SAINT MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES
GENERAL MBA PROGRAM

THE IMPACT OF NON-PERFORMING LOANS ON BANKS PROFITABILITY IN CASE OF DASHEN BANK S.C

By: Wondim Tarko

Advisor - Alem Hagos (PhD)

A thesis submitted to the school of graduate studies of Saint Mary's in partial fulfillment of the requirements for the degree of Masters of Business Administration [MBA]

July, 2015

Addis Ababa, Ethiopia

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Approved by the Examining Board

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Advisor   Signature   date

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Dean, Graduate studies   Signature   date

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External Examiner   Signature   date

_____ _____ _____

Internal Examiner   Signature   date

DECLARATION

I declare that this project work entitled **"The impact of non-performing loan on banks profitability in case of Dashen Bank S.C."** is my own original work. I have carried out it independently with the guidance and suggestions of the research advisor. And it has not been presented in saint Mary's University or any other University.

Wondim Tarko   _____
(The Researcher)   *Signature*

CERTIFICATE

This is to certify that **Wondim Tarko** has worked his research on the topic **"The impact of non-performing loan on banks profitability in case of Dashen Bank S.C."** under my supervision**. This work undertaken by **Wondim Tarko** is original and qualifies for submission in partial fulfillment of the requirements for the award of Masters of Business Administration.

_____   _____

Alem Hagos (PhD)   Date

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ACRONYMS /ABBREVATIONS

ANOVA: - Analysis of variance

CAR = Capital Adequacy Ratio

CSA: - Center of Statistical Agency

CMWF = Construction Manufacturing Working Fund

CPI=Consumer Price Index

CPDD =Corporate Planning and Development Department

DB = Dashen Bank

DMTS = Domestic Trade and Service

ETB = Ethiopian Birr

FDRE = Federal Democratic Republic of Ethiopia

GDP = Gross Domestic Product

GDPR = Gross domestic product growth rate

GMM= Generalized Method of the Moment

IMF: - International Monetary Fund

INFR = inflation rate

JV = Joint venture

LIR = lending interest rate

NBE = National Bank of Ethiopia

NPL = Non-Performance Loan

NPLR = non-performing loan rate

PLC = private limited company

ROA= Return on Asset

ROE= Return on Equity

S.C = share company

SME= Small to Medium Enterprise

SPSS =Statistical Package for Social Sciences

VIF =Variance Inflation Factor

Abstract

This study focuses on the impact of NPL on Dashen bank profitability. Bank loans have a vital contribution towards development of economy by financing different sectors. However, non-performing loans are leads to incidence of huge loss on banks profit in particular and country economy in general. Hence, this study was conducted to examine both internal factors (non-performing loan rate and lending interest rate) and external factors (Ethiopian inflation and GDP rate) impact of NPL on bank profitability. To this end, the researcher has selected Dashen bank S.C judgmentally. This study used secondary sources of data, which is cover the period 1999/00-2013/14.These data were collected from Dashen bank S.C annual reports, memos, loan policy and procedure, NBE directives and CSA. Furthermore, a descriptive statics and linear regression model was used to examine the impact of NPLs by using SPSS version 20 software. This research is a quantitative research design, explanatory, that identifies the cause and effect relationships between the study variables and ROA.

The finding of this study is significant since once identifying the impact of NPLs might enable management body to make appropriate lending policies that prevent the occurrence of NPLs. Furthermore, the study recommended the bank should emphasize the management of loans to reduce the level of nonperforming loans. Besides, it is better for the loan officers to provide financial counseling to the borrowers on the wise use of loan.

Key words: Nonperforming loans, internal factors, external factors, ROA

CHAPTER ONE

1. INTRODUCTION

1.1 BACKGROUND OF THE STUDY

In the competitive environment, more and more lines of business, which need a huge investment, are being opened. Some these huge investments are financed through commercial bank's loans. With this respect, banks play a major role in the overall economic development of a country. However, in this process of extending credit to customers, a bank should have a way of scrutinizing its borrowers so that it would minimize the risk of default. The effect of default, non-performing loans, is not limited to that of affecting the profit of one particular bank but it has a ripple effect that extends itself into the economy at large. Hence, prudent banks are concerned about the quality of their loan and the effectiveness of their risk management processes in order to safeguarding their business as well as the overall economy.

Non Performing Loans (NPLs) is a loan that is in default, or close to being default. Loans become non-performing when there are not being paid, or default for 3 consecutive months, or depends on the contract terms. According to IMF (www.imf.org), "a loan is nonperforming when payments of interest and principal are past due by 90 days or more, or at least 90 days of interest payments have been capitalized, refinanced or delayed by agreement, or payments are less than 90 days overdue, but there are other good reasons to doubt that payments will be made in full". In Dashen bank S.C the amount of NPL increases from time to time. For example in 1999/00 amount of NPL shows 61.1 million but this figure reached to 242.5 million in 2013/14.

1.2 BACKGROUND OF THE ORGANIZATION

Dashen Bank is the second private bank in Ethiopia to start the operation next to Awash International bank S.C; which was established in September 20, 1995 G.C. In accordance with the license and supervision of banking service under proclamation No.84|1994 and now this proclamation number amended by proclamation No.592|2008 "A proclamation that provide to a banking business to undertaking commercial banking activities." The bank obtaining the license from NBE (National Bank of Ethiopia) on September 20, 1995 and

started its operational activities by 11 shareholders at 14.5 Million paid up capital on January 01, 1996 G.C. Its operation starts through its head office and opening 11 new branches. The bank also became the first private bank to render western union international money transfer service and connects all city area banks with WAN (wide area network) as a year of 2001.

In addition to this the bank procured the electronic card system processing software called "Database 24" and signed a principal membership agreement with international visa net.(15th year bulletin, 2011). Presently, it operates through its head office in Addis Ababa and opened 150 area banks (branches) established within and outside Addis Ababa. Among the government and privately owned commercial Banks, Dashen Bank, is the one, which contributes greater role in the development of the Nation's Economy. (Dashen bank S.C 18th Annual report, 2014). Now a day the bank gives international money transfer services (western union, money gram, Xpress money, Dahabshii, Transfast, Ezramit, Dawit money), local money transfer, local Visa card services and international card services(union pay, visa card, master card and American express using ATM and POS machines), international banking, other banking services and used Oracle flex cube 10.5. And also the bank gives a service of internet banking and SMS balance confirmation service during cash withdraw and deposit through **"8833"** since December 2014. As of June 30, 2014 G.C Dashen bank reaches 2.6 billion birr total capital, 22.00 billion birr total asset level, one million two hundred four thousand number of account holders, one billion sixty four million paid up capital, 4,284 number of staffs, 7,957 number of loanees, 170 number of ATMs, 827 POS terminals and 133 number of area banks.(Dashen Bank S.CO., 18th annual report for the year ended June 30, 2013/14 page 3)

1.3 Statement of the problems

Lending functions is the major service line of the Banks, which contributes the major share of revenue to their profits. As a result, the need to employ a sound credit appraisal and management system is crucial in providing effective credit services and achieve the Banks overall objectives.

Every loan disbursed should be collected including its return, if the lending bank has to sustain as a going business concern. However, today, the problem of uncollected loans has

been growing in indigenous banks. Different sources have revealed that most of the banks have been facing serious problem having a significant portion of their loans fall into the category of bad debts or what is technically termed as Non-Performing Loans (NPL). Lending activities require banks to make judgment related to the credit worthiness of a borrower. However, the judgment does not always prove to be accurate and the credit worthiness of a borrower may decline overtime due to various factors. Consequently, banks face credit risks that the borrower may fail to meet the terms of the underlining loan agreement.

The growing trend of NPLs is becoming a concerning issue not only for the banking sector but also for the national economy, at large. It hinders financing capacity of the banks, where in effect it has an adverse impact on the overall socio-economic development of the country. It has been believed that there are a number of factors contributing to the source and extent of this problem. Among the various services provided by the bank, lending has been the primary activity for a decade. Dashen bank has a better share in the financial market. Due to this Dashen bank risk exposure is very high when it compared with other private banks in Ethiopia. Out of these risks, Non-performing loans are take the major part as the borrower of the bank become large and large overtime. Credit risk of the bank is expressed in its NPL position of 2.57% which is within 5% limit of NBE in 2013/14. In fact, it is below the Bank's target of 3% and the 2013/14 last quarterly positions were over 5%. Hence, it may require keeping on the effort exerted at end of the fiscal year. Special Mention loans are contained in 10-11%, but it may require improvement as it is still prone to migration.[Dashen Bank S.C, Risk Management and Compliance office Annual report July, 2014 Page 2]

Although the bank has work for the better position of Non-performing loans, it still needs great attention for the reasons of a source of profit for banking and plays a great role in country economy. In this study, certain variables such as lending interest rate, inflation rate, real GDP growth rate, NPL rate were used, in order to explain the relationship that exist between those factors with NPLs and its impact on profit, measured by ROA.

1.4 Objectives of the study

1.4.1 General objective

The general objective of this study was to identify the impact of nonperforming loan on profitability of Dashen Bank S.C.

1.4.2 Specific objectives

The Specific objective of this research is:-

➢ To examine the trend of nonperforming loans (NPLs) in Dashen bank S.C.

➢ To identify the relationship of inflation towards nonperforming loans

➢ To review the major causes and consequences of nonperforming loans

➢ To determine the impact of banks lending interest rate towards NPLs

➢ To determine the effects of GDP towards NPLs

➢ Asses the loan recovery strategies of Dashen bank to minimize NPL

1.5. Basic Research Questions

▪ To what extent that non-performing loan affects the bank's profitability?

▪ What are the effects of GDP towards NPL?

▪ What are the major causes and consequences of non-performing loans?

▪ Is there lending interest rate have an impact towards Non Performing Loan?

▪ Is there any relationship between inflation towards NPLs?

▪ What are the loan recovery strategies to minimize NPLs?

1.6. Significance of the study

The contribution of this study is generally to address the basics of stated problem. In addition, the researcher attempt to provide solution to the impacts and help to achieve organization goals. The researcher also believes that the result of this research would have the following contributions.

➢ Enrich the reader knowledge on the impact of nonperforming loan on organizational profitability.

➢ Enable the Bank and borrowers to develop and implement good credit worthiness system to minimize nonperforming loans.

➢ Enable officials, executive and customers to aware of their respective duties and responsibilities towards satisfying mutual goals.

➢ Enable the managers to be aware of what is expected of them in managing loans of different firms.

➢ This paper enables some highlights for further studies and researchers on respective areas.

1.7. Delimitation/scope/of the study

The problem of non-performing loans is not limited to one bank. But for simplifying the study the researcher selects Dashen Bank S.C., which is one of Ethiopian private banks. The study covers the period from 1999/00 to 2013/14 G.C.

The scope of this study will be also delimited to identify the impact of non-performing loans on profitability of Dashen Bank S.C. in selected variables.

1.8. Definition of Terms

Credit policy: - Guidelines that spell out how to decide which customers are sold on open account, the exact payment terms, the limits set on outstanding balances and how to deal with delinquent accounts (small Business Encyclopedia)

Inflation :- is a rise in the general level of prices of goods and services in an economy over a period of time. (Encyclopedia.com)

Gross Domestic Product (GDP):- is the total market value of goods and services produced by workers and capital within a nation's boarders during a given period (usually one year) **(www.thefreedictionary.com).**

Follow up: - Bank Officers checks on the borrower's behavior of turnover, the information regarding the profitability, liquidity, cash flow situation, level of security offered, insurance coverage of security and trend in sales in maintaining various ratios of the borrower to meet its timely obligation.

Interest: - is a fee paid on borrowed assets. It is the price paid for the use of borrowed money, or, money earned by deposited funds (**Sullivan Arthur, 2003**).

Non- Performing Loans (NPLs) :- loans which are likely to be un collectible and providing for those on the basis of aging and risk class category of the loans concerned *(Dashen Bank S.C "Credit Manual"2010, 103)*

Loan Approval Form (LAF)*:-* is a Principal credit document on which all the relevant information of the loan request, summary of the credit analysis, recommendations and decisions of the credit committees are recorded *(Dashen Bank Bank S.C "Credit Manual, 2010 page 92)*

Provisions for Loan Losses Account means a balance sheet valuation account established through charges to provision expense in the income statement in respect of possible losses in the loan portfolio. (NBE Directives No.SBB/ 48/2010)

Suspended Interest Account means an account where previously accrued but uncollected interest on loans required to be placed on non-accrual status is reserved out of the income of the development finance institution. (NBE Directives No.SBB/ 48/2010)

Profit: - A financial benefit that is realized when the amount of revenue gained from a business activity exceeds the expanses, costs and taxes needed to sustain the activity; an amount of total revenue deducted total expenses (www.investopedia.com)

1.9 Sources of Data Collection

In conducting this study, the researcher used secondary data that covers from the year 1999/00 up to 2013/14 G.C. For this study it is better to use the viable data to identify the impact of NPL on profit to give recommendation for future credit performance in the existed secondary data.

The sources of data for this study was collected from Dashen bank S.C annual reports, memos related to lending interest rate revision, and credit manual, CSA, national bank of Ethiopia credit directives and guidelines, books, journals, empirical studies, and magazines and websites.

1.10 Limitations of the study

The researcher faced some of the problem during conducting of this study are luck of willingness by the credit department to give full information about nonperforming loans. Since it is a first time experience in conducting an individual research study, it is quite difficult to perform well in data collection and analysis. However, the researcher did try to

make this study easier by adopting a positive attitude and taking it as a challenge and by discussing and receive each comment from the advisor as well as our class mat students.

1.11 Organization of the Study

The study has five chapters. The first chapter includes background of the study, background of the organization, statement of problems, objective of the study, basic research questions, significance of the study, scope of the study, limitation of the study, definition of terms and sources of data. The second chapter deals with the review of literature and empirical studies of loan broadly NPLs in banking industry in general. Chapter three includes research design and methodology of the study. . Chapter four contains analysis, discussion and results and the last chapter deals with the conclusions drown and recommendations that originates from the analysis. Finally, list of figures, graphs and tables will be attached as an appendix.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

2.1 THEORITICAL LITERATURE

2.1.1 Introduction

Loan means any financial assets of a development finance institution arising from a direct or indirect advance of funds (i.e. unplanned over drawings, participation in loan syndication, the purchase of loans from another lender, etc.) or commitment to advance funds by a development finance institution to a person that are conditioned on the obligation of the person to repay the funds, either on a specified date or dates or on demand, usually with interest. The term includes a contractual obligation of a development finance institution to advance funds to or on behalf of a person, claim evidenced by a lease financing transaction in which the development finance institution is the lesser, and line of credit to be funded by the development finance institutions on behalf of a person.(NBE Directives No.SBB/ 48/2010). A certain amount of money that is given by one party to the other party with the expectation of it being fully repaid is called a loan. The nature of this transaction is financial. All the specific terms and conditions that are a part of the transaction from either side are formally laid out in a promissory note. A lender granting temporary use of a sum of money to borrower, who must repay the money that, was borrowed over a fixed term, in addition to the interest on the loan or debt, that was incurred, defines loan. There is a stated due date to the borrower by the lender to repay the money back to the borrower, but if the borrower failed to repay the stated money back, the lender charges late fee from those persons who do not return the money on the due date. Generally, a financial loan typically refers to monetary debt, although   it is possible to lend any material possession, aside from sales, the lending of money is the most frequent type of commercial transaction that occurs in a modern economy.

2.1.2 Credit Activity

The word "Credit" is derived from Latin word creditum, which means to believe or trust. In economics, the term credit refers to a promise by one party to pay another for money borrowed or goods or services receive. It is a medium of exchange to receive money or good on demand at some future date. Credit defines as the right to receive payments or the

obligation to make payment on demand at some future time on account of the immediate transfer of goods"(M.L Jhingon, 165).

The principal reason commercial banks are operating in their environment is to maximize their profit by extending credit facilities to their customers. Banks are expected to support their local business comminutes with an adequate supply of credit for all legitimate business and consumer finical needs and to price that credit reasonably in line with competitively determined interest rates. Indeed, it is the principal economic role of banks-to provide loans to the business entities and individuals who are engaged in various economic activities (Agriculture, manufacturing and industry, import/ export, trade and services, housing etc...). The bank's role in finding involves assisting prospective borrowers by availing working or investment capital from which it generates profit.

How well a bank performs its lending function has a great deal to do with the economic development of the country, because bank loans support the growth of new businesses and creates jobs within the banks' environment and promote economic growth, Moreover, bank loans often seem to convey positive information to the marketplace about a borrower's credit quality, penalty, enabling a borrowers to obtain more and perhaps somewhat cheaper funds from other sources.

For most commercial banks, loan accounts are half or more of their total assets and about half to two-third of their revenue, moreover, risk in banking tends to be concentrated in the loan portfolio when a bank gets serious finical trouble, its problems usually come from loans that have become uncorrectable due to mismanagement, illegal manipulation of loan, misguided lending policies, or unexpected economic downturn. (Yonas, 2004 page 28)

2.1.3 Types of Credit in Bank

According to IMF (www.imf.com), the great variety of credit line results from the widely varying needs and activities of borrowers and lenders. Credit can be classified in different ways, but usually in banking sector it can be classified based on two criteria:

I. Based on the needs of customers and nature of their business

Overdraft Facility: This is credit facility by which customer is allowed to withdraw cash in excess of their deposit up to the extent of an approved limit by the bank.

Term Loan: it is a type of credit facility giving for specific time. The duration may be short up on one year or medium up to five years and long above five years. These loans are paid by equal monthly, Quarterly or semi-annually repayments. Short-term loans are usually used for working capital needs; medium term loan may be extended to purchasing of public transport vehicles, equipment, trucks and trailers … etc. Long- term loan extended for new investment projects, manufacturing, building and constructions purpose.

Merchandize Loan - When a loan is granted against the pledge of merchandise goods for a short period it is called merchandise loan.

Letter of credit Facility - When importers are not in opposition to cover fully the value of the letter of credit to be opened for goods intended to be imported, the bank provide them advance to cover some part of the cost and deal with the exporters' bank on behalf of the importer.

II. Based on Economic Sectors

Loans can be classified based on the purpose they involved in the economic sector. These economic sectors are Agricultural production, manufacturing production, Domestic trade and Service, Building and Construction and import - Export loan categories (Aklilu, 22-23).

According to Dashen Bank loan category, loans are segregated among eight categories for the purpose of report and analysis. The categories are agriculture, manufacturing, DMTS, import, export, real estate, CMWF, and transport (Dashen Bank S.C. 2013/14, Annual Credit Report).

2.1.4   What is Non-Performing Loan?

There is no common definition of nonperforming loans (NPLs) in the whole country since it is recognized that it is possible that what is appropriate in one country may not be so in another. There is, however, some common opinion on this issue. (Gadise Gezu, 2014).

According to Oxford Dictionary of Finance & Banking (3rd Edition), nonperforming loans (NPLs) is a loan on which the interest or payment are overdue. In the USA, non-performing loans (NPLs) defined by regulators as a category of loan which is more than 90 days". Based to Oxford Business English Dictionary, non-performing loans (NPLs) is a loan in which the borrower has not made a

payment for a particular period of time. Therefore the bank run into trouble with non-performing loans (NPLs).

According to National Bank of Ethiopia directive number SBB/43/2008, "Nonperforming" means loans or advances whose credit quality has deteriorated such that full collection of principal and/or interest in accordance with the contractual repayment terms of the loan or advance is in question.

"A non-performing loan is a loan that is in default or close to being in default. Many loans become non-performing after being in default for three months but this can depend on the contract terms. A loan is non-performing when payments of interest and principal are past due by 90 days interest payments have been capitalized, refinanced or delayed by agreement or payments are more than 90 days overdue, but there are other good reasons to doubt that payments will be made in full" (IMF,2005)

According to NBE directives (2010) Loans or advances with pre–established repayment programs are nonperforming when principal and/or interest is due and uncollected for ninety consecutive days or more beyond the schedule payment date or maturity.

Overdraft and loans or advances that do not have a pre – established repayment program shall be considered non – performing when.

♦ The debt remains outstanding for ninety consecutive days or more beyond the scheduled payment date or maturity.

♦ The debt exceeds the borrowers approved limit for ninety consecutive days or more.

♦ Interest is due and un collectable for ninety days or more or

♦ The account has been in active for ninety consecutive days and /or deposit are insufficient to cover the interest capitalized during the period.

Non-performing loan is a loan that is not earning interest income and:-

a. Full payment of principal and interest is no longer expected.

b. Principal or interest is 90 days or more delinquent.

c. The maturity rate has passed and payment is full has not been made (www. workpedia.com).

Non-performance loan are not generating income as a first step, loans are often considered to be non-performance when principal or interest on them is due and left unpaid for 90 days

or more (this period may vary by justification). The borrower cash flow and overall ability to repay amount is significantly more important than whether the loan is overdue or not.

☞ Non-performing loan are those in which borrowers are experiencing some repayment problems. Past due loans represent loans for which contracted interest and principals payments have not been made within 90 days after the due date.

☞ According to World Bank, asset classification is important for repayment of loan. Asset classification is the process whereby an asset is assigned a credit risk grade, which is determined by the likelihood threat debt obligations, will be serviced and debt liquidated according to contract terms.

According to NBEs directive SBB/48/2010, loans & advances are classified in to five. Those are:-

1. Pass

Loans in this category are fully protected by the current financial and paying capacity of the borrower and are not subject to any criticism. Notwithstanding the generality of this statement, the following loans shall be classified pass: short term loans past due for less than 30 (thirty) days, medium and long term loans past due for less than 90 (ninety) days; and any loan, or portion thereof, which is fully secured, both as to principal and interest, by cash or cash-substitutes, regardless of past due status or other adverse credit factors.

2. Special Mention

The following loans at a minimum shall be classified special mention: short term loans past due for 30 (thirty) days or more, but less than 90 (ninety) days; medium and long term loans past due 90 (ninety) days or more, but less than 180 (one-hundred-eighty) days;

3. Substandard

The following non-performing loans at a minimum shall be classified substandard: short term loans past due 90 (ninety) days or more, but less than 180 (one-hundred-eighty) days and medium and long term loans past due 180 (one-hundred-eighty) days or more, but less than 360 (three-hundred-sixty) days.

4. Doubtful

The following non-performing loans at a minimum shall be classified doubtful: short term loans past due 180 (one-hundred-eighty) days or more, but less than 360 (three-hundred-sixty) days and medium and long term loans past due 360 (three-hundred-sixty) days, but less than 3 (three) years.

5. Loss

The following non-performing loans at a minimum shall be classified loss: short term loans past due 360 (three-hundred-sixty) days or more and medium and long term loans past due 3 (three) years or more.

According to NBEs directive SBB/ 48/2010, Non-performing loans are those loans which are past their due dates. They are classified into:

1. **Sub-Standard**:- Non-performing loans or advances past due 90 days or more but less than 180 days shall at minimum be classified sub-standard.

2. **Doubtful**: - Non-performing loans or advances past due 180 days or more but less than 360 days will be referred as doubtful.

3. **Loss**: - Non-performing loans or advances past due 360 days or more will be classified as loss.

2.1.5 Causes for Non-Performing Loans

Causes for non-performing loans are merely varied from bank to bank as well as countries to countries. Even the classification of this causes differ from one bank to another. Some classified them based on the level of the responsibility for the occurrence of NPLs.

According to Corporate planning and development department (CPDD) of Dashen bank S.C on its October 2005 NPL issues, the causes are classified in to two broad groups. These are:-

1. **Internal factors**
   - ❖ Lack of continuous follow up of repayment due to manpower shortage
   - ❖ Lack of consultation and communication with defaulter
   - ❖ Overstating the collateral value at the time of estimation
   - ❖ Lack credit information to be gathered from other commercial banks
   - ❖ Agency problem (i.e. branch managers focus merely on increasing their loan portfolio by accepting borrowers without making due analysis)

2. **External factors**

❖ Diversion of the borrowed fund to other purposes

❖ Unavailability of demand and price fluctuation on both local and international market.

❖ Country's economic and political condition

❖ Impact of change fiscal and monetary policy

❖ Insufficient credit awareness

❖ Unwilling customer to disclose the information required

❖ Unethical computation made between banks

❖ Willful default

There are large macroeconomics reasons for wide spread of NPLs and the causes for it have multi faced dimensions such as structural systematic policy and managerial though different banks encounter different causes for NPLs general consensus of common causes, are also there. Some of these common causes are; bankruptcy of the borrower business, absence of risk assessment, poor follow up, Lack of credit information and moral hazard (Haregewoin Tesfye, 1999)

Although the causes of NPLs different form bank to bank, the following are the bank and self – explanatory reasons for the occurrence of NPLs in the commercial banking sector of Ethiopia. (Yonas, 2004)

❖ Providing loan over the total capital of the forms or business entities

❖ Providing loan without sufficient back up /adequate safety of collateral or security

❖ Providing loan without sound credit principal and appraisals

❖ Providing loan to unfamiliar borrowers and without adequate information about the borrower.

❖ Providing loan without the quality and dependability of personal guarantee

❖ Providing loan (large sum) without audited financial statement of borrower firm /company

❖ Providing additional loan without additional collateral

❖ Providing loan without the expertise of engineering appraisal and without consideration of depreciation and current fair value of the property of the borrower

❖ Providing loan without sufficient credit history or information of the borrower

❖ Providing loan with a collateral, which has no legal document, or registration with the municipality.

❖ Providing loans without viable project/business proposals

The damages of NPLs on commercial banks occurred due to the above causes aggravated because of the way that the banks try to recover sick loans.

2.1.6 Inflation

Inflation is a supported build in the normal cost of all merchandise and administrations processed in an economy. Money loses buying force throughout inflationary periods since every unit of money purchases dynamically fewer merchandise. Swelling is an ascent in the general value level. There are two real reasons for expansion: Demand change, and supply change. Powerless and vacillating recuperation needs is a great solid dosage of swelling published ahead of time by the Fed/Treasury. The thinking behind that solution is that expansion and the desire of swelling might activate organizations sitting on crowds of money and families attempting to shore up their asset reports to begin using some of their money on ventures and shopper durables instead of watch the money devalue. Additionally, climbing costs, and the desire of climbing costs, might energize organizations, hesitant to grow yield and livelihood as a result of deficient interest, to do only that in the desire that costs might climb sufficiently to permit them to offer the included yield at a benefit. Inflation is defined as the percentage increases of a reference index, the Consumer Price Index (CPI), which is a representative of a common basket of goods and services (Mercurio, 2004).

The impact of inflation on an economy takes the form of restructuring of income. It harms savers as price increases, and purchasing power of savings depreciates. Saving account, insurance plans, annuities and other fixed value paper assets decrease in real value during inflation. Unexpected inflation profits borrowers at the expense of lenders. For the macro-economic managing, low levels of inflation are preconditions mostly in developing nations (Gill & Khan, 2010). Inflation can have a chain of negative significances for the economy. Initially, inflation wears down the purchasing power of the individuals and therefore, leads to a reduction in economic growth. It leads to rise in macro-economic unsteadiness as an inflationary atmosphere creates much ambiguity. Moreover, inflation has backsliding significances on the poverty of a country's citizens. The surge in general

price level harms the poor more since their basket of goods and services becomes considerably concentrated in every inflationary spell.

Furthermore, inflation can hurt a nation's effectiveness by leading towards the appreciation of the national currency and a resulting overestimated exchange rate, which has an adverse impact on exports (Gill & Khan, 2010).

According to, Fofack (2005) in a study shows that inflationary forces influence the high level of compromised loans in African countries with variable exchange rate systems. According to this author, inflation is accountable for the prompt destruction of the equity of commercial banks and therefore higher credit risk in the banking regions of these African countries.

In this study, the research intends to find out the impact of inflation with relation of loan default or non-performing loans on ROA of Dashen bank.

2.1.7 The Effects of NPLs on Economy

Non-performing loans can lead to efficiency problem for banking sector. It is found by a number of economists that failing banks tend to be located far from the most-efficient frontier (Berger and Humphrey (1992), Barr and Siems (1994), DeYoung and Whalen (1994), Wheelock and Wilson (1994)), because banks don't optimize their portfolio decisions by lending less than demanded. What's more, there are evidences that even among banks that do not feel, there is a negative relationship between the non-performing loans and performance efficiency (Kwan and Eisenbeis (1994), Hughes and Moon (1995), Resti (1995)).

The phenomena that banks are reluctant to take new risks and commit new loans is described as the '"credit crunch/crisis/" problem. According to the United States Council of Economic Advisors (1991), credit crunch is "a situation in which the supply of credit is restricted below the range usually identified with prevailing market interest rates and the profitability of investment projects". A "credit crunch" is a disequilibrium phenomenon. It is present when banks are unwilling to lend, especially when a firm with profitable projects cannot obtain credit in spite of low interest rates (lower than the expected marginal products). Credit crunch results in excess demand for credit and hence credit rationing, where loans are allocated via non-price mechanism. Eventually, it imposes additional pressure on the performance of the monetary policy.

The idea of credit crunch has drawn attention when the traditional view failed to satisfactorily explain the economy state for those countries that suffered from the South-East Asian financial crisis in 1997. Under the traditional view, the link between the interest rate change and the real economic activity occurs through investment and consumer durable expenditure. It was strongly believed by IMF that the hike would help stabilize the foreign currency market and eventually induce banking reform by crowding out low-profit projects. However, the persistent fall in economic growth rate and the lasting economic recession cast doubt on the true benefits of the policy and the effectiveness of the traditional view of the transmission mechanism. The idea of credit crunch addresses an alternative explanation for the transmission mechanism.

During a crisis, in order to restore the credibility among creditors and depositors, failing financial institutions not only try to expand their equity bases, but also reduce their risky assets or change the composition of the assets portfolio. As a result of such defensive action, the corporate debtors are always targeted, thus stalling the overall economic growth.

Specially, the reluctance of banks to lend can be caused by several reasons, such as the increased capital adequacy requirement imposed by Basel Accords; impaired debt-servicing capacity, especially small-to-medium enterprises (SMEs); risks of a further fall in collateral value, etc., which make the interest rate not to serve as the main determinant by banks in credit approval. Non-performing loans have been viewed to constitute one of the most important factors causing reluctance for the banks to provide credit. In a high NPL condition, banks increasingly tend to carry out internal consolidation to improve the asset quality rather than distributing credit. Also, the high level of NPLs requires banks to raise provision for loan loss that decreases the banks' revenue and reduces the funds for new lending. The cutback of loans impairs the corporate sector as they have difficulties in expanding their working capital, blocking their chances of resuming normal operation or growing. Unavailability of credit to finance firm's working capitals and investments might trigger the second round business failure which in turn exacerbates the quality of bank loans, resulting in a re-emerging of banking or financial failure. In a worse case, it triggers an endless violent liquidity curved. As a result of poor economic condition and the depressed economic growth, the level of NPLs increases

→ The weaker corporate sector makes banks more reluctant to provide additional credits

→ With insufficient capital, the production sector is further weakened, resulting in decreases in aggregate demand

→ Again, even worse borrowers' condition creates more NPLs.

Krueger and Tornell (1999) support the credit crunch view and attribute the credit crunch in Mexico after the 1995 crisis partially to the bad loans. They point out that banks were burdened with credits of negative real value, thereby reducing the capacity of the banks in providing fresh fund for new projects. Agung et. al. (2001) using the macro and micro panel data analyses to study the existence of a credit crunch in Indonesia after the crisis. Both the macro and micro evidences show that there was a credit crunch, characterized by an excess demand for loans, starting to emerge in August 1997, one month after the contagion effects of the exchange rate turmoil in Thailand spreading to Indonesia. They investigate the relationship between the loan supply and real lending capacity, lending rates, real output, bank's capital ratio, and non-performing loan. The results show that the coefficients on NPLs are negative and significant, which indicate that bank credit supply declines with the worsening of the NPLs problem. Westermann (2003) compares the cases of Germany after the credit boom of the late 1990s and Japan aftermath the bubble burst in early 1990s. He argues that even though the German banks were in a better condition than Japanese banks were, as the path of German's aggregate credit looks so similar to that of Japan, it is at least unlikely that the German credit slowdown was entirely driven by demand, while that of Japan was mostly caused by a lack of supply. There must at least be some supply side changes that affect the aggregate credit, and differences only exist in the magnitude of the problem. He further points out that the one of the main reasons in Germany for the credit crunch is the increased risk of non-performing loans after the credit boom.

In this study, the researcher tries to find researches on Ethiopian commercial banks to saw the empirical study related to credit crunch and NPLs but not yet exist.

2.1.8 Preventing and Non-performing Loans

Safety is the watchword in commercial bank lending activities. Bankers want to feel reasonably sure that the principals of their loans will be repaid, even though they may have to be satisfied with relatively low rates of interest because of their selection of only the better risks.

Banks deal with problem loans in a variety of ways. The eventual path to collect problem loans depends on how early the problems are discovered. Problems that are discovered early enough can frequently be corrected by restructuring the borrower's operations and

repayment schedule. *(Peter 1999, 243)* there are useful warning signals of a weak loans and poor bank lending policies. The signals of weak loans include irregular or delinquent loan repayment, frequent request for alternations in loan, rising debt to net worth and not filing documents like financial statements. In addition, request for reappraisal of assets to increase net worth and applying for loan on poor quality collateral signal problem loans. The customer may also rely on non-recurring sources of funds, such as selling of buildings and equipment to meet loan repayments.

On the other hand, poor selection of risks among borrowing customers, ending money on contingent future events, lending money because a customer promises a large deposit, failure to specify a plan for liquidation of each loan are indicators of poor lending policies. In addition to this, substantial loans to insides including employees, directors, or shareholders, tendency to overreact to competition, like making poor loans to keep customers form going to other banks is dangerous attitude. Lending money to support speculative purchases and lack of sensitivity to conditions are also good indicators of inadequate or poor bank lending polices *(Koch and Timothy, 1995, 157-58).*

Lending difficulties can be reduced if management establishes and adheres to loan policy guidelines that restrict unacceptable activity. Such guidelines specify quantitative goals for loan production versus loan quality, and indicate procedures to attain these goals. The procedures document format for obtaining loan application, grading loans, approving loans and systematically reviewing loan performance and quality.

Once the bank comes to the realization of a problem loan on its books, the first thing it should do is to contact the debtor. This helps to assess the attitude of the borrower and to find solutions to the problem. If the bank expects a debtor's co-operation, it is usually necessary to give him assurance that the bank wishes to co-operate with him and that is advantageous to both the bank and the debtor. At this time the bank must be taken actions immediately. But it must also be reasonable and conciliatory enough that the debtor will believe that all is not lost, and that co-operating with the bank in instituting plan for correction may be beneficial to him. In this case the bank's officer should make unrealistic demands for immediate payment, unless obvious fraud or gross misrepresentation exists, nor should they threaten legal action at this time. *(Rose and Peter, 1999, 248-251)*

The second step in handling the problem loan, as describe by the same author is searching solutions. Achieving workable solution is rarely easy, and in some cases impossible. Where no workable solution can be found, the bank has no alternative but to collect the loan, either through the voluntary liquidation of assets by the debtors or by forced liquidation. The benefits that accrue to the debtor, if the plan for correction is successful are rather obvious. For the bank as well, if it can help the borrower solve his problems and become a successful businessman, it will have a loyal customer for many years to come. The bank ordinarily gains the good will of the customer, as well as the business community as a whole. Corrective actions should be sought to recover problem loans using various workout strategies. Each problem is different, and no routine is universally applicable. Some of the most common approaches to be considered include:

- ➢ Developing a debt structuring program,
- ➢ Agreeing on additional documentation, and guarantees,
- ➢ Calling on a guarantees,
- ➢ Arranging for joint partnership and capital contribution,
- ➢ Working with managements to define problems & potential solutions,
- ➢ Developing a retrenchment program with closely monitored budgets,
- ➢ Arranging the sale of the operating company to a third party, and
- ➢ Replacing management

When all the above methods fail to be effective in the recovery process, the bank has no option but to forego the dues by writing them off. Write-off should, however, be permitted as the last resort after exhausting all other opportunities.

As a solution, the creditor may seek to solve the borrower's problem of inadequate cash flow to meet loan obligations through the extension of loan terms. Extensions and renewals however, should be considered only after a thorough examination of a cash flow projection, and only if there is adequate evidence that repayment will actually materialize at a later time. Any renewals should be for a short period of time, and the bank should carefully re-examine its position before granting additional renewals or extension. There are several dangers involved in the granting of an extension. The debtor may feel relieved of pressure

from, and may reduce his efforts to repay the debt, or divert available cash to the repayment of other debts, which are more pressing. Therefore, when dealing with prospective renewal request, the lender should carefully analyze the credit in the same manner as would analyze a new application.

2.2   Empirical Literature

The term "bad loans" as described by Basu (1998) in Fofack (2005) is used interchangeably with non- performing and impaired loans. Berger and De Young, (1997) also consider these types of loans as "problem loans". In effect, these would be considered bad or toxic assets on the banks books (Bexley and Nenninger, 2012). These descriptions were used interchangeably during the study. According to Berger and De Young (1997), non performing loans could be injurious to the financial performance of banking institutions.

According to Alton and Hazen (2001) non performing loans are those loans which are ninety days or more past due or no longer accruing interest. Hennie (2003) agrees arguing that non performing loans are those loans which are not generating income. This is further supported by Caprio and Klingebiel (1996), cited in Fofack (2005), who define non performing loans as those loans which for a relatively long period of time do not generate income that is, the principal and or interest on these loans have been left unpaid for at least ninety days. Non- performing loans are also commonly described as loans in arrears for at least ninety days (Guy, 2011). Therefore in this study, non performing loans are loans that are ninety or more days delinquent in payments of interest and/or principal (Bexley and Nenninger, 2012).

Most empirical studies examine the influence of the macroeconomic environment on non performing loans (Louzis et al, 2011). Rinaldi and Sanchis-Arellano (2006) analyze household non performing loans for a panel of European countries and provide empirical evidence that disposable income, unemployment and monetary conditions have a strong impact on non performing loans. Berge and Boye (2007) find that problem loans are highly sensitive to the real interest rates and unemployment for the Nordic banking system over the period 1993–2005[Non Performing loans in Commercial Banks: A case of CBZ Bank Limited In Zimbabwe, Institute of Interdisciplinary Business Research , November 2012 Volume 4, No. 7]

Louzis *et al.* (2010) conduct study to examine the determinants of NPLs in the Greek financial sector using fixed effect model from 2003-2009 periods. The variables included were ROA, ROE, solvency ratio, loan to deposit ratio, inefficiency, credit growth, GDP growth rate, unemployment rate and lending rates. The finding reveals that loan to deposit ratio, solvency ratio and credit growth has no significant effect on NPLs. However, ROA and ROE has negative significant effect whereas inflation and lending rate has positive significant effect on NPLs. It justifies that performance and inefficiency measures may serve as proxies of management quality.

Ali and Iva (2013) who conducted study on "the impact of bank specific factors on NPLs in Albanian banking system" considered Interest rate in total loan, credit growth, inflation rate, real exchange rate and GDP growth rate as determinant factors. They utilized OLS regression model for panel data from 2002 to 2012 period. The finding reveals a positive association of loan growth and real exchange rate, and negative association of GDP growth rate with NPLs. However, the association between interest rate and NPL is negative but weak. And also inflation rate has insignificant effect on NPLs.

Similarly, Shingjergji (2013) conducted study on the "impact of bank specific factors on NPLs in Albanian banking system". In the study, capital adequacy ratio, loan to asset ratio, net interest margin, and return on equity were considered as a determinant factors of NPLs. The study utilized simple regression model for the panel data from 2002 to 2012 period and found as capital adequacy ratio has negative but insignificant whereas ROE and loan to asset ratio has negative significant effect on NPLs. Besides, total loan and net interest margin has positive significant relation with NPLs. The study justifies that an increase of the CAR will cause a reduction of the NPLs ratio. Besides, an increase of ROE will determine a reduction of NPLs ratio. Besides, Mileris (2012) on the title of "macroeconomic determinants of loan portfolio credit risk in banks" was used multiple and polynomial regression model with cluster analysis, logistic regression, and factor analysis for the prediction. The finding indicates that NPLs are highly dependent of macroeconomic factors.

However, Swamy (2012) conduct study to examine the macroeconomic and indigenous determinants of NPLs in the Indian banking sector using panel data a period from 1997 to 2009.

The variables were GDP growth, inflation rate, per capital income, saving growth rate, bank size, loan to deposit ratio, bank lending rate, operating expense to total assets, ratio of priority sector`s loan to total loan and ROA. The study found that real GDP growth rate, inflation, capital adequacy,

bank lending rate and saving growth rate had insignificant effect; whereas loan to deposit ratio and ROA has strong positive effect but bank size has strong negative effect on the level of NPLs.

Similarly, Farhan *et al.*(2012) on the title of "Economic Determinants of Non-Performing Loans: Perception of Pakistani Bankers" utilized both primary and secondary data in 2006 years. The data was collected from 201 bankers who are involved in the lending decisions or handling nonperforming loans portfolio. Correlation and regression analysis was carried out to analyze the impact of selected independent variables. The variables included were interest rate, energy crisis, unemployment, inflation, GDP growth, and exchange rate. The study found that, interest rate, energy crisis, unemployment, inflation and exchange rate has a significant positive relationship whereas GDP growth has insignificant negative relationship with the non-performing loans.

According to an Empirical Study made on Commercial Banks in Pakistan by Badar &Yasmin(2013) on the title of "Impact of Macroeconomic Forces on Nonperforming Loans" the long and short run dynamics between nonperforming loans and macroeconomic variables covering the period from 2002 -2011 of 36 commercial banks in Pakistan were assessed. In the stud, inflation, exchange rate, interest rate, gross domestic product and money supply were included as macroeconomic variables. They applied vector error correction model. The study found that as there is strong negative long run relationships exist of inflation, exchange rate, interest rate, gross domestic product and money supply with NPLs.

Makri *et al.*(2014) identify the factors affecting NPLs of Euro zone's banking systems for 2000-2008 periods before the beginning of the recession exclusively pre-crisis period. The study includes 14 countries as a sample out of 17 total Euro zone countries. The variables included were growth rate of GDP, budget deficit (FISCAL), public debt, unemployment, loans to deposits ratio, return on assets, and return on equity and capital adequacy ratio. The study utilized difference Generalized Method of the Moments (GMM) estimation and found as real GDP growth rate, ROA and ROE had negative whereas lending, unemployment and inflation rate had positive significant effect on NPLs. However, ROA & loan to deposit ratio, inflation, and budget deficit did not show any significant impact on NPL ratio. Similarly, Carlos (2012) on macroeconomic determinants of the Non-Performing Loans in Spain and Italy found as inflation rate has insignificant effect on NPLs.(cited in Gadise Gezu, 2014).

Researchers in banking and finance have indicated that bank performance is related to internal and external factors.The internal factors relate to banks' characteristics and external factors are described

as the economic and legal environment (Athanasoglou, Brissimis & Delis, 2008). Multiple linear regression is a very common statistical technique used in finding the determinants of bank performance, for example Athanasoglou, Brissimis & Delis (2008), Haron (2004) and Sanusi & Mohamed (2007).cited in Nor Mazlina Abu Bakar and Izah Mohd Tahir (International Business Research journal no.2 Vol.4 October, 2009)

A similar study in finding determinants of bank profitability, Sanusi & Mohamed (2007) found that bank's characteristics and the financial structure of a country are significant variables affecting bank profitability. They also compared the results of fixed effects and random effects on the proposed model and observed low adjusted $R2$ values, indicating a low proportion of variation in profitability explained by the significant independent variables. Cited in Nor Mazlina Abu Bakar and Izah Mohd Tahir (International Business Research journal no.2 Vol.4 October, 2009)

2.3 Conceptual Framework model

Figure 2.1 conceptual framework model

Independent variables

Dependent variable
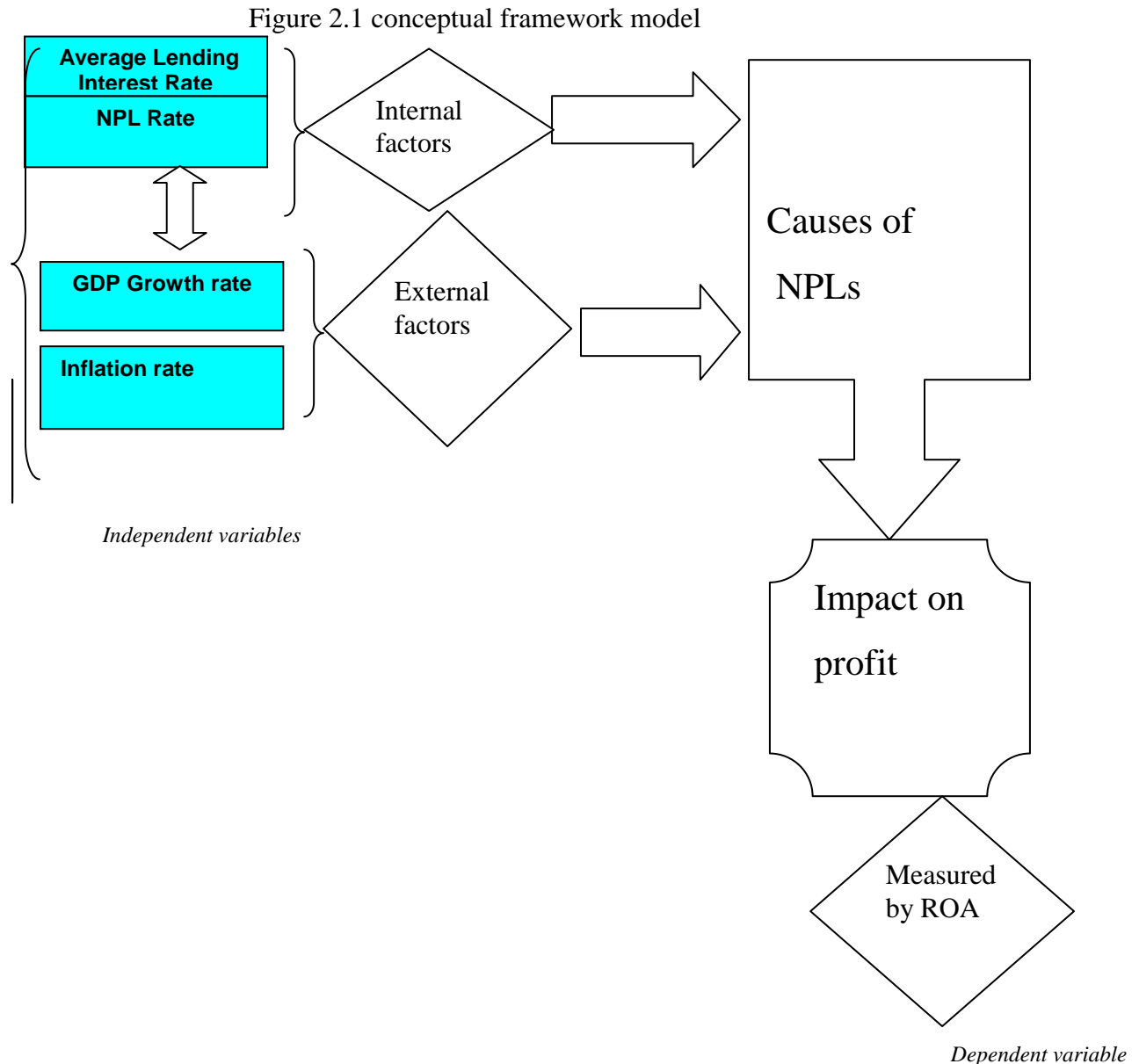
Source*: extracted by the researcher (2015)*

In the above conceptual framework model, the researcher expects if the average lending interest rate and NPL rate are high, it was an internal factor that affects banks NPL position. Where as if GDP growth rate is low and inflation rate was high, it was an external factor that affects NPL status of the bank. The researcher used the average lending interest rate as lending interest rate in the sudy.

CHAPTER THREE

3. Research Designs and Methodology

3.1 Introduction

This chapter examines and discussed the research design and methodology procedure that is used to carry out this study. The researcher discussed research design and approach followed by the sampling design and data collection tools and methods. The subsequent section presents and discusses method of data process and analysis. Finally, study variables with their model specifications are presented.

3.2 Research Design and Approach

Research design is a master plan specifying the methods and procedures for collecting and analyzing the required data. The choice of research design depends on objectives that the researchers want to achieve (John, 2007) cited in Gadisa Gezu, 2014. According to Kotzar et al., (2005), research design is defined as the plan and structure of investigation and the way in which studies are put together. Cooper et al. (2003) also define research design as the process of focusing on the researcher's perspective for the purpose of a particular study. Leedy and Ormrod (2005) define a research methodology as a means to extract the meaning of data, cited in Wondimagegnehu Negera, 2012

Since this study was designed to examine the impact of NPLs in relation with profit. The researcher is used quantitative data in respect with research variables of non-performing loan rate (NPL to total loan ratio), inflation rate, suspend interest income rate, lending interest rate, and real GDP growth rate. Since it tries to describe the problem and attempts to explain the phenomenon with quantitative research approach. Thus, due to quantitative nature of data, the researcher used deductive reasoning to examine the cause and effect relationships between NPLs and in relation with profit because Deductive reasoning starts from laws or principles and generalizes to

Particular mean that the researcher generalized the position of NPL depend on NBE directives. As noted by Kothari (2004), explanatory research design examines the cause and effect relationships between dependent and independent variables. Therefore, since this study was examined the cause and effect relationships between nonperforming loans and profitability. it is an explanatory research design where as quantitative explanations are quantitative research approach.

A SPSS software version 20 was used to compute the descriptive statics (mean, standard deviation, maximum and minimum) of the study variable and multiple linear regression analysis were used to explore the relationship between NPL and profitability performance(ROA).

3.3   Sampling Design

Sample design deals with sample frame, sample size and sampling technique. Sampling is a technique of selecting a suitable sample for the purpose determining parameters of the whole population. Population is the list of elements from which the sample may be drawn (John, 2007).

Since the primary aim of this study is to determine the impact of nonperforming loans of Dashen bank S.C., For the purpose this study on an efficient and effective manner in line with the researcher time and resource, the researcher conduct using secondary data in line with 15 years data's (1999/00-2013/14). Since Dashen bank S.C was started the operation in 1996 and now experienced for 19 years in the industry and this study covers 15 years data's which covers 78.95 %(15/19 years).

3.4   Data Collection Tools and Methods

The methodologies to be used in collecting and organizing the data used secondary data's (Dashen bank S.C annual reports, credit manual and memo's, national bank of Ethiopia credit directives and guidelines, books, journals, empirical studies, and websites). In addition to this, such data's are published as well as done by national bank of Ethiopia authorized auditor; will be used to check the validity and reliability of information gathered from secondary data's. Moreover, Secondary data was obtained from the company's published audited financial statements to find out how non performing loans have affected the bank profitability.

3.5   Methods of Data Analysis

In order to acquire meaningful facts, the researcher will be used several analysis methods for this research to achieve the objectives and answer the basic research questions. To this end, inferential statics were be used. The researcher employs regression analysis and a time series dataset covering 15 years (1999/00 to 2013/14) to examine the relationship between nonperforming loans and other key internal and external variables along with the impacts on profit. To do this quantitative research design certain statistical methods are used. Therefore, the researcher used multiple linear regression analysis. According to Nor Mazlina Abu Bakar and Izah Mohd Tahir (International Business Research journal no.2 Vol.4 October, 2009) multiple linear regression analysis is a technique for

modeling the linear relationship between two or more variables. It is one of the most widely used of all statistical methods. In banking and finance literature, regression analysis is a very common method used to find the determinants of bank performance.

3.6   Study Variables and Model specification

The researcher were used Return on assets (ROA) (dependant variable) as a measure of bank profit performance and four predictor (independent variables) were chosen to be analyzed. Those chosen variables are both internal variables (lending interest rate and NPL rate) and external variables (Ethiopian inflation rate and real GDP growth rate).

Research model expressed

$$\text{ROA} = \alpha 0 + \beta 1 NPLR + \beta 2 LIR + \beta 3 InR + \beta 4 GDPR + £$$

Where **ROA** (Return on Asset) = $\underline{\text{Net income}}$
                                              Total Asset

$\alpha 0$ = constant parameter/constant term, $\beta 1 - \beta 4$ = coefficient of independent variables

$NPLR$ = non-performing loan rate

LIR = lending interest rate,

$INFR$ = represents the Ethiopian inflation rate,

$GDPR$ = real Ethiopian Gross domestic product growth rate and $£$ is the error term.

In the research model equation, ROA is a dependant variable because profitability were measured by using return on asset; whereas lending interest rate, total outstanding loan, and external Ethiopian inflation rate and GDP are independent variables of this study.

CHAPTER FOUR

4. DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the analysis, results and discussions of the study depend on the collected data. As discussed in the preceding chapter this study is aimed at exploring impacts of nonperforming loans on profitability. In case, the data for this study was drawn from the year 1999/00 to 2013/14. To this end, 15 years observations were analyzed to examine the impact study variables on ROA.

4.2 Data Analysis and Results

4.2.1 Descriptive Statistics

This section presents the descriptive statistics of dependent and explanatory variables used in this study. The dependent variable was ROA that used to measure profit performance of the bank while explanatory variables are GDP rate, inflation rate, lending interest rate and NPL rate.

Accordingly, the following table 4.1 reports mean, maximum, minimum, standard deviation and number of observation for each variables used in this study.

Table 4.1 summery of descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic
GDP rate (%)	15	-2.10	13.88	8.86	4.35
Inflation rate (%)	15	-10.60	36.40	12.54	13.08
Lending interest rate (%)	15	6.53	12.48	9.16	1.87
NPL rate (%)	15	2.57	11.87	6.26	3.13
ROA	15	1.18	3.72	2.49	.78
Valid N (list wise)	15				

Source: Researcher computation on SPSS software

In the descriptive analysis, the researcher computes the variables minimum, maximum, mean and standard deviation. The above descriptive analysis 'N' indicates that the researcher used fifteen years data of respective variables. From these data percentage of -2.10, -10.60, 6.53, 2.57 and 1.18 are the minimum rates for Ethiopian GDP rate, Ethiopian inflation rate, Dashen Bank lending interest rate,

Dashen Bank NPL rate and ROA of Dashen Bank respectively. Whereas percentage of 13.88, 36.40, 12.48, 11.87 and 3.72 are the maximum rates for Ethiopian GDP rate, Ethiopian inflation rate, Dashen Bank lending interest rate, Dashen Bank NPL rate and ROA of Dashen Bank from the year 1999/00 respectively. NPLs ratio measured by Nonperforming loans divided by total loan ranges from 2.57 – 11.87 percent and it has a mean of 6.26% shows greater than the standard deviation by (3.13 %).

This indicates that Dashen Bank S.C incurred 6.26% of NPLs on averages from its total loan from the year 1999/00 up to 2013/14 fiscal year. According to Ethiopian context, the banking sectors are required to maintain the ratio of NPLs at least a maximum of 5% (NBE, 2008).

4.2.2 TESTS AND RESULTS OF MULTIPLE LINEAR REGRESSION MODEL

Multiple linear regression analysis is a technique for modeling the linear relationship between two or more variables. It is one of the most widely used of all statistical methods. In banking and finance literature, regression analysis is a very common method used to find the determinants of bank performance (Nor Mazlina Abu Bakar and Izah Mohd Tahir, 2009)**.**

Table 4.2 Model Summary

Mode	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.946[a]	.894	.852	.30207	2.115

Source: Researcher computation on SPSS software

The coefficient of determination r 2 (two-variable case) or R2 (multiple regression) is a summary measure that tells how well the sample regression line fits the data. Typically, however, R2 lies between 0 and 1 extreme value. The fit of the model is said to be "better'' the closer is R2 to 1. (Gujarati: Basic Econometrics, Fourth Edition The McGraw−Hill Companies, 2004). In other word, The R Square statistic tells us the proportion of variance in the dependent variable that is accounted for by the independent variables. In this case, the model fits (accounts) for 89.4% of the variance in the dependent variable, ROA. The adjusted R Square is slightly lower, indicating 85.2% of the variance is accounted for by the model. According to, MacEachron, (Basic Statistics in the Human Services: an Applied Approach, page 132) the strength of variables relationship (multiple correlation

coefficient) is based on the value of R statistic which describes Very weak (Between 0 and ±0.20), Weak(Between ±0.20 and ±0.40), Moderate(Between ±0.40 and ±0.60), Strong(Between ±0.60 and ±0.80) and Very strong (Between ±0.80 and ±1.00).In this study, the R statistic is 0.946, indicated that there is a very strong relationship between study variables. This implies that the profitability (ROA) was perfectly influenced by its independent variables. Standard error of estimate is flawlessly associated with regression analysis.

According to, Savin N. E. and K. J. White (1977) (The Durbin-Watson Test for Serial Correlation with Extreme Sample Sizesor Many Regressors," *Econometric* 45, 1989–1996).The Durbin-Watson statistic is used to test for independent of residuals. The value of the Durbin Watson statistic ranges from 0 to 4. As a general rule, the residuals are independent if the Durbin-Watson statistic is approximately 2, and an acceptable range is between 1.50 and 2.50. In this study, Durbin-Watson is 2.115, close to 2 and within the acceptable range.

Table 4.3 Analysis of variance (ANOVA)

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	7.715	4	1.929	21.138	.000[b]
1	Residual	.912	10	.091		
	Total	8.627	14			

a. Dependent Variable: ROA

b. Predictors: (Constant), NPL   rate(%), GDP   rate(%), Inflation   rate(%), Lending   interest   rate(%)

Source: Researcher computation on SPSS software

In the above ANOVA table, the probability of the F statistic for the regression analysis is 0.000, less than the level of significance of 0.05. Therefore, the researcher rejects the null hypothesis that there is no relationship between the independent and the dependent variable. Therefore, from this out put the researcher rejects the relation between inflation rate and ROA.

Table 4.4 Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Co linearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	3.721	1.007		3.694	.004		
GDP rate(%)	.014	.024	.077	.569	.582	.583	1.716
Inflation rate(%)	.004	.008	.063	.445	.666	.532	1.881
Lending interest rate(%)	-.005	.064	-.011	-.075	.942	.455	2.199
NPL rate(%)	-.216	.054	-.863	-3.979	.003	.225	4.445

Source: Researcher computation on SPSS software

$$ROA = 3.721 + 0.014\boldsymbol{GDPR} + 0.004\boldsymbol{InR} - 0.005\boldsymbol{LIR} - 0.216\,\boldsymbol{NPLR}$$

The direction of the relationship is based on the sign of the B coefficient for the independent variable. Since -0.005 of lending interest rate and -0.216 of NPL rate are negative, there is an inverse relationship between ROA and lending interest rate and NPL rate. This model suggested that a unit increase in NPL amounts will result in 0.216 unit decreases in ROA and also a percentage increase in lending interest rate on borrowers will result in 0.005 units decrease of ROA of Dashen bank S.C. Contrary to this, GDP growth rate and Inflation rate showed a positive effect at 0.014 and 0.004 level of significance.(see the result in table 4.4)   Multi-co linearity exists when Tolerance is below .10 and VIF is less than 2.5. In this study, all of the tolerance values are less than .10 and the VIF is less than 2.5 except VIF of NPL rate. Researcher assumes VIF of NPL is not a problem.

According to data analysis a positive relationship is found between inflation trends and return on assets (ROA). Due to this relation, the researcher concludes that, calculated ROA for Dashen bank segments with credit officers and managers describes that when inflation is high indeed planning activities increased and asset utilization becomes effective to some extent but creditors default risk also high. From the above 4.4 table significance values of the three independent variables are out of range. Such a significant variation could be justified as the impact of many other NPLs indicators, which have not taken into the study, in addition to the effect of the used in the study. According to Amalendu Bhunia, Sri Somnath Mukhuti and Sri Gautam Roy(2011) in the Current Research Journal of Social Sciences 3(3): 269-275, on the topic of financial performance analysis case study all five study variables significance values lies

between 0.234 And 0.884 and justified as the impact of many other financial performance indicator, which have not taken into the study.

4.3   Discussion on study variables

The discussion part explained the variables depend on the theoretical aspects of each study variables with the collected data of this study. i.e depend on the following table 4.4.1 summery.

Table 4.5 Summery of collected variables data

Year	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
GDP rate (%)	5.9	7.4	1.6	-2.1	11.7	12.6	11.5	11.8	11.2	9.9	10.4	11.5	7.5	13.88	8.109
Inflation rate (%)	0.3	-0.3	-10.6	10.9	7.3	6.1	10.6	15.8	25.3	36.4	2.8	18.1	33.2	24.75	7.4
Lending interest rate (%)	8.33	8.91	8.78	6.53	6.95	7.1803	7.4	7.7	9.72	9.68	9.68	10.67	11.55	11.9	12.48
NPL rate (%)	11.87	9.88	10.57	9.77	8.29	7.5	5.99	4.91	4.48	4.64	4.20	3.02	3.16	3.03	2.57
ROA	1.18	1.74	1.52	1.33	2.10	2.08	2.94	3.11	3.10	2.57	2.62	3.08	3.72	3.07	3.24

Sources: CSA and Dashen Bank S.C Annual reports (1999/00-2013/14)

4.3.1 Inflation rate

It is a situation in which the economies overall price level is rising. It represents sustained and pervasive increment in aggregate price of goods and services resulting decline in purchasing power of money. Accordingly, when inflation is high and unexpected, it can be very costly to an economy. At the same time, inflation generally transfers resources from lender and savers to borrowers since borrowers can repay their loans with in birr/USD that are worthless. It is determined as the general consumer price index. This indicates that, as inflation increase, the cost of borrowing gets more expensive and deteriorates the quality of loan portfolio. In this study, the data shows an inverse relationship between inflation rate and ROA. For example, in 2000/01 inflation decreases from 0.3 to -0.3 but in the same fiscal year ROA increases from 1.18 to 1.74.

According to Farhan *et al.*(2012), Skarica(2013), Klein(2013) and Tomak(2013) found as there is a positive relationship between NPLs and Inflation rate. Theoretically, inflation should reduce the real

value of debt and hence make lending easier. However, high inflation may leads to reducing borrowers' capacity to repay their debt.

As inflation rises, credit rationing becomes more severe. As a result, banks make fewer loans; resource allocation is less efficient as well as reduction in capital investment.

Besides, inflation cause firms to increase their costs of changing prices. Finally, it made individuals to hold less cash and make more trips to banks since inflation lowers the real value of money holdings. It can negatively affect the borrowers' real income when wages are stick. Besides, price stability is considered as prerequisites for ones' countries economic growth (Skarica, 2013). For this study the relationship of ROA & inflation shows in table 4.5

Graph 4.1 Graphical representation of inflation rate trend
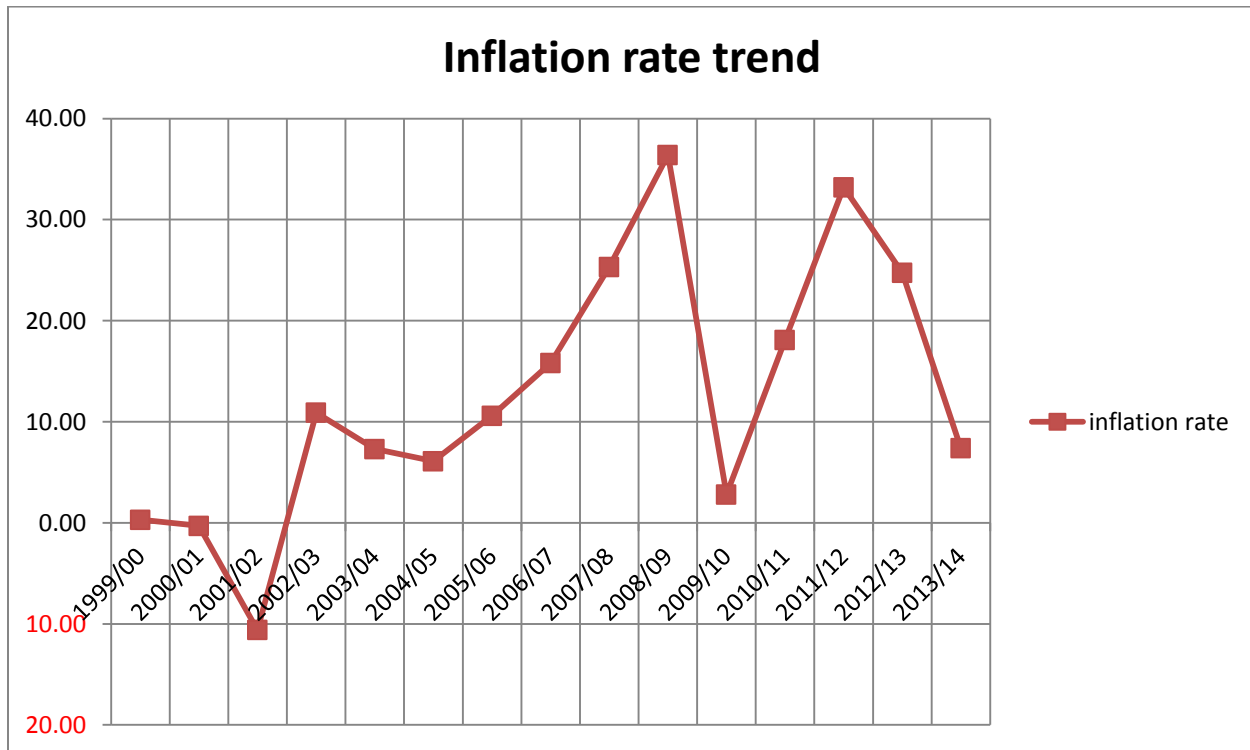
4.3.2 Lending interest rate

Lending rate is the bank rate that usually meets the short, medium and long-term financing needs of the private sector. This rate is normally differentiated according to creditworthiness of borrowers and objectives of financing. The interest rate affects also the amount of bad debt in the case of floating interest rate. This implies that the effect of interest rates should be positive, and therefore, there is an

increase in the debt caused by the increase in payments of interest rates and hence the rise of non-performing loans. According to Bofondi and Ropele (2011) and Fofack (2005), they argue that economic growth and the lending interest rate are important determinants of bad loans in the sub-Saharan African countries.

Banks that charge high interest rate would comparatively face a higher default rate or non performing loans. Study by Sinkey and Greenwalt (1991) on large commercial Banks in US depict that a high interest rate charged by banks is associated with loan defaults. Rajan and Dhal (2003) who used a panel regression analysis indicates that financial factors like cost of credit has got significant impact on NPLs. Study by Waweru and Kalini (2009) on the commercial banks in Kenya using statistical analysis indicates that high interest rate charged by the banks is one of the internal factors that leads to incidence non-performing loans.

In this study, lending interest rate is positively associated with NPL rate of Dashen Bank S.C. This means; when lending interest rate decreases NPL rate decreases and vice versa. But, both lending interest rate and NPL rate negatively associated with ROA (see table 4.5).

Graph 4.2 Graphical representation of average lending interest rate trend
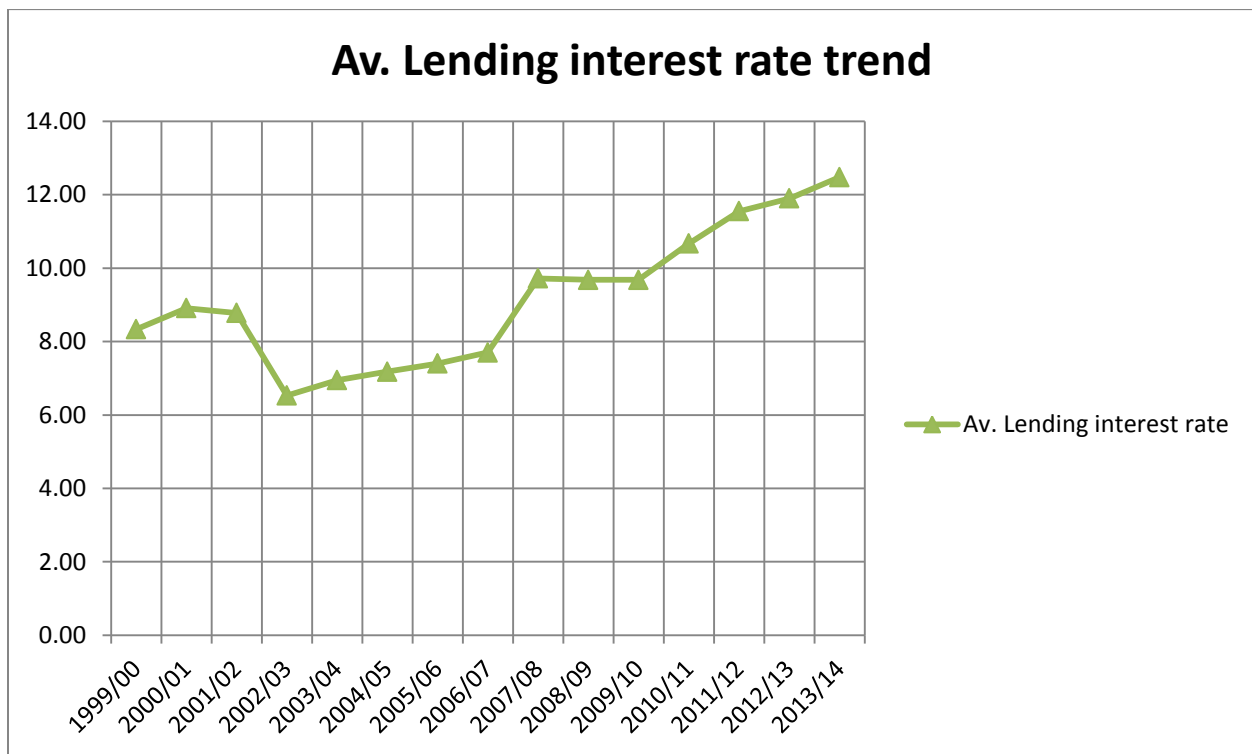
4.3.3 GDP Growth rate

From the collected data present evidence, the ROA is explained by GDP growth rate as one predictor variable in Dashen bank. Their results demonstrate that GDP growth is negatively associated to the NPL, suggesting that the improvement in GDP leads in real economy to decrease NPL, Quite consistent with the theory; the results that we found show a significant and negative relationship between the growth rate of GDP, and NPL, whereas GDP and ROA had a positive relationship. The improvement in the real economy is generating a reduction in non-performing loan portfolios of banks. An increase in GDP usually leads to greater flows of household income and a rise in profitability. In this study, GDP growth rate is negatively associated with NPL rate of Dashen Bank S.C. This means; when GDP increases NPL rate decreases and vice versa. And GDP growth rate positively associated with ROA (see table 4.5). The result is similar to those obtained by Louzis et al. (2010) for the case of Greek banks and Bofondi and Ropele (2011) for Italian banks.

**Graph 4.3** Graphical representation GDP growth rate

4.3.4 NPL rate

NPL rate is the major indicator of commercial banks credit performance. It is the ratio of nonperforming loan to total loan and advance which measures the extent of credit risk of banks. In this case, the bank was exposed to risk when NPL rate is increase. (See table 4.4.1)

Poor management can imply week monitoring for both operating cost and credit quality of customers, which will include high levels of capital losses. This may be expressed in the form of follow-up problem, poor ratio analysis, collateral estimation and registration problem etc.

Come back on assets, is influenced by their credit score risk; the connection between the two is not straightforward. Movements in the return on assets will reflect not just a credit score threat, but the wide range of rising prices, including banks.

Graph 4.4 Graphical representation of NPL rate trend
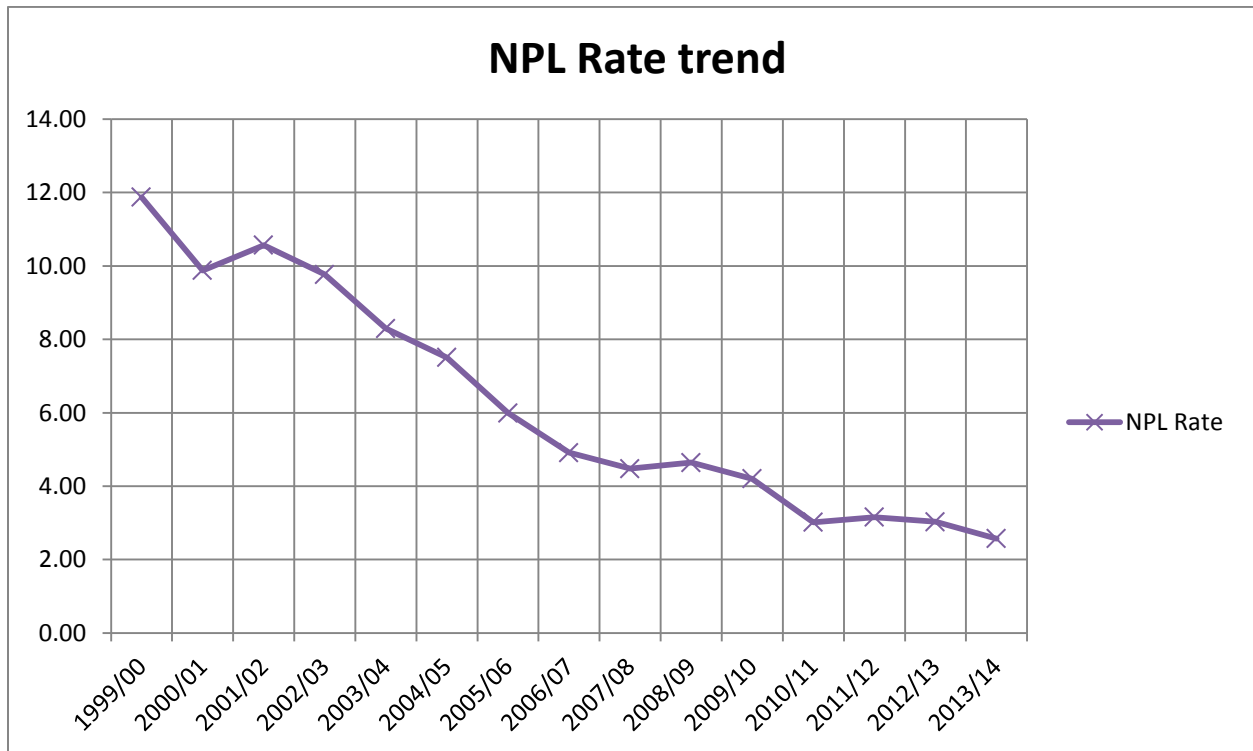
4.3.5   Return on Asset

Return on Asset (ROA) is defined as the efficiency in asset utilization and shows how much net income is generated out of assets. It indicates the ability of bank management to generate profits by utilizing the available assets of the bank. Factors used to measure the performance of banking sector are known as key performance indicators, i.e. profitability, return on assets (ROA), and return on equity (ROE), net interest margin, liquidity, etc. from these performance indicators, the researcher used ROA.

Thus, if the ratio of ROA is high, it indicates that it is better performance in order to generate profit. Strong bank profitability measured in terms of ROA might result from high lending rate, fees and commission that lead bank growth in size and profitability. Therefore, ROA gives an idea as to how efficient management is at using its assets to generate earnings. One of the parameter to measure ROA were, Come back on assets is an indicator of how successful an organization is compared to its complete assets. It gives a concept of the efficiency of the control in using its assets to generate earnings

Different researchers found different results regarding the relationship between ROA and NPLs.

For instance Ahmed and Bashir (2013) and Makri *et al.*(2014),) were examined positive significant relationships between ROA and NPLs. However, Boudriga *et a.,* (2009) and Selma and Jouini (2013) found negative association between NPLs and ROA by supporting the arguments that states deterioration of profitability ratio measured in terms of ROA leads to riskier activities of banks and then raise the level of NPLs. They justified that since ROA represents efficiency in asset utilization, poor utilization of assets leads higher NPLs for the banks. Thus, this ratio is expected to have negative relationships with NPLs in this study.

Graph 4.5 Graphical representation of ROA trend
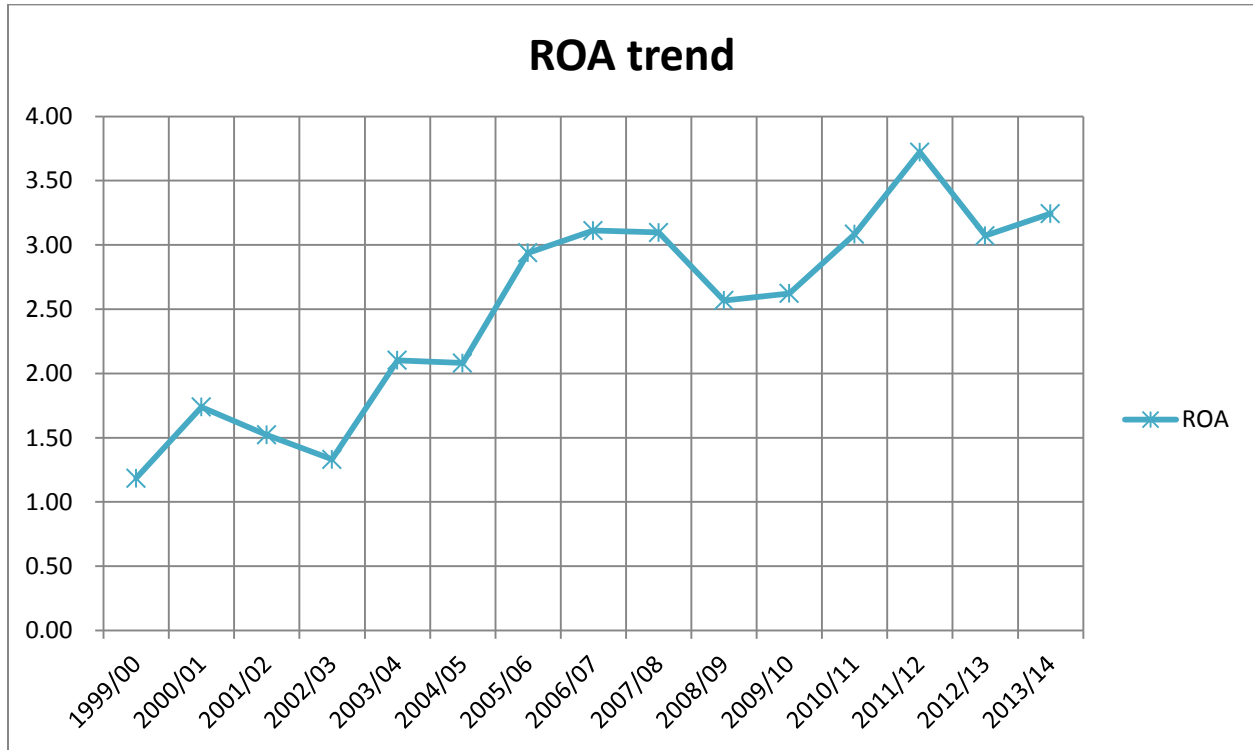
It is measured by the ratio of net profit to total asset as follows;

ROA   =   <u>Net profit</u>
           Total asset

In this study, the researcher used the net profit/income/ of the bank (profit after tax).

Generally, the researcher suggested that great loaning activities, low credit score threat, effective spending budget and well-capitalized economical institutions are associated with standard bank productivity/profitability/, which is measured by ROA.

Table 4.6 Dashen Bank S.C. ROA (1999/00-2013/14).

Year	Total Asset	PROFIT BEFOR TAX	PROFIT AFTER TAX	ROA
1999/00	924,629,893.00	18,103,369.00	10,952,134.00	1.18
2000/01	1,235,456,835.00	36,745,083.00	21,485,881.00	1.74
2001/02	1,563,179,335.00	38,428,858.00	23,782,917.00	1.52
2002/03	1,991,471,836.00	36,858,503.00	26,526,519.00	1.33
2003/04	2,676,644,049.00	78,552,352.00	56,262,396.00	2.10
2004/05	3,419,808,716.00	97,603,572.00	71,155,956.00	2.08
2005/06	4,546,012,978.00	185,367,401.00	133,589,788.00	2.94
2006/07	6,040,914,220.00	259,147,659.00	187,988,216.00	3.11
2007/08	7,718,928,030.00	332,570,355.00	239,055,070.00	3.10
2008/09	9,732,583,441.00	352,488,395.00	249,876,396.00	2.57
2009/10	12,353,386,038.00	458,253,987.00	324,037,250.00	2.62
2010/11	14,614,795,156.00	629,878,382.00	450,655,361.00	3.08
2011/12	17,520,042,319.00	893,262,960.00	652,012,122.00	3.72
2012/13	19,747,174,767.00	812,934,208.00	606,756,384.00	3.07
2013/14	21,962,202,063.00	957,589,717.00	712,484,276.00	3.24

Source: Dashen Bank S.C Annual reports for Total Asset figures

4.4 Analysis of nonperforming loans trend

The NPLs trend in banking sector indicates the loan performance of the bank. This means when NPLs increases through time it indicates poor credit performance, which affects the expected interest income collection and has a direct impact on banks profitability. Whereas NPLs decrease through time it indicates good credit performance.

Table 4.7 Nonperforming loans trend of Dashen Bank S.C (1999/00- 2013/14)

Years	Total Loan &Advance	NPL				NPL RATE (%)
		Litigation	Suspended interest	PDLA	TOTAL NPL	
1999/00	515,038,789.00	43,551,378.00	0.00	17,600,024.00	61,151,402.00	11.87
2000/01	690,578,472.00	45,252,215.00	0.00	22,951,097.00	68,203,312.00	9.88
2001/02	845,024,445.00	62,212,498.00	0.00	27,077,895.00	89,290,393.00	10.57
2002/03	1,217,873,555.00	70,122,376.00	0.00	48,817,829.00	118,940,205.00	9.77
2003/04	1,627,369,234.00	71,104,367.00	395,588.00	63,469,000.00	134,968,955.00	8.29
2004/05	2,160,632,436.00	89,938,764.00	695,075.00	71,500,887.00	162,134,726.00	7.50
2005/06	3,080,263,248.00	97,814,465.00	2,872,614.00	83,877,287.00	184,564,366.00	5.99
2006/07	3,889,003,611.00	92,258,145.00	10,256,292.00	88,498,270.00	191,012,707.00	4.91
2007/08	4,291,704,476.00	82,528,751.00	8,163,055.00	101,548,280.00	192,240,086.00	4.48
2008/09	4,349,249,994.00	99,753,248.00	5,340,243.00	96,919,720.00	202,013,211.00	4.64
2009/10	4,938,736,202.00	97,510,944.00	3,161,463.00	106,944,940.00	207,617,347.00	4.20
2010/11	6,093,873,109.00	57,210,972.00	3,082,089.00	123,664,930.00	183,957,991.00	3.02
2011/12	7,949,369,597.00	76,672,472.00	6,677,831.00	167,765,625.00	251,115,928.00	3.16
2012/13	8,663,249,398.00	63,613,480.00	14,054,595.00	185,011,970.00	262,680,045.00	3.03
2013/14	9,429,628,139.00	64,303,443.00	10,441,409.00	167,755,350.00	242,500,202.00	2.57

Source: Dashen Bank S.C Annual reports

From the above table, NPL ratio decreases through time to time(1999/00 -2013/14)i.e. from 11.87% to 2.57 % but when we see the amount there is an inverse relation because the total loan growth was high(from amount of 5.15 million to 9.43 billion ETB - 1999/00 to 2013/14).moreover in 1999/00 fiscal year the amount of interest income in NPL(suspended interest) was zero but in 2013/14 fiscal year the amount reached 10.44 million ETB.

According to NBE directive No.SBB/43/2007 Loan and advances which are not performing in accordance with contractual repayment terms are recognized and reported as past due in a manner consistent with regulatory standard. Accrued but uncollected interest on loans or advances is accounted for in accordance with international accounting and regulatory standards; timely and adequate provisions are made to the provisions for loan losses account in order to accurately reflect the risk inherent in lending activities and to ensure that disclosed capital and earning performance are accurately reflected. Therefore, in this study from the NPL amount which called suspended interest is an income that kept as a suspended interest for provisional for doubtful and loss accounts but not for loan and advances under litigation. In this study, Dashen Bank has a suspended interest

from the year 2003/04 up to now. This amount had significance impact on banks profitability as well as on country economy.

Hence, in the table 4.7, Dashen Bank audited financial statement does not show suspended interest from the year 1999/00 to 2002/03. But after this year(2002/03) the following figures in the table are indicated.

**Table 4.8** Suspended interest of Dashen Bank S.C

Year	Suspended interest amount	35% X SUS.INTEREST
2003/04	395,588.00	138,455.80
2004/05	695,075.00	243,276.25
2005/06	2,872,614.00	1,005,414.90
2006/07	10,256,292.00	3,589,702.20
2007/08	8,163,055.00	2,857,069.25
2008/09	5,340,243.00	1,869,085.05
2009/10	3,161,463.00	1,106,512.05
2010/11	3,082,089.00	1,078,731.15
2011/12	6,677,831.00	2,337,240.85
2012/13	14,054,595.00	4,919,108.25
2013/14	10,441,409.00	3,654,493.15

Source: - Dashen Bank S.C Annual report

From the above table, the amount that describe in suspended interest column was the uncollected amount of interest income from only the amount that categorize as provisional for doubtful and loss account. Whereas, the government were loses an income tax 35% of suspended interest only from PDLA. Therefore, this implies that, the impact of NPL was not the issue of one private bank but also it is a great issue for government. Because different government projects that does not done for shortage of money might accomplish in this amount. Furthermore, the government loses 35% from this amount. Because, if there is a suspended interest, there will be a suspended (uncollected) operational tax. These results suspended national projects.

**Graph 4.6** Graphical representation of NPL amount
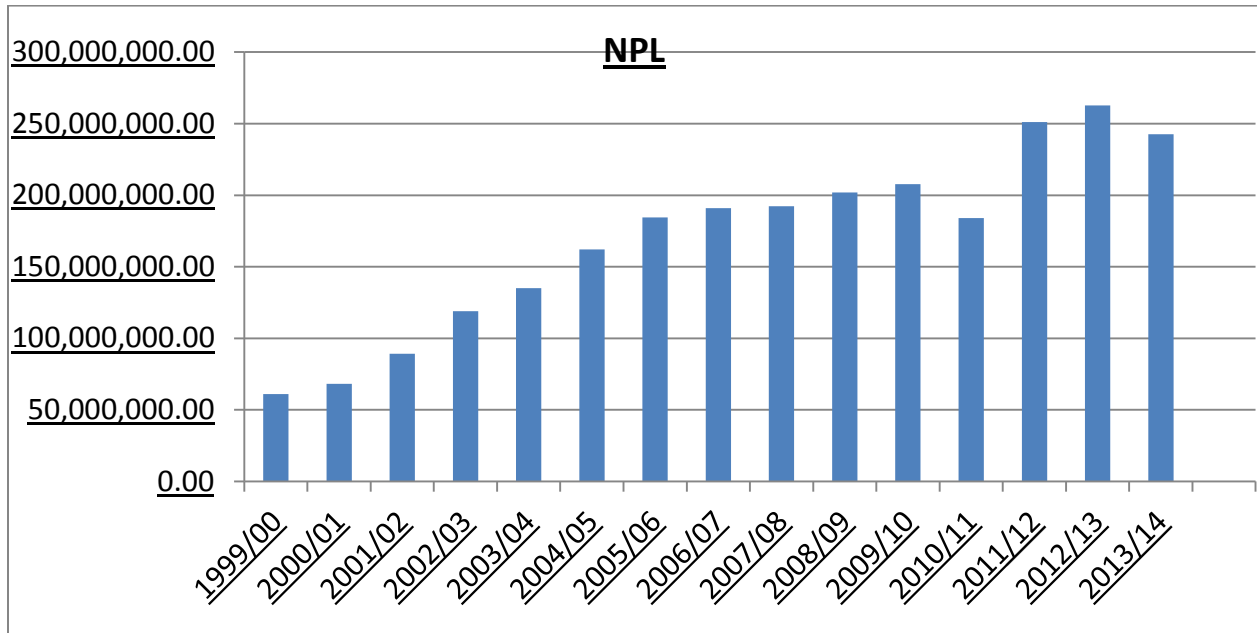
Source :- figures taken from Dashen Bank S.C Annual report

From the graphical expression, the researcher understand that NPL amount of Dashen bank increases an increasing rate for fifteen years and peaks above 250 million in the year 2012/13 , except the year 2010/11 and 2013/14. This figure had a great impact on banks profitability in the respective amount.

Graph 4.7 Graphical representation of total loan amount of Dashen Bank S.C
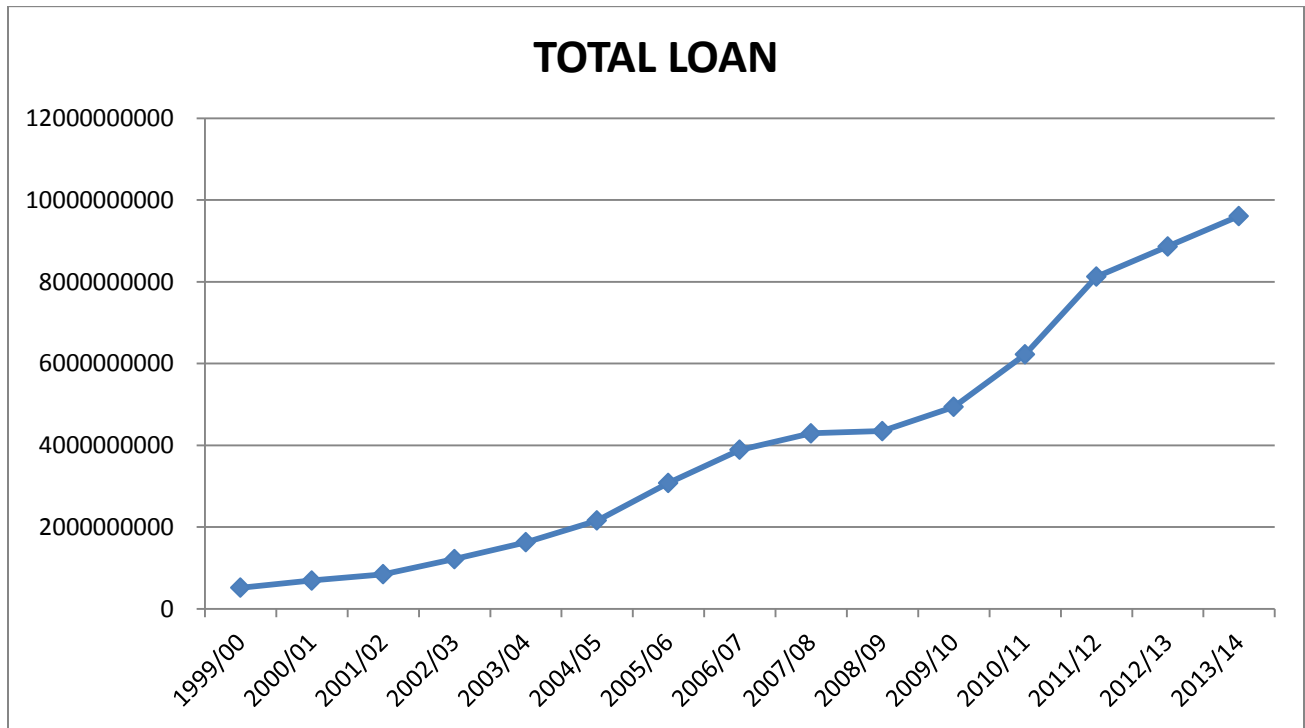
Source :- Dashen Bank S.C Annual reports

4.5   Bank Profitability

Bank profitability may reflect the risk taking behavior of bank managements. Banks with high profitability are less over stressed for revenue creation and thus less forced to engage risk credit offering. However, inefficient banks are more likely to experience high level of problem loans since they are tempted to grant and to engage in more uncertain credits to defend their profitability and meet the prudential rules imposed by monetary authorities/NBE/.

In this study, Dashen bank Lending performance was the major source of income. The interest income in 2013/14 accounted 52.45% (birr 1,125,099,795) from the total operating income.

Profitability ratio is a class of financial metric that are used to assess a business's ability to generate earnings as compared to its expenses and other relevant costs incurred during a specific period of time. For most of these ratios, having a higher value relative to competitor's ratio or the same ratio from a previous period is indicating that the company is doing well. The most common profitability ratio measurements are net profit margin (NPM), return to asset (ROA) and return to equity (ROE).

In this study, the researcher used ROA ratio to measure profitability performance of the bank. The return on assets (ROA) provides a standard for evaluating how efficiency financial employs the average ETB invested in the firm's asset, whether the ETB come for investors or creditors. A low return on assets (ROA) ratio indicates that the earnings are low for the amount of assets. In other words, return on assets (ROA) ratio measures how efficiency profit is being generated from the assets employed.

4.6   Loan Recovery Strategies to minimize NPLs

Loan recovery strategy can be defined as the science and art of using all the forces of NBE/bank to execute approved plans as effectively to collect back all the outstanding loans including collection of payment on an obligation previous written off as a loss. Loan recovery is essential for all financial institutions involved in lending money. It is recommended that lending procedures are consolidated into an integrated strategy aimed at reducing late payment and default in loan portfolios. Since the loan was already written off, it was charged against the reserve account for bad debts; recoveries may be credited against the loan loss reserve or allocated to undivided profits. Recoveries may result from payment made by the borrower or liquidation of collateral.

Based on the study, the researchers have detected some evidence that higher level of non-performing loans reduces banks' aspiration to increase lending. According to NBE directive banks NPL rate were not more than 5% of the total loan. When banks can increase the deposit mobilization more and more and have above 5% rate of NPL, deposit mobilization was nothing to do because it is impossible to approve/ disburse/ the loan rather than deposit interest expenses. This leads to decrease in performance of the bank. But, it has significant in national level. Therefore, like competition between banks to increase/collect/ the deposit, it should have a parallel assignment to decrease NPL rate.

In Dashen bank S.C credit policy and procedure, the bank sets 3% NPL rate as a higher standard for each branch level as well in organization level. But, when one branch have more than 3% NPL it is impossible to request loan approval as well as disbursement. NPL loans may recover through re-scheduling(for the purpose of decrease the loan repayment by extending duration of the loan), giving grace period for construction, manufacturing and project loans, export credit guarantee scheme to exporters, giving LC advance for importers. But, the bank doesn't implement a strategies

and policies on loan recovery. The researcher also suggested some ways to recover the non-performing loans into performing one such as: -

a) Risk assessment with continues follow up especially for manufacturing, construction and project/investment/ line of business.

b) Maintain sufficient collateral with regular check of the value, ownership, physical condition and other legal status.

Graph 4.8 Graphical representation of suspended interest amount of Dashen Bank S.C

 Source:- Dashen Bank S.C Annual report

From the above graph, the researcher understands that there is high amount of suspended interest in 2012/13, which reached 14 million birr. But there is no suspended interest before 2003/14 fiscal year.

CHAPTER FIVE

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

The paper tries to identify the relationship between profit performance (ROA) of Dashen bank S.C. and the internal variables (NPL rate & lending interest rate) and external variables (inflation rate and GDP growth rate). The main objective of this study was to examine the impact of nonperforming loans (NPLs) on profitability of Dashen bank based on descriptive and multiple linear regressions from the period 1999/00 to 2013/14. The finding of the trend analysis of NPL rate shows a downward sloping of NPLs of Dashen bank over the time of study. The study found out that NPLs rate, lending interest rate and GDP growth rate had statistically significant effect on the level of ROA. However, the results of multiple linear regression model revealed the insignificant effect of inflation rate on the level of ROA of Dashen bank for the period covered in the study.

Furthermore, GDP growth rate has a direct significance on the levels of ROA of Dashen bank as per the regression result in this study. Thus, the presence to shift interest burden to borrowers resulted in the occurrence of NPLs in the bank increases. From the study, NPL rate highly affects the ROA of the bank which shows in the model. However, in the model result inflation rate were not have effect on ROA.

NBE seems to aim at controlling inflation using its policy by controlling finance and banking sectors. This might explain why excess money supply does not enter the inflation model, as the money stock is endogenous in such a monetary policy framework. Moreover, the current tight monetary policy appears to be reducing inflation, indicating that the monetary authorities have some clout.

In recent years Dashen bank experienced a rapid deterioration in assets' quality, leading to substantial losses and reduction of capital buffer. The fast increase in NPLs not only increased banks' vulnerability to further shocks but also limited their lending operations with broader repercussions for economic activity.

Beyond the internal factors, such as the lending interest rate and NPL rate, have a direct impact on banks' asset quality. Whereas the external factors, such as country GDP rate and inflation rate, have an indirect impact on banks asset quality. But according to this study inflation have not an impact.

The paper also finds that NPLs are sensitive to bank-level factors. Higher quality of the bank's management, as measured by the previous period's profitability, leads to lower NPLs, while moral hazard incentives, such as low asset, tend to worsen NPLs. In addition, excessive risk taking (measured by loans-to-assets ratio and the growth rate of bank's loans) was found to contribute to higher NPLs in the subsequent periods. More specifically, the estimations suggest that an increase in NPLs has a significant impact on GDP growth, and inflation in the periods ahead, thus validating the notion that a healthy and sustainable growth cannot be achieved without a sound and resilient banking system. Lastly, the paper findings have some policy implications (NBE, NPL level of 5% and dashen bank sets NPL level of 3%). First, given the adverse effect of NPLs on the broad economy and also in view of the significant contribution of internal factors to ROA, there is merit to strengthen supervision to prevent a sharp buildup of NPLs in the future, including by ensuring that banks avoid excessive lending interest rate, maintaining high credit standards, and limiting rescheduling and restructuring lending before assessing the risk.. Beyond this, high levels of NPLs continue to be a burden on the country economy.

Generally, the four predictor variable (lending interest rate, GDP growth rate, inflation rate and NPL rate) and ROA used as dependant variable for this study.

5.2 RECOMMENDATIONS

Based on the findings from descriptive and the multiple linear regression analysis and conclusion, the researcher forwarded the following recommendations.

- ❖ 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 loans loss. 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 Dashen bank NPLs.

- ❖ Lending interest rate has an influential impact on the level of NPLs which decreases ability of borrower or results unwillingness to pay. Therefore, to minimize such problems, every loan officer and area bank manager should properly inform to the borrower about the situation of changing lending interest rate (by answering when and how) questions. The degree of increasing and decreasing the level of lending rate has its own limit as per the regulatory authorities of the country set by the NBE. Besides, it is strongly recommendable for the loan officers to communicate with the borrowers on timely basis regarding their duties and obligations to ensure their loan repayment ability.

- ❖ Create staff incentives: - Incentives are established to motivate staffs to direct their considerable talents to obtaining desired results. In addition to improving the effectiveness of collections, incentives may also promote a workplace environment of healthy competition. The incentives could be defined based on results of collections activities, according to changes in percentages of past-due amounts at each different stages of delinquency. This incentive includes the area bank managers at organizational level; depend on area bank NPL level. Incentives could be monetary or in-kind, depending on what form best suits the environment.

- ❖ Inflation rate does not provide a significant impact on the banking profitability/ROA/ in the study, but the management and credit analysts should give attention to the two external factors (GDP growth rate and inflation rate) which cannot be controlled.

- ❖ The credit analysts should aware about the national inflation and GDP rate in addition to evaluate the loanee performance through ratio analysis.

❖ The bank lending policy should be revised depending on the situation and economic condition of the country.

❖ Spreading effect in NPL has a negative impact on managing it. Therefore, the bank should take serious measures when a customer is reluctant in paying the loan.

❖ Lastly, the researcher recommended that, the bank should stand to Designing and Implement loan recovery strategies and policies. Because like huge projects finance, if the bank stands directly to sold the collateral that affect country economy, which mean it may result in increasing unemployment rate for the result of company liquidation.

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APPENDIX

Appendix- 1 summery of study variables data

Year	GDP rate (%)	Inflation rate (%)	Lending interest rate (%)	NPL rate (%)	ROA
1999/00	5.90	0.30	8.33	11.87	1.18
2000/01	7.40	(0.30)	8.91	9.88	1.74
2001/02	1.60	(10.60)	8.78	10.57	1.52
2002/03	(2.10)	10.90	6.53	9.77	1.33
2003/04	11.70	7.30	6.95	8.29	2.10
2004/05	12.60	6.10	7.18	7.50	2.08
2005/06	11.50	10.60	7.40	5.99	2.94
2006/07	11.80	15.80	7.70	4.91	3.11
2007/08	11.20	25.30	9.72	4.48	3.10
2008/09	9.90	36.40	9.68	4.64	2.57
2009/10	10.40	2.80	9.68	4.20	2.62
2010/11	11.50	18.10	10.67	3.02	3.08
2011/12	7.50	33.20	11.55	3.16	3.72
2012/13	13.88	24.75	11.90	3.03	3.07
2013/14	8.11	7.40	12.48	2.57	3.24

Appendix -2 Summery of SPSS out put

Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic
GDP rate(%)	15	-2.10	13.88	8.8593	4.34987
Inflation rate(%)	15	-10.60	36.40	12.5367	13.08323
Lending interest rate(%)	15	6.53	12.48	9.1640	1.87508
NPL rate(%)	15	2.57	11.87	6.2587	3.13072
ROA	15	1.18	3.72	2.4933	.78501
Valid N (listwise)	15				

Model summery

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change
1	.946[a]	.894	.852	.30207	.894

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.715	4	1.929	21.138	.000[b]
	Residual	.912	10	.091		

Total	8.627	14					

a. Dependent Variable: ROA

b. Predictors: (Constant), NPL   rate(%), GDP   rate(%), Inflation   rate(%), Lending   interest   rate(%)

**coefficient**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	3.721	1.007		3.694	.004		
GDP rate(%)	.014	.024	.077	.569	.582	.583	1.716
Inflation rate(%)	.004	.008	.063	.445	.666	.532	1.881
Lending interest rate(%)	-.005	.064	-.011	-.075	.942	.455	2.199
NPL rate(%)	-.216	.054	-.863	-3.979	.003	.225	4.445

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.1966	3.2940	2.4933	.74234	15
Residual	-.37531	.50875	.00000	.25529	15
Std. Predicted Value	-1.747	1.079	.000	1.000	15
Std. Residual	-1.242	1.684	.000	.845	15

Appendix _ 3 Graphical representation of study variables (1999/00 to 2013/14)
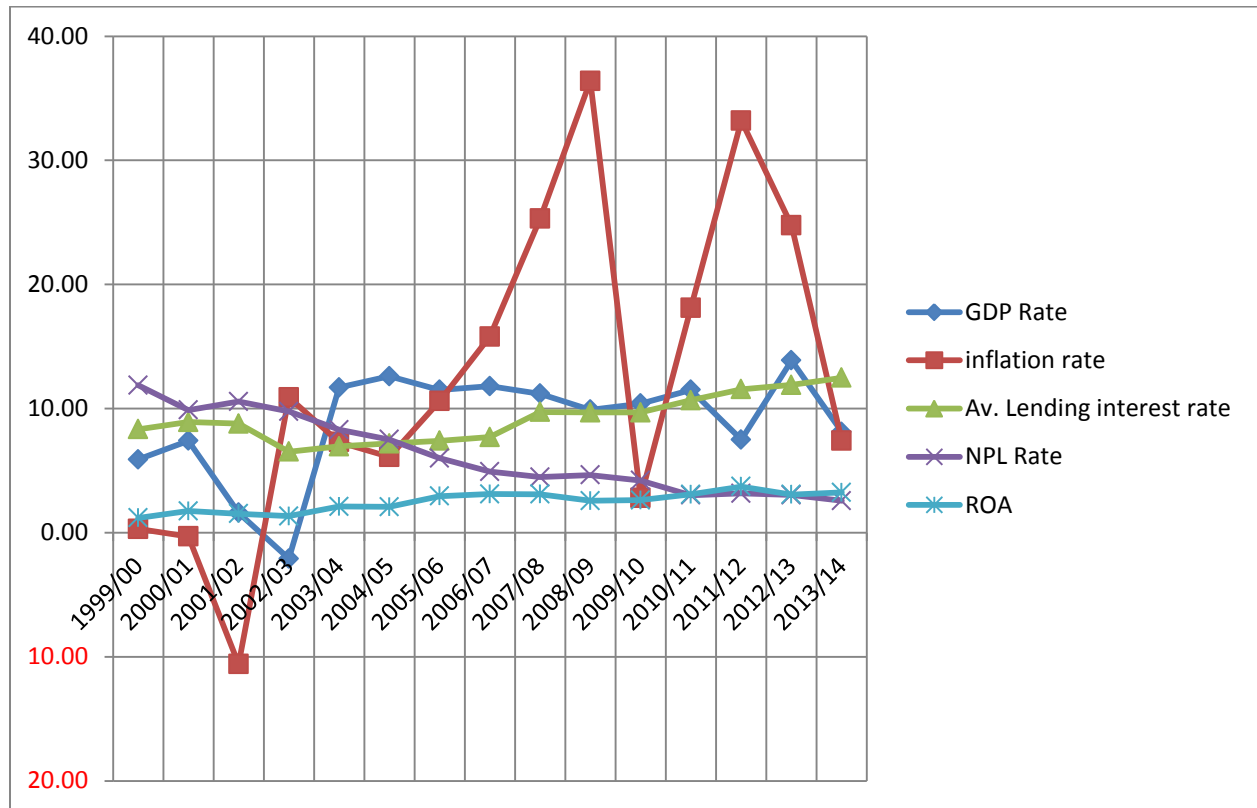
Appendix – 4 Dashen bank S.C. graphical explanation of profit (1999/00 to 2013/14)

Appendix – 5 Dashen bank S.C data summery (1999/00 to 2013/14)

Year	Total capital	Total Asset	Total Deposit	total loan &advance	TOTAL NPL	Profit before tax
1999/00	72,091,647.00	924,629,893.00	605,264,000.00	515,038,789.00	61,151,402.00	18,103,369.00
2000/01	88,577,528.00	1,235,456,835.00	861,232,000.00	690,578,472.00	68,203,312.00	36,745,083.00
2001/02	122,360,445.00	1,563,179,335.00	1,141,717,431.00	845,024,445.00	89,290,393.00	38,428,858.00
2002/03	128,886,965.00	1,991,471,836.00	1,621,385,000.00	1,217,873,555.00	118,940,205.00	36,858,503.00
2003/04	172,149,359.00	2,676,644,049.00	2,177,734,000.00	1,627,369,234.00	134,968,955.00	78,552,352.00
2004/05	242,883,014.00	3,419,808,716.00	2,800,000,000.00	2,160,632,436.00	162,134,726.00	97,603,572.00
2005/06	385,872,802.00	4,546,012,978.00	3,700,000,000.00	3,080,263,248.00	184,564,366.00	185,367,401.00
2006/07	544,472,122.00	6,040,914,220.00	4,900,000,000.00	3,889,003,611.00	191,012,707.00	259,147,659.00
2007/08	730,609,657.00	7,718,928,030.00	6,200,000,000.00	4,291,704,476.00	192,240,086.00	332,570,355.00
2008/09	908,694,727.00	9,732,583,441.00	7,900,000,000.00	4,349,249,994.00	202,013,211.00	352,488,395.00
2009/10	1,123,347,631.00	12,353,386,038.00	10,100,000,000.00	4,938,736,202.00	207,617,347.00	458,253,987.00
2010/11	1,396,402,271.00	14,614,795,156.00	11,800,000,000.00	6,093,873,109.00	183,957,991.00	629,878,382.00
2011/12	1,827,893,695.00	17,520,042,319.00	14,100,000,000.00	7,949,369,597.00	251,115,928.00	893,262,960.00
2012/13	2,045,698,696.00	19,747,174,767.00	15,900,000,000.00	8,663,249,398.00	262,680,045.00	812,934,208.00
2013/14	2,597,625,196.00	21,962,202,063.00	17,700,000,000.00	9,429,628,139.00	242,500,202.00	957,589,717.00