployment, and GDP. In both Spain and Italy, macroeconomic conditions are major determinants of non-performing loans. Among the five explanatory factors examined, only unemployment, wage, and GDP were statistically significant. The impact of lags is another major conclusion made by those researchers. When adding 6 months of lag for the Spanish economy and 12 months of lag for the Italian economy, it had the greatest explanatory power for the NPL index. As a result of the revised time series, changes in the economy have a greater impact on problematic loans. The reduction in the extent of the lags could be due to the economy's instability following the debt crisis.

2.2.2 Related literatures in Ethiopian case

In his Research Report on the Determinants of Non-Performing Loans in Ethiopian Banks, W. N. Geletta (2012) discovered that fund diversion, compromised integrity, over/under financing, unfair competition among banks, willful default, and macroeconomic factors were the most frequently mentioned factors, followed by unfair competition among banks, willful default, and macroeconomic conditions. Lack of bank supervision, bank size, poor risk assessment, and credit culture/orientation were rated as the top four reasons for loan default in a poll where respondents were asked to list qualities that they feel cause nonperforming loans in order of priority. The least likely causes of non-performing loans were identified as charging a high interest rate and rapid loan growth.

The study of Zelalem (2012), examined the bank specific and Macroeconomic determinants of Nonperforming loans (NPLs) of commercial banks in Ethiopia. The study adopts a mixed methods research approach by combining documentary analysis (structured review of documents) and in depth interviews. The study of Kassahun (2013), examined the internal and external factors of nonperforming loan in development bank of Ethiopia Dilla branch the researcher used qualitative and quantitative research approach, he founded Internal factors such as poor credit policy, Weak credit analysis, poor credit monitoring and insufficient risk management . Also external factor namely natural disaster, market failure and integrity of the borrowers cause for the occurrence of NPL. The study of Anisa (2015) investigated the Determinants of Nonperforming Loan in Ethiopian Commercial Banks. The study aimed to test and confirmed the effectiveness of common Commercial banks non-performing loan determinants and how it affects the level of nonperforming loan in Ethiopia commercial banks (two public owned and six private owned banks). Seven factors (four bank specific and three macroeconomic factors) affecting banks nonperforming loan were selected and analyzed. The results of balanced fixed effect panel data regression analysis showed that deposit rate, loan to deposit ratio and lending interest rate had positive and significant impact on banks nonperforming loan. Similarly, Eshetu (2016) conducted a study on “Determinants of Non-performing loans: in the case of construction and Business Bank” by using purposive sampling or judgmental (nonprobability sampling) and descriptive statistics and multiple regression model within eight bank specific variables. The study founded that bank-specific factors like credit assessment; credit monitoring, ROA has strong and significant effect for the occurrence

Non-Performing Loans. On the other hand, the finding of the document collateralized loan, lending interest rate, loan maturity, LDR and LGR has a weak significant effect and relationship with the occurrence of NPLs.

Siemon Gudeta (2018) conducted a study on “determinants of non-performing loans: the case of development bank of Ethiopia. The researcher undertakes explanatory research design with quantitative and qualitative data approach used. The researcher found that project follow up attributes, policy induced attributes and credit evaluation criteria.

Tesfaye (2014) based on his research of the determinants of Ethiopian bank performance from 1990 to 2012, which looked at the impact of both internal and external variables on the profitability of selected banks. And he discovered that the majority of the variance in profitability is due to bank-specific features. A bank's capacity to manage credit risk, diversify revenue streams by introducing non-traditional banking services, and keep overhead costs under control is linked to its performance. Furthermore, according to his findings, a bank's capital and liquidity status have little impact on its performance. Bank size and macroeconomic variables such as real GDP growth rates, on the other hand, have little effect on bank profitability, according to the article. The rate of inflation, on the other hand, has been identified as a crucial determinant of Ethiopian commercial banks' performance.

Million et al., (2012), who used a structured questionnaire to collect data from 140 small-holder farmers in order to determine what characteristics influenced loan repayment. They discovered that agro ecological zone, off-farm activity, and technical assistance from extension agents influenced small-holder farmers' loan repayment performance positively, but production loss, informal credit, social festivals, and loan-to-income ratio were negatively influenced.

According to Teshome (2010), non-performing loans have a detrimental impact on a bank's financial performance through reducing loan interest income and lending money. On the lending institution side, ineffective loan monitoring and poor credit appraisal were identified as major factors, while on the borrower side, Non-performing loans are caused by a lack of suitable business knowledge, a lack of sufficient income, a lack of sufficient infrastructure, a lack of sufficient bank oversight, a lack of a savings account, high consumption expenditure, and high interest charges. Loan rehabilitation is widely used by bank management to improve the quality of the bank's loan portfolio. Some of the measures that have been suggested to the bank's management to reduce the existing burden of non-performing loans include credit

training programs, effective loan monitoring (i.e. providing good on-site supervision to clients, filling required credit staff, and informing clients to present adequate collateral), and advising clients to have good knowledge of the business area they engaged in. Based on his research findings, Kassahun (2013) concluded that non-performing loans were caused by both internal and external factors in the context of the Dilla Branch of the Ethiopian Development Bank. Non-performing loans have been caused by internal factors such as a lax lending policy, a lack of credit analysis, poor credit monitoring, and insufficient risk management. External factors such as natural disasters, market failure, borrowers' integrity, and non-performing loans all had a detrimental impact on the bank's profitability and liquidity, according to the study's findings. Aside from the aforementioned issues, the majority of borrowers do not use the loan for the intended purpose. As a result, funds or debt are diverted. This money could be diverted for non-productive purposes, and the debtor will be unable to repay the loan.

Gadise (2014); her research purpose was to use panel data analysis to look at the determinants of bad loans (NPLs) in Ethiopian commercial banks from 2002 to 2013. Using the Fixed Effect Model, she discovered that the return on equity (ROE), return on asset (ROA), capital adequacy, lending rate, and effective tax rate all had statistically significant influence on the level of NPLs. A fixed effect regression model, on the other hand, revealed that the loan-to-deposit ratio and inflation rate had no effect on the quantity of NPLs in Ethiopian commercial banks over the research period.

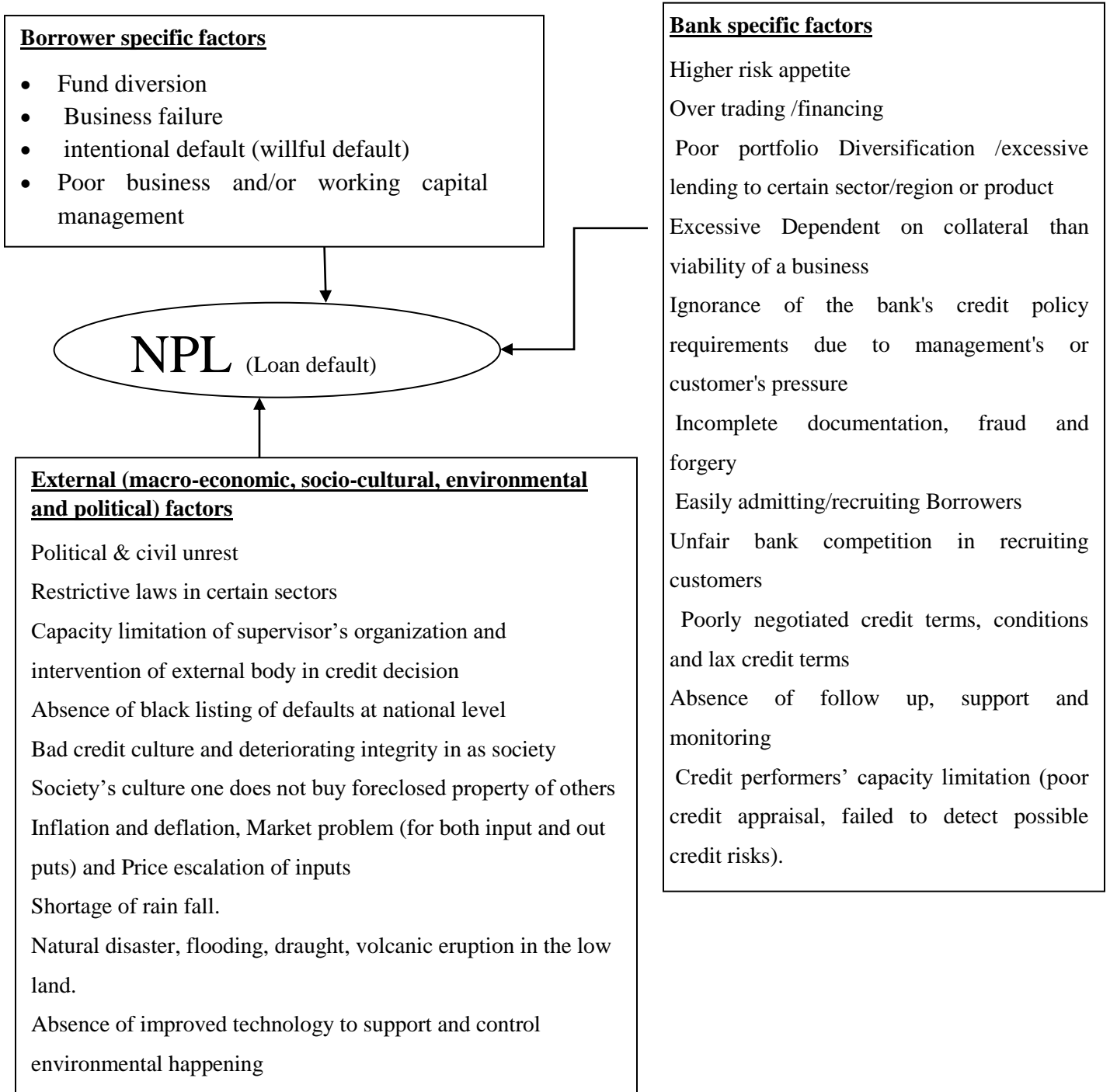
Kibrom (2010) used a probit model to determine the factors that influence borrowers' effective loan repayment performance, and he found that the debtors' level of education, loan repayment period, accessibility of other income sources, sector, loan purpose, and type of labor all have a positive and significant impact on borrowers' successful loan repayment performance. Gender and household size, for example, are not statistically significant variables with a positive sign. In addition, factors including age, loan diversion, and other credit sources exhibit a negative trend but are not statically important. Despite being statistically significant, the variable experience has a negative sign.

Tilahun and Dugasa (2014), based on the article Bank- Specific Determinants of Credit Risk: Empirical Evidence from Ethiopian Banks, credit growth and bank size have a negative and statistically significant impact on credit risk.) On the other hand, operational inefficiency and ownership have a positive and statistically significant impact on credit risk.

2.3. Conceptual Framework

The conceptual schema of the relationship between the loan Default and causes of Loan Default are depicted here below:

Figure-1: Conceptual schema of the relationship the determinants of non-performing loan and NPL.



2.4. Knowledge gap

The Banks are exposed to a high default risk as a result of credit generation process, which could result in financial difficulties, including bankruptcy. Credit risk is seen as the most dangerous of all the threats that banks face, as bad debts would diminish the bank's profit margin.

Bank failures, financial crises, and macroeconomic issues are all linked to high levels of non-performing loans. The failure of one bank might trigger a run on other banks, which would spread throughout the financial industry and to other parts of the world. Regular monitoring of loan quality, possibly with an early warning system capable of notifying regulatory authorities of approaching bank stress, is necessary to ensure a healthy financial system and avoid systemic catastrophes. There have been very few scholarly works undertaken in the Ethiopian banking business in this regard. Wondimagegnehu (2012), Zelalem (2013), Gadise (2014), and Anisa (2015), for example, are notable. Wondimagegnehu (2012) used a questionnaire to identify bank specific factors that determine NPLs in the Ethiopian banking sector. Poor credit assessment, performed poorly loan monitoring, poorly developed credit culture, flexible loan terms and conditions, aggressive lending, compromised integrity, inadequate administrative frameworks, unfair business practices among banks were among the factors identified. He failed to address other bank specific factors like dependency on collateral, banks risk appetite, diversification. Zelalem (2013), on the other hand, investigated the macroeconomic and bank-specific causes of NPLs in Ethiopian banks using a mixed research technique. Among the bank-specific variables examined, the study discovered that loan growth, profitability, and productivity improvement are the most relevant and statistically significant variables affecting NPLs. But he failed to detect external factors other than macroeconomic issues. Sirak (2016) Variables such as poor credit risk assessment, focusing on collateral and cash flow based lending, poor loan monitoring and follow-up, poor banker's skill in dealing with lending matters, undiversified loan products, short loan life and lack of credit advisory practices, providing unreliable information and previous financial performance by the borrower, using the loan for unintended purposes that are undesirable from the banks' point of view, lack of borrowers credit worthiness, willful default by the borrowers and borrowers poor credit knowledge and orientation were found to be the most important bank specific factors that affect NPLs. Gadise (2014) investigated the macroeconomic and bank-specific variables of NPLs in

Ethiopian banks using a quantitative research approach and secondary data. Return on equity and capital adequacy ratio have statistically significant effects on NPLs, according to the study. Anisa (2015) revealed that financing costs, loan-to-deposit ratios, and lending interest rates all had a positive and significant influence on bank NPLs in a study based on secondary data. Despite the fact that the research has certainly aided the field, there is still a research vacuum to be filled. Despite that a lot of bank-specific attributes, Anisa (2015) utilized secondary data from other banks (cost efficiency, deposit rate, loan to deposit ratio and lending interest rate). Other measures, such as return on equity and credit growth rate, might help determine a bank's nonperforming loan percentage (NPL). Furthermore, during the loan process, Zelalem (2013), Gadise (2014), and Anisa (2015) disregarded the credit performers' capacity. As a result, credit performer competence and knowledge should be considered and researched. Although some researchers disagree, Gadise (2014) contends that inflation has no effect on NPL and that raising the lending rate reduces the amount of NPL. The aforementioned facts and inferences, as well as the research gap identified above, need a study to completely understand the major drivers that influence non-performing loan in Ethiopian commercial banks.

CHAPTER THREE

3. Methodology of the Study

3.1. Research Design and Approach

To conduct this study, the researcher employed descriptive research design to address the research questions and purpose outlined in the first subsection, as well as the data was analyzed qualitatively and quantitatively (mixed research approach were used).

3.2. Population, Sampling and sample size

The study included a total population of all commercial banks registered by NBE in Ethiopia. Due to the limited time and budgetary restrictions in researching all of the abovementioned banks, a sample was purposefully selected among the banks based on size, measured in terms of total asset (the majority of a commercial bank's asset being loans and advances) as of June 2021. As a result, the sample consisted of nine banks: bank of Abyssinia, Awash bank, Commercial bank of Ethiopia, Hibret Bank, Wegagen bank, and Nib international bank, cooperative bank of Oromia, Dashen bank, and Zemen bank.

Furthermore, because the bank lending process is carried out by a small number of personnel, the study could not include all bank employees and officials, the sample frame is confined to those who involved in credit process those are credit analysis and appraisal officers, credit relationship officers and credit monitoring (loan review and portfolio) officers. Therefore From each of the 9 sample banks, the researcher randomly selected 10 respondents from each bank, as well as 15 purposively selected key informants/respondents from professional and regulating bodies (key job holders (directors and executives) and NBE) was included to examine the problem of the study. Accordingly, a total of 105 respondents were selected for the successful completion of the study.

3.3. Methods of Data Collection

3.3.1. Questionnaires

The questionnaire was administered to the selected participants in Addis Ababa from October 15 to November 30, 2021.

3.3.2. Interview

Data was also gathered by interviewing purposively selected individuals, key informants by preparing some structured and unstructured questions to the executive officers of credit business and directors of credit department in each commercial bank and from the supervisory organ of the country.

3.3.3.Secondary Data

In addition to these primary data sources, secondary data was also gathered from both published and unpublished data sources to make the study more scientific and reliable and to justify the collected data from primary sources.

3.4.Data Analysis

The data collected by the above collecting methods was analyzed using descriptive statistics, like tables, mean and percentages to check the significance of the associated problem. The information gathered from the respondents as well as document assessments and the data from the interviews were analyzed and interpreted qualitatively. The data from the interviews was analyzed using a narrative scheme.

3.5.Reliability and validity

To ensure content validity the target groups included in sample represented were those who know better about the issue being investigated. The respondents have professional background and knowledge about bank lending and credit management and those who were involved in the interview were not expected to change their behavior during interview. They were also asked to give their consent and they were free not to answer any questions if they did not wish to. The findings from one research can be applied to other similar situations as the researcher performed multi method approach. The researcher also believes that this study is reliable since the respondents were selected based on their past experience on credit management and their answers were expected to be credible. Given the credibility of selected respondents, the same answers would probably be given to another independent researcher. Furthermore, ambiguous terms were not used in interviews to avoid confusion.

3.6. Ethical Consideration

Due consideration was given to obtain consent from each participant about their participation in the study. It was strictly conducted on voluntary basis. The researcher tried to respect participants' right and privacy. The findings of the research were presented without any deviation from the outcome of the research. In addition, the researcher gave full acknowledgements to all the reference materials used in the study. In general, to help address all the research questions with the methods discussed so far, attempts to show the linkage between research questions and the different data sources were made.

CHAPTER FOUR

4. Data analysis and interpretations

4.1. BACKGROUN OF RESPONDENTS

The questionnaire was distributed to those who involved in credit process, those are credit analysis and appraisal officers, credit relationship officers, credit monitoring (loan review and portfolio) officers, work out loan and credit sanctioning team members of the sample banks that are registered and active in Ethiopia before the fiscal year 2021/20. The questionnaire was sent to 90 employees via online, to credit officers. Out of 90 questionnaires all were completed and collected, since the questionnaire in the online filling form has a mandatory option, respondents were need to answer all the questions raised, As the result the response rate was 100 percent. In addition, 15 purposively selected individuals, key informants by preparing some structured and unstructured questions to the executive officers of credit business, directors and managers of credit department in each commercial bank and from banks supervisory organ of the country.

A) Current position of respondents in the banking sector

Table 4.1 job family (position) of respondents.

Job family of Respondents in credit line	Frequency	Percent
Consumer loan officer	8	8.90%
Credit analyst/Appraisal officer	26	28.90%
Credit portfolio and Recovery/workout loan officer	23	25.50%
Credit Relationship officer	27	30.00%
Loan review officer	6	6.60%
Total	90	100.00%

Source: sample survey, 2021

Note: 15 key informants (key job holders, chief credit business officers, Directors/Managers, which are also members of credit approving team members at different discretionary lending limit) were interviewed to fill the gap.

As it can be seen in the table 4.1 above 27(30.00%) of the respondents were credit relationship officers who have direct relation with borrowers and it is believed that they are the gate way for the borrowers to the banks credit line (borrower recruiters based on know your customer principle, follow up and monitoring personnel and business consultants) and 26(28.90%) of the respondents were credit Analysts/Appraisal officers who critically analyze the credit worthiness of a borrower, responsible for identifying the possible credit risks and proposes necessary amount of loan based on tailor-made financing principle. The other 23 (25.50%) of the respondents were portfolio, recovery and work out loan officers who are also responsible for keeping the banks' portfolio risk at minimum, where non-performing loans are dealt with by diversifying lending based on the principle of "don't put all your eggs in one basket" which

cannot be further managed by the credit relationship wing based on retaining existing customers' principle of credit process. The rest 8 (8.90%) of the respondents were consumer loan officers who engaged in consumer loan operation, and the remaining 6(6.60%) respondents were loan review officers who are engaged in risk assessment operation.

B) Experience of respondents in the banking industry

Table 4.2 experience of respondents in the banking industry

Years of experience of respondents	Frequency	Percent
1-5 years	31	34.40%
11-15 years	18	20.00%
6-10 years	34	37.80%
greater than 15 years	7	7.80%
Total	90	100.00%

Source: Survey Result, 2021

In terms of banking service experience, 37.8% (34) of survey participants said they have 6-10 years of experience in the industry. The second largest group, 34.40 percent (31) of respondents, had 1-5 years of banking experience. Twenty percent (18) of respondents had 11-15 years of banking experience, while the remaining 7.8% (7) have more than 15 years of banking experience. This certainly demonstrates that participants had sufficient banking experience.

C) Experience of respondents in the bank's credit process

Table 4.3 experience of respondents in the credit process

Experience in years	Frequency	Percent
1-5 years	61	67.80%
11-15 years	9	10.00%
6-10 years	18	20.00%
greater than 15 years	2	2.20%
Total	90	100.00%

Source: survey result, 2021

In terms of experience in the bank's lending process, 61(67.80%) of survey respondents indicated that they had 1-5 years of banking experience. The second larger number of respondents, 18(20%) had lending experience of 6-10 years. 9(10%) of the respondents have 11-15 years of experience and the remaining 2(2.2) of respondents had lending experience of greater than 15 years. This clearly depicts that respondents had Matured experience in providing response that naturally contributed to the data quality of the survey.

4.2. Determinants /causes of non-performing loan

Several variables, according to respondents, contribute to loan default. The factors can be classified into three categories based on the results of the interview: bank-specific factors, borrower-specific factors, and external factors (Political, legal, socio-cultural, economical, technological and environmental factors). To gain a deeper understanding of the factors affecting non-performing loans, the factors were organized and presented under the respective subtitles; deep interviews were conducted with special job holders of the banks' credit business operators, credit business executive officers, directors, and credit department managers. In addition to their extensive banking knowledge, all of the interviewers had over ten years of credit experience. So many factors of non-performing loans have been raised by the respondents.

4.2.1. Bank specific causes of loan default

1. Banks with higher risk appetite usually have higher Non-Performing Loans

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Strongly agree	5	33	36.70%	4.167	0.8773
Agree	4	48	53.30%		
Neutral	3	1	1.10%		
Disagree	2	7	7.80%		
Strongly disagree	1	1	1.10%		
Total statistic		90	100.00%	-	-

Table 4.4 the relationship of banks risk appetite and non-performing loan.

Source Survey Result, 2021

As depicted in the table 4.4 above, 33(36.70%) of the respondents strongly agreed that banks' with higher risk appetite have higher non-performing loans plus 48(53.30%) of the respondents agreed that banks which take visible credit risks usually encounters more non-performing loans. 1 respondent remain neutral and 7(7.80%) of the respondents disagreed and the other 1(1.1%) of the respondents strongly disagreed. Generally, most of the respondents, 81 (90%) of the respondents supported the issue of banks' higher risk appetite leads to more non-performing loan exposure. As per the sample survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) through up to strongly agree valued 5 (Maximum) is 0.8773 and 4.167 respectively which shows the high credit risk taking leads to higher non-performing loan, credit risk taking is strong factor in determining loan default.

2. Over trading /financing causes Non-Performing Loan/loan default

Alternative	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Strongly agree	5	35	38.90%	4.233	0.8080
Agree	4	48	53.30%		
Disagree	2	7	7.80%		
Total		90	100.00%	-	-

Table 4.5 the relationship of banks over trading/financing and non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.5 above, 48(53.30%) of the respondents agreed that over trading and financing have leads to more non-performing loan exposure plus 35(38.90%) of the respondents strongly agreed on the issue over trading and financing as a determining factor for non-performing loan. 1 respondent remain neutral and 7(7.80%) of the respondents disagreed. Generally, most of the respondents, 83 (92.22%) of the respondents supported the issue of banks over trading and over financing aiming to maximize profit lead non-performing loan exposure. As per the sample survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) through up to strongly agree valued 5 (Maximum) is 0.8080 and 4.233 respectively which shows banks attempting to over lending of their deposits to every credit applicant so as to increase their profit and over financing of a single borrower lead to bulk of non-performing loan.

3. Poor portfolio Diversification /excessive lending to certain sector can be a cause for Non-Performing Loan

Alternative	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Strongly agree	5	36	40.00%	4.322	0.7004
Agree	4	51	56.70%		
Disagree	2	2	2.20%		
Strongly disagree	1	1	1.10%		
Total		90	100.00%	-	-

Table 4.6 the relationship of portfolio diversification and non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.6 above, 51(56.70%) of the respondents agreed that poor portfolio diversification of banks' lead to more non-performing loans plus 36(40%) of the respondents strongly agreed that banks which have concentrated loan in a certain sector, region and product usually encounters more non-performing loans. 1 respondent strongly disagreed and 2(2.2%) of the respondents disagreed. Generally, most of the respondents, 87(96.67%) of the respondents supported the issue of poor portfolio diversification leads to more non-performing loan exposure. As per the sample survey result, the standard deviation and the mean values of

the responses, strongly disagree valued 1 (minimum) through up to strongly agree valued 5 (Maximum) is 0.7004 and 4.322 respectively which shows banks which have more concentrated loans in a specific sector, region or product usually have higher non-performing loan, ones that sector fails to perform a normal business transaction borrowers in that sector will fail to service their debt or if that region encounters any manmade/ natural problem borrowers in that region can't operate their business as usual and finally they will fail to repay the loan plus if banks concentrate their loan in a specific credit product and if the borrowers of that product fail to service their debt banks will carry bulk of non-performing loan.

4.Excessive Dependent on collateral than viability of a business may increase Non-Performing Loan

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Strongly agree	5	40	44.40%	4.167	0.9972
Agree	4	37	41.10%		
Neutral	3	2	2.20%		
Disagree	2	10	11.10%		
Strongly disagree	1	1	1.10%		
Total		90	100.00%		

Table 4.7 the relationship of excessive dependent on collateral than business viability and non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.7 above, 40(44.4%) of the respondents strongly agreed that banks' which depend on collateral than viability of a business (credit worthiness) have higher non-performing loans plus 37(41.10%) of the respondents agreed that banks' must not depend on collateral rather they have to critically assess the credit worthiness of borrowers to grant a loan. 2 respondents remain neutral and 10(11.10%) of the respondent disagreed and the other 1(1.1%) of the respondents strongly disagreed with the intention that banks must back up the loan with collateral and borrowers will repay their debt as they fear foreclosure of their property. Generally, most of the respondents, 77 (85.55%) of the respondents agreed that to depend on collateral rather than credit worthiness of a business leads to more non-performing loan exposure. As per the sample survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) up to strongly agree valued 5 (Maximum) is 0.9972 and 4.167 respectively which shows collateral does not guarantee the repayment of a loan rather banks should critically identify and evaluate their credit customers, capacity of customers to carry the fund, manage the fund and repay the debt.

5. Absence of due care / Analysis and approval process not being prudent causes loan default

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Strongly agree	5	33	36.70%	3.911	1.1577
Agree	4	37	41.10%		
Neutral	3	1	1.10%		
Disagree	2	17	18.90%		
Strongly disagree	1	2	2.20%		
Total		90	100.00%		

Table 4.8 the relationship of credit analysis and approval process with non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.8 above, 37(41.10%) of the respondents agreed that the credit analysis and approval process of a credit business has to be prudent plus 33(36.70%) of the respondents strongly agreed that due care has to be taken when analyzing the credit worthiness of borrowers. 17(18.90%) of the respondents disagreed and the other 2(2.2%) of the respondents strongly disagreed. Generally, most of the respondents, 70 (77.78%) of the respondents agreed that if the credit analysis and approval process is not prudent wrong decision may be made, loan may be granted for whom not deserving it and over/under financing may happen which is direct operational risk and finally lead to high non-performing loan exposure. As per the sample survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) through up to strongly agree valued 5 (Maximum) is 1.1577 and 3.911 respectively which shows credit operational risk can lead to higher non-performing loan.

6. Ignorance of the bank's credit policy, requirements due to management's or customer's pressure causes NPL

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Strongly agree	5	40	44.4%	4.322	0.7618
Agree	4	44	48.90%		
Neutral	3	1	1.10%		
Disagree	2	5	5.60%		
Total		90	100.00%	-	-

Table 4.9 the relationship of banks' credit policy ignorance and non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.9 above, 44(48.90%) of the respondents agreed that credit performers' failed to comply with the banks credit policy they may recommend/grant a loan or whom not deserve it and the borrower finally ailed to service the debt plus 40(44.40%) of the respondents strongly agreed that bankers should not ignore the banks credit policy. 1 respondent remain neutral and 4(4.40%) of the respondents disagreed. In sum most of the respondents, 84

(93.33%) of the respondents supported the issue of ignoring the banks credit procedure due to the management's, customer's or any other body leads to more non-performing loan exposure. As per the sample survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) through up to strongly agree valued 5 (Maximum) is 0.7618 and 4.322 respectively which shows ignoring credit procedure is strong factor in determining loan default.

7. Incomplete documentation, fraud and forgery may cause NPL

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Strongly agree	5	45	50.00%	4.400	0.7313
Agree	4	40	44.40%		
Neutral	3	1	1.10%		
Disagree	2	4	4.50%		
Total		90	100.00%	-	-

Table 4.10 the relationship of bankers' lacks of integrity and non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.10 above, 45(50%) of the respondents strongly agreed that credit performers' must be disciplined in granting a loan plus 40(44.40%) of the respondents agreed that incomplete documentation of securities, letters, contracts intentionally or unknowingly it may reduce the bargaining power of the bank especially if the customer is informed about the issue, he/she/it may intentionally default. 1 respondent remain neutral and 4(4.40%) of the respondents disagreed. In sum most of the respondents, 85 (94.44%) of the respondents supported the issue of incomplete documentation, fraud and forgery as a cause for non-performing loan. As per the sample survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) through up to strongly agree valued 5 (Maximum) is 0.7313 and 4.400 respectively which shows credit performers lack of integrity is strong factor in determining loan default.

8. Easily admitted Borrowers usually defaults

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Disagree		31	34.40%	3.456	1.1432
Neutral		3	3.30%		
Agree		40	44.40%		
Strongly agree		16	17.80%		
Total		90	100.00%		

Table 4.11 the relationship of Admitting borrowers and non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.11 above, 40(44.40%) of the respondents agreed that easily admitted borrowers usually defaults, but 31(34.40%) of the respondents disagreed that not all easily admitted borrowers default. 16(17.80%) of the respondents agreed that easily admitted borrowers usually defaults and 3 respondent remain neutral. In sum majority of the respondents, 56 (62.22%) of the respondents supported the issue of easily admitting borrowers as a cause for non-performing loan. As per the sample survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) through up to strongly agree valued 5 (maximum) is 1.1432 and 3.456 respectively which shows lending for easily admitted borrowers lead to higher non-performing loan exposure despite the variable is not that much strong factor in determining loan default.

9.Unfair banks competition in recruiting customers rather than setting own credit standard leads to loan default

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Strongly disagree	1	1	1.10%	4.189	0.8058
Disagree	2	5	5.60%		
Neutral	3	1	1.10%		
Agree	4	52	57.80%		
Strongly agree	5	31	34.40%		
Total		90	100.00%	-	-

Table 4.12 the relationship of bankers' bans completion in recruiting customers and non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.12 above, 52(57.80%) of the respondents agreed that banks completion in recruiting credit customers rather than setting their own credit standard and procedure can lead to higher non-performing loan exposure plus 31(34.40%) of the respondents strongly agreed on the issue.. 1 respondent remain neutral, 5(5.60%) of the respondents disagreed and 1(1.1%) of the respondents strongly disagreed. In sum most of the respondents, 83 (92.22%) of the respondents supported the issue of banks competition in attracting credit customers as a cause for non-performing loan. As per the sample survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) through up to strongly agree valued 5 (maximum) is 0.8058 and 4.189 respectively which indicates that banks should recruit credit customers through formal credit standard and by assessing their credit worthiness.

10. Poorly negotiated credit terms, conditions and lax credit terms can cause loan default

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Disagree	2	3	3.30%	4.278	0.6365
Agree	4	56	62.20%		
Strongly agree	5	31	34.40%		
Total		90	100.00%		

Table 4.13 the relationship of poorly negotiated and lax credit terms and non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.13 above, 56(62.20%) of the respondents agreed that banks have to negotiate their loans and advances strictly plus 31(34.40%) of the respondents strongly agreed that loans and advances must be backed by proper terms and conditions. but 3(3.30%) of the respondents disagreed. In general, most of the respondents, 87 (96.60%) of the respondents supported the issue of poorly negotiated credit terms, conditions and lax credit terms as a cause for non-performing loan. As per the sample survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) through up to strongly agree valued 5 (Maximum) is 0.6365 and 4.278 respectively which shows poorly negotiated and lax credit term is strong factor in determining loan default

11. Absence of follow up, support and monitoring to check early symptoms may sever occurrence of NPL

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Strongly disagree	1	1	1.10%	4.478	0.7225
Disagree	2	2	2.20%		
Agree	4	37	41.10%		
Strongly agree	5	50	55.60%		
Total		90	100.00%		

Table 4.14 the relationship of follow up and monitoring with non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.14 above, 50(55.60%) of the respondents strongly agreed that Absence of follow up support and monitoring can sever the occurrence of non-performing loan plus 37(41.10%) of the respondents agreed on the issue. 2(2.2%) of the respondents disagreed and 1(1.10%) of the respondents strongly disagreed. Generally, most of the respondents, 87(96.60%) of the respondents supported the issue of Absence of follow up of credit customers, monitoring and support as a cause for non-performing loan. As per the sample survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) through up to strongly

agree valued 5 (Maximum) is 0.7225 and 4.478 respectively which indicates that banks have to follow up, support and monitor their customers to early identify the symptoms of default and to take mitigating measures.

12. Credit performers’ capacity limitation (poor credit appraisal, failed to detect possible credit risks) can cause Non-Performing Loan.

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Strongly disagree	1	1	1.10%	4.422	0.6700
Disagree	2	1	1.10%		
Agree	4	45	50.00%		
Strongly agree	5	43	47.80%		
Total		90	100.00%	-	-

Table 4.15 the relationship of capacity limitation of credit performers and non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.15 above, (50%) of the respondents agreed that credit performers’ be capable enough and must clearly identify the possible and associated credit risks plus 43(47.80%) of the respondents strongly agreed that credit performers capacity limitation, unable to identify possible risks and recommending/granting a loan for customers who do not deserve it finally lead to default, but 1(1.10%) of the respondents disagreed other 1 (1.10%) of respondents strongly disagreed. In general, most of the respondents, 87 (96.60%) of the respondents supported the issue of capacity limitation of credit performers as a cause for non-performing loan. As per the sample survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) through up to strongly agree valued 5 (Maximum) is 0.6700 and 4.422 respectively which indicates credit performers capacity limitation is strong factor in determining loan default.

4.2.2. BORROWER SPECIFIC FACTORS

13. Fund diversion may cause NPL (Not using the fund for the intended purpose)

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Strongly disagree	1	1	1.10%	4.500	0.8107
Disagree	2	4	4.40%		
Agree	4	29	32.20%		
Strongly agree	5	56	62.20%		
Total		90	100.00%	-	-

. Table 4.16 the relationship of fund diversion and non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.16 above, 56(62.20%) of the respondents strongly agreed that fund diversion is a cause for non-performing loan plus 29(32.20%) of the respondents agreed on the

issue, but 4(4.40%) of the respondents disagreed and 1(1.10%) of the respondents strongly disagreed. In general, most of the respondents, 85 (94.44%) of the respondents supported the issue fund diversion, not using the loan for the intended purpose as a cause for non-performing loan. As per the sample survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) through up to strongly agree valued 5 (Maximum) is 0.8107 and 4.500 respectively which loan diversion is strong factor in determining loan default.

14. Business failure causes loan default

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Strongly disagree	1	1	1.10%	4.589	0.6852
Disagree	2	1	1.10%		
Neutral	3	1	1.10%		
Agree	4	28	31.105		
Strongly agree	5	59	65.60%		
Total		90	100.00%	-	-

Table 4.17 the relationship of bankers’ lack of integrity and non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.17 above, 59(65.60%) of the respondents strongly agreed that business failure is a cause for default plus 28(31.10%) of the respondents agreed that business failure is the cause for loan default. 1(1.10%) respondent remain neutral and 1(1.10%) of the respondents disagreed and 1(1.10%) strongly disagreed. In sum most of the respondents, 87(96.60%) of the respondents supported the issue of business failure as a cause for non-performing loan. As per the sample survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) through up to strongly agree valued 5 (Maximum) is 0.6852 and 4.589 respectively which indicates business failure is strong factor in determining loan default.

15. Some customers intentionally default (willful default)

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Strongly disagree	1	2	2.20%	3.967	1.0434
Disagree	2	12	13.30%		
Neutral	3	2	2.20%		
Agree	4	45	50.00%		
Strongly agree	5	29	32.20%		
Total		90	100.00%	-	-

Table 4.18 the relationship of intentional defaulters and non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.18 above, 45(50%) of the respondents agreed that some customers intentionally defaults plus 29(32.20%) of the respondents strongly agreed that some customers

intentionally defaults. 2(2.2%) respondents remain neutral and 12(13.30%) of the respondents disagreed and 2(2.2%) strongly disagreed. In sum most of the respondents, 74(82.20%) of the respondents supported that some customers intentional default. As per the sample survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) through up to strongly agree valued 5 (Maximum) is 1.0434 and 3.967 respectively which indicates intentional defaulters has an effect on the non-performing loan exposure of banks despite it is not strong factor in determining loan default lie other factors.

16. Poor business and/or working capital management leads to loan default

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Disagree	2	1	1.10%	4.411	0.5588
Agree	4	50	55.605		
Strongly agree	5	39	43.30%		
Total		90	100.00%	-	-

Table 4.19 the relationship of poor business/working capital management and non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.19 above, 50(55.60%) of the respondents agreed that poor business or working capital management is a cause for default plus 39(43.30%) of the respondents strongly agreed that inefficient working capital management is the cause for loan default. and 1(1.10%) of the respondents disagreed. In sum most of the respondents, 89(98.9%) of the respondents supported the issue of poor business and/or working capital management as a cause for non-performing loan. As per the sample survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) through up to strongly agree valued 5 (Maximum) is 0.5558 and 4.411 respectively which indicates poor business and/or working capital management is strong factor in determining loan default.

4.2.3. External factors (Political, legal, Socio-cultural, economical, Technological and Environmental factors)

17. Political & civil unrest causes loan default

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Agree	4	29	32.20%	4.678	0.4699
Strongly agree	5	61	67.80%		
Total		90	100.00%	-	-

Table 4.20 the relationship of political and civil unrest with non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.20 above, 61(67.80%) of the respondents strongly agreed that political and civil unrest as a cause for default plus 29(32.2%) of the respondents agreed on the issue. As per the sample survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) through up to strongly agree valued 5 (Maximum) is 0.4699 and 4.678 respectively which indicates political and civil unrest is strong factor in determining loan default as the borrowers failed to carry out their day today business activities and unable to service the debt.

18. Absence of black listing of defaulters at national level can be a cause for default

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Disagree	2	7	7.80%	4.144	0.8150
Neutral	3	3	3.30%		
Agree	4	50	55.60%		
Strongly agree	5	30	33.305		
Total		90	100.00%	-	-

Table 4.21 the relationship of black listing of defaulters and non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.21 above, 50(55.60%) of the respondents agreed that absence of black listing of defaulters at national level is a cause for default plus 30(33.30%) of the respondents strongly agreed that absence of responsible organ which black lists loan defaulters is the cause for loan default. 3 (3.30%) respondents remain neutral 7(7.80%) of the respondents disagreed. In sum most of the respondents, 80(88.90%) of the respondents supported the issue of absence of any organ which lists loan defaulters as a cause for non-performing loan. As per the sample survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) through up to strongly agree valued 5 (maximum) is 0.8150 and 4.144 respectively which indicates customers does not fear to default as they will not be black listed at national level and even they can easily gate financed by other banks while they are defaulters in one bank, so absence of blacklisting of defaulters is strong factor in determining loan default.

19. Bad credit culture and deteriorating integrity in a society can be a cause for loan default; " a borrower or a lender may die ", a proverb which appreciates loan default.

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Disagree	2	5	5.60%	4.333	0.7495
Agree	4	45	50.00%		
Strongly agree	5	40	44.40%		
Total		90	100.00%	-	-

Table 4.22 the relationship of credit culture of a society and non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.22 above, 45(50%) of the respondents agreed that poor credit culture or repayment habit of the society at large is a cause for default plus 40(44.40%) of the respondents strongly agreed bad repayment habit of the society is the cause for loan default. and 5(5.60%) of the respondents disagreed. In sum most of the respondents, 89(98.9%) of the respondents supported the issue of poor business and/or working capital management as a cause for non-performing loan. As per the sample survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) through up to strongly agree valued 5 (Maximum) is 0.7495 and 4.333 respectively which indicates bad credit culture is strong factor in determining loan default. There is also a proverb ‘‘A borrower or a lender may die’’ which appreciates loan default.

20. Inflation and Market problem (for both input and out puts) can causes loan default

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Disagree	2	1	1.10%	4.400	0.5569
Agree	4	51	56.70%		
Strongly agree	5	38	42.20%		
Total		90	100.00%	-	-

Table 4.23 the relationship of market problem and inflation with non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.23 above, 51(56.70%) of the respondents agreed that inflation and market problem for both inputs and out puts of a business is a cause for default plus 38(42.20%) of the respondents strongly agreed the issue of market problem and inflation is the cause for loan default. 1(1.10%) of the respondents disagreed. In sum most of the respondents, 89(98.9%) of the respondents supported the issue of market problem for inputs on the supply side price escalation of inputs and decreasing demand for outputs on the demand side highly affects the repayment habit of borrowers. In addition, inflation has significant impact on borrowers’ repayment habit especially for importers. As per the sample survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) through up to strongly agree valued 5 (Maximum) is 0.5569 and 4.400 respectively which indicates market problem and inflation are strong factors in determining loan default.

21. GDP Growth reduces loan default

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Disagree	2	13	14.40%	4.133	0.8100
Neutral	3	2	2.20%		
Agree	4	57	63.30%		
Strongly agree	5	18	20.00%		
Total		90	100.00%	-	-

Table 4.24 the relationship of GDP growth and non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.24 above, 57(63.30%) of the respondents agreed that GDP growth reduces loan default plus 18(20%) of the respondents strongly agreed the issue of GDP growth in reducing loan default, as GDP growth is a function of positive macroeconomic results and healthy business activities borrowers will not face external factors which affects their business operation and assumed that they will repay their debt comfortably. 13(14.40%) of the respondents disagreed and 2(2.2%) respondents remain neutral. Generally, most of the respondents, 75(83.30%) of the respondents supported the issue of GDP growth in reducing non-performing loan. As per the sample survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) through up to strongly agree valued 5 (Maximum) is 0.8100 and 4.133 respectively which indicates GDP growth is a cumulative macroeconomic factors which reduces loan default despite it has not direct relation.

22. Shortage of rain fall cause loan default

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Disagree	2	6	6.70%	3.889	0.8925
Neutral	3	1	1.10%		
Agree	4	61	67.80%		
Strongly agree	5	22	24.40%		
Total		90	100.00%	-	-

Table 4.25 the relationship of shortage of rainfall and non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.25 above, 61(67.80%) of the respondents agreed that shortage of rain fall is a cause for default plus 22(24.40%) of the respondents strongly agreed the issue of shortage of rain fall as a triggering factor for loan default with the intent that the Ethiopian economy is based on Agriculture, which is dependent on rain fall. 6(6.70%) of the respondents disagreed and 1(1.10%) of the respondent remain neutral. Generally, most of the respondents, 83(92.20%) of the respondents supported the issue of shortage of rain fall as a causative factor of loan default. As per the sample

survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) through up to strongly agree valued 5 (Maximum) is 0.8925 and 3.889 respectively which indicates shortage of rain fall is strong factors in determining loan default.

23. Natural disaster, flooding, drought, volcanic eruption in the law land causes load default

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Agree	4	48	53.30%	4.467	0.5017
Strongly agree	5	42	46.70%		
Total		90	100.00%	-	-

Table 4.26 the relationship of natural disaster, flooding, drought, volcanic eruption in the low land and non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.26 above, 48(53.30%) of the respondents strongly agreed that Natural disaster, flooding, drought, volcanic eruption in the law land are a cause for default plus 42(46.70%) of the respondents agreed the issue. Generally, all of the respondents, 90(100%) of the respondents supported the issue of Natural disaster, flooding, drought, volcanic eruption in the law land as a causative factor of loan default. As per the sample survey result, the standard deviation and the mean values of the responses, strongly disagree valued 1 (minimum) through up to strongly agree valued 5 (Maximum) is 0.5017 and 4.467 respectively which indicates Natural disaster, flooding, drought, volcanic eruption in the law land are major factors for the customer to default.

24. Absence of improved technology to support and control environmental happenings may be mentioned as a cause for loan default

Alternatives	Value given to each alternatives	Frequency	Percent	Mean	Standard Deviation
Disagree	2	11	12.20%	4.033	0.8799
Agree	4	54	60.00%		
Strongly agree	5	25	27.80%		
Total		90	100.00%	-	-

Table 4.27 the relationship of natural disaster, flooding, drought, volcanic eruption in the low land and non-performing loan.

Source: Survey Result, 2021

As depicted in the table 4.27 above, 54(60%) of the respondents agreed that Absence of improved technology to support and control environmental happenings is a cause for default plus 25(27.80%) of the respondents strongly agreed the issue. 11 (12.20%) of the respondents disagreed. Generally, all of the respondents, 79(87.80%) of the respondents supported the issue of Absence of improved technology to support and control environmental happenings as a causative factor of loan default. As per the sample survey result, the standard deviation and the mean values of the responses, strongly

disagree valued 1 (minimum) through up to strongly agree valued 5 (Maximum) is 0.8799 and 4.033 respectively which indicates absence of improved technology to support and control environmental happenings is major factors for the customer to default.

Beside the above questions the following three open ended questions were asked for the respondents and interviewed to 15 purposively selected individuals, key informants (the executive officers of credit business, directors and managers of credit department) in each commercial bank and from the supervisory organ of the country. Both the respondents and the interviewees in one or the other way raised the following factors which causes non-performing loan in Ethiopian banking context.

1. What are the Bank specific factors which causes non-performing loan in your bank?

As per the in-depth interview with the key informants and the responses given by respondents the following factors were mentioned as causes/determinants of non-performing loan in the banks' credit business.

Banks with higher risk appetite.

Over trading /financing.

Poor portfolio Diversification /excessive lending to certain sector/region or product.

Excessive Dependent on collateral than viability of a business.

Absence of due care /Analysis and approval process not being prudent causes.

Ignorance of the bank's credit policy, requirements due to management's or customer's pressure.

Incomplete documentation, fraud and forgery.

Easily admitting/recruiting Borrowers.

Unfair bank competition in recruiting customers rather than setting own credit standard.

Poorly negotiated credit terms, conditions and lax credit terms.

Absence of follow up, support and monitoring to check early symptoms.

Credit performers' capacity limitation (poor credit appraisal, failed to detect possible credit risks).

2. What are the Borrower specific factors which causes loan default in your bank?

The following borrower specific factors were raised as determining factors for loan default.

Fund diversion (Not using the fund for the intended purpose).

Business failure.

Some customers intentional default (willful default).

Poor business and/or working capital management.

3. What are the External (Political, legal, socio-cultural, economical, technological and environmental) factors which may cause loan default in your bank?

Political & civil unrest.

Restrictive laws in certain sectors.

Capacity limitation of supervisor's organization and intervention of external body in credit decision.

Absence of black listing of defaults at national level.

Bad credit culture and deteriorating integrity in as society.

Society's culture one does not buy foreclosed property of others.

Inflation and deflation.

Market problem (for both input and out puts).

Price escalation of inputs.

Shortage of rain fall.

Natural disaster, flooding, draught, volcanic eruption in the low land.

Absence of improved technology to support and control environmental happening.

CHAPTER FIVE

5. CONCLUSION, RECOMMENDATION AND FUTURE RESEARCH DIRECTIONS

5.1. CONCLUSION

In the beginning of the research it was explained that the purpose of this research is to identify Causes of Non-Performing Loan in Ethiopian Commercial Banks, a case of some selected commercial banks. To achieve this objective, the researcher used mixed research approach and random sampling techniques to select the respondents and purposive sampling for key informants. Descriptive statistics, frequency tables, percentage, mean, and standard deviation were used to analyze the data. The data revealed that, in the respondents' opinion, there are most likely three factors that influence the occurrence of non-performing loans in Ethiopian banks.

The first one is bank specific factors which includes, Banks with higher risk appetite, Over trading /financing, Poor portfolio Diversification /excessive lending to certain sector/region or product, Excessive Dependent on collateral than viability of a business, Absence of due care /Analysis and approval process not being prudent causes, Ignorance of the bank's credit policy, requirements due to management's or customer's pressure, Incomplete documentation, fraud and forgery, Easily admitting/recruiting Borrowers, Unfair bank competition in recruiting customers rather than setting own credit standard, Poorly negotiated credit terms, conditions and lax credit terms, Absence of follow up, support and monitoring to check early symptoms, Credit performers' capacity limitation (poor credit appraisal, failed to detect possible credit risks).

The second triggering causes are Borrower specific factors like, Fund diversion (Not using the fund for the intended purpose), Business failure, some customers intentional default (willful default), Poor business and/or working capital management

The last causative factors are external factors including Political & civil unrest, Restrictive laws in certain sectors, Capacity limitation of supervisor's organization and intervention of external body in credit decision, Absence of black listing of defaults at national level, Bad credit culture and deteriorating integrity in as society, Society's culture one does not buy foreclosed property of others, Inflation and deflation, Market problem (for both input and out puts), Price escalation of inputs, Shortage of rain fall, Natural disaster, flooding, draught, volcanic eruption in the low land and Absence of improved technology to support and control environmental happening.

5.2. RECOMMENDATION

Based on the findings of the analysis report and conclusion, the following recommendations were forwarded.

In order to improve asset quality, specifically loans, it is strongly recommended that bank management and loan officers should always give a serious attention to the health of asset quality of banks specifically loan performance for prevention of loan loss. In order to decrease the chance of occurrence of NPLs; it is better for the bank managers to give due emphasis on the asset management decision. Once assets are considered as appropriate sources of financing, these assets must be managed efficiently. Thus, it is better for the bank managers to efficiently utilize its current assets and loans than fixed assets in order to reduce the level of nonperforming loans.

Besides, loan officers should provide financial counseling to the borrowers on the wise use of loan and should make decision on timely fashion to meet their needs. If so, the banks management on asset utilization is improved and then reduces the level of NPLs commercial banks in the country.

Predict changes in the NPLs to take precautionary measures to prevent any financial crisis. Banks can look for the growth in economy, credit worthiness of borrowers, political stability and any environmental changes while extending their loans or at the time of extensive lending.

Banks should do regular loans supervision and monitoring in order to check for early symptoms of loan default and to take mitigating measures. In order to prevent any bad loan banks should strictly follow standard procedures of credit allocation and lend only to good credit worthy borrowers. In addition banks should not go for extensive lending during inflation in order to prevent the future NPLs. Furthermore banks should follow credit allocation process during allocations of funds to avoid concentrated loans in a certain sector, region and product.

The government can also play important role in improving the level of NPLs in the economy by influencing the macroeconomic variables, setting lax business laws, reducing taxes, ensure peace and security. The finding of current study and future studies by using above mentioned variables can be helpful in predicting and controlling banking crisis in Ethiopia.

5.3. FURTHER RESEARCH IMPLICATION

This study examined the bank specific, borrower specific and external (PESTLE) factors which are accountable for occurrence of nonperforming loans in commercial banks in Ethiopia. However, the possible impacts of non-performing loan in the banking industry and the whole economy of the country is not addressed and can be a future research agenda. In addition, future researchers may also be interested in validating the consistency of the result and provide supplementary results for this study. Furthermore, the same study may be required on newly emerging banks.

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Appendix Questionnaire

Research questionnaire, Causes of Non-Performing Loan in Ethiopian Commercial Banks, a case of some selected commercial banks.

Dear Sir/Madam,

My name is Adino Andargie. I am a candidate of Master of Science in Accounting and finance at Addis Ababa University. The purpose of this questionnaire is to better understand the causes of loan default; bank specific causes, borrower specific causes and External (political, Socio cultural, economic and Environmental causes of loan default).

The results of this study will assist the financial industry in its efforts to be innovative and competitive through identifying the causes of loan default (NPL) and helping them in setting mitigating measures. The questionnaire will take only 15-20 minutes of your time. Your responses will be kept strictly confidential and will be used solely for the research/analysis purpose. No individual, bank and department/division will be mentioned in the report. There are no correct or incorrect answers. Your participation and candid responses are critical to the success of this research. I, therefore, respectfully ask you to answer all the questions, and I would appreciate your favorable consideration in completing the enclosed questionnaire and assisting me in the research endeavor.

Thank you very much for your time and participation!

Yours sincerely,

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SECTION ONE – BACKGROUND INFORMATION

1. Your current position in the Banking industry.

Credit analysis/appraisal officer 1 credit Relationship officer 2
 Loan review officer 3 credit portfolio and work out loan officer 4
 Consumer loan officer 5 other, please specify _____

2. Indicate your experience in the banking industry

1-5 years 6-10 years 11-15 years >15 years

3. Indicate your experience in bank credit processes

1-5 years 6-10 years 11-15 years >15 years

SECTION TWO: QUESTIONS

I. Please indicate your degree of agreement or disagreement to the statements pertaining the following factors for the occurrence of loan default.

No	Questions	Strongly Agree	Agree	Neutral	disagree	Strongly disagree
1	Banks with higher risk appetite usually have higher NPL					
2	Over trading /financing causes NPL					
3	Poor portfolio Diversification /excessive lending to certain sector causes NPL					
4	Excessive Dependent on collateral than viability of a business may increase NPL					
5	Absence of due care /Analysis and approval process not being prudent causes					
6	Ignorance of the bank’s credit policy, requirements due to management’s or customer’s pressure causes NPL					
7	Incomplete documentation, fraud and forgery may cause NPL					
8	Easily admitted Borrowers usually defaults					
9	Unfair bank competition in recruiting customers rather than setting own credit standard leads to loan default					
10	Poorly negotiated credit terms, conditions and lax credit terms can cause loan default					
11	Absence of follow up, support and monitoring to check early symptoms may sever occurrence of NPL					
12	Credit performers capacity limitation (poor					

No	Questions	Strongly Agree	Agree	Neutral	disagree	Strongly disagree
	credit appraisal, failed to detect possible credit risks) can cause NPL					
B. Borrower specific factors						
13	Fund diversion may cause NPL (Not using the fund for the intended purpose)					
14	Business failure cause, loan default					
15	Some customers intentional default (willful default)					
16	Poor business and or working capital management leads to loan default					
C. External /PESEL/ Factors						
17	Political & civil unrest caused loan default					
18	Restrictive loan in certain sectors can cause loan default					
19	Societies culture one does not buy foreclose property of others can be a cause for default					
20	Inflation and Market problem (for both input and out puts) can cause loan default					
21	GD Growth reduces loan default					
22	Shortage of rain fallen cause loan default					
23	Natural disaster, flooding, draught, volcanic eruption in the law land causes load default					
24	Absence of improved technology to support and control environmental happening very cause loan default					

II. Open Ended Questions on the causes of loan default, NPL.

1. What bank specific factors do you think are causing loan default in in your bank?

2. Do you believe there are any borrower-specific characteristics that contribute to the incidence of non-performing loans in your bank?
