ADDIS ABABA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

MASTER OF BUSINESS ADMNISTRATION

FACTORS AFFECTING LOAN REPAYMENT PERFORMANCE OF BORROWERS IN THE CASE OF DASHEN BANK ADDIS ABABA DISTRICT

By:

TABOR TADESSE

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APPROVED BY BOARD OF EXAMINERS

Dean, Graduate studies	**signature**
Advisor	**signature**
External Examiner	**Signature**
Internal Examiner	**Signature**

Declaration

I, the undersigned, declare that this thesis is my original work, prepared under the guidance of Sewale Abate (PhD). All sources of materials used for the thesis have been duly acknowledged. I further confirm that this research has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

Declared by:

Name: Tabor Tadesse

Signature: _____

Date: January31, 2021

Place: Addis Ababa, Ethiopia

Advisor: Sewale Abate (PHD)

Signature: _____

Date: _____

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Abstract

The loan is a single largest asset in banks' balance sheet. Thus, it's essential to learn about the factors that affect this asset. However; some of the loan given out become non-performing or end up in default and adversely affect the financial performance of commercial banks.

Dashen bank A.A district currently provides different types of loan to its customers. But its non-performing loan rate is becoming high and high comparing to the previous periods.

Although different studies were undertaken to find out the different factors that contributed for non-performing loans most of them concentrated on micro finance which can't be generalized to the bank context in addition to this new factors like effect of covid 19 and corruption was included in the study.

The general objective of the study is to identify and explain how and which client, lender and business characteristics affect loan repayment performance of Dashen bank A.A district borrowers.

Identifying factors that affect successful loan repayment will help Dashen Bank to be aware of the current factors influencing loan repayment performance and reformulate appropriate credit program.

There are many researches regarding repayment of loans, in Ethiopia as well as internationally. The researcher's states different empirical and theoretical literature reviews from different perspective and titles. And Based on the objective of the study conceptual model has been developed.

The research adopted descriptive research designing and it applied a qualitative and quantitative research methodology. The quantitative data method will be employed to collect the primary data from the sample respondents in relation to the socio-economic characteristics of borrowers, business factors and loan related factors.

The hosmer and lemeshow test result shows that 0.821 which means that the model is fit in addition Nagelkerke R Square suggests that the model explains roughly 88.5% of the variation in the outcome or all the 19 variables together or jointly explain 88.5% of loan repayment performance of a borrower by the model.

There are around 11 significant factors which can distinguishes credit worthy borrowers and not creditworthy borrowers, so scrutinize borrowers based on those factors and give the loan to the one which have high rate comparing to the other borrowers.

Keywords: borrowers, loan repayment, logistic mode

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Abbreviation and acronym

SLR	Successful loan repayment
NBE	National Bank of Ethiopia
LRP	Loan repayment Performance
NPL	non-performing Loan
MPT	Modern Portfolio Theory
C19	Covid 19
EL	Educational level
LD	loan diversion
OSC	Other source of income
LPT	loan processing time
NPF	Number of project follow up
IR	Interest rate
MEPM	Managerial experience of the project manager
RPS	Repayment period Suitability

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

The proper recovery of loan is not only a prerequisite for rapid expansion of banks but also a question of survival (Dula, 2012).The loan is a single largest asset in banks' balance sheet. Thus, it's essential to learn about the factors that affect this asset.

Different loan giving criteria should be put in to effect before providing a loan the borrowers Loan but Credit risk assessment and lending decisions made in the past by lenders put a lot of emphasis on security than other similar important considerations (Santomero, 1997). There are examples in the past when it was easier to get a loan from a financial institution as long as the borrower had security to be charged rather than the ability to service the loan. Cash flow projections, viability of the project, character of the borrower, previous loans completion and ability to repay were not considered as important.

Dashen bank was founded by eleven visionary shareholders and veteran bankers with initial capital of 14.9 million in September 1995 and currently its paid up capital is 2,704,558,000 upon securing license from NBE, Dashen opened its doors for service on the 1st of January 1996 with eleven fully-fledged branches.

Loan has renowned as one of the significant financial service that adds to the success of a business venture. This achievement is in turn supposed to back on the way to economic development of the country. Though, the presence of loan facility alone does not necessarily result in supporting economic development unless and otherwise it is go together with by the being of 3 factors conducive to the efficient utilization of credit funds. For instance, a loan has to be repaid on time, if the objective of making loan able funds available to those who want them for productive purpose on continuous base is to be met (Nelson, 2003). Above extending loan and generate revenue, bank's has to progress credit policies and procedures, which stipulate the

lending process. This one includes process includes: Documentation, know your customer (KYC) and due diligence, credit appraisal, disbursements, follow up and monitoring, recovery processes, and repayments. Loan rules and actions should defense the financial trustworthiness of the Bank while at the same time upholding a positive resource flows to borrowers. This should too decrease the negative effects borne by borrowers implementing projects and businesses financed by the bank. Through more systematic information, it should help borrowers to better program their repayments (DBE loan manual 2014). Currently the Development Bank of Ethiopia, Addis Ababa District has a serious problem of Nonperforming loan that is 19% of the total loan portfolio of the bank (December, 2019 quarter report). This also shows very far below the accepted non-performing loan directive of National Bank of Ethiopia number SBB/69/2018 which is 5%. Therefore, loan repayment of its borrowers is regarded as the most important factor affecting the liquidity and profitability of the District. Therefore, the research examines factors affecting loan repayment performance of borrowers in the case Dashen bank A.A district.

1.2 Statement of the problem

Banks Loan portfolio constitutes the largest operating assets and source of revenue of most commercial banks.(karim et al.(2010).however, some of the loan given out become non-performing or end up in default and adversely affect the financial performance of commercial banks.

Dashen bank A.A district currently provides different types of loan to its customers. But its non-performing loan rate is high comparing to the previous periods. Source (financial statement of db, 2008-2019).

Although different studies were undertaken to find out the different factors that contributed for non-performing loans in different financial institution but the effect of covid 19 and effect of corruption or bribe was't tasted to dashen bank share company and other institutions too.. In addition to this most of the studies done with this title have concentrated on different sectors other than the bank sector especially on micro-finance and thus their results cannot be generalized to the bank context this shows that even if the issue needs high concern little literature exists which concentrates on bank context.

Besides of all this most of the prior studies conducted on factors affecting loan repayment performance of borrowers doesn't tested the effect of this two factors on loan repayment performance of the borrowers, thus the need for this study is to investigate whether bribe and covid 19 significantly contribute to loan default.

It is against this setting that this paper seeks to analyze and explain how and what factors influence loan defaulting to the Dashen bank Addis Ababa district borrowers specifically.

And all those reasons prompted the researcher to further study on what other researchers have done. So the bank can be able to manage its loan book more effectively.

1.3 Objectives of the Research

1.3.1 General objective

The general objective of the study is to identify and explain how and which client, lender and business characteristics affect loan repayment performance of Dashen bank A.A district borrowers.

These significant factors will be identified using more of by yes or no question prepared for all borrowers in the district by assigning number to each alternative questions presented by the borrowers in other word it is measured using dummy variables based on the alternatives presented for the borrowers.

1.3.2 Specific objectives

1. To determine the effect of lenders' factors on loan repayment performance of customers of Dashen bank Addis Ababa district.

2. To find out the extent to which borrowers factors affect loan repayment performance of customers of Dashen bank Addis Ababa district.

3. To know the effect of business related factors on loan repayment performance with customers of Dashen bank Addis Ababa district.

4. To know the effect of external factor like covid 19.

1.4 Research Questions

1. Do borrower's characteristics such as educational level, number of dependent household, age, sex, availability of other source of income and voluntarily saving affect loan repayment performance of the borrowers and how could they affect?

2. Do loan characteristics such as repayment period of the loan, timeliness of loan release, profit gained from loan, loan diversion, project implementation period and amount of loan affect the loan repayment performance of the borrowers and to what extent?

3. Do lenders characteristics such as interest rate have a significant impact on loan repayment performance of borrowers when and how?

4. Do external factors like Covid 19 has an effect on loan repayment performance and how?

1.5 Research Hypotheses

H0: Borrowers demographic characteristics have positive and significant relationship with loan repayment performance but except sex which has negative and significant relationship with loan repayment performance medihin, (2015) and kibrom ,(2010).

H1: repayment schedule suitability and supervision as well as advisory visit on the way of borrowers on loan usage has positive and significant relationship with loan repayment performance Retta,(2000).

H2.business profitability has positive and significant effect on loan repayment performance Firafis ,(2015).

1.6 Scope of the Study

The research is bordered to the examination of causes that affect successful loan repayment Performance of borrowers at Dashen Bank share company .It does not include borrowers of Other banks in Ethiopia. Includes only borrowers in Addis Ababa city branches of Dashen bank S.C

1.7 Significance of the study

As output of the analysis, identifying factors that affect successful loan repayment will help Dashen Bank credit officers and senior managers(department directors) to be aware of the current factors influencing loan repayments and reformulate successful credit programs that will help in allocating the Bank financial resources effectively and showing financial mechanisms to screen loan applicants to effectively use the loan proceeds on income generating activities and following up the loan utilization of borrowers to improve repayment rates and creating smooth relationship between the borrower and the Bank.

Furthermore, the finding of the study may help others, who have intentions to investigate the topic further.

1.8 Organization of the study

Chapter one introduces a general outline with sub sections; background, Statement of the problem, purposes of the research, space and boundaries of the Study, limitation and significance of the study.

- ✓ Chapter two shields a evaluation of some significant theoretical and empirical studies on Factors affecting LRP are presented.
- ✓ Chapter three covers explanation of the design and methodologies employed for the study.
- ✓ Chapter four enlarges the outcomes and debate of the study with detailed explanatory and econometric inquiry.
- ✓ Chapter five shelters the summary and policy references part for Dashen bank sc.

1.9 Limitation of the study

This research is limited to one specific area this is because of time and financial constraint. However, since the advancing guidelines and dealings of the bank is the same in all its branches, the result that is obtained taking case of this specific area could reflect the situation of the bank's small-scale private client all over the country under normal condition.

CHAPTER TWO

RELATED LITRATURE REVIEW

2.1 theoretical Literature

2.1.1 Introduction

A literature review scrutinizes recent or historically significant research studies, company data or industry reports that act as the basis for the proposed study. It is a body of text that aims to review the critical points of current knowledge on a particular topic. This chapter will bring together diverse streams of literature that touched on the determinants of non-performing loans from both locally and internationally empirical review.

2.1.2Meaning of Loan and advance

An arrangement in which a lender gives money or property to a borrower and the borrower agrees to return the property or repay the money, usually along with interest, at some future point(s) in time. Usually, there is a predetermined time for repaying a loan, and generally the lender has to bear the risk that the borrower may not repay a loan (though modern capital markets have developed many ways of managing this risk). (www.investorwords.com).

Loans and advances are defined in the respective laws of different countries. In Ethiopia, under Article 13 (FDRE 592/2008) and (NBE/2008) Article (4.5) loans and advances are defined as:
"… Any financial assets of a bank arising from a direct or indirect advance (i.e. unplanned overdrafts, participation in a loan syndication, the purchase of loan from another lender etc.) or commitment to advance funds by a bank to a person that are conditioned on the obligation of the person to repay the funds, either on a specified date or on demand, usually with interest. The term includes a contractual obligation of a bank to advance by the bank on behalf of a person. The term does not include accrued but uncollected interest or discounted interest."

2.1.3 Nonperforming loan

According to the International Monetary Fund (IMF, 2009) a non-performing loan is any loan in which interest and principal payments are more than 90 days overdue. Non-performing loans proportion is one of the determinant factors that depict soundness of the banking sector. Thus,

identifying and investigating the determinants of nonperforming loans is very vital to minimize loan default.

Non -performing loans can be defined as defaulted loans, which banks are unable to profit from. Usually loans fall due if no interest has been paid in 90 days, but this may vary between different countries and actors. Defaulted loans force banks to take certain measures in order to recover and securitize them in the best way. Loans become non-performing when it cannot be recovered within certain stipulated time that is governed by some respective laws so nonperforming loan is defined from institutional point of view. J.Paterson ,(2010).

According to the National Bank of Ethiopia directory non-performing loans -loans or advances whose credit quality has deteriorated such that full collection of principal and/or interest in accordance with the contractual repayment terms of the loan or advances are in question; or when principal and/ or Interest is due and uncollected for 90 (ninety) consecutive days or more beyond the scheduled payment date or maturity (NBE Directive, SSB/43/008).

Bank loan management is crucial and it is instrumental in ensuring the success or failure of any credit institution. A banks safety and soundness lies in having an efficient control LR & credit function. So that the management should ensure bank comply with credit regulations for easier monitoring the performance of loans.

Credit is recognized as the important financial services that contribute to the success of business venture. This success intern believes to contribute towards economic development. However existence of credit facility alone not necessarily result in supporting of economic development unless and other ways it would be accumulated by the existence of conductive to the efficient utilization of credit fund. Loan recover is the main factor to determine the quality of loan assets of financial institutions. Lower recovery indicates erosion of the institution effectiveness to provide the expected services.

The loss arising from the borrower default by delaying or not making repayments of interest or principal promised transactions affects largely banking sector, currently banks experiencing high

levels of none performing loan even if on the year 2019/2020 the percent of non-performing is less than the previous physical year still there is 3.4% nonperforming loan exist from private financial institution.(From gov't report). This trend threatens viability and sustainability of banks and hinders the achievement of their business goal and one of the victims of this is Dashen bank S.C.

2.2 Theoretical Orientation

The study is guided by different theories including Information Asymmetry Theory, Experiential Learning Theory, Portfolio Theory, Theory of credit Rationing, Moral hazard theory and adverse selection theory.

Like any other lending business, the lender is out to earn a return on the money advanced in the form of interest on top of the principal. This therefore means that they have to thoroughly evaluate the borrowers to make sure that they only extend credit to borrowers with ability and capacity to repay. These theories explain the reasoning and bases of credit extension and management of nonperforming loans among customers of commercial banks.

2.2.1 Moral hazard theory

Moral hazard is the problem that arises in the credit market when lenders fail to detect the actions of borrowers. It can also arise in credit markets when the behavior of the borrower is influenced by the terms of the loan contract.

2.2.2Adverse selection theory

The adverse selection theory of credit markets originated with the paper by Stiglitz and Weiss (1981) (as sighted by Ghosh and Mookherjee 1999). The theory rests on two main assumptions: that lenders cannot distinguish between borrowers of different degrees of risk, and that loan contracts are subject to limited liability (i.e., if project returns are less than debt obligations, the borrower bears no responsibility to pay out of pocket).

2.2.3Theory of credit Rationing

Credit rationing is broadly defined as a situation where the demand for loans exceeds the supply of loans at the going interest rate. Different types of credit rationing have been examined in the literature. Pehlivan (1996) as cited in Abreham (2002) saw it from the angle of loan size where borrowers receive a lesser amount of loan than they requested at a given loan rate.

Stiglitz and Weiss (1981) defined loan rationing as a situation where among loan applicants who appear to be identical some receive loans and others don't, even if these rejected ones offered to pay a higher interest rate or equivalently, some identifiable groups of individuals who, with a given supply of credit, are unable to obtain loans at any interest rate, even though with a larger supply of credit, they would.

Jaffe and Stiglitz (1990) further broadened the classification and identified four types credit rationing. These are: - 1) A situation where a borrower may receive a loan of smaller amount than desired; 2) A situation where some individuals cannot borrow at the interest rate they consider appropriate based on what they perceive to be their probability of default; 3) A situation where a borrower may be denied credit, when a lender thinks of not being able to obtain its required return at any interest rate. The concept that will be addressed in this study is, the first and the second type of rationing.

2.2.4 Portfolio Theory

During the 1980's banks have effectively exercised modern portfolio theory to market risk.
But now most of the banks are using value at risk models to manage their interest rate and market risk exposure. However, even though credit risk remains the largest risk fronting most banks, the practical of MPT to credit risk has insulated (Margrabe, 2007). Banks should know the impact of credit concentrations on the financial performance. As a result, a number of classy organizations are aggressively following quantitative approaches to credit risk measurement, Even if data problems endure an obstacle. This industry is also making noteworthy development toward evolving tools that measure credit risk in a portfolio context. In addition to this they are also using credit derivatives to transfer risk efficiently while maintaining customer relationships. The mixture of these two developments has triggered vastly accelerated progress in managing credit risk in a portfolio context over the past some years.

Traditionally, Banks tried to use different approaches like asset-by-asset approach to credit risk management. Although different bank's method varies, this approach involves periodically evaluating the credit quality of loans and other credit exposures, applying a credit risk rating and

aggregating the results of this analysis to identify a portfolio's expected losses. Asset by asset approach is a sound loan review and internal and internal credit risk rating system.
These different systems like a loan review and credit risk rating allow management of the bank to identify changes in individual credits or portfolio trends in a timely manner.
The result of the problem will lead to loan identification, loan review, and credit risk rating system management can make necessary modifications to portfolio strategies or increase the supervision of credits in a timely manner.

In the expert system, the credit judgment is left in the hands of the branch lending officer and his immediate manager. His knowledge, finding and weighting of definite factors are the most important factors in the decision to grant loans. The loan officer with his manager can inspect as numerous points as likely but must incorporate the five "Cs" which are the character, credibility, capital, collateral and cycle (economic conditions). Besides the 5 Cs, an expert may also think about the interest rate.

Because of both time consuming and error-prone nature of the computerized expertise system, many systems use introduction to infer the human expert's decision process. The simulated neural systems have been scheduled as solutions to the problems of the expert system. This system simulates the human learning practice. It studies the nature of the relationship between inputs and outputs by repetitively sampling input/output information.

Credit Scoring Systems is where a credit score is used to represent the creditworthiness of a person. A credit score is primarily based on credit report information. Different Lenders, like banks use credit scores to assess the potential risk posed by giving loans to consumers and to mitigate losses due to bad debt. With the means of credit scores, financial institutions decide who are the most qualified for a loan, at what rate of interest, and to what credit limits. Credit scores technology uses a summary statistic about the borrowers expected future loan performance (Feldman 1997, and Mester, 1997). In fact this technology assumes that credit analysis ultimately governs that the personal credit history of small business owners is highly predictive of the loan repayment prospects of the business (Berger, Frame and Miller, 2002). A researcher called Rutherford (1994, 1995) observes that although credit scores have been used for some time now

in the U.S in underwriting consumers' loans, this method of lending has applied recently only to small commercial credits which have been thought to have non-standardized documentation and to be too heterogeneous. The technique for the use of credit scoring includes attaching heavy statistical weights to the financial conditions and history of the principal owner given that the credit worthiness of the owner and that of the firm are closely related foremost small businesses (Feldman 1997, Mester 1997)

2.2.5 Experiential Learning Theory

Based on Norel (2001) training is one of the strategies that lending institutions should use to reduce the rate of default by borrowers. Training to the clients prior to the transaction of each loan and financial incentives for the credit officers can be used to introduce a culture of loan repayment. The trainers must be able to take into consideration the nature of the learners and what kind of behavior they want the learners to accept. Thus being aware of the need to direct the borrowers to practice regular behavior of commitment and reimbursement of their loans there is need to borrow from Kolb's Experiential Learning theory.

According to Kolb and Kolb (2008), the experiential learning theory can be applied to all aspect of life, all age groups, by different cultures and different kinds of organizations. Experimental learning theory by kolb and kolb (2008) tell us the best ways to learn a thing is by actually having experiences and as the management process as a process of learning for all stake holders from individuals to organizations to solve problems and make decisions, identify entrepreneurship opportunities and seeking a strategy formulation. ELT is based on the proposition that learning is a all-inclusive process of adaptation. It should not only be taken as a result of thought but includes combined functioning of the total person –thinking, feeling, perceiving and behaving.

2.2.6 Information Asymmetry Theory

This concept is significant in circumstances where there is imperfect information. It occurs in situation whereby one party has different information from another. Information Asymmetry is a problem in financial markets such as borrowing and lending. In these imperfect markets the debtor has considerable superior facts about his/her financial state than the creditor. Akerlof (1970) the theory presented by Akerlof was in the easy; "The Market for Lemons". Occurs when

important information's are hidden to some parties who are involved in an undertaking (Ekumah and Essel, 2003).It has been used extensively to explain a diversity of concept, including those in different market condition (Misukin, 1991).

According to Prof. NjugunaNdung'u, the former governor of Central Bank of Kenya during annual address in year 2008 noted that the realization of credit information sharing in the banking sector will not merely take good news to the banks and the banking sector but also to the debtors and the economy as a whole. This countrywide achievement positions to meaningfully benefit the economy and is bound to stir changes in the way credit is managed in the industry in the logic that creditors will be in a situation to access inclusive credit data and will be capable to calculate risk consequently for both worthy and wicked borrowers hence reducing their bad debt portfolios (Mwengei, 2013).

2.3 Causes of Loan Default

According to Anioku, (2012) Loan defaults are caused by variety of factors, some controllable and others uncontrollable. Controllable factors are those that reflect overall bank credit policy as well as inadequate credit analyses. Loan strutting and loan documentation, Uncontrollable factors typically reflect adverse economic conditions, adverse changes in regulations, environmental changes surrounding the borrower's and catastrophic events, while there is little that can be done to prevent uncontrollable variables. Effective credit granting procedure can significantly reduce other source of loses.

1. Bank-related factors

Lack of in-depth knowledge of customer operation, No of Projects follow up (NPF) and Interest Rate (IR)

2. Customer-related factors

Most business failures result from management expertise, inadequate planning & accounting systems, outright fraud and general incompetence.

Project Implementation period (PIP), Other Source of Income (OSI), Borrower's Personal Character

And Loan diversion

3. Uncontrollable factors

Economic downturn, Change in economic policies, Change in taste and preference and Natural hazards

Specific to Bank financed projects, Fabozzi and Nevitt (2000) listed thirteen common causes of projects failure in the book of "Project Financing". Most of these causes of failure are similar with the causes mentioned above. Causes of Bank financed project failure according to the authors are as follows:

2.4 Empirical studies

There are many researches regarding repayment of loans, in Ethiopia as well as internationally. The researchers states the following empirical literature reviews from different perspective and titles which will help for this study as an input.

Okorie (1986) reported that four factors had a tremendous effect on the loan repayment performance of Ondo State smallholders in Nigeria. These factors include time of loan disbursement.

The bank related problems include lending policies and procedures as well as personnel capacity of the banks. Some bank managers do not apply the principles of good lending while giving loans to farmers. Related to this is the problem of skilled and adequate number of staff. Wenner (1995) stated that formal lenders find it difficult and costly to: accurately ascertain the likelihood of defaults and to monitor closely how borrowers use funds and what technologies they choose for project implementation. Thus, borrowers may not take actions that make repayment more likely (moral hazard). Weak legal system, lack of secure collateral and pervasive views that government bank loans are backing, magnify loan enforcement costs for formal lenders.

Khandker et al., (1995) based on their study of Grameen Bank's microcredit operation at branch level reported that loan default is not completely a result of borrower's unpredictable behavior. Rather, factors like roads, electrification, educational infrastructure, borrower's age, incentives, etc., were reported to have a strong bearing on repayment performance. Kashuliza (1993) reported a positive and significant relationship between borrowers' attitude to repayment and repayment performance based on a case study in Tanzania. He also reported a positive

relationship between repayment and farm income and a negative but statistically insignificant relationship between household size and repayment performance.

Bhatt and Tang (2002) conducted a study to investigate the determinants of loan repayments in microcredit programs that applied the group lending approach, but took a different approach. Bhatt and tang choose the borrower's socio economic variables than the elements of group lending for their influence on loan repayment behavior. Those included socio economic variables are gender, educational level, household income and characteristics of the business (type of business, years in business, etc.).

The result of their study shows that a higher education level was significant and positively related to better repayment performance. Conversely, female borrowers, level of household income, type of business and borrowers experience had no significant effect on repayment behavior.

Arene (1992) outlines the main factors that determine loan repayment performance as loan size, enterprise size, income, age, number of years of business experience, Remoteness from home to business area and source of loan, education, household size, adoption of innovations, and credit needs.

Roslan and Zaini, (2009) examines the outcome of borrowers' characteristics, project characteristics and loan characteristics on loan repayment of agro bank micro credit scheme.
Roslan and zaini, (2009) used primary data which is the data used in the study is a primary data, which is gathered through an investigation carried out among agro-bank micro credit arrangement debtors in 86 branches of agro bank through Malaysia.

To now the outcome of borrowers characteristics on the probability of default, an econometric approach that relies on both probit and logit models were employed. The outcome of the study displays the variable gender is positive and significant. This shows that the probability to default is higher for male than for female borrowers. The coefficient for the variable type of the project

is significant but negative. This again shows that the possibility not to repay is lower for borrowers that involve in service/support activities as compared to those in production activities. The coefficient for the variable whether training taken or not is also negative and significant. The study recommends that borrowers that did not have any training in relation to their business/project activity have a higher probability to default compared to those borrowers who had some training. The coefficient's for the amount of loan variable also negative and significant which suggests in terms of amount of loan the higher the loan amount the lower the probability for default. The coefficient for the variable repayment schedule is positive and significant this gives an indication that the probability to default is higher the longer the repayment period.

Gerald and Deogratius,(2013) examined the credit rationing and loan repayment performance of victoria savings and credit cooperative society in Tanzania. The study found that business management skills, alternative source of income, unfavorable weather conditions, household size, late loan delivery, distance between the savings and credit cooperative and the member's task, number of years of business runs, experience, age, credit rationing and loan diversion influenced loan repayment performance.

2.4.1 Banks' internal factors causing non-performing loans

Different internal factors affect lending behavior of the bank. Many literature reviews have examined the connection between these factors and NPLs in KCB Bank Kenya Limited. Literature on banks internal factors that affects non-performing loans are reviewed in the following sections:-

Growth in loans, many studies indicate that loan delinquencies are associated with rapid credit growth. Keeton (1999) used data from commercial banks in the United States from 1982 to 1996 and a vector auto regression model indicates this association between loan and rapid credit growth. Sinkey and Greenwalt (1991) also studied large commercial banks in the US and found out that 15 excessive lending explains loan loss rate. Study by Bercoff et al (2002) shows that asset growth explains NPL.

Lending rate/Interest rate, Interest rate spread affect performing assets in banks as it increases the cost of loans charged on the borrowers (Joseph, 2011). Interest rate is the price borrower pays for the use of money they borrowed from the lenders. Interest can be thought of as rent of money.

Thus, borrowing percentage is a percentage of return usually remains in admission of monetary regulators (NBE) to manipulate the pursuance of monetary objectives. In case, maximum and minimum lending rate is set by NBE.

There is empirical evidence showing a positive and negative association between lending rate and NPLs. For instance: - Saba et al.(2012) found negative association between lending rate and NPLs whereas Farhan et al.(2012) and Ranjan and Chandra (2003)found as there is a positive relationship with NPLs and lending rate since an increase in interest rate curtails the paying capacity of the borrowers. Thus, lending rate is expected to have positive association with NPLs in this study.

The amount of bad debt also affected In 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. Bofondi and Ropele, (2011).

Jimenez and Saurina, (2006) For the Spanish banking sector, present evidence that the NPL ratio is explained by GDP growth, real interest rates and credit conditions. Based on their model, Khemrajand Pasha, (2009) try to find the determinants of NPL in the Guyanese banking sector. The result of the study shows that the real effective exchange rate (REER) has a positive effect on impaired loans. The result indicates that whenever there is an appreciation of the local currency, the NPL portfolios of credit institutions are expected to be high. Their results demonstrate that GDP growth is negatively associated to theNPL, suggesting that the improvement in GDP leads, in real economy, to decrease NPL.

2.4.2Customers related factors

These are factors affecting loan repayment behavior of the borrowers. Customer failure to disclose vital information during the application process leads to occurrence of non-performing loans (Brownbridge 1998). The following are some of the customer specific factors; diversion of funds by the borrower from the intended purpose, death of the borrower, loss of a job, age and gender among other factors contributes to loan default.

Diversion of funds

Diversion of funds occurs when the funds borrowed have to be used only for a particular or the purpose it was intended for Ashiq (2003). Nevertheless, more often than not, such funds are not used for the primary purpose they were intended for and as such, many projects become halfway done, in such case the borrowed money were meant for income generating project but the borrower decides to divert into a different project thus leading to loan unpaid.

Gender

Gender can either be male or female. Which gender is prone to loan default regardless of their age group male or female? This study will seek to find answers for the above question. In the past, very few women used to work in the corporate world but this trend has since changed. These days we have more women in leadership positions both in the public and the private sectors. Presently most women have also become the bread winners of most families just like their male counterparts. Currently women play the roles men used to do because they have been empowered through education. Nowadays women have equally have privileges to borrow from any financial institutions to satisfy both business and personal needs just like their male counterparts.

Level of Education

Authors have found out that education level affects loan repayment to a significant level (Oladeebo&Oladeebo, 2008). The importance of educational level is given too much emphasize especially on small scale entrepreneurism's demand for credit which has a positive impact on repayment performance of a borrowers. The main reason why banks perceive MSEs as high risk borrowers is usually the difficulty involved in obtaining adequate information from their bookkeeping on which the lenders can base assessments.

Since banks take financial statement as a main prerequisite by formal credit institutions, presumably MSE operators with higher education level, accounting knowledge, better business management skills, and capability of absorption and implementation of knowledge give them an added advantage when it comes to credit borrowing.

Age of Borrowers

Mpuga, (2004) analyzed demand for credit in rural Uganda. Household surveys data for 1992/93and1999/2000, using a profit estimation model on demand for credit showed that

individual characteristics have important implications on demand for credit. Age is also one of the factors for an individual is positively related to the decision to apply for credit and the amount of credit applied for. Following the life-cycle Theory, the fresh and energetic individual's with drives to earn higher incomes are expected to be more active in terms of saving in order to accumulate wealth.

Most of the old aged is less motivated to save and borrower while the young may incline to save or borrow more for investment. The life-cycle theory forecasts that the old are likely to trust more on their past savings and accumulated wealth for consumption. Those at intermediate ages (18-40years) have positive and significant demand, while the old are less inclined to demand for credit, particularly from the Formal and the semiformal sources. Another factors such as level of education, value of household assets owned by household and other dwelling characteristics strongly influenced demand for credit (Wangai, 2011).

2.5 Ethiopian case Empirical Literature

Wondmagegn, (2012), his study result on cause of nonperforming loans shows that poor credit assessment, failed loan monitoring, underdeveloped credit culture, lenient credit terms and conditions, aggressive lending, compromised integrity, weak institutional capacity, unfair competition among banks, willful default by borrowers and their knowledge limitation, fund diversion for unintended purpose, over/under financing by banks ascribe to the causes of loan default.However, the study outcome failed to support the existence of relationship between banks size, interest rate they charge and ownership type of banks and occurrences of Nonperforming loans.

Fitsum(2018) Based on his findings he concluded that education level, equity to debt ratio, Project implementation period, number of supervisions/ follow-ups conducted, and managerial experience of project manager have significant impact on loan repayment performance; which means any increase (decrease) on the value of these variables leads to an increase (decrease) on repayment performance of Development Bank of Ethiopia, Addis Ababa District. The education level, equity to debt ratio, numbers of supervisions/ follow-ups by the Bank, and managerial experience are significant variables which have positive relationship with loan repayment

performance of the District. While delayed project implementation period has negative relationship with loan repayment performance of the Bank.

Education level of project manager has significant at 5% and positive effect on successfulness of the project. It might be because of the fact that project manager, who has higher education level, could find better market for their products, they could be cost conscious that is cost-effective usage of resources and they may have future investment plan working with the Bank.

The equity to debt ratio is an important factor, which is positively related to borrowers' ability to repay their loans and is significant at 5% predictive probability level. This means that the more equity to debt the company is more willing to repay the debt because of the higher portion of the company asset is its own financial sources than being financed by creditors, the better borrowers' loan repayment abilities and vis-à-vis.

Delayed Project implementation period of the financed project has a negative impact on loan repayment performance of the District's borrowers. It is significant at 5% predictive probability level. This means that the decrease the project implementation period for the financed project borrowers, the better ability to pay its debt and vis-à-vis.

The Number of project follow-up/supervisory visit is an important institutional factor, which is positively related to borrowers' ability to repay their loans and is significant at 10% predictive probability level. This means that the more credit officers visit the financed project borrowers to control how the project is used, the better borrowers' loan repayment abilities and vis-à-vis. Project management experience has a positive coefficient and it is significant at 10% predictive probability level. This means that the likelihood of the financed project borrower able to pay the loan will increase when the number of years of managerial experience of project manager increase and vis-à-vis.

Yodit(2017) concluded that 1. Age of borrower: The age variable was negatively and significantly influencing loan repayment at 5% significant level. This implies that younger borrowers acquire new technology and updated information in business than older borrowers.

This result is agreed with the findings of Medihin, (2015) and Kibrom, (2010) but contrary with Firafis, (2015) estimation which come up with positively and significant result.

2. Sex: The regression result implies being male/female was not related with loan repayment performance as expected, although the difference is statistically insignificant. This result is in agreement with the findings of Retta, (2000).

3. Marital status: Martial status of the borrower was not an important predictor of loan repayment performance. From regression result it is statistically insignificant. This result is in agreement with findings of Firafis, (2015).

4. Education level: education level was positively and significantly influencing loan repayment at 5% significance level. This suggests that more educated borrower have more level of awareness, exposure to technologies, better managing ability and access to business information. This result is agreed with the findings of Medihin, (2015) and Retta, (2000).

5. Loan diversion: From the regression result diversion of loan has no relation with repayment performance and statistically insignificant. This result contrary with the findings of Belay, (1998) and Retta , (2000).

6. Loan size: this variable also was found to influence borrowers' loan repayment performance positively and significantly at 1% significance level providing borrowers with the required amount of finance or sufficient loan size and operating business with adequate amount of capital reduce the probability of being defaulter that may encountered due to under or over financing of borrowers. This result is agreed with findings of Kibrom, (2000) and Medihin,(2015) but contrary with results of Chirwa,(2015) which come up with insignificant results.

9. House hold size: The regression result implies family size is not related with loan repayment performance as expected, although the difference is statistically insignificant. This result agreed with the study result of Firafis, (2015).

10. Loan purpose: this variable was found to influence positively and significantly the borrowers' loan repayment performance at 1% significance level. Borrowers who use the loan for business purpose become productive and generate additional income. The suggestion is those debtors who avert the loan finance to consumption will face a shortage of finance to be engaged

in income generating activities which finally leads them to be defaulters. This result is also agreed with findings of Kibrom,(2000) and Medihin,(2015).

11. Other source Income: availability of other source of income is significant at 10% level and surprisingly negatively related to borrowers' ability to repay their loans. Borrowers may not be given much attention for the business they run jointly & the borrowed fund may not spend for the intended purpose. This result is contrary with the findings of Kibrom,(2010) and Medhin ,(2015).

12. Repayment period: From the regression result repayment period has no relation with repayment performance and statistically insignificant. This result agreed with the findings of Belay, (1998). Timeliness of loan release: this variable was found to influence positively and significantly the borrowers' loan repayment rate at 1% significance level. Loan which is timely disbursed used for the intended yet productive purposes. The complex loan processing procedures which might delay payout, most likely have high default rate. So when loans are timely disbursed it can increase the repayment performance of borrowers. This result is also agreed with findings of Kibrom, (2000) and Medihin,(2015).

13. Dependent Household: This variable was found to determine negatively and significantly borrowers' loan repayment performance at 5% significance level. Borrowers with large number of dependent family having the higher responsibility to shoulder family members the loan may go into Non-income generating activities like house hold consumption. 14. Voluntarily saving: Voluntarily saving is positively related to borrower's repayment performance. It implies that saving habit helps borrowers to improve the proper utilization of the loan, improve relationship with the bank and saving helps to repay their loan easily. This result agreed with the estimation result of Yonas ,(2015).

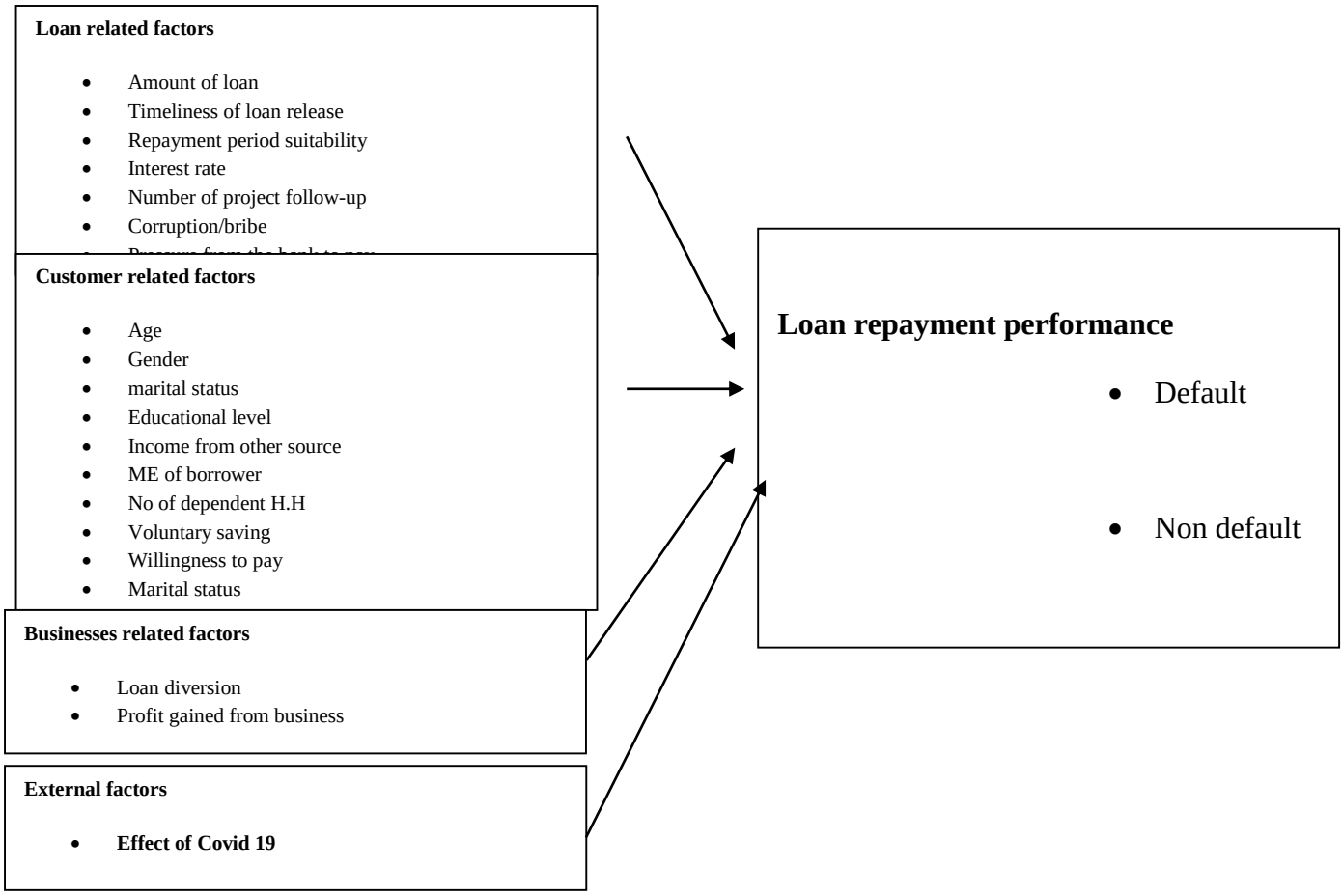
2.6 Conceptual framework

The aim of this study was to identify the major bank, borrower and business -specific factors which causes the occurrence of NPLs more especially whether bribe/corruption and covid 19 contributes to the loan defaults.

Accordingly, based on the objective of the study, the following conceptual model has been developed. Non-performing loans are affected by bank specific, customer specific and business factors as discussed in the literature review section above.

Hear the gap is some new factors which are supposed to affect loan repayment performance of a borrowers like effect of covid 19 and corruption.

Therefore, the following conceptual model summarizes the main focus of this study:-



Source: extracted by the researcher (2020)

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

In this Chapter, the research identified the procedures and techniques that will be used in the collection, processing and analysis of data. This chapter includes target population, area of the study, data source and type of data will be used, tools that will be used to gather data, sample size and sampling techniques that will be used and Method of data analysis**.**

3.2 Research Design

A research design is a framework that has been created to find answers to research questions and it helps to integrate the different components of the study in a coherent and logical way. It establishes the design for the gathering, measurement, and analysis of data (Cooper and Schindler, 2003).

The research adopted explanatory research designing in order to examine the topic thoroughly.
Explanatory research is conducted in order to help us find the problem that was not studied in depth.
Explanatory research designing helps to use study as a method of gathering evidence by questioning or handling a survey to a sample of persons the study applied a qualitative and quantitative research methodology to analyze and interpret the findings. This way of research is chosen because a researcher is able to collect data, analyze the matters and answer questions concerning the subject of study.

The quantitative data method employed to collect the primary data from the respondents in relation to the socio-economic characteristics of borrowers, business factors and loan related factors. The researcher administered questionnaires to the borrowers of Dashen bank A.A district.

The research also used econometric model to analyze the findings based on the statistical data collected from the respective sources through the questionnaires and interviews.

3.3 Data Collection

3.3.1 Type and Sources of Data

There exist two major types of data; primary data which is information gathered directly from the source for purposes of the study and secondary data which is information gathered from the published work of other authors (Wilson, 2010).

The research was conducted using both Primary data and secondary data sources to retrieve the findings and analyze the problem at hand. Primary data is obtained from the respondents, while secondary data as required are sourced from published works like records at the Bank like operational reports and published and unpublished documents.

3.4 Data gathering tools

This paper used a questionnaire for primary data collection. Questionnaire was used, because it is hasty method to collect data, it is less time consuming, it is able to cover entire sample with the proposed time frame work.

3.5 Sampling and Sampling Techniques

Addis Ababa region was selected because it constitutes of all sectors in the industry and also because of its feasibility in line with time and funds available for the study.

Based on the data base of Dashen Bank S.C, Addis Ababa District has a total of 142 projects (115successful and 27 defaulters) up to the year fiscal year2019/2020. And the research constituted 142 financed project borrowers of this district and the population was taken for the study.

And based on the data base of Dashen bank up to the year 2019/2020 total loan disbursed amount is 32,626,703,399 birr.

3.6 Target Population

A population is also known as a “universe” denotes to all the matters in the field of investigation (Kumar, 2008). The population of the study consisted of Dashen bank A.A district borrowers.

The Area of the study is Addis Ababa district. The study collected information from employees through informal interview who are dealing directly with loan administration in the Bank because of their knowledge on the subject under study. Again the questionaries' is distributed for all borrowers of Dashen bank Addis Ababa District.

But specifically, the study focused on credit department employees and customer relationship managers and their customers. The total borrowers of the district are chosen because they are engaged in different industry and they get different types of loan so it can be the representative of other region borrowers too.

3.7 Piloting

Before distributing the questionnaire to the borrowers, pre-testing was conducted on 10 borrowers to test the relevancy and accuracy of the questionnaire and to know how the borrower understands the questionnaire. Accordingly it was revised based on the pre-test information.

3.8 Ethical Considerations

Borrowers and bank staffs were informed that the collected data is confidential, and used for academic purpose only.

3.9. Data Analysis Techniques

A data analysis technique is needed to analyze which and how much the hypothesized regressor will be relating to the loan repayment performance of borrowers.

Data analysis will be engaged in after all data had been collected and cleaned. It will be a process used to make sense of the data. The type of data analysis tool that will be used will dependent on the type of data that will; will the data qualitative or quantitative (Walsh &Wigens, 2003).

The quantitative data was analyzed by descriptive statistics using SPSS version 24.Nature of data and its capability to process large amount of data and easiness to use made it SPSS better than other software's.

The qualitative data took an exploratory/conceptual content analysis process while the quantitative will be presented using frequency tables and if it is good by graph.

Above all, the study conducted a binary logistic regression analysis to establish the effect of all the factors on the level of loan repayment performance among customers of Dashen bank Addis Ababa district.

3.9.1Model specification

Model 1: Loan Repayment Model

Logistic regression analytical technique will be used to determine the factors affecting the loan repayment performance of the borrowers. The model in the implicit form is specified as:

$Q = Zo + Zixi + e$ …….. …… …… ……..……. (1)

Model 2: Loan Default Model

The binary logistic regressions will be used to estimate the loan default rate.

$Y = Z0+ Z1x1+Z2x2 +Z3x3 +Z4x4 + Z5X5 + Z6X6 + Z7X7 + Z8X8 + Z9X9 + Z10X10+ Z11X11 + Z12X12+ Z13X13+Z14X14+Z15X15+Z16X16+Z17X17+Z18X18+Z19X19$…. (2)

Y = Amount of loan Repaid

Z1 – Z20= Coefficients of explanatory variables (i. e. X1 – X20)

Z1= Amount of loan

Z2=Timeliness of loan release

Z3=Repayment period suitability

Z4=Interest rate

Z5=Number of project follow-up

Z6=Corruption/bribe

Z7=Pressure from the bank to pay

Z8=Age

Z09=Gender

Z10=Income from other source

Z11=ME of borrower

Z12=No of dependent H.H

Z13=Voluntary saving

Z14=Willingness to pay

Z15=Marital status

Z16=Loan diversion

Z17=Profit gained from business

Z18=Effect of Covid 19

Z19=Educational level

€= Error term

The loan repayment equation is specified based on the assumption that the decision of the ith borrower whether to repay loan or not depends on a number of independent variables.

3.10 Operationalization of variables

3.11 Dependent (Explained) Variable

Successful Loan Repayment (SLR) It is measured as a dummy variable and have been measured for all the borrowers' that have fully repaid their loans according to the promised agreement takes 1 and 0 for the borrowers which could not paid its debt based on their agreement.

3.12 Independent (Explanatory Variables)

1. Education Level (EL) Managers with higher levels of education may have higher repayment rates. So it is a dummy variable taking the value of 1 if the borrowers/managers have literate and 0 for otherwise. It is supported by Empirical studies of Matin (1997), Muluken (2014) and Mulugeta (2010).

2. Loan Diversion (LD); this is a dummy variable taking 0 if the project is not diverted and 0 if the project is diverted.

3. Other source of income (OSI): This is demarcated as income derived from other business activities outside the project established by the district loan. It is a dummy variable which takes 0 if the borrower has income from other source and 1 otherwise.

4. Loan processing time (LPT) if it is disbursed on the shortest possible time it will take the value of 0 otherwise 1.

5. Number of Project Follow-up (NPF) it is a variable that can be measured in number of supervisory project visits of the project by Bank's credit officers per annum. If they visit the project once per annum it will take the value of 0 if they visit more than one in a year it will take the value of 1.

6. Interest Rate (IR): it is a dummy variable taking 0 for high interest charged borrowers and 1otherwise.

7. Managerial Experience of Project Manager/borrower (MEPM) managers who have an experience more than 5 year as loan manager will take a value of 1 if less than 5 it will be 0.

8. Gender: The variable gender consists of two text values: Male and female. Observations could be labeled with the number 0 if male and if Female 1.

9 Age (AGE): Age can be operationalized as continuous, categories or binary variables. Age can be Operational zed as if it is above 50 it will take the value of 0,if it is between 30-50 it will take the value of 1 and if it is below 30 it will take the value of 2.

10 number of dependent (ND); if the borrower do not have dependent it will labled as 0,if he/she have one dependent it takes the value of 1 if it is more than one dependent it will take the value of 2.The negative impact will have on successful loan repayment performance which is attributed to Higher house hold expenses. And it is similarly anticipated that the smaller the family size the higher will be its chance to reimburse the loan successfully. So if the household size is higher it will take the value of 0 if it is smaller 1.

11. Repayment Period suitability (RPS); it is the period of time during which the entire loan must be repaid. It is a dummy variable, taking 0 if the repayment period is suitable otherwise 1.

12. Voluntary saving (VS); if the borrower have voluntary saving it will have a value of 1 if not 0.

13. Amount of loan (AL); the loan amount should be disbursed based on borrowers work plan. If it is based on their work plan it will take a value of 0 if not 1.

14. Willingness to pay (WTP); if the borrower willing to pay it will take the value of 0 other wise 1.

15. Profit gained from the loan (PGFL); if a borrower gains profit from its business it will take the value of 0 otherwise 1.

16. Covid 19(C19); if covid 19 have an effect on repayment performance of the borrower it will have a value of 0 otherwise 1.

17. Pressure from the bank to pay (PTP); if there is enforcement from the bank to pay their loan timely it will have a value of 0 otherwise 1.

18. Corruption/bribe (COR); if there were a fraud for the disbursement of the loan it will take a value of 1otherwise 0.

19. Marital status (MS); if married it will take the value of 0 otherwise 1.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Descriptive analysis

The first part of this chapter presents borrowers characteristics, lenders characteristics and business characteristics using tables. Econometric analysis was carried out to identify the most important factors affecting loan repayment performance of borrowers` by using SPSS version 24. Then the findings of the study and presentations of major findings will follow. The interpretation of the study is conducted by using magnitude, significance and direction of relationship between explanatory variables with dependent variable. Finally conclusion and recommendation presented.

And correlation coefficient result between independent variables, diagnosis test for regression model, regression analysis for the regression result and discussion of the result.

As you can see from below table 4.1 27 of them or 19% of the borrowers are defaulters and 115 or 81% of them are non-defaulters. And from this we can understand that even if the numbers of non-defaulters are greater than defaulters still the number of default projects should be minimized.

Table 4.1 LOAN_REPAYMENT_STATUS

	Frequency	Percent
DEFAULTERS	27	19.0
NON DEFAULTERS	115	81.0
Total	142	100.0

Source: survey result 2020 using spss.

The cross tab shows 19% of the borrowers are defaulters but based on National bank of Ethiopia Directive no 69/2018 the %of non-performing rate of a bank should 5% of their total loan so econometric analysis will help to identify factors affecting loan repayment performance of borrowers.

4.1.1Relationship between dependent variable with explanatory variable

1. Age of the borrower

From the below table we can understand that from those borrowers who are not credit worthy 12 of them or 44.4% of them are above the age of 50, 8 of them or 29.6% of them are between the age group of 30 to 50 and 7 of them or 25.9% of them are below the age of 30.to conclude this most of the defaulters are those age group which belongs to above the age of 50. This is happen because of the physical and mental decline related with aged.

From the total number of non-defaulters 26 of them or 22.6% of them are above the age of 50 next 69.6% or 80 of them belong to the age group of 30-50 lastly 9 of them or 7.8% of them are below the age of 30.from this we can conclude that most of the non-defaulters belong to the age of 30-50.this is because a person between the age group of 30-50 are active physically as well as mentally.

Generally most of the borrowers are belong in the age group of 30-50 or 62% of the total borrowers.

Table 4.2 LOAN_REPAYMENT_STATUS * AGE Cross tabulation

			AGE			
			above 50	between30-50	below 30	Total
LOAN_REPAYMENT_STATUS	DEFAULTER	Count	12	8	7	27
		% within LOAN_REPAYMENT_STATUS	44.4%	29.6%	25.9%	100.0%
		% within AGE	31.6%	9.1%	43.8%	19.0%
		% of Total	8.5%	5.6%	4.9%	19.0%
	NON DEFAULTER	Count	26	80	9	115
		% within LOAN_REPAYMENT_STATUS	22.6%	69.6%	7.8%	100.0%
		% within AGE	68.4%	90.9%	56.3%	81.0%
		% of Total	18.3%	56.3%	6.3%	81.0%
Total		Count	38	88	16	142
		% within LOAN_REPAYMENT_STATUS	26.8%	62.0%	11.3%	100.0%
		% within AGE	100.0%	100.0%	100.0%	100.0%
		% of Total	26.8%	62.0%	11.3%	100.0%

Source: survey result 2020 using spss.

2. Gender of the borrower

As you can see from the below table from the total number of defaulters 5 or 18.5% of them are female borrowers whereas 22 or 81.5% of them are male default borrowers and from the total non-defaulters 102 or 88.7% of them are male whereas 13 or 9.2% of them are female defaulters.

From total number of credit worthy borrowers 102 or 88.7 % of them are male borrowers while 11.3% or 13 of them are female borrowers. Most of the female borrowers are defaulters than male borrowers this is because of lack of experience in a business world. Generally 87.3% or 124 of them are male borrowers the rest are female borrowers, this shows the number of male borrowers are greater than female borrowers. Table 4.3 LOAN_REPAYMENT_STATUS * GENDER Cross tabulation

			GENDER		
			MALE	FEMALE	Total
LOAN_REPAYMENT_STATUS	DEFAULTER	Count	22	5	27
		% within LOAN_REPAYMENT_STATUS	81.5%	18.5%	100.0%
		% within GENDER	17.7%	27.8%	19.0%
		% of Total	15.5%	3.5%	19.0%
	NON DEFAULTER	Count	102	13	115
		% within LOAN_REPAYMENT_STATUS	88.7%	11.3%	100.0%
		% within GENDER	82.3%	72.2%	81.0%
		% of Total	71.8%	9.2%	81.0%
Total		Count	124	18	142
		% within LOAN_REPAYMENT_STATUS	87.3%	12.7%	100.0%
		% within GENDER	100.0%	100.0%	100.0%
		% of Total	87.3%	12.7%	100.0%

Source: survey result 2020 using spss.

3. Educational level of the project manager

From the below table 21 or 77.8% of the total defaulters are literate on the other hand 6 or 22.2% of them are illiterate. From total non-defaulters 105 or 91.3% of them are literate and 10 or 8.7%

of them are illiterate. And most of non-defaulters are literate while most of defaulters are illiterate. And this because, According to kim and staw(1991), and katz(1992) reported those with higher level of education are more successful because higher education provides them knowledge and modern managerial skills, making them more conscious of the reality of the business world.

Table 4.4 LOAN_REPAYMENT_STATUS * EDUCATIONAL LEVEL Cross tabulation

			EDUCATIONAL LEVEL		
			LITTERATE	ILLETRATE	Total
LOAN_REPAYMENT_STATUS	DEFAULTER	Count	21	6	27
		% within LOAN_REPAYMENT_STATUS	77.8%	22.2%	100.0%
		% within EDUCATIONAL LEVEL	16.7%	37.5%	19.0%
		% of Total	14.8%	4.2%	19.0%
	NON DEFAULTER	Count	105	10	115
		% within LOAN_REPAYMENT_STATUS	91.3%	8.7%	100.0%
		% within EDUCATIONAL LEVEL	83.3%	62.5%	81.0%
		% of Total	73.9%	7.0%	81.0%
Total		Count	126	16	142
		% within LOAN_REPAYMENT_STATUS	88.7%	11.3%	100.0%
		% within EDUCATIONAL LEVEL	100.0%	100.0%	100.0%
		% of Total	88.7%	11.3%	100.0%

Source: survey result 2020 using spss.

4. Other source of income of the borrower

From the below cross tabulation we can see that 7 of or 25.9% them of the borrowers who are not credit worthy but have other source of income on the other hand 20 of them or 74.1% of the

default borrowers do not have other source of income. And from the total credit worthy borrowers 85 or 73.9% of them do have other source of income whereas 26.1% or 30 of them do not have other source of income. Most of not credit worthy borrowers does not have other source of income while most of credit worthy borrowers has other source of income. Generally 92 or 64.8 % of the total borrowers do have other source of income but 50 or 35.2% of them do not have other source of income.

Table 4.5 LOAN_REPAYMENT_STATUS * OTHER SOURCE OF INCOME Cross tabulation

			OTHER SOURCE OF INCOME		
			Yes	no	Total
LOAN_REPAYMENT_STATUS	DEFAULTER	Count	7	20	27
		% within LOAN_REPAYMENT_STATUS	25.9%	74.1%	100.0%
		% within OTHER SOURCE OF INCOME	7.6%	40.0%	19.0%
		% of Total	4.9%	14.1%	19.0%
	NON DEFAULTER	Count	85	30	115
		% within LOAN_REPAYMENT_STATUS	73.9%	26.1%	100.0%
		% within OTHER SOURCE OF INCOME	92.4%	60.0%	81.0%
		% of Total	59.9%	21.1%	81.0%
Total		Count	92	50	142
		% within LOAN_REPAYMENT_STATUS	64.8%	35.2%	100.0%
		% within OTHER SOURCE OF INCOME	100.0%	100.0%	100.0%
		% of Total	64.8%	35.2%	100.0%

Source: survey result 2020 using spss.

5. Managerial experience of the project manager

Data was collected in order to answer whether the borrower/the project manager do have prior business experience before he/she take the loan from Dashen bank. Table 4.6 shows 20 or 74.1% of the loan defaulter have a business experience less than five year whereas 7 or 25.9% of them

do have a business experience of 5 year and above. From total non-defaulter 8 or 7% of them do have a business experience which is less than 5 year but 107 or 93% of them have a business experience which is 5 year and above. From total borrowers 19.7% or 28 of them have a business experience which is less five year on other hand 114 or 80.3% of them do have a business experience of five year and above. And most of the defaulters have a business experience below five year while most of non-defaulters have more than five year business experience. Most borrowers have engaged in a business for more than five year

Table 4.6 LOAN_REPAYMENT_STATUS * MANAGERIAL EXPERENCE OF PROJECT MANAGER Cross tabulation

			MANAGERIAL EXPERENCE OF PROJECT MANAGER		
			less than 5 yr	5 yr and above	Total
LOAN_REPAYMENT_STATUS	DEFAULTER	Count	20	7	27
		% within LOAN_REPAYMENT_STATUS	74.1%	25.9%	100.0%
		% within MANAGERIAL EXPERENCE OF PROJECT MANAGER	71.4%	6.1%	19.0%
		% of Total	14.1%	4.9%	19.0%
	NON DEFAULTER	Count	8	107	115
		% within LOAN_REPAYMENT_STATUS	7.0%	93.0%	100.0%
		% within MANAGERIAL EXPERENCE OF PROJECT MANAGER	28.6%	93.9%	81.0%
		% of Total	5.6%	75.4%	81.0%
Total		Count	28	114	142
		% within LOAN_REPAYMENT_STATUS	19.7%	80.3%	100.0%
		% within MANAGERIAL EXPERENCE OF PROJECT MANAGER	100.0%	100.0%	100.0%
		% of Total	19.7%	80.3%	100.0%

Source: survey result 2020 using spss.

6. Number of dependents within the borrowers

Number of dependent in a family or house hold shows effects in a different research done before since the borrower need more money to fulfill their requirement in addition to the loan

repayment and table 4.7 shows the effect of number of dependent house hold on loan repayment performance.

From the total number of defaulter 5 or 18.5% of them do not have dependent in addition five or 18.5% of them have only one dependent lastly 17 or 63% of them do have more than one dependent. From total number of non-defaulters 85 or 73.9% of them do not have dependent and 20 or 17.4% of them have only one dependent lastly 10 or 8.7% of them do have more than one dependent.

most of defaulters have more than one dependent while most of non-defaulters do not have dependent. Out of total number of borrowers most of them do not have dependent.

Table 4.7 LOAN_REPAYMENT_STATUS * NUMBER OF DEPENDENT Cross tabulation

			NUMBER OF DEPENDENT			
			no dependant	one dependent	more than one dependent	Total
LOAN_REPAYMENT_STATUS	DEFAULTER	Count	5	5	17	27
		% within LOAN_REPAYMENT_STATUS	18.5%	18.5%	63.0%	100.0%
		% within NUMBER OF DEPENDENT	5.6%	20.0%	63.0%	19.0%
		% of Total	3.5%	3.5%	12.0%	19.0%
	NON DEFAULTER	Count	85	20	10	115
		% within LOAN_REPAYMENT_STATUS	73.9%	17.4%	8.7%	100.0%
		% within NUMBER OF DEPENDENT	94.4%	80.0%	37.0%	81.0%
		% of Total	59.9%	14.1%	7.0%	81.0%
Total		Count	90	25	27	142
		% within LOAN_REPAYMENT_STATUS	63.4%	17.6%	19.0%	100.0%
		% within NUMBER OF DEPENDENT	100.0%	100.0%	100.0%	100.0%
		% of Total	63.4%	17.6%	19.0%	100.0%

Source: survey result 2020 using spss.

7. Voluntary saving of the borrower

Through questionnaire borrowers were asked whether if they are training voluntary saving. And it is presented in table 4.8 below .As you can see from the table 22 or 81.5% of the total defaulters do not exercise voluntary saving but 5 or 18.5% of them have voluntary saving. On the other hand from total number of non-defaulters 10 or 8.7% of do not exercise voluntary saving but 91.3% or 105 of them do exercise voluntary saving. And out of total number of sample borrowers 22.5% or 32 of them do not have voluntary saving but 110 or 77.5% of them do have voluntary saving. And non-defaulters do have better voluntary saving experience than defaulters.

Table 4.8 LOAN_REPAYMENT_STATUS * VOULUNTAY SAVING Cross tabulation

			VOULUNTAY SAVING		
			no	YES	Total
LOAN_REPAYMENT_STATUS	DEFAULTER	Count	22	5	27
		% within LOAN_REPAYMENT_STATUS	81.5%	18.5%	100.0%
		% within VOULUNTAY SAVING	68.8%	4.5%	19.0%
		% of Total	15.5%	3.5%	19.0%
	NON DEFAULTER	Count	10	105	115
		% within LOAN_REPAYMENT_STATUS	8.7%	91.3%	100.0%
		% within VOULUNTAY SAVING	31.3%	95.5%	81.0%
		% of Total	7.0%	73.9%	81.0%
Total		Count	32	110	142
		% within LOAN_REPAYMENT_STATUS	22.5%	77.5%	100.0%
		% within VOULUNTAY SAVING	100.0%	100.0%	100.0%
		% of Total	22.5%	77.5%	100.0%

Source: survey result 2020 using spss.

8. Willingness of the borrower to pay his/her debt

Borrowers were also asked whether they are willing to pay the mount they borrowed because it is suspected that some of the borrowers may have the capability to pay but no willingness.so in order to get answer borrowers were asked and their answer presented through Table 4.9.Among defaulters 12 or 44.4% of the borrowers are willing to pay their debt or obligation but 15 or 55.6% of them are not willing to pay their debt even if they have the capability to do that.

And among non-defaulters 55 or 47.8% of them are willing to pay their outstanding loan but 60 or 52.2% of them have a capacity but not willing to pay their debt. And from total number of borrowers 67 or 47.2% of them are willing to pay their obligation. But 52.8% or 75 of them are not willing to pay. And relatively most of defaulters are not willing to pay their obligation even if they have the capacity to pay.

Table 4.9 LOAN_REPAYMENT_STATUS * WILLINGNESS TO PAY Cross tabulation

			WILLINGNESS TO PAY		
			Willing to pay	not willing	Total
LOAN_REPAYMENT_STATUS	DEFAULTER	Count	12	15	27
		% within LOAN_REPAYMENT_STATUS	44.4%	55.6%	100.0%
		% within WILLINGNESS TO PAY	17.9%	20.0%	19.0%
		% of Total	8.5%	10.6%	19.0%
	NON DEFAULTER	Count	55	60	115
		% within LOAN_REPAYMENT_STATUS	47.8%	52.2%	100.0%
		% within WILLINGNESS TO PAY	82.1%	80.0%	81.0%
		% of Total	38.7%	42.3%	81.0%
Total		Count	67	75	142
		% within LOAN_REPAYMENT_STATUS	47.2%	52.8%	100.0%
		% within WILLINGNESS TO PAY	100.0%	100.0%	100.0%
		% of Total	47.2%	52.8%	100.0%

Source: survey result 2020 using spss.

9. Marital status of the borrower

It is assumed that married households are more settled and responsible for social values than single.as you can see from the table 4.11 20 or 74.1% of them are married and default borrowers and 7 or 25.9% of them are single default borrowers. On the other hand from total non-default

borrowers 48 or 41.7% of them are married borrowers whereas 67 or 58.3% of are single borrowers. Most of defaulters are married while most non-defaulters are single. And from total number of borrowers most of them are single.

Table 4.10 **LOAN_REPAYMENT_STATUS * MARTIAL STATUS Cross tabulation**

			MARTIAL STATUS		
			married	single	Total
LOAN_REPAYMENT_STATUS	DEFAULTER	Count	20	7	27
		% within LOAN_REPAYMENT_STATUS	74.1%	25.9%	100.0%
		% within MARTIAL STATUS	29.4%	9.5%	19.0%
		% of Total	14.1%	4.9%	19.0%
	NON DEFAULTER	Count	48	67	115
		% within LOAN_REPAYMENT_STATUS	41.7%	58.3%	100.0%
		% within MARTIAL STATUS	70.6%	90.5%	81.0%
		% of Total	33.8%	47.2%	81.0%
Total		Count	68	74	142
		% within LOAN_REPAYMENT_STATUS	47.9%	52.1%	100.0%
		% within MARTIAL STATUS	100.0%	100.0%	100.0%
		% of Total	47.9%	52.1%	100.0%

Source: survey result 2020 using spss.

10. Profit gained from the business activity using the loan

If a business is profitable it is expected that the borrower will be creditworthy this is because the borrowers have enough funds to finance their debt.

And from the table 4.12 we understand that 17 or 63% of the total number of defaulters gain a profit while 10 or 37% of them do not get a profit. And from total number of sample defaulters 73.9% or 85 of them have got a profit from their business while 30 or 26.1% of them do not get a profit. And from total number of borrowers 102 or 71.8% of them have got a profit from their business while 40 or 28.2% of them do not get a profit from their business. Relatively most of non-defaulters have got a profit from their business than defaulters. Most of defaulters were in a loss while most of the non-defaulters are profitable. Most of the borrowers are profitable.

Table 4.11 LOAN_REPAYMENT_STATUS * PROFIT_GAINED_FROM_THE_LOAN Cross tabulation

			PROFIT_GAINED_FROM_THE_LOAN		
			Gain	loss	Total
LOAN_REPAYMENT_STATUS	DEFAULTER	Count	17	10	27
		% within LOAN_REPAYMENT_STATUS	63.0%	37.0%	100.0%
		% within PROFIT_GAINED_FROM_THE_LOAN	16.7%	25.0%	19.0%
		% of Total	12.0%	7.0%	19.0%
	NON DEFAULTER	Count	85	30	115
		% within LOAN_REPAYMENT_STATUS	73.9%	26.1%	100.0%
		% within PROFIT_GAINED_FROM_THE_LOAN	83.3%	75.0%	81.0%
		% of Total	59.9%	21.1%	81.0%
Total		Count	102	40	142
		% within LOAN_REPAYMENT_STATUS	71.8%	28.2%	100.0%
		% within PROFIT_GAINED_FROM_THE_LOAN	100.0%	100.0%	100.0%
		% of Total	71.8%	28.2%	100.0%

Source: survey result 2020 using spss.

11. Effect of covid 19 on loan repayment performance of the borrowers.

The covid -19 epidemic has significantly affected firm operations. More than 42% of registered business in Addis Ababa completely ceased operations and 37% reported no revenues in March or april.so respondents were asked whether covid 19 have affected their business negatively. And from table 4.11 we can see covid 19 affected negatively 15 or 55.6% of the total number of Defaulters while 12 or 44.4% of sample defaulters are not negatively affected by Covid 19 pandemic.

And from total number of non-defaulters 50 or 43.5% of them are negatively affected by Covid 19 pandemic on the other hand 65 or 56.5% of non-defaulters are not negatively affected by Covid 19 pandemic. Relatively most of non-defaulters businesses were not negatively affected by covid 19 pandemic comparing to defaulters. Generally most of the borrowers are not negatively affected by Covid

Table 4.12 LOAN_REPAYMENT_STATUS * COVID 19 Cross tabulation

			COVID 19		
			have effect	no effect	Total
LOAN_REPAYMENT_STATUS	DEFAULTER	Count	15	12	27
		% within LOAN_REPAYMENT_STATUS	55.6%	44.4%	100.0%
		% within COVID 19	23.1%	15.6%	19.0%
		% of Total	10.6%	8.5%	19.0%
	NON DEFAULTER	Count	50	65	115
		% within LOAN_REPAYMENT_STATUS	43.5%	56.5%	100.0%
		% within COVID 19	76.9%	84.4%	81.0%
		% of Total	35.2%	45.8%	81.0%
Total		Count	65	77	142
		% within LOAN_REPAYMENT_STATUS	45.8%	54.2%	100.0%
		% within COVID 19	100.0%	100.0%	100.0%
		% of Total	45.8%	54.2%	100.0%

Source: survey result 2020 using spss.

Lender's related characteristics

12. Amount of loan taken for the project

From the below cross tab we can see that 8 of them or 29.6% of the total defaulters have got a loan amount which is as per their work plan whereas 19 or 70.4% of them are do not get loan amount as per their work plan. On the hand 38 or 33.0% of the total number of non-default borrowers have got a loan amount as per their work plan but 77 or 67.0% of do not get a loan amount as per their work plan. Most of defaulters didn't get a loan amount which is as per their work plan but most of non-defaulters have got a loan as per their work plan. Generally 46 or 32.4% of the total borrowers have got a loan amount as per their work plan whereas 96 or 67.6% of them do not get a loan amount as per their work plan.

Table 4.13 LOAN_REPAYMENT_STATUS * AMOUNT OF LOAN Cross tabulation

			AMOUNT OF LOAN		
			work plan	not based on work plan	Total
LOAN_REPAYMENT_STATUS	DEFAULTER	Count	8	19	27
		% within LOAN_REPAYMENT_STATUS	29.6%	70.4%	100.0%
		% within AMOUNT OF LOAN	17.4%	19.8%	19.0%
		% of Total	5.6%	13.4%	19.0%
	NON DEFAULTER	Count	38	77	115
		% within LOAN_REPAYMENT_STATUS	33.0%	67.0%	100.0%
		% within AMOUNT OF LOAN	82.6%	80.2%	81.0%
		% of Total	26.8%	54.2%	81.0%
Total		Count	46	96	142
		% within LOAN_REPAYMENT_STATUS	32.4%	67.6%	100.0%
		% within AMOUNT OF LOAN	100.0%	100.0%	100.0%
		% of Total	32.4%	67.6%	100.0%

Source: survey result 2020 using spss.

13. Use of the loan

In this cross tabulation we can see that 4 or 14.8% of the total defaulters utilized the loan for its intended purpose whereas 23 or 85.2% of them diverted the loan for other purpose other than its intended purpose. From total non-defaulters side 60 or 52.2% of them used the loan as per the agreement while 55 or 47.8% of them used for other purpose other than the agreement. From the total borrowers 64 or 45.1% of them do not divert the loan for other purpose. While the 78 or 54.9 % of them diverted the loan for other purpose. Most of the borrowers diverted the loan for other purpose.

Table 4.14 LOAN_REPAYMENT_STATUS * LOAN DIVERSION Cross tabulation

			LOAN DIVERSION		
			not diverted	diverted	Total
LOAN_REPAYMENT_STATUS	DEFAULTER	Count	4	23	27
		% within LOAN_REPAYMENT_STATUS	14.8%	85.2%	100.0%
		% within LOAN DIVERSION	6.3%	29.5%	19.0%
		% of Total	2.8%	16.2%	19.0%
	NON DEFAULTER	Count	60	55	115
		% within LOAN_REPAYMENT_STATUS	52.2%	47.8%	100.0%
		% within LOAN DIVERSION	93.8%	70.5%	81.0%
		% of Total	42.3%	38.7%	81.0%
Total		Count	64	78	142
		% within LOAN_REPAYMENT_STATUS	45.1%	54.9%	100.0%
		% within LOAN DIVERSION	100.0%	100.0%	100.0%
		% of Total	45.1%	54.9%	100.0%

Source: survey result 2020 using spss.

14. Time taken to disburse the loan

This data collected to answer whether time of loan disbursement have an effect on LRP.

Based on the collected data 4 or 14.8% of loan defaulters responded to get the loan disbursement it takes less than 30 days while 23 or 85.2% of the total defaulters responded more than 30 days to get the loan. On the other hand from total non-defaulters 90 or 78.3% of them responded that they get the loan with 30 days from the application date while the rest or 21.7% or 25 of them get after 30 days from the date of application for the loan. Most of defaulters get their loan after 30days while most of non-defaulters get their loan within 30days.generally most of the borrowers get loan within 30days after date of application.

Table 4.15 LOAN_REPAYMENT_STATUS * LOAN PROCESSING TIME Cross tabulation

			LOAN PROCESSING TIME		
			less than 30days	more than 30 days	Total
LOAN_REPAYMENT_STATUS	DEFAULTER	Count	4	23	27
		% within LOAN_REPAYMENT_STATUS	14.8%	85.2%	100.0%
		% within LOAN PROCESSING TIME	4.3%	47.9%	19.0%
		% of Total	2.8%	16.2%	19.0%
	NON DEFAULTER	Count	90	25	115
		% within LOAN_REPAYMENT_STATUS	78.3%	21.7%	100.0%
		% within LOAN PROCESSING TIME	95.7%	52.1%	81.0%
		% of Total	63.4%	17.6%	81.0%
Total		Count	94	48	142
		% within LOAN_REPAYMENT_STATUS	66.2%	33.8%	100.0%
		% within LOAN PROCESSING TIME	100.0%	100.0%	100.0%
		% of Total	66.2%	33.8%	100.0%

Source: survey result 2020 using spss.

15. Repayment period suitability

This data was collected in order to identify whether the loan repayment period or interval is suitable or not and to answer whether this factors do have an effect on LRP. Based on the below cross tabulation within defaulter 17 of them or 63% of them responded that the loan repayment period is suitable for them while 37% responded the repayment period is not suitable. On the other hand 47.8% of the total non-defaulters responded the loan repayment period is suitable while 52.25% of them responded not suitable. Generally from the total borrowers 50.7% or 72 of them responded loan repayment period is not suitable for them while 49.3% or 70 of them agreed that the repayment period is suitable with them. Relative to non-defaulters most of the defaulters conveyed the loan repayment period is suitable. Most non-defaulters responded their repayment period is not suitable but generally most of the borrowers said repayment period is suitable.

Table 4.16 LOAN_REPAYMENT_STATUS * REPAYMENT PERIOD SUITABLITY Cross tabulation

			REPAYMENT PERIOD SUITABLITY		
			suitable	not suitable	Total
LOAN_REPAYMENT_STATUS	DEFAULTER	Count	17	10	27
		% within LOAN_REPAYMENT_STATUS	63.0%	37.0%	100.0%
		% within REPAYMENT PERIOD SUITABLITY	23.6%	14.3%	19.0%
		% of Total	12.0%	7.0%	19.0%
	NON DEFAULTER	Count	55	60	115
		% within LOAN_REPAYMENT_STATUS	47.8%	52.2%	100.0%
		% within REPAYMENT PERIOD SUITABLITY	76.4%	85.7%	81.0%
		% of Total	38.7%	42.3%	81.0%
Total		Count	72	70	142
		% within LOAN_REPAYMENT_STATUS	50.7%	49.3%	100.0%
		% within REPAYMENT PERIOD SUITABLITY	100.0%	100.0%	100.0%
		% of Total	50.7%	49.3%	100.0%

Source: survey result 2020 using spss.

16. Number of visit to the project compound within year by the bank officers

The below table answers whether the borrower's where supervised by the bank respective units

During the execution of their project in order to check whether the loan where utilized for the intended project and to observe the progress of the project.

14 or 51.9% of the defaulters where supervised once in a year while 13 or 48.1% of them supervised more than once in a year. On the other hand 55 or 47.8% of the non-defaulters supervised once a year while 60 or 52.2% supervised more than one in a year.

Most credit worthy borrowers is supervised more than once in a year whereas most of defaulters are supervised once in a year.

Generally from the total borrowers 69 or 48.6% of them where supervised once in a year while 73 or 51.4% of them supervised more than once a year.

Table 4.17 LOAN_REPAYMENT_STATUS * NUMBER OF PROJECT FOLLOW UP Cross tabulation

			NUMBER OF PROJECT FOLLOW UP		
			once	more than one	Total
LOAN_REPAYMENT_STATUS	DEFAULTER	Count	14	13	27
		% within LOAN_REPAYMENT_STATUS	51.9%	48.1%	100.0%
		% within NUMBER OF PROJECT FOLLOW UP	20.3%	17.8%	19.0%
		% of Total	9.9%	9.2%	19.0%
	NON DEFAULTER	Count	55	60	115
		% within LOAN_REPAYMENT_STATUS	47.8%	52.2%	100.0%
		% within NUMBER OF PROJECT FOLLOW UP	79.7%	82.2%	81.0%
		% of Total	38.7%	42.3%	81.0%
Total		Count	69	73	142
		% within LOAN_REPAYMENT_STATUS	48.6%	51.4%	100.0%
		% within NUMBER OF PROJECT FOLLOW UP	100.0%	100.0%	100.0%
		% of Total	48.6%	51.4%	100.0%

Source: survey result 2020 using spss.

17. Inappropriate payment made by the borrowers to the employees of the bank

Corruption can be one of the causes for high amount of loan default. Table 4.11 shows the effect of corruption on being defaulter and non-defaulter. From total defaulters 1 or 3.7% of them responded corruption do not have an effect on being defaulter while 96.3% of them responded corruption was one of the factor for being defaulter. On the other hand 60.9% of the total non-defaulters responded corruption was't there when they process the loan and it has no effect on their loan repayment status while 39.1%of them responded corruption was there while they process the loan and it have an effect on their loan repayment performance.

From total borrowers 71 or 50% of them responded no corruption was there while they process the loan and it does not have an effect on the loan repayment performance on the other hand 71 or 50% of them responded there was a corruption while they were processing the loan and it have an effect on their loan repayment performance. Generally it can't be distinguished whether corruption have an effect on loan repayment performance.

Table 4.18 **LOAN_REPAYMENT_STATUS * CORRUEPTION Cross tabulation**

			CORREPTION		
			no	yes	Total
LOAN_REPAYMENT_STATUS	DEFAULTER	Count	1	26	27
		% within LOAN_REPAYMENT_STATUS	3.7%	96.3%	100.0%
		% within CORREPTION	1.4%	36.6%	19.0%
		% of Total	0.7%	18.3%	19.0%
	NON DEFAULTER	Count	70	45	115
		% within LOAN_REPAYMENT_STATUS	60.9%	39.1%	100.0%
		% within CORREPTION	98.6%	63.4%	81.0%
		% of Total	49.3%	31.7%	81.0%
Total		Count	71	71	142
		% within LOAN_REPAYMENT_STATUS	50.0%	50.0%	100.0%
		% within CORREPTION	100.0%	100.0%	100.0%
		% of Total	50.0%	50.0%	100.0%

Source: survey result 2020 using SPSS.

18. Pressure from the bank to the borrower to pay their loan

Sometimes banks start to pressure their borrower at some phase to pay their obligation. And table 4.13 summarizes the response of the sample respondents.20 or 74.1% of defaulters agreed that there were a pressure from the bank to pay their loan obligation while 7 or 25.9% of them agreed there weren't a pressure. And 102 or 88.7% of them agreed there were a pressure to pay their outstanding loan while the rest of non-defaulters weren't agreed with this. Generally most of the borrowers agreed there were a pressure from the bank to pay their obligation timely.

Table 4.19 **LOAN_REPAYMENT_STATUS * PRESSURE FROM THE BANK TO PAY Cross tabulation**

			PRESSURE FROM THE BANK TO PAY		
			Pressure	no pressure	Total
LOAN_REPAYMENT_STATUS	DEFAULTER	Count	20	7	27
		% within LOAN_REPAYMENT_STATUS	74.1%	25.9%	100.0%
		% within PRESSURE FROM THE BANK TO PAY	16.4%	35.0%	19.0%
		% of Total	14.1%	4.9%	19.0%
	NON DEFAULTER	Count	102	13	115
		% within LOAN_REPAYMENT_STATUS	88.7%	11.3%	100.0%
		% within PRESSURE FROM THE BANK TO PAY	83.6%	65.0%	81.0%
		% of Total	71.8%	9.2%	81.0%
Total		Count	122	20	142
		% within LOAN_REPAYMENT_STATUS	85.9%	14.1%	100.0%
		% within PRESSURE FROM THE BANK TO PAY	100.0%	100.0%	100.0%
		% of Total	85.9%	14.1%	100.0%

Source: survey result 2020 using spss.

19. Interest rate charged by the bank

In most of the studies made before this research interest rate was one of the significant factors for being defaulter. And this study revealed that 22 or 81.5% of total sample defaulters said the interest rate that the bank charging is high while 5 or 18.5% of them said it is fair.

And from total number of sample non-defaulters 96 or 83.5% of them said the interest rate is high whereas 16.5% or 19 of them said it is fair.

Amazingly most of the defaulters said interest rate charged by the bank is fair whereas most credit worthy borrower's responded interest rate is not fair.

But generally most of the borrowers responded that the interest rate charged by the bank is high.

Table 4.20 **LOAN_REPAYMENT_STATUS * INTEREST RATE Cross tabulation**

			INTEREST RATE		
			high	fair	Total
LOAN_REPAYMENT_STATUS	DEFAULTER	Count	22	5	27
		% within LOAN_REPAYMENT_STATUS	81.5%	18.5%	100.0%
		% within INTEREST RATE	18.6%	20.8%	19.0%
		% of Total	15.5%	3.5%	19.0%
	NON DEFAULTER	Count	96	19	115
		% within LOAN_REPAYMENT_STATUS	83.5%	16.5%	100.0%
		% within INTEREST RATE	81.4%	79.2%	81.0%
		% of Total	67.6%	13.4%	81.0%
Total		Count	118	24	142
		% within LOAN_REPAYMENT_STATUS	83.1%	16.9%	100.0%
		% within INTEREST RATE	100.0%	100.0%	100.0%
		% of Total	83.1%	16.9%	100.0%

Source: survey result 2020 using spss.

4.2 Diagnostic test, Muticollonarity

Logistic regression does not make many of the key assumptions of linear regression and general linear models that are based on ordinary least square algorithms particularly regarding linearity, normality and homoscedasticity and its measurement level.

First, logistic regression does not require a linear relationship between the dependent and the independent variables. Second the error terms (residuals) do not need to be normally distributed. Third, homoscedasticity is not required. Finally, the dependent variable in logistic regression is not measured on an interval or ratio scale.

However, some other assumptions still apply

The First assumption is, binary logistic regression needs the dependent variable to be binary and ordinal logistic regression requires the dependent variable to be ordinal.

The Second, logistic regression requires the observations to be independent of each other. this means, the observation should not come from repeated measurements or matched data.

The Third, logistic regression requires there to be little or no multicollinearity among the independent variables. In other word the independent variables should not be too highly correlated with each other.

The Fourth, logistic regression assumes linearity of independent variables and log odds. Although this analysis does not require the dependent and the independent variable to be related linearly, it requires that the independent variables are linearly related to the log odds.

This paper fulfill the first assumption as we can see clearly from the tables, it is binary taking two values (defaulter and non-defaulter) and the second assumptions also fulfilled.

For the third assumptions as we can see from the below multicollonarity test output table from SPSS there is no significant problem of multicolonarity among the independent variables.

2.1 person correlation result table

Correlations

	EDUCATIONAL LEVEL	NUMBER OF PROJECT FOLLOW UP	GENDER	VOULUNTAY SAVING	COVID 19	LOAN DIVERSION	INTEREST RATE	AGE	AMOUNT OF LOAN	PRESSURE FROM THE BANK TO PAY	OTHER SOURCE OF INCOME	MANAGERIAL EXPERENCE OF PROJECT MANAGER	NUMBER OF DEPENDENT	WILLINGNESS TO PAY	CORREPTION	LOAN PROCESSING TIME	REPAYMENT PERIOD SUITABLITY	PROFIT_GAINED_FROM_THE_LOAN	MARTIAL STATUS
EDUCATIONAL LEVEL	1	.346	.768	.139	.327	.323	.701	.652	.247	.380	.483	.177	.650	.337	.356	.499	.361	.569	.342
NUMBER OF PROJECT FOLLOW UP	.346	1	.370	.285	.617	.590	.438	.645	.000	.394	.510	.297	.452	.572	.606	.397	.759	.609	.817
GENDER	.768	.370	1	.205	.350	.345	.545	.595	.264	.641	.517	.189	.614	.360	.381	.533	.386	.608	.365
VOULUNTAY SAVING	.139	.285	.205	1	.350	-.014	.243	.425	.275	.121	-.132	.319	-.238	.233	-.169	-.256	.363	.150	.495
COVID 19	.327	.617	.350	.350	1	.702	.414	.661	.703	.372	.441	.362	.378	.087	.523	.328	.406	.575	.302
LOAN DIVERSION	.323	.590	.345	-.014	.702	1	.409	.476	.643	.367	.668	-.022	.636	.117	.521	.647	.452	.567	.605
INTEREST RATE	.701	.438	.545	.243	.414	.409	1	.558	.312	.290	.612	.224	.609	.426	.451	.631	.457	.720	.432
AGE	.652	.645	.595	.425	.661	.476	.558	1	.678	.648	.463	.464	.525	.653	.378	.385	.634	.582	.649
AMOUNT OF LOAN	.247	.712	.264	.275	.703	.643	.312	.678	1	.280	.479	.262	.429	.732	.482	.367	.683	.433	.722
PRESSURE FROM THE BANK TO PAY	.380	.394	.641	.121	.372	.367	.290	.648	.280	1	.549	.201	.661	.383	.405	.567	.411	.647	.388
OTHER SOURCE OF INCOME	.483	.510	.517	-.132	.441	.668	.612	.463	.479	.549	1	-.116	.716	.549	.737	.376	.453	.549	.323
MANAGERIAL EXPERENCE OF PROJECT	.177	.297	.189	.319	.362	-.022	.224	.464	.262	.201	-.116	1	-.211	.241	-.177	-.245	.382	.192	.517
NUMBER OF DEPENDENT	.650	.452	.614	-.238	.378	.636	.609	.525	.429	.661	.716	-.211	1	.504	.703	.689	.375	.746	.228
WILLINGNESS TO PAY	.337	.572	.360	.233	.087	.117	.426	.653	.732	.383	.549	.241	.504	1	.635	.437	.632	.592	.288
CORREPTION	.356	.606	.381	-.169	.523	.521	.451	.378	.482	.405	.737	-.177	.703	.635	1	.715	.563	.626	.423
LOAN PROCESSING TIME	.499	.397	.533	-.256	.328	.647	.631	.385	.367	.567	.376	-.245	.689	.437	.715	1	.338	.711	.208
REPAYMENT PERIOD SUITABLITY	.361	.759	.386	.363	.406	.452	.457	.634	.683	.411	.453	.382	.375	.632	.563	.338	1	.635	.461
PROFIT_GAINED_FROM_THE_LOAN	.569	.609	.608	.150	.575	.567	.720	.582	.433	.647	.549	.192	.746	.592	.626	.711	.635	1	.506
MARTIAL STATUS	.342	.817	.365	.495	.302	.605	.432	.649	.722	.388	.323	.517	.228	.288	.423	.208	.461	.506	1

Source: spss output 2020.

Pearson correlation coefficient values ranges between 0 and 1.based on the results of multicoolonarity diagnostics test for dummy explanatory variables, no variable was found to be highly correlated or associated with one of the variable/s with other variable or variables except the slight correlation exist between marital status and number of project follow-up.

4.3 Analysis of factors influencing loan repayment performance

In this study, a binary logistic regression analysis was conducted to test the influence of predictor variables on dependent variable.

Table 4.20 the maximum likelihood estimates of the binary Logit model.

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)
EDUCATIONAL_LEVEL	-.294	2.14737	15.120	1	.045*	1.342
NUMBER_OF_PROJECT_FOLLOW_UP	.265	.105	32.185	1	.706	1.304
GENDER	-1.413	1.1464	61.280	1	.311	.243
VOLUNTARY_SAVING	19.102	16.136	23.159	1	.000**	1.785
COVID_19	.422	.127	76.260	1	.257	1.656
LOAN_DIVERSION	-10.814	2.938	132.29	1	.000**	0.755
INTEREST_RATE	1.621	0.324	71.316	1	.803	5.057
AGE	17.657	2.819	105.060	1	.770	1.033
AMOUNT_OF_LOAN	-.869	.573	294.861	1	.033*	0.483
PRESSURE_TO_PAY	-.896	.494	12.213	1	.049	.408
OTHER_SOURCE_OF_INCOME	-2.519	1.985	36.722	1	.000**	1.2412
MANAGERIAL_EXPERINCE	18.194	11.120	67.012	1	.000**	1.580
NUMBER_OF_DEPENDENT	-2.940	.354	164.172	1	.000**	1.53
WILLINGNESS_TO_PAY	-19.783	11.932	136.974	1	.751	390341523.273
CORRUPTION	21.368	9.787	13.991	1	.000**	0.420
LOAN_PROCESSING_TIME	-10.651	3.608	3.215	1	.000**	.001
REPAYMENT_PERIOD	10.497	6.945	11.158	1	.157	.000
PROFIT_GAINED_FROM_THE_LOAN	10.978	9.742	27.909	1	.255	58584.259
MARTIAL_STATUS	.807	.640	.839	1	.002*	2.241
Constant	2.079	1.061	3.844	1	.050*	8.000

Source: SPSS 24 regression result

*significant @ .05 level

** Significant @ .01 level

Interpretation of regression result using sign, magnitude and significance level of independent variables with the dependent variable

4.3.1Customer related factors

1. Gender

Gender and loan repayment status have a positive relationship which is unlike with the hypothesis. Other things held constant the relationship between them statically not significant which is also contrary with the initial hypothesis but This is similar with the result of abafita(2003).

2. Age

Age of the borrowers have negative relationship with his/her loan repayment performance which is also unlike with the hypothesis. And it is statically insignificant or being at any age group does not have effect on loan repayment performance of a borrowers. Which is again opposite to the initial hypothesis and it also oppose with the findings of Medihin, (2015) and Kibrom, (2010) but agree with Firafis, (2015).

3. Educational Level

Illiteracy and being non-defaulter has a negative relationship. This means again literacy go with high loan repayment status of the borrower, and it is the same with the initial hypothesis. As a person become literate other things remain constant its probability of paying its loan will increase by 57% and their relationship is significant at 5% significant level.

4. Marital status

Marital status of the borrowers and their loan repayment performance has positive relationship. This is similar with the initial hypothesis. And as a borrower is single his/her probability to pay his/her loan on time will increase by 69%.And their relationship is statically significant at 5% significance level.

This is because being single will decrease many responsibility like taking care of children which cost the finance and time of the borrower and can lead the borrower to divert the loan for house hold consumption.

5. Income from other source

Other source of income has positive relationship with loan repayment performance of the borrowers. Which means if a borrower do have other source of income his probability to become

non-defaulter will increase by 55% and other things being constant the relationship between other source of income and loan repayment status have significant relationship at 1% significance level. Which is contrary with the hypothesis but the result similar with the result of abafita(2003) and abreham(2002).

6. Managerial experience of borrowers

The more experience and talent the borrower has shown in the past, the lower the risk in lending from the bank's point of view.

Managerial experience of a borrower and his/her loan repayment performance has positive relationship. Which means as a borrower managerial experience is above five year other things held constant his/her probability to pay his/her loan will increase by 61.2%.And the relationship between managerial experience of a borrowers and their loan repayment performance have strong relationship at 1% significance level. This finding is supported by the finding of dula(2012) and muluken(2014).

7. Number of dependent house hold

Number of dependent in a family or elsewhere that depend on the borrower for their livelihood which is expressed on percentage.

Number of dependent negatively related with loan repayment performance of the borrower. Which means as number of dependents are more than two people the probability of being defaulter will decrease by 60.4%. And the relationship between number of dependent and loan repayment performance of a borrower is statically significant at 1% significance level. This is contrary with study of mulualem yakob (2010).

8. Voluntary Saving

Voluntary saving and loan repayment status have a positive relationship which means in a sense that, having voluntary saving and being non-defaulter have a positive relationship. And as a person having voluntary saving his/her probability of paying his/her loan will increase by 64%.The relationship between voluntary saving and loan repayment status is statically significant at 1% significance level.

9. Willingness of the borrower to pay

Willingness of the borrower and being non-defaulter is positively related each other. But the relationship between willingness of the borrower to pay their loan on time and their loan repayment performance do not have strong relationship or statically not significant.

4.3.2 Business related factors

10. Loan diversion

loan diversion and repayment performance of a borrower have positive relationship this means loan which was diverted other than its intended purpose have positive relationship with non – default borrowers. From regression result we can see that Borrowers who diverted their loan for other productive purpose can pay their loan successfully. And other things held constant if they diver the loan for other productive purpose their probability to pay successfully will increase by 57%.The relationship between loan diversion and loan repayment performance is significant at 1%.This result do not agree with the result of belay,(1998) and retta,(2000).

11. Profit gained from the loan

Loan repayment performance of the borrower and profit gained from the loan has positive relationship. But their relationship is not statically significant. This result is contrary with the finding of belay, (1998) but the same with the initial hypothesis.

4.3.3 External factors

12. Covid 19

Negative Effect of covid 19 and loan repayment performance have a negative relationship. But There is no strong relationship between effect of covid 19 pandemic and loan repayment status of borrowers.

4.3.4 Loan related factors

13. Number of project follow up

Regarding frequency of bank's official visit to client's business territory, it has a positive relationship with being non defaulter. As no of project follow made by the bank officials is more than one in a year the probability of being non-defaulters will increase by 57% and other things being constant the relationship between number of project follow up and loan repayment status of borrowers is significant at 5% significance level. This result is similar with the hypothesis.

14. Loan processing time

Loan processing time and being non defaulter have a positive relationship. As loan processing or disbursement time is less than 30 working days the probability of being non-defaulter will increase by 91% and other things being constant the relationship between time it take to make disbursement to the borrower and loan repayment status of the borrowers is significant at 1%.

15. Interest Rate

Rate of interest charged by the bank and loan repayment performance of the borrower has positive relationship in other words fairness on interest rate charged by the bank and being non-defaulter has positive relationship and the opposite is true for being defaulter and high interest rate charged by the bank. But this relationship is not significant so we can conclude that loan repayment performance of the borrower and interest rate does not have strong relationship.

16. Amount of loan

From regression result amount of loan taken by the borrower have an inverse relationship with loan repayment performance of the borrowers. Which means loan which is not taken as per work plan influenced negatively repayment performance or can a cause for being defaulter.

When a borrower was not received a loan amount which is not as his/her work plans other things being constant his/her probability of being defaulter will increase by 32.6% and their relationship is statistically significant at 5%.

17. Pressure to pay

pressure from the bank officers to pay their loan on time have positive relationship with loan repayment performance of the borrower on other words if there is no pressure from the bank officer to the borrowers other things being constant their probability to pay their loan on time will decrease by 59.2%. And their relationship is statistically significant at 5%.

18. Corruption

Corruption or bribe may occur between the lender and the borrower in order to fasten or get the loan amount that the borrower need.

The regression result shows us corruption and loan repayment performances of the borrower have negative relationship. And if there is a corruption between the lender and the borrower the probability of being defaulter will increase by 70%.And their relationship is statically significant at 1% significance level.

19. Loan Repayment period suitability

Repayment period is the period of time during which the entire loan must be repaid. The regression result shows us loan repayment period suitability of the borrower and their loan repayment status has positive relationship. But the relationship between them is not statically significant. The sign of the coefficient is the same with the.

4.3.5The goodness of the model

Hosmer and Lemeshow Test

The hosmer and lemeshow test (HL test) is a goodness of fit test for logistic regression. A goodness of fit tells us how well your data fits the model. Specifically, HL test calculates if the observed events rate much the expected event rates in the population subgroups. Here the hosmer and lemeshow test result shows that 0.821 which means that the model is fit.

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	.000	19	.821

Source: survey result 2020 using spss.

4.3.6 The Omnibus test of Model Coefficients

The Omnibus test of Model Coefficients is used to check that the new mode with explanatory variables included) is an improvement over the baseline model. It uses chi-square tests to see if there is a significant difference between the log-likelihoods (specifically the -2lls) of the baseline model and the new model. If the new model has a significantly reduced -2ll compared to the baseline then it suggests that the new model is explaining more of the variance in the outcome and is an improvement. In other word Here the chi-square is highly significant (chi-square=113.617),Df=19,P less than .000). So the model is significantly better.

Omnibus Tests of Model Coefficients

		Chi-square	Df	Sig.
Step 1	Step	113.617	19	.000
	Block	113.617	19	.000
	Model	113.617	19	.000

Source: survey result 2020 using spss.

4.3.7 Likelihood Ratio Test for logit Model

This is the -2 log likelihood for the final model. By itself, this number is not very informative. However, it can be used to compare nested (reduced) models.

R square value tells us approximately how much variation in the outcome is explained by the model. Nagelkerke R Square suggests that the model explains roughly 88.5% of the variation in the outcome or all the 19 variables together or jointly explain 88.5% of loan repayment performance of a borrower by the model.

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	124.528[a]	.551	.885

Source: survey result 2020 using spss.

CHAPTER FIVE

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This section expresses finding which is discussed in chapter 4 & summaries, conclusions on findings based and recommendations will be forwarded for Dashen bank A.A district and other stake holders.

5.2. Summaries

In the study the factors affecting loan repayment performance of the borrowers of Dashen Bank Share Company is analyzed using primary data. The primary data is collected from 142 borrowers from Addis Ababa district. The borrowers were asked four types of questions the first questions related to the Borrower's characteristics such as Age, Gender, marital status, Educational level, Income from other source, ME of borrower, No of dependent H.H and Voluntary saving. The second types of questions refer to the loan related characteristics, which include Amount of loan, Timeliness of loan release, Repayment period suitability, Interest rate, Number of project follow-up, Corruption/bribe and Pressure from the bank to pay. The third question related to Businesses related factors such as loan diversion and profit gained from the business. The Fourth question is related to external factor which is Covid 19.

A descriptive analysis was employed to analyze borrowers characteristics, institutional related characteristics, business related characteristics and external factors of the borrowers. Under this method of data analysis, descriptive statistics including frequency, percentages, etc. were used to summarize and describe those characteristics of the borrowers and to compare the defaulters and non-defaulters. In addition, binary logistic regression model was used to econometrically analyze

determinants of loan repayment performance by using Hosmer and Lemeshow Test and its p-value, The Omnibus test of Model Coefficients and its P value, and Nagelkerke R Square.

The descriptive statistics results showed that about 19% and 81% of the borrowers were defaulters and non-defaulters respectively. The result of binary logistic econometric model showed that, from a total of 19 explanatory variables used in the model, 7 variables voluntary saving, loan diversion, other source of income, managerial experience, number of dependent, corruption and loan processing time had statistically 1% significant influence on the loan repayment performance of the borrowers. Educational level, amount of loan, pressure to pay and marital status had 5% significant influence on loan repayment performance. And totally out of 19 variables used in the model other things held constant 11 of them are statistically significant.

5.3. Conclusions

Results from the questionnaire were analyzed by descriptive analysis and empirically by applying econometric model. The survey result revels that 19% of the borrowers are defaulters while 81 % of them are non-defaulters.62% of the borrowers are in the age group of 30 up to 50.with regard to sex 87.3% of the borrowers are male,88.7% of the borrowers are literate while the rest are illiterate, 64.8% of the total borrowers have other source of income while the rest do not have other source of income, 80.3% of the total borrowers have a business experience of five year and above while the rest have less than five year experience, most of the borrowers do not have dependent that is 63.4 % of the do not have dependent,77.5% of them have voluntary saving while the rest do not have voluntary saving,52.8 % of the total borrowers are do not have willingness to pay their debt while the rest have willing to pay their debt,52.1 % of total borrowers are single while the rest are married.71.8% of the total borrowers get profit from their business. 54.2% of the borrowers responded Covid 19 do not have an effect on their

business.67.6% of the total borrowers do not get loan amount which align with their work plan, 54.9 % of the total borrowers have diverted their loan for other purpose than it was intended for, 66.2% of the total borrowers responded that they get loan disbursement within 30days interval, 50.7% of the total borrowers responded that the loan repayment period is suitable while the rest responded not suitable, 51.4% of the total borrowers responded visit to their work compounded by the loan officers where done for more than one time in a year,50% of the respondent said there was no corruption until the disbursement of loan made to them while the rest 50% responded there was corruption while they were applying for the loan,85.9% of the borrower responded that there was a pressure from the bank loan officers to pay their loan on time and lastly 83.1% of the respondent said the interest charged by the bank in unfair relative to the loan amount they have taken.

Educational level of the borrower, marital status of the borrower, managerial experience of the project manager, voluntary saving and pressure from the bank to pay have positive relationship with successful loan repayment performance or with being non-defaulter. While corruption, amount of loan, loan diversion and loan processing time have negative relationship with successful loan repayment performance.

Based on the findings it can be concluded that voluntary saving, loan diversion, other source of income, managerial experience, number of dependent, corruption, loan processing time, educational level, amount of loan, pressure from the bank to pay and marital status have significant impact on successful loan repayment performance; which means any increase (decrease) on the value of these variables leads to an increase (decrease) on repayment performance of Dashen bank, Addis Ababa District borrowers.

So the banks stakeholders should focus on those variables in accepting or rejecting loan application from their borrowers on other word in order to decrease the amount of their NPL they have to focus on those significant variables in order to scrutinize whether a borrower is defaulter or non-defaulter.

5.4. Recommendation

This study has a potential to support Dashen bank, Addis Ababa District to take corrective measures on the most important factors affecting loan repayment performance of borrowers. From the research findings the following recommendations can be forwarded.

There are around 11 significant factors which can distinguishes credit worthy borrowers and not creditworthy borrowers, so scrutinize borrowers based on those factors and give the loan to the one which have high rate comparing to the other borrowers.to see some of them, Educational level of managers shows strong relationship with loan repayment performance of borrowers. This relationship requires the project manager or the borrowers need to be at least literate in today's highly competitive world. This requirement should be specified in the credit policy of the Bank as a basic requirement for loan provision.

The other important factor is managerial experience of the borrower. Since experience in any field makes you better there should be a focus needed on the managerial experience of the borrower. So the bank should put it as one of the main criteria for the provision of loan to the borrowers.

Based on the finding other source of income is the other significant factor to screen out the loan non-defaulters from defaulters. Other source of income can help to deal with a business profit

loss much easier than being caught off guard. Even if other source of income can't cover all of the loss, it can still give time to figure out things.so focus to it should be given.

The bank should have to also revise or shorten its loan provision time. If the loan is disbursed to the borrowers their probability to pay the loan on the stated time will increase since it can go with project time schedule but if the loan processing time is long they will loss financially like rent cost and other cost with comes with the elongation of loan disbursement time.

All these are to say that any increase (decrease) on the value of these variables leads to an increase (decrease) on repayment performance of borrowers of Dashen bank s.c.

In addition to the above there are different systems like value at risk models to manage interest rate and market risk exposure of the banks, asset-by-asset approach to credit risk management, computerized expertise system, Credit Scoring Systems and the like.so Dashen bank should left the traditional way of rating borrowers and apply the modern system to identify and fix loan default problem.

These different systems allow management of Dashen bank to identify changes in individual credits or portfolio trends in a timely manner and take appropriate action.

For business owners it is better to use loan for its intended purpose and wisely use the loan provided to them, for lender it is better to scrutinize borrowers using those significant factors affecting loan repayment performance of a borrowers since it better to decrease the number of default rate by providing loan to the qualified borrowers and for the government in general it will be better to revise national bank of Ethiopia loan provision loan based on those significant factors, since it help to standardize the way lenders scrutinize qualified borrowers from their own end.

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Annex 1

Survey questionnaire

Determinants of loan Repayment Performance: A case of dashen bank addis ababa district, Addis Ababa, Ethiopia

Questionnaire

I. Personal Details

1. Sex □ Male □ Female
2. Age □ between 18-30 □ between 30 and 50 □ above 50
3. Are you literate? □ Yes □ No
4. If yes, your educational level is □ Primary school completed □ Junior completed □ Secondary school completed □ Certificate □ Diploma □ Degree& above
5. Marital status □ Single □ Married
6. Total number of family members (Family size) _____

□ Age 1- 10 Male _____ Female _____ □ Age 11- 20 Male _____ Female _____
□ Age 21- 40 Male _____ Female _____ □ Age 41– 60 Male _____ Female _____
□ Age 61 and above Male _____ Female _____

7. Number of dependents out of the household: Children Male _____ Female _____ Adults Male _____ Female _____
8. What is/are your sources of income in the household?

□ From one business □ From additional (more) business □ From husband/ wife's monthly salary □ From more household member salary □ Others _____.

9. Do you have saving account?

□ Yes □ No

If your answer is yes where do you save?

□ Dashen bank □ other private bank or CBE □ microfinance institutions

If your answer for Q no 9 is yes, for what purpose do you save?

□ for expand business □ For personal needs □ For consumption □ For emergency □ For repayment □ Others _____

II. Institutional related questions

1. Is the repayment scheme set by Dashen bank S.C suitable? □ Yes □ No 2.

If No, what are the reasons?

□ The starting time to repay is too early □ The repayment period is short □ The amount of repayment in each month is too much □ Others _____

2. What do you suggest to make the repayment scheme suitable?

□ To give enough time before starting to repay □ To make the repayment period longer □ Others_____

3. Interest rate for credit set by Addis microfinance is:

□ Fair □ not fair

4. How many times in a year your business area was visited by the bank loan officer?

□ once in a year □ more than two times in a year

Do you think follow up of loan officers to your compound help you to pay your repayment on time?

□ yes □ no

If your answer is yes how……..

1. How long it takes to get loan disbursement?

□ Less than one month □ more than One month
What is/are the reason(s) for being the loan disbursed either more than one month or less than one month?
□ loan officers are qualified □ Speedy procedure (short process) □ Due to long procedure (process) □ Many people apply for credit at one time □ The loan officers are not willing to finish within short time □ Others

_____

2. Does the money you get as a loan from Dashen bank is in line with your work plan?
□ Yes □ no _____
3. Did you spend the entire loan for running your business? □ Yes □ No
If No, for what purpose do you spent? □ Consumption □ Education for children □ Health □ others _____
4. Are you repaying your loan? □ Yes □ No
5. Does Covid 19 have a negative effect on your business profitability and repaying loan on time?
□ Yes □ no
If your answer is yes how_____
6. Do the loan officers need money as bribe to process your loan?
□ Yes □ No
If your answer is yes for q no 6, does it have an effect on our loan repayment?
□ Yes □ no
7. Did u get a profit from your business from 2008-2019?
□ yes □ no
If your answer is yes for question no 7, in which years
A.in all of the years between 2008-2019
B. for the 5 years a above
C. less than 5 years
VI. General questions
1. If you face any difficulties and challenges during the repayment process, please mention the major challenges

_____
_____
_____

2. What is your overall opinion about Dashen bank?

_____

DASHEN BANK S.C				
NPL DATA FOR 12 YEARS				
NO	YEARS	NPL AMOUNT	NPL %AGE	OUTSTANDING LOAN
1	2008	257,930,000.00	0.06	4,382,020,000.00
2	2009	328,470,000.00	0.07	4,450,000,000.00
3	2010	151,890,000.00	0.08	2,012,000,000.00
4	2011	204,390,000.00	0.04	5,728,240,722.46
5	2012	193,379,000.00	0.03	6,359,495,677.60
6	2013	265,500,000.00	0.04	7,363,761,988.30
7	2014	314,500,000.00	0.04	8,958,146,732.05
8	2015	314,500,000.00	0.05	6,799,851,502.80
9	2016	343,014,000.00	0.05	6,341,716,952.00
10	2017	900,448,090.00	0.05	18,078,880,858.00
11	2018	650,021,000.00	0.06	11,534,689,000.00
12	2019	1,210,570,581.00	0.04	32,626,703,399.00

(source; Dashen bank credit department).