

# SAINT MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES

BY FELEKE TSEGAYE

> June, 2015 Addis Ababa, Ethiopia

# THE PERFORMANCE OF PROJECT REHABILITATION AND LOAN RECOVERY PROCESS IN THE CASE OF DEVELOPMENT BANK OF ETHIOPIA

BY FELEKE TSEGAYE

## A THESIS SUBMITTED TO ST. MARY'S UNIVERSITY, SCHOOL OF GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION (MBA GENERAL)

June, 2015 Addis Ababa, Ethiopia

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## **DECLARATION**

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

Name

Signature

St. Mary's University, Addis Ababa June, 2015

## **ENDORSEMENT**

This thesis has been submitted to St. Mary's University, School of Graduate Studies for examination with my approval as a university advisor.

Advisor

Signature

St. Mary's University, Addis Ababa, June 2015

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## **ACRONYMS**

| AIB   | Agricultural and Industrial Bank                       |
|-------|--|
| AMC   | Asset Management Corporation                           |
| BOM   | Board of Management                                    |
| CBB   | Construction and Business Bank                         |
| CBE   | Commercial Bank of Ethiopia                            |
| DBE   | Development Bank of Ethiopia                           |
| ECCSA | Ethiopian Chamber of Commerce and Sectoral Association |
| EMC   | Executive Management Committee                         |
| EPPCF | Ethiopian Public Private Consultation Forum            |
| FSRA  | Finance Sector Restructuring Agency                    |
| HSB   | Housing and Savings Bank                               |
| IBRA  | Indonesian Bank Restructuring Agency                   |
| IFC   | International Financial Corporation                    |
| KYC   | Know Your Customer                                     |
| LAT   | Loan Appraisal Team                                    |
| LPM   | Loan Portfolio Management                              |
| MEI   | Manufacturing & Extractive Industries                  |
| MFI   | Micro-Finance Institution                              |
| NBE   | National Bank of Ethiopia                              |
| NPA   | Non-Performing Asset                                   |
| NPL   | Non-Performing Loan                                    |
| PFESA | Public Financial Enterprises Supervising Agency        |
| PMC   | Performance Measurement Criteria                       |
| PRLRP | Project Rehabilitation and Loan Recovery Process       |
| PRSC  | Poverty Reduction Strategy Credits                     |
| RTC   | Resolution Trust Corporation                           |
| SHG   | Self Help Group  |
| SPSS  | Statistical Package for Social Studies                 |
| TV    | Tolerance Value  |
| VIF   | Variance Inflation Factor                              |

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#### Abstract

The purpose of this study is to examine the performance of Project Rehabilitation and Loan Recovery Process at head office level in Development Bank of Ethiopia during the year 2009/10 to 2014. The concern is to identify and measure the actual performance of Project Rehabilitation and Recovery Process in relation to monitoring and follow up activities, government policy and performance measurement criteria towards the ultimate goal of the bank. A descriptive and explanatory research method was applied and primary data was collected using questionnaire to the 110 respondents i.e. participating the target population (census) that are founds at head office. Secondary data also reviewed in order to strengthen the study. Based on the source data descriptive analysis, hypothesis test and multiple regression were developed and interpreted by using quantitative method. The results from secondary data indicated that most of loan recoverable problems exhibited from Manufacturing and Extracting Industries and Commercial Agriculture, no record revealed on the area of Agro-Processing Industries, therefore there is no recoverable problems on this area. The findings also revealed from primary data that there has been problem encountered on performance of PRLRP because of the loose contact of monitoring and follow up activities, government policy and performance measurement criteria. It was proved that the predictors are statistically significant. It was recommended that government policy and credit policy of the bank should comply with the clients of primary sector requirements. To avoid or minimize the sick loans the organization should work on even default. Monitoring and follow up activities should have to give more emphasis on every steps of the business.

Key words: Performance, monitoring & follow up, government policy, measurement criteria, default loans

## **CHAPTER ONE**

#### **1. INTRODUCTION**

#### 1.1 Background of the Study

A strong financial system is very important for a country to flourish. The economic progress of a nation and development of banking is invariably interrelated. The Banking sector is an indispensable financial service sector supporting development plans through channelizing funds for productive purpose, intermediating flow of funds from surplus to deficit units and supporting financial and economic policies of government. The importance of bank's stability in a developing economy is noteworthy as any distress affects the development plans (Rajaraman and Vasishtha, 2002) thereby the economic progress (Thiagarajan, et al, 2011). The stability of banking hence is a pre-requisite for economic development and resilience against financial crisis. Like any other business, success of banking is assessed based on profit and quality of asset it possesses. Even though bank serves social objective through its priority sector lending, mass branch networks and employment generation, maintaining asset quality and profitability is critical for banks survival and growth.

Providing loans to the customers represent the heart of the banking industry. Loans are the dominant asset and represent 50 - 75 percent of the total amount at most banks, generate the largest share of operating income and represent the banks greater risk exposure (Mac Donald and Koch, 2006). Moreover, its contribution to the growth of any country is huge in that they are the main intermediaries between depositors and those in need of fund for their viable projects (creditors) thereby ensure that the money available in economy is always put to good use. Therefore, managing loan in a proper way not only has positive effect on the banks performance but also on the borrower firms and a country as a whole. Failure to manage loans, which make up the largest share of banks assets, would likely lead to the episode of high level of non - performing loans.

The significance of banks in an economy may not be eliminated as they are institutions, which provide liquidity for both lender and borrower (Kashyap et al., 1999). Because of this significance bank have to evaluate the risk, which it face daily while lending (Mohammad,

2014). Banks involves continuously in corporate governance to monitor, screen and recovery of loan for better performance of loan (Mohammad, 2014). Performance of commercial banks influences economic growth positively. Despite their role in growth of economy, well performing commercial banks helps in economic acceleration while those poorly performing hampers the economic growth and enhance poverty in the country (Barth et al., 2004). Hence performance is critical for commercial banks for achieving their objectives.

In the recent years, credit risk gained focal importance because of huge financial losses faced by big international financial organizations (Nikolaidou & Vogiazas, 2014). Since the financial crisis, financial organizations particularly commercial banking sector have taken special measures to mitigate any forthcoming financial losses caused by mismanagement in loan allocations and credit recoveries. Credit risk management offers a viable solution to such challenges. Today, credit risk management constitutes a critical component of a comprehensive approach to risk management in banking sector (Arora & Kumar, 2014). A key necessity for viable credit risk management is the capacity to sagaciously and productively oversee client credit lines. To minimize the introduction to terrible obligation, over-saving and liquidations, banks must have more prominent understanding into client budgetary quality, financial assessment history and changing instalment designs (Nkusu, 2011). Credit management for a loan deal does not stop until the full and last instalment has been recovered (Moti et al., 2012).

A major threat to banking sector is prevalence of Non-Performing Loans (NPLs). NPL represents bad loans, the borrowers of which failed to satisfy their repayment obligations. Michael et al (2006) emphasized that Non-Performing Asset (NPA) in loan portfolio affect operational efficiency which in turn affects profitability, liquidity and solvency position of banks.

Lending is the principal business activity for most commercial banks. The loan portfolio is typically the largest asset and the predominate source of revenue. As such, it is one of the greatest sources of risk to a bank's safety and soundness. Whether due to lax credit standards, poor portfolio risk management, or weakness in the economy, loan portfolio problems have historically been the major cause of bank losses and failures. (Controller's hand book, 1998).

Effective management of the loan portfolio and the credit function is fundamental to a bank's safety and soundness. Loan portfolio management (LPM) is the process by which risks that are inherent in the credit process are managed and controlled. Because review of the LPM process is so important, it is a primary supervisory activity. Assessing LPM involves evaluating the steps bank management takes to identify and control risk throughout the credit process. The assessment focuses on what management does to identify issues before they become problems. (Controller's hand book, 1998)

According to (Loan collection and recovery, CCP-CC Institute Bank – Bank Malaysia): The **collection function** collects payments from those who are delinquent, i.e. those who make payments later than their contractual due date. The **recovery function** collects money still owed on accounts after the financial institution has classified the account as non-performing or has written off the account as a loss. The functions of collection and recovery also help the financial institution measure and evaluate the lending policies. Therefore, these functions help preserve the quality of the consumer loan portfolio and avoid unnecessary loss of revenue.

It is said that lending is a science but collection and recovery is an art. Before pursuing legal action (litigation), it takes the counselling, persuasive and negotiating skills of the lender to collect and recover the monies lent.

As we have seen from the above points Non performing loans have negative impact on the bank's image and its survival. Development Bank of Ethiopia has taken serious measures and made repeated efforts to revitalise and rehabilitate troubled projects that were unable to meet debt service obligations through concessions such as rescheduling, additional loan and provision of technical support, loan transfer to third parts, management intervention, debt structuring and taking legal action. Following all these processes debts are not paid by the borrower which have a significant impact on the general profits of the bank, so in this regard this research has conducted on the performance of Project Rehabilitation and Loan Recovery Process of the bank that have highly influenced on, performance measurement criteria, monitoring and follow up, government policy, and the gaps between the actual and the desired performance.

### 1.2 Background of the Organization

The Development Bank of Ethiopia (DBE) is one of the financial institutions engaged in providing short, medium and long term development credits. DBE's distinguish feature is its "project" based lending tradition. The history of Development Bank of Ethiopia goes back to 1909 when the first attempts of its kind known as The Societe Narionale d' Ethiopie Pour le Development de l' agriculture et de Commerce (The Society for the promotion of Agriculture and Trade) was established in the Menelik II era. Further, as per the National Bank of Ethiopia (NBE, 2010), due to change of government in 1974, and the command economic system which had prevailed in the country, the Commercial Bank of Ethiopia S.C. and other banks and financial institutions were nationalized on January 1<sup>st</sup>, 1975. The nationalized banks were re-organized and one commercial bank, the Commercial Bank of Ethiopia; two specialized banks- the Agricultural and Industrial Bank (AIB), renamed as the Development Bank of Ethiopia (DBE) and a Housing and Savings Bank (HSB) currently named as the Construction and Business Bank (CBB); and one insurance company, the Ethiopian Insurance Corporation were formed.

The Bank extends its credit service through the Head office and five Regional Offices and 32 Branch offices throughout the country. Each region is empowered to extend loan up to Birr 15 million in priority area projects. Loan in excess of Birr 15 million is the jurisdiction of the Head office credit process.

#### Mission

"The Development Bank of Ethiopia is a specialized financial institution established to promote the national development agenda through development finance and close technical support to viable projects from the priority areas of the government by mobilizing fund from domestic and foreign sources while ensuring its sustainability."

### Vision

"100% success for all financed projects by 2020"

## Values

DBE's Values are beliefs which are upheld in common by its employees and management to put them into practiced. They are the cumulative effect of personal and professional values which are shared and owned by all. Hence, the values are:

Commitment to Mission, Customer focus, Integrity, Team work, High value to employees, Learning organization, Concern to the environment.

## **Economic Sector Financed by the Bank**

DBE's credit policy is purely aligned with financing projects in line with government priority areas. Major areas of DBE's financing are: Commercial Agriculture, Agro-processing, Manufacturing & Extractive Industries, preferably export focused and Input – supplying projects to the above three areas.

Nonetheless, the bank also financed a good number of projects from other areas through its extensive branch network. The DBE prefers working with big projects from 15 million to in billions: that have a huge impact on the economy. Loan amounts less than 15 million are treated in regional branches. In manufacturing business, the products are preferred to be export quality and the project will be critically analyzed and evaluated by a committee to decide their feasibility. The estimated time for processing is from 3 to 6 months for critical evaluation.

DBE's main area of focus is provision of long and medium-term loans for investment projects within the Government's priority areas.

## **Equity Capital Contribution and Interest Rate**

For purpose of commitment to the success of the project to be financed, the applicant shall be required to make a contribution towards the project cost shall not in any event be less than thirty percent (30%) of total project cost. The interest rate to be charged on loans will be set by management of the Bank and considered by the BOM in consultation with the government. The current interest rate for the priority areas of the Bank is 8.5% per annum and for non priority area is 9.5% per annum.

### **1.3 Statement of the Problem**

Performance can be measured in different ways for different disciplines; Development Bank of Ethiopia loan process can have its own steps. During this process, most of the time loans become attainable as agreed up on the contract between the lender and the borrowers. However some projects get trouble in any one of the sector and become default loan as a result extra efforts can be made, if not possible, the direct effect would be reducing company's profit significantly. So as to the bank provide a mechanism to rehabilitate the sick loan and recover from its previous position that helps the customers to turn back in the normal truck. In general the bank's overall credit operation can tell us how the money is allocated for different bank's prior areas and the status of each project loan history in connection with the approval, disbursement and collection. By these processes the money which was uncollected within a specified period of time indicated that the projects were in grace period, incapable or in need of support from Project Rehabilitation and Loan Recovery Process unit.

As company's vision stated that "100% success for all financed projects by 2020" It implies, the vision will come true when all the projects are free from default/sick loans. However, there are still default loan projects at head office level that have been supported or administrated by Project Rehabilitation and Loan Recovery Process units forwarded by Credit Process unit and from all over the branches which amounts more than Br.15 million. For the sake of understanding let us see the overall loans and advances of the bank for the year, 2011 and 2012. In the year ended of June 30, 2011 the total loans (Which includes Agriculture, Industrial and Other businesses) was Birr 11,245,829,958 out of this Birr 1,299,739,988 was loan losses. In the same ways by the year 2012 the total loans and total loan losses were Birr 14,038,331,614 and 1,249,426,823 respectively. The above figures confirmed that the bank has to have applied a mechanism to minimize the loan losses that will pave the way to reach its own vision. One of the methods adopted by the bank was implementing the project Rehabilitation and Loan Recovery Process units with full responsibility.

Therefore in this research the problem that can be studied deeply were the gap between the performance of Project Rehabilitation and Loan Recovery Process units and the actual performance in relation to monitoring and follow up activities, government policy and

performance measurement criteria towards the ultimate goal of the bank. In these regard the study elaborated and discussed in detail by using document analysis, Hypothesis test and statistical analysis.

## Document Analysis Using Secondary Data

Case 1: Is there any loan recoverable problems in the area of Commercial Agriculture Project?

Case 2: Is there any loan recoverable problems in the area of Agro-Processing industries?

Case 3: Is there any loan recoverable problems in the area of Manufacturing and extractive industries?

## **1.4. Basic Research Questions**

In this research the major questions that provide the study a broad sense of understanding when it could be well addressed to the user, the questions are:

- 1. What are the loan recoverable issues on selected sectors?
- 2. What are the criteria to measure the performance of Project Rehabilitation and Loan Recovery Process in the activities of administrating performed loan, non performed loans and final resolution (foreclosure / write-off)?
- 3. Why the bank allocates resources in loan monitoring and follows up?
- 4. What are the effects of government policy towards the process of Project Rehabilitation and Loan Recovery activities?

### **1.5.** Objectives of the Study

## 1.5.1. General Objective

The general objective of the study is to determine and minimize project failures and loan default risks associated with costs and to maximize loan recovery.

## **1.5.2. Specific Objectives**

Achieving remarkable result interpreted in a manner of successive project loan recovery to the bank that adds corporate profit. Consequently, the specific objectives of this research are:

- To examine the loan recoverable issues on selected sectors.
- To examine the performance measurement criteria of PRLRP in relation to Performed loans, non-performed loans and final resolution (foreclosure/write off).
- To determine the importance of monitoring and follow up activities in PRLRP.
- To identify the effect of government policy towards the performance of PRLRP.

## 1.6. Hypothesis

- Hypothesis 1: Performance measurement criteria have a direct and significant relationship with the performance of PRLRP.
- Hypothesis 2: Monitoring and follow up activities have a direct and significant relationship with the performance of PRLRP.
- Hypothesis 3: Government policies on primary area of the bank's service have direct and significant relationship with the performance of PRLRP.

## **1.7.** Definition of Terms

**Performing Loan** - a contractual promise between two parties where one party, the creditor agrees to provide a sum of money to a debtor, who in turn promises to return the said amount to the creditor.

**Non Performing Loan** – Loans whose credit quality has deteriorated such that full collection of principal and/or interest in accordance with the contractual repayment terms of the loan or advance is in question.

**Sick Loans / Default Loans -** A project is basically defined as sick when its loan turns out to be non-performing per NBE definition.

**Foreclosure** – The right of banks to sell assets mortgaged or pledged for a loan should the borrower fail to meet contractual agreements/defaults, and it included the right for banks to transfer assets to banks if the auction fails to be materialized at the floor price.

**Write off** – A reduction in the value of an asset or earnings by the amount of an expenses or loss. Companies are able to write off certain expenses that are required to run the business, or have been incurred in the operation of the business and detract from retained revenues.

Event Default - Any deviation from the agreed terms and conditions.

## 1.8. Significance of the Study

Development Bank of Ethiopia provides different kinds of services to the customers nationwide. Based on the geographical coverage, the amount of money vested for investor as well as facilitating state owned projects that are difficult for private banks are crucial elements for study to identify the problems encounter the whole process of loan granting and collection.

The above stated research problems revealed tangible reduction of corporate profit, so being known the problems is significantly helpful to provide best solution for the bank.

This kind of research is very much significant for the researcher to apply accumulated various knowledge in due courses of learning and hence play a role of solving a problems in the area of study. The bank can have an opportunity to look through the views of others towards the performance of loan rehabilitation and recovery activities in a systematic ways. It can also add value to other researchers as an input.

## 1.9. Organization of the Research Report

This research report is organized into five chapters. The first chapter includes introduction, statement of the problem, basic research questions, objectives of the study, significance, delimitation/scope, and organization of the research. The second chapter deals with literature review: it discusses the key concepts that are used in the paper to place the problem in the broader perspective of the literature. The third chapter focussed on research design and methodology. The fourth chapter includes summarizing of the results, Data Presentation, Analysis and Interpretation part. The fifth chapter comprised summary, conclusion and recommendation.

# CHAPTER TWO LITERATURE REVIEW

#### **2.1. Introduction**

This chapter reviews the existing literatures related to the research problem and it is sub-divided into headings: Loans related issues and its terms, Lon policy measures and regulations, Various categories of Credit information, Credit Assessment, Mechanism and approach for maximizing recovery on NPL, Major project rehabilitation mechanisms applied by the DBE.

#### 2.2. Loans related issues and its terms

#### 2.2.1. Loan

According to National Bank of Ethiopia Directives No.SBB/ 48/2010 define loans and medium or long term loans are:"Loans" means any financial assets of a development finance institution arising from a direct or indirect advance of funds (i.e. unplanned over drawings, participation in loan syndication, the purchase of loans from another lender, etc.) or commitment to advance funds by a development finance institution to a person that are conditioned on the obligation of the person to repay the funds, either on a specified date or dates or on demand, usually with interest. The term includes a contractual obligation of a development finance institution to advance funds to or on behalf of a person, claim evidenced by a lease financing transaction in which the development finance institution is the less or, and line of credit to be funded by the development finance institutions on behalf of a person.

Loan portfolio is not only considered as a largest asset as well as pre-dominate source to generate revenue but one of the biggest risk source for the financial institution's soundness and safety as well (Richard et al., 2008). Hence credit risk management is considered to be one of the road maps for soundness and safety of the sector through prudent actions as well as monitoring and performance.

## 2.2.2. Terms of Loans

#### Long – Term Loans

Long term loan is mainly used for the purpose of construction of building, acquisition of machinery and equipment, irrigation, plantation of crops, vehicles, communication

equipment and for any other infrastructure related with the project to be financed. For these reason the maximum length of time the Bank advances long term loan is fixed at 20 years including any grace period, any additional loans or rescheduling must also fail within the 20 years, permanent working capital can be considered as part of the long term investment loan of project that will be recovered within the 5-15 years loan repayment period.

## Medium-Term Loan

Such loan is mainly used for the purpose of building construction, machinery and equipment, furniture and vehicles. This type of loan is a loan repayable within 3 to 5 years including any grace period.

#### 2.2.3. Performing Loan

Legally a credit facility is defined to mean a contractual promise between two parties where one party, the creditor agrees to provide a sum of money to a debtor, who in turn promises to return the said amount to the creditor either in one lump or in installments over a specified period of time. A loan /credit facility may therefore be considered as performing if payments of both the principal and interest charges are up to date as agreed between the lender and the borrower.

#### 2.2.4. Disbursement

It occurs when a part of the available amount of the loan is utilized, i.e. debited from the loan account. This is always in the loan currency. From the date of the drawdown, the amount drawdown accrues loan interest, and will be due for repayment in accordance with the repayment terms of the loan agreement. (Handbook for Public Sector, 2013).

#### 2.2.5. Non Performing Loans (NPLs)

The term Non-Performing Loans is used interchangeably with Bad loans and impaired loans as identified in Fofack (2005). Berger and De young (1997) also describes these types of loans as "problem loans" In broad context, loans that are outstanding in both interest and principal for a period of time contrary to terms and conditions spelt out in the loan agreement are considered as non performing loans. Caprio and Klingebiel (1996) cited in Fofack (2005), consider non performing loans as loans which for a relatively long period of time do not generate income, that is both the principal and interest on these loans remain unpaid for at least 90 days.

Basically, the non- performing loans are a result of the compromise of the objectivity of credit appraisal and assessment. The problem is aggravated by the weakness in the accounting, disclosure and grant of additional loans. In the assessment of the status of current loans, the borrower's credit worthiness and the market value of collateral are not taken into account thereby rendering it difficult to spot bad loans (Patersson, 2004). Compromise in quality of risk assessment thus leads to occurrence of nonperforming loans.

Default occurs when a debtor has not met his or her legal obligations according to the debt contract. For example a debtor has not made a scheduled payment, or has violated a loan covenant (condition) of the debt contract (Ameyaw-Amankwah, 2011). A default is the failure to pay back a loan. Default may occur if the debtor is either unwilling or unable to pay their debt. A loan default occurs when the borrower does not make required payments or in some other way does not comply with the terms of a loan. (Murray, 2011).

According to the study of Gadise Gezu (2014) the finding of analysis on NPLs shows a downward sloping of NPLs of commercial banks in Ethiopia over the time of the study found out that return on asset, return on equity, capital adequacy ratio, lending rate, and effective tax rate had statistically significant effect on the level of NPLs.

## 2.2.6. Non Performing Asset (NPAs)

Aynal Ud-din Ahmed (2011) in his study concluded that the earning capacity and profitability of banks has been adversely affected by the high level of NPAs and the reduction of NPAs in banks is posing the biggest challenges in the Indian economy.

Veerakumar,K. (2012) in his research study concluded that the bank management may speed up recovery of good loans and bad loans through various modes to decelerated growth of NPAs from the present level and also to prevent re-emergence of NPAs over the minimum level.

Siraj.K.K and Prof.P.Sundarsanan Pillai (2012) in their research study concluded that NPA still remains a major threat and the incremental component explained through additions to NPA poses a great question mark on efficiency of credit risk management of banks in India.

Zahoor Ahmed and Prof. Jagadeeshwaran.M. (2013) in their research study concluded that NPA is a major problem and hurdle faced by banking industry. And also assessed the various causes for accounts for becoming NPAs are willful defaults, improper processing of loan proposals, poor monitoring and so on.

#### **2.2.6.1 NPL in Relation to Bank Efficiency**

Non-performing loans in the banking industry can be due to external events, such as adverse situation in economic activities (Berger and DeYoung, 1997, refers to it as bad luck hypothesis). When banks list the loan amount for collection, banks will incur extra operating costs from non-value-added activities to handle and supervise the collection process. These non-value-added activities consist of constantly tracking the debtor's financial status, being cautious of the collateral value, discussing the amortization plan, paying expenses for contract negotiation, calculating the costs to withhold, deposit and dispose of collateral at the time the loans become non-payable. The costs include winning the trust from management and the public, preserving the banks from being rated poor as a consequence of external affairs, declining deposits because of a loss in credibility, and extra costs to monitor loan quality. Furthermore, higher future costs are generated by the ignorance of the problems from other operations when the loan quality issues grab the attention of the senior management. This escalation in cost, in turn, deteriorates bank efficiency.

#### **2.2.6.2 NPL in Relation to Cost Efficiency**

Tsai and Huang (1999), by utilizing a translog cost function, examined the relationship between management quality and cost efficiency within Taiwan's banking industry. They discovered that asset quality and cost efficiency are related; the non-value-added activities of bad assets incur a negative consequence on the operating performance. In recent years, studies on bank efficiency have taken into account asset quality, specifically non-performing loans. The omission of such a variable might lead to an erroneous bank efficiency measure (Mester, 1996). This is particularly true since a large proportion of non-performing loans may signal that banks use fewer resources than usual in their credit evaluation and loans monitoring process. In addition, non-performing loans lead to inefficiency in the banking sector as found by Altunbas *et al.* (2000), Fan and Shaffer (2004) and Girardone *et al.* (2004). By taking into account risk and quality factors into the estimation of banks' cost efficiency in the Japanese commercial banks for the period 1993 to 1996, Altunbas *et al.* (2000) finds that the level of non-performing loans are positively related to bank inefficiency. Furthermore, banks tend to experience a decrease in their scale efficiency level after controlling for risk factors. On the other hand, Fan and Shaffer (2004) analyzed profit efficiency of large commercial banks in the U.S. by accounting for non-performing loans. They find that, although non-performing loans are negatively related to banks' profit efficiency, it is not statistically significant.

#### 2.2.7. Loan Monitoring and Follow up

Some of the factors that lead to loan default include; inadequate or non-monitoring of micro and small enterprises by banks, delays by banks in processing and disbursement of loans, diversion of funds, over-concentration of decision making, where all loans are required by some banks to be sanctioned by Area/Head Offices (Bichanger and Aseya, 2013). Credit analysis of potential borrowers should be carried out in order to judge the credit risk with the borrower and to reach a lending decision. Loan repayments should be monitored and whenever a customer defaults action should be taken. Thus banks should avoid loans to risky customers, monitor loan repayments and renegotiate loans when customers get into difficulties (Ameyaw-Amankwah, 2011). Micro-Finance Institution (MFIs) needs a monitoring system that highlights repayment problems clearly and quickly, so that loan officers and their supervisors can focus on delinquency before it gets out of hand (Warue, 2012).

To control default MFIs should also carefully examine the monitoring and control stage in the lending process. Anjichi (1994) lamented that, many of the agonies and frustrations of slow and distressed credits can be avoided by good loan supervision which helps in keeping a good loan good. This is done by visiting the borrowers' premises to investigate the general state of affairs,

checking on the state of borrowers' morale and physical stock of finished goods. The general business policy and advice are considered. If the MFI is sensitive to business development, it can revise its own credit policies and loan procedures as well as advising its customers. It can also monitor the disbursed loans by the use of loan tracking sheets, checking the amount deposited and the remaining balance of the borrowers. He further says that early recognition of the loan default is crucial, and therefore tries to give guidelines on managing loan losses. These guidelines include immediate recognition of non- performing loans, re-appraising the borrowers' financial positions in respect to the market share and extending of payment period where necessary.

According to Warue (2012) Microfinance institutions regulators, credit referencing bureau and MFIs policy makers have to be wary about increasing loan delinquency in the industry and put in place appropriate management strategies to mitigate portfolio at risks. In addition MFIs management should regularly review credit risk techniques used and expand loan monitoring framework among Self Help Group (SHGs) for effective credit portfolio assessment. Further SHGs management should strengthen group solidarity to facilitate prompt loan repayment by the group members, suggested that cooperative bank should improve their recovery performance, adopt a new system of computerized monitoring of loans, implement proper prudential norms and organize regular workshops to sustain in the competitive banking.

According to Wondimagegnhu Negera (2012) poor credit assessment ascribing to capacity limitation of credit operators, institutional capacity drawbacks and unavailability of national data for project financing that had also led to setting terms and conditions that were not practical and/or not properly discussed with borrowers had been the cause for occurrences of loan default. Besides, despite the fact that credit monitoring/ follow-up plays pivotal role to ensure loan collection failure to do this properly was also found to be causes for sick loans. The research also indicated that over financing due to poor credit assessment, compromised integrity of credit operators were cause for incidences of NPL. In fact cases of under financing loan requirement that meant shortage of working capital or not being able to meet planned targets were associated with defaults.

#### **2.3. The Loan Policy**

Loan policy sets standards for portfolio composition, individual credit decisions, fair lending, and compliance management. Loan policies vary in length, organization, degree of detail, and breadth of topics there is no ideal format. Frequently, the bank's general lending policy will be supplemented by more detailed underwriting standards, guidelines, and procedures. There are various policies that lenders put in place to ensure that credit administration is done effectively. One of these policies is collection policy which is needed because all customers do not pay the firms bills in time. The collection effort should, therefore aim at accelerating collections from slow payers and hence reducing bad debt losses. A collection policy ensures prompt and regular collection for fast turnover of working capital keeping collection costs and bad debts within limits and hence maintaining collection efficiency. The collection policy specifies clear-cut collection procedures and hence dissuades conflicts arising from loan repayment periods, amounts and loan structure (Pandey, 2004). According to DBE Credit Policy (2009) any deviation from the agreed terms and conditions will be an event of default. The following shall be considered as events of default:

- (a) Misappropriation of investment (project) funds
- (b) Over invoicing
- (c) Presentation of falsified documents
- (d) Misrepresentation
- (e) Enter into other loans with other financial institutes for the same project without the consent of DBE
- (f) Adverse material changes which affect the execution or implementation of the project
- (g) Unless otherwise agreed by the Bank, failure to perform under the agreed implementation plan;
- (h) Failure to comply with the agreed terms and conditions as stated in the loan contract including failure to service the loan.

In instances where (a) through (e) above apply, the Bank reserves the right to cancel all agreements and contracts, including return of all funds and legal measures. In instances where (f) through (g) above apply, a legal measure or penalty interest rate will be applied. However, the

penalty will be applied only when the customer refuses to comply with the terms and condition set by the Bank to resolve the problem.

#### 2.3.1. Policy Measures Introduced by the Government

From the research study of Admasu Bezabh and Asayehgn Desta, (2014), during the military rule in Ethiopia, the banking sector was riddled with non-performing loans as a consequence of weak lending practices. For instance, the non-performing loans of the Commercial Bank of Ethiopia amounted to ETB 5.8 billion, equivalent to 59 percent of its total annual loan portfolio at the end of June, 2002. Similarly, the non- performing loans of the Development Bank of Ethiopia reached 94 percent in 2003 (Banking Sector Review 2010). The factors that led these two banks to accumulate massive amounts of non-performing loans and eventually to their insolvency were mismanagement, ineffective supervision and political interference. All of these factors were at play in Ethiopia during the early years of the current administration. Abiding by the first perspective that there is a strong positive relationship between financial development and economic growth, in the early 1990s, the Ethiopian government implemented several measures to reform the banking sector's competitiveness and efficiency and thereby enhance the country's economic growth.

Initially, efforts of the government were focused on cleaning up these non-performing loans by restructuring and recapitalizing the Development Bank of Ethiopia. Regarding the longer-term, according to the Memorandum on Economic and Financial Policies for the period July 8, 2003 – July 7, 2004 dated July 23, 2003, the following measures were taken.

\*The Construction and Business Bank (CBB) was brought to the point of sale through the floatation of all of its shares to the Ethiopian public. However, the offer was withdrawn due to lack of audited accounts.

\*The government decided to finalize the financial restructuring of the Development Bank of Ethiopia (DBE) by end of 2003.

\*with respect to the Commercial Bank of Ethiopia (CBE), an independent audit was carried out according. The audit found that non-performing loans of the bank amounted ETB 5.8 billion, equivalent to 59 percent of total loans at the end of June, 2002. The audit recommended that the issue of non-performing loans be addressed and actions taken to restore the profitability of the bank.

The government adopted a gradual devaluation policy for the ETB when its value was substantially reduced by 58.6 percent, from \$0.4831 to \$0.20 on October 1, 1992. The government replaced the foreign exchange allocation system from that determined administratively to that determined by auction beginning May 1, 1993. Foreign exchange can be purchased at the auction for current account transactions only and there was a negative list of goods, which cannot be imported through the auction. As a consequence, the value of ETB progressively declined from US \$ 0.4831 in September, 1992 to US \$ 0.0594 to date.

Policies have made by the government for different sectors at different time, According to The National Chamber of Commerce & Sectoral Association study released through Fortune,(2014), that aimed at finding out challenges deterring the productivity and competitiveness of the manufacturing sector, was undertaken by the Ethiopian Public Private Consultation Forum (EPPCF), an institution under Ethiopian Chamber of Commerce and Sectoral Association (ECCSA). It was sponsored by the International Financial Corporation (IFC), a member of the World Bank Group and global development institution, focused exclusively on the private sector in developing countries.

It was presented at the Sheraton hotel on December 23, 2014, at a meeting attended by such high level government officials as the minister for Industry and Trade, Ahmed Abtew and Kebede Chane, as well as the state minister for Industry, Mebrahtu Meles (PhD), and the vice governor of the central bank, Yohannes Ayalew. According to the research, the manufacturing sector has faced strong financial problems for investment. As a result, the sector is under a huge risk. The manufacturing sector has not been able to get the investment financing it needed because of the absence of an investment bank to collect capital from the public through IPO underwriting and private placement, the study said. Manufacturing are also including losses as a result of the loans they take because of the service charge of LC credits and interests for other payables, the study said. It added that the survival and growth of the sector is in danger because the Development

Bank of Ethiopia (DBE) was not giving overdraft loans. This is a policy question to be determined by the National Bank of Ethiopia, says DBE's president Esayas Bahre. "The DBE cannot give any kind of short-term loans even if there are questions being raised," Esayas said.

#### 2.3.2 Bank regulations in Ethiopia

Banking is a highly regulated industry in Ethiopia for a number of reasons. Some of the reasons include protecting depositors' fund, ensuring safety and stability of the banking system, protecting safety of banks (that means to limit credit to a single borrower), and limiting or encouraging a particular kind of lending because of expected impact on the economy. For these and other reasons, the government issued Proclamation No. 591/2008 dated August 11, 2008, in order to increase the autonomy of the National Bank of Ethiopia, which among other things clarified the role of the National Bank as the regulator and supervisor of the banking sector. Among those the majors are:

\*License and regulate banks, insurance companies and other financial institutions in accordance with the relevant laws of Ethiopia,

\*Determine on the basis of assessing the received deposit, the amount of assets to be held by banks. (Reserve requirement)

\*Issue directive governing credit transactions of banks and other financial institutions, and \*Determine the rate of interest.

The Second proclamation is banking business proclamation (FDRE, 2008) proclamation No 592/2008. The proclamation sets the following banking business issues:

\*Requirement for obtaining license for banking business in Ethiopia

\*Prohibit foreign nationals or organizations fully or partially open banks or branch offices, \*Subsidiaries of foreign bank in Ethiopia or acquire the shares of Ethiopian banks,

\*Limitation of the acquisition of shares, appointment of bank directors and officers,

\*Maintenance of required capital, legal reserve and adequate liquidity and reserve balance,

\*Limitations on certain transaction (investment),

\*Inspection of banks, and revocation of license.

Despite improvements in the regulatory framework, the supervisory capacity of the National Bank of Ethiopia remained weak largely due to an acute shortage of qualified banking supervisors. In recent years however, the NBE has made a concerted effort to develop its capabilities over time. As a consequence, the public has gained greater confidence in the banking sector, which has led to strong growth in financial intermediation from levels that were among the lowest in Africa. Admasu Bezabh, Asayehgn Desta,(2014).

#### 2.3.3. Development Policy Loan

According to World Bank development policy (2004) loans provide quick-disbursing assistance to countries with external financing needs to support structural reforms in an economic sector or in the economy as a whole. They support the government policy and institutional changes needed to create a dynamic environment that encourages fair and sustained growth for every segment of society. Over the past two decades, development policy lending-previously called adjustment lending-has accounted, on average, for 20 to 25 percent of total Bank lending.

Development policy loans were originally designed to provide support for macroeconomic policy reforms and adjustment to economic crises. Over time, they have evolved to focus on longer-term structural, financial sector and social policy reforms. Loans seek to address complex institutional issues such as strengthening education and health policies, improving a country's investment climate, and addressing weaknesses in governance, public expenditure management and public financial accountability.

**Instruments**: The <u>policy OP/BP 8.60</u>, adopted in 2004, applies uniformly to all development policy lending, replacing the previous different types of lending (Rehabilitation Loans, Structural Adjustment Loans, Sector Adjustment Loans, etc.). Development policy operations in low-income borrowing countries may continue to be called "PRSCs" (Poverty Reduction Strategy Credits) because the term has become a well-established "brand name."

#### 2.3.4 Investment Loans

According to World Bank, Investment loans (2004) provide financing for a wide range of activities aimed at creating the physical and social infrastructure necessary to reduce poverty and

create sustainable development. Over the past two decades, investment lending has, on average, accounted for 75 to 80 percent of all Bank lending.

The nature of investment lending has changed over time. Originally focused on hardware, engineering services, and bricks and mortar, investment lending has come to focus more on institution building, social development, and improving the public policy infrastructure needed to strengthen private sector activity.

**Instruments**: The large majority of investment loans are either Specific Investment Loans or Sector Investment and Maintenance Loans. Adaptable Program Loans and Learning and Innovation Loans were recently introduced to provide more innovation and flexibility in how funds can be used. Other instruments tailored to borrowers' specific needs are Technical Assistance Loans, Financial Intermediary Loans, and Emergency Recovery Loans.

#### 2.3.5 Lack of Strict Admittance Exist Policies

Under the influence of idea of pursuing market share excessively, banks do not establish detailed and strict market admittance policies, which undermine the first risk to prevent gate and weaken the orientation effect of admittance policies to market (Shofiqul Islam, 2005). During pre-loan investigation, bank officers put little emphasis on authenticity and integrality review on related materials. They don't clarify the true intended usage of the loan (especially when extending short-termed credit) and the review is too optimistic, which does not analyze the potential influence of changes in related factors.

Furthermore, some banks neglect the fact that the loan procedures are not completed or detailed and the review materials are not enough; some operate in different procedures than the review materials, for instance, signing loan contract before approval of the loan, issuing letter of credit or bank acceptance before approval; consolidated credit is not fully realized, and credit to some group members is not included in the consolidated credit management.

#### 2.4. Credit Information

Engagement in financing begins with customer recruitment. An issue of knowing the customer, customarily known as KYC (Know Your Customer) is so vital before proceeding to details. Banks use various means to obtain such information about the existing or potential customer.

Use of financial statement, credit report from credit bureau, customers' history if not new is the potential sources of information (Ross et al., 2002). According to The Federal Reserve (2005) a **credit report** is the organized presentation of information about an individual's and/or company's credit record that a credit bureau communicates to those who request information about the credit history of an individual's and/or company's experiences with credit, leases, non-credit-related bills, collection agency actions, monetary-related public records, and inquiries about the individual's credit history.

The purpose of information sharing is to communicate relationship information from existing lending relationships to outside lenders (Gehrig and Stenbacka, 2007). Credit providers use credit information to conduct credit risk analysis of prospective borrowers in order to mitigate credit risk. Kallberg and Udell (2003) highlight that information sharing is useful both at the origination stage and after credit has been extended. Especially at the origination phase, information sharing reduces the problems of adverse selection.

#### 2.5 Credit Assessment

Credit analysis is the first step in the process to tailor-make a solution to fit the customer's needs. The assessment starts with an understanding of the customer's needs and capacities to ensure there is a good fit in terms of the financing solution. Credit assessment is the most important safeguard to ensure the underlying quality of the credit being granted and is considered an essential element of credit risk management (Cade, 1999). The credit quality of an exposure generally refers to the borrower's ability and willingness to meet the commitments of the facility granted. It also includes default probability and anticipated recovery rate (Saunders & Cornett, 2003). Credit assessment thus involves assessing the risks involved in financing and thereby anticipating the probability of default and recovery rate.

A credit analysis is used by the credit official to evaluate a borrower's character, capital, capacity, collateral and the cyclical aspect of the economy, or generally referred to as the five C's (Strischek, 2000). This model also referred as the five C's.

# The Five C's of Credit

The credit analysis process, traditionally employed by the first banks, does not differ fundamentally from the processes used today (Caouette et al, 1998; Rose, 2002). The five C's are considered the fundamentals of successful lending and have been around for approximately 50 years. Initially only character, capacity and capital were considered. However, over the years collateral and conditions were added. These provided an even more comprehensive view and clearer understanding of the underlying risk and resulting lending decision (Beckman & Bartels, 1955; Reed, Cotter, Gill & Smith, 1976; Sinkey, 2002).

According to Murphey (2004), these principles should be the cornerstone of every lending decision.

## Character

A company's reputation, referring specifically to credit, is based on past performance. A borrower has built up a good reputation or credit record if past commitments were promptly met (observed behavior) and repaid timely. Character is considered the most important and yet the most difficult to assess (Koch & MacDonald, 2003).

Bankers recognize the essential role management plays in a company's success. Critically analyzing quality of management has been one of the ways of assessing character. The history of the business and experience of its management are critical factors in assessing a company's ability to satisfy its financial obligations.

The quality of management in the specific business is evaluated by taking reputation, integrity, qualifications, experience and management ability of various business disciplines such as finance, marketing and labor relations into consideration (Sinkey, 2002; Nathenson, 2004).

# > Capacity

Capacity refers to the business's ability to generate sufficient cash to repay the debt. An analysis of the applicant's businesses plan, management accounts and cash flow forecasts(demonstrating the need and ability to repay the commitments) will give a good indication of the capacity to repay (Sinkey, 2002; Koch & MacDonald, 2003). To get a good understanding of a company's capacity evaluating the type of business and the industry in which it operates is also vital .It plays a significant role since each industry is influenced by various internal and external factors. The factors that form the basis of this analysis includes: Type of industry, Market share, Quality of

products and life cycle, whether the business is labor or capital intensive, the current economic conditions, seasonal trends, the bargaining power of buyers and sellers, competition and legislative changes (Koch & MacDonald, 2003; Nathenson, 2004).

Besides, the financial position is also a critical indication of a business' capacity. The company's financial position is evaluated by assessing past financial performance and projected financial performance. A company's past financial performance is reflected in their audited financial statements (Koch & MacDonald, 2003). Financial projections consist of projected cash flows demonstrating the need for the facility and the ability to repay the facility (Sinkey, 2002). In this regard at least three years audited financial statements (balance sheet and income statement) are required for data analysis. A financial spreadsheet is used to undertake the analysis.

Commercial banks utilize the financial spread (i.e. audited financial statement analysis and ratio calculations - DuPont) and it is applied through the Moody's Risk Advisor. The model

- Liquidity ratios reflect the company's ability to meet its short-term obligations. According to Conradie and Fourie (2002), the current ratio is calculated by dividing the current assets by the current liabilities.
- > Activity ratios- indicate whether assets are efficiently used to generate sales.
- Leverage ratios- indicate the company's financial mix between equity and debt and potential volatility of earnings. High volatility of earnings increases the probability that the borrower will be unable to meet the interest and capital repayments.
- Profitability ratios- supply information about the company's sales and earnings performance.

The cash flow analysis need to be done once the ratio analysis has been evaluated. The cash flow analysis allows the banker to distinguish between reported accounting profits (net income) and cash flow from operations (cash net income). Cash flow from operations gives an indication of how much cash is generated from normal business activities. The cash flow generated must be sufficient to service the banking facilities (Sinkey, 2002; Koch & MacDonald, 2003). These assumptions are evaluated against the company's past performance, industry averages and expected economic trends (Nathenson, 2004).

# Capital

Capital refers to the owner's level of investment in the business (Sinkey, 2002). Banks prefer owners to take a proportionate share of the risk. Although there are no hard and fast rules, a debt/equity ratio of 50:50 would be sufficient to mitigate the bank's risk where funding (unsecured) is based on the business's cash flow to service the funding (Harris, 2003). Lenders prefer significant equity (own contribution), as it demonstrates an owner's commitment and confidence in the business venture.

## Conditions

Conditions are external circumstances that could affect the borrower's ability to repay the amount financed. Lenders consider the overall economic and industry trends, regulatory, legal and liability issues before a decision is made (Sinkey, 2002). Once finance is approved, it is normally subject to terms and covenants and conditions, which are specifically related to the compliance of the approved facility (Leply, 2003). Banks normally include covenants along with conditions when credit facilities are granted to protect the bank's interest. The primary role of covenants is to serve as an early warning system (Nathenson, 2004).

## Collateral

Collateral (also called security) is the assets that the borrower pledges to the bank to mitigate the bank's risk in event of default (Sinkey, 2002) .It is something valuable which is pledged to the bank by the borrower to support the borrower's intention to repay the money advanced. Security is taken to mitigate the bank's risk in the event of default and is considered a secondary source of repayment (Koch & MacDonald, 2003).

The purpose of security is to reduce the risk of giving credit by increasing the chances of the lender recovering the amounts that become due to the borrower. Security increases the availability of credit and improves the terms on which credit is available. The offer of security influences the lender's decision whether or not to lend, and it also changes the terms on which he is prepared to lend, typically by increasing the amount of the loan, by extending the period for which the loan is granted and by lowering the interest rate (Norton and Andenans, 1997: 144).

# 2.6. Mechanism for maximizing recovery on NPL ("Bad Assets")

Based on Margery Waxman (1998) Banks restructuring programs can be followed one of the two models for managing and ultimately recovering whatever value remains in the non-performing loans held by failed banks.

- Separation: Establishing a separate operation within the bank that is charged with responsibility for asset recovery (this was done most successfully during the Spanish systemic bank restructuring of the 1980s, "bank hospitals" and the Norwegian and Swedish restructuring of the 1990s or "good bank/bad bank"); or
- Transfer: Transferring the bank's bad assets to an existing government agency, such as the deposit insurance corporation (this was done most successfully by U.S. Federal Deposit Insurance Corporation for banks that failed at the same time as the S&L crisis) or establishing a new government entity ("asset management corporation") solely for the purpose of receiving, managing and selling the bad assets of insolvent financial institutions, as was done at the final stage of the U.S. S&L crisis and, most recently, in Thailand, Korea and Indonesia.

The decision as to the best structure for disposition of bad assets depends on legal as well as government policy considerations. In addition to maximizing recovery of asset value, the establishment of separate vehicle for collecting and managing recovery of whatever value resides in a bank's problem loans or the collateral underlying those loans, sends a signal to the borrowing community that they are still expected to comply with their contractual obligations. The adaptation of best practices for establishing effective asset recovery mechanisms should be done within the context of the existing legal and judicial framework to the extent possible. In some cases, however, the existing legal mechanisms, particularly bankruptcy and foreclosure laws, may be inadequate and need legislative revisions.

## 2.6.1. Approach to Recover Non Performing Loan

#### Good bank/bad bank

Although the Norwegian and Swedish Governments both utilized the "good bank/bad bank" approach to separating an insolvent bank's performing loans from its non-performing loans, they did so through different legal structures. In the Norwegian systemic bank restructuring, the Government, after injecting capital, took control of the three largest troubled banks and divided each bank's assets into performing or non-performing loans (similar to the CINB approach). After effectively managing the three banks for several years, during which the "bad banks" assets were worked out, the Norwegian Government re-privatized the banks in 1996. In the Swedish bank restructuring, the Government worked with individual banks to establish separate units within each bank to be responsible for the management and disposition of bad assets. Although the work out units varied to some degree from bank to bank the Government required all banks to develop and implement resolution strategies which ensured that capable and experienced personnel with sufficient support and organizational control were assigned to handle the bad assets so the core bank could focus on rebuilding the bank's franchise. In both countries the "good" and "bad" banks reported to the same board of directors.

#### Asset Management Corporation (AMC)

The use of an AMC has become a favored mechanism for systemic bank restructuring since it was used successfully in the last stage of the U.S. S&L crisis of the 1980s with the legislative establishment of the Resolution Trust Corporation ("RTC"). Establishing an AMC allows new owners of banks, including government owners, to remove their non-performing loans from their books, thereby immediately strengthening their balance sheets, and at the same time allowing bank managers to concentrate on core (and presumably profitable) business. However, the AMC must have adequate legal authority and sufficient incentives to actually foreclose on collateral or work out non-performing loans.

AMCs can be set up as a single agency or several agencies responsible for managing the

collective bad assets of all insolvent banks. An AMC is particularly helpful in those situations in which the banks lack skills to collect bad assets or management of the banks has been so compromised by prior actions that they are considered unreliable to collect on bad assets. In the U.S. S&L crisis the RTC was set up as a limited term governmental entity to handle the assets of failed S&Ls. In the East Asia debt crisis, centralized AMCs have been established as part of the systemic bank restructuring of Thailand, Korea and Indonesia.

In the case of Indonesia, the Indonesian Bank Restructuring Agency ("IBRA") was established to resolve, restructure or dispose of those banks which were referred to it by the Bank of Indonesia, while a separate entity, ACTIVA, was intended to dispose of the assets held by the IBRA banks. Similarly, in Thailand two agencies were set up: the Finance Sector Restructuring Agency ("FSRA") responsible for assessing the finance companies' rehabilitation plans and the disposing of their assets within the first year of its operation; and the Asset Management Corporation ("AMC") responsible for managing the sale of assets acquired from insolvent banks and for serving as the buyer of last resort for the assets sold by the FRA. It will take some time before analysts will be able to evaluate the success of these agencies in accomplishing their objectives in countries where the entire banking system is under pressure from excessive leveraging in the corporate sector.

# 2.7. Major Project Rehabilitation Mechanisms in DBE

The under listed project rehabilitation mechanisms are taken from the Development Bank of Ethiopia PRLRP procedural manual (2012).

### 2.7.1 Management Intervention

The purpose of management intervention is to assist the project improve its management and realize its objectives by maintaining the continuity of normal operation in such areas like farming to keep plants alive, protect properties from thefts, by way of continuing the usual operations like nursery management, production and marketing (sales) activities, avoid diversion of loans/project proceeds and avoid conflict of interest in purchases and/or sales of project

proceeds. However, the bank's involvement in the management interventionism until the project commences its regular operations and starts loan repayments or the project is foreclosed.

#### 2.7.1.1. Management Intervention Triggers in DBE

- Existence of management problems of serious nature and lucks of confidence on the existing management staffs despite but the project is still found to be sound in its technical, market, financial and other aspects;
- > The project is not serving its debts and is in financial difficulties to go forward;
- When the owner and/or the executive management staff of a project dies or evacuates from the project area without any legally delegated person to run the day-to-day operation:
- When the bank takes over operational projects temporarily based on the foreclosure law until they are disposed to third party:
- When some special projects like flower, vegetable and fruit projects which are sensitive, highly volatile and susceptible to damages are abandoned by owners: and
- Occurrence of event of default of high magnitude.

# 2.7.1.2. Modality of Management Intervention

# 1. Staff Assignment

The bank assigns staffs who have a good knowledge and experience in the field of the specific project as a member of Care Taker Board and also a follow up officer that closely works with the project office to counter sign checks and over see the movement of transaction including raw material purchase and sale of outputs. The follow up officer must be assigned by PRLR while a member of the Care Taker Board is assigned by the President. In this approach the bank is involved at the apex and project management level and is assumed to exert its influence in the management affairs.

## 2. Establishment of Ad Hoc Committee

The bank establishes a team/ad hoc committee which shall be responsible to take over the management of the project entirely or partially depending on the nature and severity of the management problem at hand with the following responsibilities:

- The team should be established at corporate level under PRLRP comprising two or more senior and/or principal officers of which at least one member should be a principal officer who shall take the leading role of the team:
- The team shall take over the management of projects fully or partially as soon as the proposal for management intervention is approved by President:
- When sales and/or purchases are required, the team may follow sales/purchasing systems of the company, not necessarily that of the DBE: and
- The team should be accountable to the PRLRP Manager at the corporate level and should report performances and achievements on monthly basis.

# **3. Outsourcing Management of Projects**

- This type of intervention is about employment of knowledgeable experts out of the bank at management capacity or a professional to assist as an advisor;
- The outsourced management, could also be a sort of an ad hoc committee that shall monitor and assist on important decisions and report to the bank as per terms of reference given by the PRLRP;
- Management intervention by outsourcing could also be extended to management contract or leasing with special arrangement possibly by creating partnership in the form of debt equity swap: and
- The ad hoc committee, manager/advisor, management contract shall be terminated when the project is considered as fully recovered.

# 2.7.2. Provision of Additional and/or Working Capital Loans

If provision of additional investment and/or working loans is deemed necessary for rehabilitation of projects, it should be entertained accordingly:

- Provisions of additional loan working capital/expansion on exceptional cases may be entertained by PRLRP based on existing reality of sick projects if it is believed to revive the project including and the project is strategically important for the country's development even by proposing higher debt-equity ratio, However, the repayment period of additional loan should not be elongated beyond the productive life of major fixed assets of the project unless appropriate cost of replacement is considered;
- Settlement of interest arrears is a precondition for injection of any loan: and
- The PRLRP also entertains additional loans to rehabilitate non-priority area projects which were formerly financed by the bank, by ensuring that the collateral covers 125% of the total loan.

# 2.7.3. Loan Repayment Rescheduling

- Whenever loan repayment rescheduling is found to be the best project rehabilitation mechanism, it should be applied by the PRLRP;
- The PRLRP can also propose unconventional mode of loan repayments so that the sick projects may not face cash constraints for the rehabilitation tasks;
- Project that are deemed as sick but have a positive cash flow should settle their interest arrears before being rehabilitated;
- Interest arrears shall be settled before any other treatment. However, if the positive cash flow of the project is consider to be minimal or insignificant to settle interest arrears, the appropriate project rehabilitation mechanisms (e.g. interest amortization) can be considered aligned with the new core banking system; and
- All loan rehabilitation proposals undertaken by the PRLRP shall be submitted to the Loan Appraisal Team (LAT) President for appropriate decisions.

# 2.7.4. Loan Transfer to Third Party

As an option for project rehabilitation, the bank gives a chance for the customer and a person willing to take over the project/loans transfer facility. Sick projects (loans), which are deemed recoverable, can be transferred to new clients in consultation with the original borrower.

Nevertheless, due diligence assessment shall be made on the new client to ascertain the viability of the new comer.

- When loan transfer to a third party is accepted as solution for NPL reduction, the debt taker agrees to settle at least 30% of the total arrears, if in case the interest arrears balance exceeds 30% of the loan in arrears, the left over interest balance may be taken forward to the loan account of the debt taker without merging or capitalizing it with the principal balance; and
- In cases where the collateral held is inadequate to cover the remaining debt during loan transfer, additional collateral (collateral outside the project) shall be offered as per the collateral policy of the bank to make the recovery of the loan reliable.

# 2.7.5. Debit Restructuring

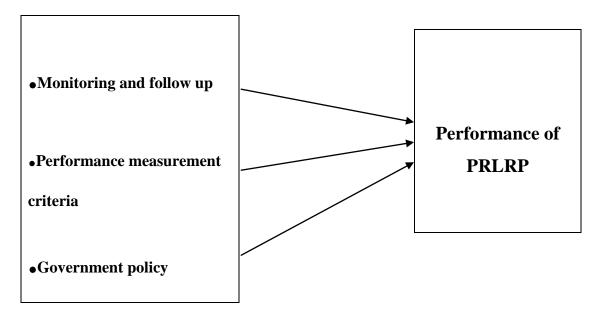
DBE shall restructure debt of projects as one of the resolution mechanism of sick or troubled loans. By debt restructuring mechanism the bank may modify or relax the terms of the loan agreement to minimize eventual losses of a borrower who is financially incapable of meeting its financial obligations by modifying the loan agreement. Debt restructuring could possibly include; reduction in the applicable interest rate, cancellation of compounded interest resulting from capitalization of interest, reduction/cancellation of suspended interest, or extension of the loan repayment period (Scheduling the loan repayment). This NPLs resolution mechanism may be applied individually or in combination with other facilities depend on the severity of the debt burden and the extent that a particular project performance is affected.

## 2.8. Conceptual Framework

The main objective of this study is to examine the performance of Project Rehabilitation and Loan Recovery Process in Development Bank of Ethiopia. Based on the study, the following conceptual model is framed. Figure 1: Conceptual Framework

# **Independent Variables**

# **Dependent Variable**



Source: Own Model 2015

# **CHAPTER THREE**

# **3.1. Introduction**

This chapter presents two issues. Firstly the methodology adopted and used for the study has been discussed. These include the research design, sampling technique, data collection. The second issue discussed is the methods of data analysis, description of variables and model specification.

## 3.2. Research Design and Methodology

# **3.2.1. Research Design**

A research design is a master plan that specifies the methods and procedures for collecting and analysing needed information. It is essentially a statement of the object of the inquiry and the strategies for collecting the evidences, analysing the evidences and reporting the findings. The intention of the research design that can be formulated is based on the objectives of the research and research problem questions. (Zikmund et al, 2009). Due to these facts it is preferably use the research design to be descriptive and to some extent explanatory types, in which it enable us to describe phenomena as they exist, identify and obtain information on the characteristics of a particular issue, usually using statistical techniques to summarise the information, to define terms, to clarify problems and hypotheses, and to establish research priorities. In order to conduct such kind of research the most appropriate ways of doing are: observational, survey, and case study methods for all data that are quantitative in nature.

Quantitative research defined by Cooper (2006) as the accurate sum of some behavior, knowledge, opinion or attitude. In this study descriptive data were analyzed, cases from secondary data were presented along with bank's primary areas, correlation and multiple regressions have been developed.

# 3.2.2. Sample and Sampling Techniques

#### **3.2.2.1 Population of the study**

According to Diamantopoulos (2006), a population is a group of items that a sample will be drawn from. For this study the target population is Development Bank of Ethiopia staffs which

involve directly or indirectly on the performance of Project Rehabilitation and Loan Recovery sub process activities, specifically located at head office only.

#### 3.2.2.2. Sample

A sample is drawn as a result of constraints that make it difficult to cover the entire research population (Leedy and Ormord, 2005). However, in this research it is very convenient to take the total population, Since Development Bank of Ethiopia is the only bank that is privileged by the government to perform loans for huge projects and facilitating the growth of nation's economy, it has a great chance to cover all geographic areas of the country with a limited number of employees totally which counts 1279 as compared to the estimation of World Population Review of (2015), the population of Ethiopia has an estimated of 98.9 million. Among these the study directly focused on the specific areas i.e. Project Rehabilitation and Loan Recovery process sub unit and related departments. Accordingly the study strictly follows stratified grouping system as commercial Agriculture, Agro-Processing and Manufacturing and Extractive Industries. Therefore the Project Rehabilitation and Loan Recovery process sub unit and related relationship for the following areas as shown below.

| No. | Department / Projects                                   | Number of employee | Remark                   |
|-----|---|--------------------|--------------------------|
| 1   | Project Rehabilitation and loan Recovery<br>Sub-Process | 24                 | work only at head office |
| 2   | Project Appraisal Sub-process                           | 35                 | work only at head office |
| 3   | Vice President Credit Services                          | 5                  | work only at head office |
| 4   | Credit Process  | 48                 | work only at head office |
| 5   | Export Credit Guarantee                                 | 8                  | work only at head office |
|     | Total   | 120                | Target population        |

| Table1. | Target | population | (Census) |
|---------|--------|------------|----------|
|---------|--------|------------|----------|

Source: Own survey 2015

Scientifically, it is advisable to take the total population for research when the numbers are small. Being small is not mean concerning for few groups of individuals/things. In this regard Development Bank of Ethiopia is a single bank which stands for the whole population of the nation. As a result of this the project rehabilitation and loan recovery process by the same token its services address the over all areas of the country. Moreover loans which exceeds Birr 15million would be granted to the borrowers by the head office. Therefore it is a lot to mean for conducting research on the above 120 respondents in the subject matter.

**3.2.3. Sampling Techniques:** The technique that has been appropriate for this research were participating all the target population (census approach), so as to make the study result to be more accurate.

# **3.3. Source and Tools of Data Collection**

#### 3.3.1 Primary Data

Primary data collection has been made using structured questionnaires, which supports the objective of the study to be strengthening and hence developed the relationships of the variables adopted from the respondents.

#### **3.3.2 Secondary Data**

Secondary data collection sources extracted from Development Bank of Ethiopia financial statements, reports, Journals, credit procedure manuals, as well as bank's web site.

## **3.4.** Methods of Data Analysis

In this research analysis, descriptive and inferential statistics were applied for the result obtained. The respondents agreement to statement rating system was adopted from five point Likert Scale (5 point, Strongly Agree), (4 point Agree), (3 point, Neutral), (2 point Disagree), (1 point, strongly Disagree), that associated with the performance of PRLRP. For data summarize, analyze and interpret, Statistical Package for Social Sciences (SPSS) was used.

Reliability analysis was used to test how well the items in a set are positively correlated to one another. The internal consistency reliability was higher if the Cronbanch's alpha is closer to 1

(Sekaran, 2003). The Cronbanch's alpha value was used to measure the reliability of the instrument which well exceeded the recommended critical point of 0.7 (Sekaran, 2003).

In order to analyze the existence of loan recoverable problems in the primary areas of the bank secondary data were used solely.

Beside this hypothesis was developed to check whether there is a relationship between the performance of PRLRP with performance measurement criteria, monitoring & follow up and government policy.

To compute the correlation between dependent variable (Performance of PRLRP) and the independent variables (Performance measurement criteria, monitoring & follow up, and government policy), the most common correlation coefficient called Pearson r was applied. To describe the strength of the measure of association the following table provides a framework for the researchers.

| Measure of Association            | Descriptive Adjective    |
|-----------------------------------|--------------------------|
| > 0.00 to 0.20 ; < -0.00 to -0.20 | Very weak or very low    |
| > 0.20 to 0.40; < -0.20 to -0.40  | Weak or low              |
| > 0.40 to 0.60; < -0.40 to -0.60  | Moderate                 |
| > 0.60 to 0.80; < -0.60 to -0.80  | Strong or high           |
| > 0.80 to 1.0; < -0.80 to -1.0    | Very high or very strong |

 Table 2. The strength of the relationship

Source: MacEachron Basic Statistics in Human Services

In addition to the above methods to get the research more clear and understandable the researcher developed multiple regressions with all the assumptions of:

- Normality of the distribution
- Linear relationship
- Homoscedasticity (equal variance)
- Independent of residuals

• Multicollinearity

Throughout the process frequency, percentages, tables, and other statistical tools were implemented to analyze the data.

# 3.5. Description of Variables

The variables that are used in this research are Performance of PRLRP is independent Variable and monitoring and follow up, performance of measurement criteria and government policy are independent variables.

# 3.6. Model Specifications

The model that has been formulated here under supports to predict the average value of the PRLRP performance from the independent variables. Since there is more than one independent variable, it is appropriate to use multiple regression model.

 $P_i = \alpha + \beta_1 PMC_i + \beta_2 MF_i + \beta_3 GP_i + e$ 

Where  $P_i$  = Performance of PRLRP (Dependent Variable)

 $\alpha$  = the intercept term

 $\beta_1$ ,  $\beta_2$ ,  $\beta_3$  = Partial regression coefficient of independent variables.

PMC = Performance measurement criteria

MF = Monitoring and follow up

GP = Government Policy

e = error term

# **CHAPTER FOUR**

# 4.1. Introduction

This chapter presents the results from the descriptive and multiple regression analyses. Specially on the primary source: data was collected, edited, coded and entered into the SPSS to identify the significant relationship of the independent variables (performance measurement criteria, monitoring and follow up and government policy) and the dependent variable (performance of PRLRP). The descriptive analysis made use of to check whether there are loan recoverable issues on selected sectors or not.

# 4.2. Loan recoverable issues related to selected sectors

Project Rehabilitation and Loan Recovery Process units provide services based on government primary areas. In order to attain the desired objectives, it has been checked the real existence of recoverable problems for the last five years (2009/10 to 2014), gone through the secondary data source of the organization which directly focused on clients at head office level and projects worth more than 15 million from all over the branch and districts. The questions that can be proved were:

Case 1: Is there any loan recoverable problems in the area of Commercial Agriculture Project?

Case 2: Is there any loan recoverable problems in the area of Agro-Processing Industries?

Case 3: Is there any loan recoverable problems in the area of Manufacturing and Extractive Industries?

All sick loans forwarded by Credit Process to PRLRP are classified as resolved, foreclosure/write-off and pending cases. This study strictly focused on the last five years activities of the organization. In this case the following secondary data are presented:

# Sick Loan Project Resolved by PRLRP

# Development Bank of Ethiopia Project Rehabilitation and Loan Recovery Sub – Process Rehabilitated Projects that are Resolved Data Capturing Format From Year 2009/10 to date (March 31,2015)

#### Table 3. Resolved projects after treatment

| S/N | Name of<br>Borrower | date the<br>project<br>entered to<br>PRLR | NPL's Resolution Mechanism<br>Applied                         | date the project<br>sent back to<br>CP/CR after<br>rehab./Settled | Primary Area                            |
|-----|---------------------|---|---|---|---|
| 1   |                     | 1 20 2000                                 | Additional loan   | L 07 2011   | Manufacturing and                       |
| 1   | A                   | June 30,2009                              | Rescheduling (4 times)  | June27,2011   | extracting industries                   |
| 2   | В                   | June 30,2009                              | Rescheduling (2 times)  | May 27, 2010  | Commercial Agriculture                  |
| 3   | С                   | June 30,2009                              | Additional loan & Rescheduling                                | April14,2011  | Commercial Agriculture                  |
| 4   | D                   | June 30,2009                              | Rescheduling  | May 11, 2010  | Commercial Agriculture                  |
| 5   | E                   | June 30,2009                              | Rescheduling  | June29,2010   | Commercial Agriculture                  |
| 6   | F                   | June 30,2009                              | Rescheduling  | May 24, 2011  | Commercial Agriculture                  |
| 7   | Н                   | June 30,2009                              | Rescheduling (2 times)  | July 19, 2010   | Commercial Agriculture                  |
| 8   | Ι                   | June 30,2009                              | Rescheduling  | June29,2010   | Commercial Agriculture                  |
| 9   | J                   | June 30,2009                              | Rescheduling (2 times)  | May 11, 2010  | Commercial Agriculture                  |
| 10  | К                   | June 30,2009                              | Rescheduling (2 times)  | November 1,<br>2010   | Commercial Agriculture                  |
| 11  | L                   | June 30,2009                              | Loan settlement   | May 15, 2014  | Commercial Agriculture                  |
| 12  | М                   | June 30,2009                              | Loan settlement   | May 15, 2014  | Commercial Agriculture                  |
| 13  | Ν                   | June 30,2009                              | Loan Transfer   | October 5,2009  | Commercial Agriculture                  |
| 14  | 0                   | October 09,2009                           | Additional loan<br>Rescheduling,( 2 times)                    | August16,2010   | Manufacturing and extracting industries |
| 15  | Р                   | December 8,<br>2009                       | Rescheduling and<br>management intervention,<br>2 times.      | April 30,2013   | Commercial Agriculture                  |
| 16  | Q                   | December 8,<br>2009                       | Rescheduling and management intervention                      | April 30,2012   | Commercial Agriculture                  |
| 17  | R                   | December 9,<br>2009                       | Additional loan<br>Rescheduling & Loan Transfer,<br>(3 times) | may 26,2014   | Manufacturing and extracting industries |
| 18  | S                   | December 8,<br>2009                       | Add. Loan & rescheduling and mgt intervention, (3 times)      | August 20, 2014   | Manufacturing and extracting industries |
| 19  | Т                   | December 8,<br>2009                       | Additional loan<br>Rescheduling,(2 times)                     | may 26,2014   | Commercial Agriculture                  |

Source: PRLRP Third Quarter Report

From the above table out of 19 resolved project cases 15 of them are categorized under Commercial Agriculture. The other 4 is belongs to Manufacturing and extracting industries. The name of the company and the amount of loans were not displayed because of the procedure of the bank and the financial institution business secrecy.

The mechanism that was applied to resolve the problems were additional loan, rescheduling, management intervention, loan settlement and loan transfer. The recoverable period taken by PRLR unit with a minimum of 4 months by the mechanism of Loan Transfer under the category of Commercial Agriculture to the maximum period of 4 years and 10 months using the combination of Additional loans and Rescheduling mechanism under the primary area of Manufacturing and extracting Industries.

As per the procedure of the bank it is so difficult to express the costs interns of quantifiable unit, for those projects under the recoverable areas that have got solution by PRLR. However we can justify that there is a frequent Commercial Agriculture loans problem that leads to NPL and through an alternative rehabilitates process some of the projects had turned back to the normal position.

Apart from turned back to the normal status some projects had been resolved through Foreclosure /Write-off after a number of recovery mechanisms applied.

# > Project loans resolved through Foreclosure / Write off

#### **Development Bank of Ethiopia**

## PRLR Evaluation of the Past Five Year NPLs Resolution Strategy (2009/10 to 2013/14)

#### Loans Resolved Through Foreclosure and Write-off

#### Table 4. Loan resolved through Foreclosure / write off

|     | Name of  | Project<br>Address                      |             | Type of  | NPL's posi<br>strategy w<br>(June 30 | NPL's<br>Resolution                     |                      |
|-----|----------|---|-------------|--|--------------------------------------|---|----------------------|
| S/N | Borrower | (name of the<br>Regional<br>State only) | Sector      | Project/<br>commodity  | Principal<br>(Due +Not<br>yet Due)   | Interest<br>( Due +<br>Not Yet<br>Due ) | Mechanism<br>Applied |
| 1   | A        | Oromia                                  | Industry    | Pasta noodles<br>macaroni  | 57,331,329                           | 16,583,743                              | Write off            |
| 2   | В        | Addis Ababa                             | Industry    | Garment  | 21,779,523                           | 5,493,992                               | Foreclosure          |
| 3   | С        | Oromia                                  | Agriculture | Floriculture   | 13,461,465                           | 380,403                                 | Write off            |
| 4   | D        | Oromia                                  | Agriculture | Floriculture   | 12,244,201                           | 331,098                                 | Write off            |
| 5   | E        | Addis Ababa<br>Tigray                   | Industry    | Medical &<br>dental practice<br>& activities<br>Soap &<br>detergents<br>cleaning &<br>polishing<br>preparation | 11,852,781<br>21,185,961             | 5,284,412<br>2,096,897                  | Write off Write off  |
| 7   | G        | Addis Ababa<br>Addis Ababa              | Industry    | Food<br>Processing<br>Pharmaceuticals<br>medicinal<br>chemicals &<br>botanical<br>products                     | 57,657,310<br>27,351,679             | 5,787,045<br>24,961,811                 | Write off Write off  |
| 9   | I        | Amhara                                  | Industry    | Mineral & other<br>bottled water   | 46,052,753                           | 35,788,463                              | Write off            |
| 10  | J        | Amhara                                  | Industry    | Cotton<br>production &<br>ginning  | 20,625,948                           | 3,121,976                               | Write off            |

| 11 | К     | Oromia      | Agriculture | Floriculture                                 | 18,699,487  | 1,276,751   | Write off   |
|----|-------|-------------|-------------|--|-------------|-------------|-------------|
| 12 | L     | Amhara      | Industry    | Industry Tannery                             |             | 45,854,297  | Foreclosure |
| 13 | М     | Addis Ababa | Industry    | Precision<br>medical<br>instruments          | 456,976,881 | 31,347,306  | Foreclosure |
| 14 | N     | Oromia      | Agriculture | Agricultural production                      | 6,453,694   | 1,143,933   | Write off   |
| 15 | 0     | Addis Ababa | Industry    | Medical &<br>dental practice<br>& activities | 18,661,613  | 2,887,366   | Write off   |
| 16 | Р     | Oromia      | Agriculture | Floriculture                                 | 26,654,012  | 5,338,344   | Foreclosure |
| 17 | Q     | Addis Ababa | Industry    | Tannery                                      | 5,249,796   | 4,073,846   | Write off   |
|    | Total |             |             |  | 929,969,476 | 191,751,681 |             |

#### **Source: PRLRP Third quarter report**

Having been looking through the data from the above Table 4, seventeen projects were become write-off or foreclosure. Under the category of Commercial Agriculture five projects and under Manufacturing and Extracting Industries twelve projects registered with the total amount of Br. 66,512,859 + 8,470,529 = 74,983,388 (Principal + Interest) and Br. 863,456,617 + 183,281,152 = 1,046,737,769 (Principal + Interest) respectively. Floriculture took the majority of shares that has been write-off/ foreclosure from Commercial Agriculture. The result showed that significant recoverable problems observed on primary areas of the bank that worth the total amount of Br. 1,121,721,157).

Due to known and unknown reasons default loans under PRLRP stayed unresolved for longer period, the five years pending projects of primary areas of the bank is illustrated here under:

# > Default Project loans still not resolved

## **Development Bank of Ethiopia**

## Project Rehabilitation and Loan Recovery Sub –Process Projects that are still found under rehabilitation treatment or debt recovery proceedings From year 2009/10 to date (March 26, 2015)

#### Table 5. Project loans still not resolved

| S/N | Nam<br>e of<br>Borr<br>ower | Type of Project/<br>commodity                                      | Sector  | date the<br>project<br>entered to<br>PRLR | NPL's<br>Resolution<br>Mechanism<br>Applied   | date the<br>first rehab.<br>Measure<br>applied | no. days<br>taken to<br>recover to<br>performin<br>g loan |
|-----|-----------------------------|--|---|---|---|--|---|
|     |                             | Construction   | Manufacturing<br>and extracting               |   | Loan transfer   |  |   |
| 1   | А                           | materials  | industries                                    | 12/8/2009                                 | underway  | -  | 2,052   |
| 2   | В                           | Manufacturing of<br>made up textiles<br>articles except<br>apparel | Manufacturing<br>and extracting<br>industries | 12/8/2009                                 | Additional loan<br>Rescheduling   | 27/04/2007                                     | 2,052   |
| 3   | С                           | Tannery  | Manufacturing<br>and extracting<br>industries | 12/8/2009                                 | loan restructuring,<br>Reschedule &<br>additional loan                                  | 4/12/2002                                      | 1,933   |
| 4   | D                           | Textile and<br>Garment   | Manufacturing<br>and extracting<br>industries | 04/13/03<br>E.C                           | 1 <sup>st</sup> Add. Loan &<br>1st loan<br>rescheduling and<br>2 times pre-<br>shipment | May<br>10,2012                                 | 1,292   |
| 5   | Е                           | Shoe<br>Manufacturing  | Manufacturing<br>and extracting<br>industries | OCT<br>5,2012                             | Additional loan<br>and repayment<br>rescheduled   | Feb 26,2009                                    | 1,090   |
| 6   | F                           | Horticulture   | Commercial<br>Agriculture                     | 9/7/2011                                  | Additional and loan rescheduling  | June21,2011                                    | 1,332   |
| 7   | G                           | Textile and Garment  | Manufacturing<br>and extracting<br>industries | march 03,2014                             | 1st Add. Loan &<br>2nd loan<br>rescheduling and<br>3rd special wc                       | March<br>20,2009                               | 388   |
| 8   | Н                           | Tannery  | Manufacturing<br>and extracting<br>industries | June<br>30,2009                           | Loan Repayment reschedule and additional loan   | Oct 16,2011                                    | 2,091   |
| 9   | I                           | Textile  | Manufacturing<br>and extracting<br>industries | 8/31/2011                                 | Granted add. loan twice   | 3/7/2007                                       | 571   |
| 10  | J                           | Shoe<br>Manufacturing  | Manufacturing<br>and extracting<br>industries | 04/13/03<br>E.C                           | 1 <sup>st</sup> add wc & 1 <sup>st</sup><br>loan<br>rescheduling                        | October<br>8/2012                              | 1,293   |
| 11  | K                           | Metal<br>Manufacturing   | Manufacturing<br>and extracting<br>industries | APRIL28,2<br>014                          | Additional loan<br>and repayment<br>rescheduled   | May<br>30/2012                                 | 332   |

|    |      |               | Manufacturing  |           |                  |             |        |
|----|------|---------------|----------------|-----------|------------------|-------------|--------|
|    |      |               | and extracting |           | Add. Loan & loan |             |        |
| 12 | L    | Tannery       | industries     | 2/13/2013 | reschedule       | Feb 19,2014 | 771    |
|    |      |               | Commercial     |           | management       | March       |        |
| 13 | Μ    | Horticulture  | Agriculture    | 7/4/2011  | intervention     | 19/2012     | 1,356  |
|    |      |               | Commercial     |           | Additional loan  |             |        |
| 14 | Ν    | cotton        | Agriculture    | 25-Nov-14 | Rescheduling     |             | 131    |
|    |      |               | Manufacturing  |           |                  |             |        |
|    |      |               | and extracting | Nov20,201 | Additional loan  |             |        |
| 15 | 0    | Manufacturing | industries     | 4         | Rescheduling     |             | 136    |
|    | Tota |               |                |           |                  |             |        |
|    | 1    |               |                |           |                  |             | 16,820 |

Source: PRLRP Third quarter report

From the above 15 not yet recovered sick loan projects 12 of them are under the category of Manufacturing and Extracting Industries. The rest 3 projects are from Commercial Agriculture. The maximum and the minimum number of days stayed not to be recoverable in the area of manufacturing and Extracting Industries are 2091 and 136 respectively. The total days of M&EI staying in the PRLRP are 14001 days. On average still each project is waiting 3.19 years to get solution.

In the case of Commercial Agriculture of the 3 projects, the total days of waiting solution are 2819, in other words on average each project is still stayed 2.5 years.

Based on the above three cases only foreclosure/write-off were explained in monetary terms. From this we can argue that a huge amount of losses has been exhibited and hence negative contribution to the profit of the organization.

The mechanism that was applied chosen by PRLRP in all the three cases had revealed different results to the default loan projects.

From the above three tables, it is possible to justify that;

# Case 1: Is there any loan recoverable problems exist in the area of Commercial Agriculture?

There have been 15 project cases out of 19 found under the category of sick loan projects recovered after rehabilitation mechanisms adopted. During those process there were observed recoverable problems.

Considered the data observe from foreclosure/write off table, five projects worth Br. 74,983,388 were foreclosure/write-off as a result of inability of not recovered through all alternative means.

From the pending category, out of 15 sick loan cases 3 of them are Commercial Agriculture which is still not yet solved. Therefore, by looking through the three classifications (resolved, foreclosure/write-off and pending) of sick loan projects, it can be easily identified that there is a recoverable problems in Commercial Agriculture.

# Case 2: Is there any loan recoverable problems exist in the area of Agro-Processing Industries?

Based on the report generated from PRLRP there is no project or company exhibited under the category of Agro-processing Industries. Therefore there is no way to check the existence of recoverable problems unless otherwise, specified by the responsible body.

# Case 3: Is there any loan recoverable problems exist in the area of Manufacturing and Extractive Industries?

There have been 4 project cases out of 19 found under the category of sick loan projects recovered after rehabilitation mechanisms adopted. During those process there were observed recoverable problems even if the projects become normal.

Considered the data observe from foreclosure/write off table, surprisingly enough out of 17 projects 12 of them are M&EI worth Br.1, 046,737,769 which adversely affect the lending performance of the organization.

From the pending category, out of 15 sick loan cases 12 of them are M&EI which is still not yet solved. Therefore, by looking through the three classifications (resolved, foreclosure/write-off and pending) of sick loan projects, it can be easily identified that there is huge recoverable problems in M&EI.

# 4.3. Questionnaires response rate

Out of the one hundred twenty questionnaires sent to the respondents target population, one hundred ten responses were collected. This represents a response rate of 91.6 percent and implies that 8.4 percent of the questionnaires were not returned at all.

# 4.4. Profile of respondents

|       | Gender          | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|-----------------|-----------|---------|---------------|-----------------------|
|       | Male            | 69        | 62.7    | 62.7          | 62.7                  |
|       | Female          | 41        | 37.3    | 37.3          | 100                   |
| Valid | Total           | 110       | 100     | 100           |                       |
| Age   | group in years  |           |         |               |                       |
|       | 20-29           | 45        | 40.9    | 40.9          | 40.9                  |
|       | 30-39           | 42        | 38.2    | 38.2          | 79.1                  |
|       | 40-49           | 20        | 18.2    | 18.2          | 97.3                  |
|       | 50 and above    | 3         | 2.7     | 2.7           | 100                   |
| Valid | Total           | 110       | 100     | 100           |                       |
| Edu   | ucation Status  |           |         |               |                       |
|       | College Diploma | 7         | 6.4     | 6.4           | 6.4                   |
|       | First Degree    | 92        | 83.6    | 83.6          | 90                    |
|       | Masters Degree  | 11        | 10      | 10            | 100                   |
| Valid | Total           | 110       | 100     | 100           |                       |

Table 6. Gender , Age group and Education status of respondents

Source: Own survey 2015

## Gender

Out of one hundred ten respondents 62.7 percent is belongs to male category, the rest 37.3 percent counts for female. This shows that the number of male staffs in the organization is greater than female staffs, and as well most positional areas are covered and attributes more to the organization.

## Age

Data obtained from the questionnaires about age group, 40.9 percent are found between 20 and 29 years old, the other age group which counts for 38.2 percent are found between 30 to 39 years old. In other words 79.1 percent of the staffs are grouped to be young and highly productive, and the rests are much older and near to retirement which scores 18.2 percent and 2.7 percent from the total target population respectively.

## **Educational Status**

As explained above from Table 6, the coverage of first degree is 83.6 percent that it means the majority of the Development Bank of Ethiopia staffs of the target population are get prior attention from the senior management to improve the skills of the employees, above all this 10 percent of the staffs are masters degree holders and 6.4 percent are college diploma.

| Number of service years |  | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------------------------|--|-----------|---------|---------------|-----------------------|
|                         | Below 3 years                            | 11        | 10      | 10            | 10                    |
|                         | 3-5 Years                                | 41        | 37.3    | 37.3          | 47.3                  |
|                         | 5-10 Years                               | 30        | 27.3    | 27.3          | 74.5                  |
|                         | 10-15 Years                              | 12        | 10.9    | 10.9          | 85.5                  |
|                         | Above 15 years                           | 16        | 14.5    | 14.5          | 100                   |
| Valid                   | Total                                    | 110       | 100     | 100           |                       |
| Curre                   | nt job position                          |           |         |               |                       |
|                         | Junior Officer                           | 26        | 23.6    | 23.6          | 23.6                  |
|                         | Officer                                  | 38        | 34.5    | 34.5          | 58.2                  |
|                         | Senior Officer                           | 26        | 23.6    | 23.6          | 81.8                  |
|                         | Principal officer                        | 17        | 15.5    | 15.5          | 97.3                  |
|                         | Manager                                  | 3         | 2.7     | 2.7           | 100                   |
| Valid                   | Total                                    | 110       | 100     | 100           |                       |
| Worki                   | ing Department                           |           |         |               |                       |
| Valid                   | Project Rehab. and loan recovery process | 23        | 20.9    | 20.9          | 20.9                  |

|   | Credit Process          | 44  | 40  | 40  | 60.9 |
|---|-------------------------|-----|-----|-----|------|
|   | Project Appraisal Sub - |     |     |     |      |
| - | Process                 | 33  | 30  | 30  | 90.9 |
|   | Export Credit Guarantee | 7   | 6.4 | 6.4 | 97.3 |
|   | V/P Credit Services     | 3   | 2.7 | 2.7 | 100  |
| - | Total                   | 110 | 100 | 100 |      |

Source: Own survey 2015

#### **Work Experience of respondents**

Employees in the target population stay longer time and provide larger contribution to the organization. Among the total population 37.3 percent served between 3 and 5 years, increasing the service year from 5 to 10 its contribution were become 27.3 percent, again when we consider its experience 10 to 15 and above 15 years their contribution from the respondents both are resulted 10.9 percent, and 14.5 percent of them had work experience below 3 years.

#### **Current Job Position of the respondents**

Since most of the respondents have experience more than three years in the organization, they would have been known the jobs very well and the level of respondents' position specified in the form of Officer which counts for 34.5 percent, both senior and junior staffs scored 23.6 percent and top level management shared 2.7 percent.

## **Department of the respondent**

The total target population constituted with a combination of 20.9 percent of Project Rehabilitation and Loan Recovery sub units, 40 percent of Credit Process, 30 percent of Project Appraisal sub process, 6.4 percent of Export Credit Guarantee and 2.7 percent of V/P Credit Service.

# 4.5. Hypothesis

In this study the researcher identify the dependent variable as performance of PRLRP and the independent variables are performance measurement criteria, monitoring and follow up and government policy.

#### Hypothesis 1

Ho: Performance measurement criteria do not have significant and direct relationship with the performance of PRLRP.

H1: Performance measurement criteria have significant and direct relationship with the performance of PRLRP.

## Hypothesis 2

Ho: Monitoring and follow up activities do not have significant and direct relationship with the performance of PRLRP.

H1: Monitoring and follow up activities have significant and direct relationship with the performance of PRLRP.

#### Hypothesis 3

Ho: Government policies on primary area of the bank's service do not have significant and direct relationship with the performance of PRLRP.

H1: Government policies on primary area of the bank's service have significant and direct relationship with the performance of PRLRP.

To check the relationships, internal correlation and multiple regression outcomes within and between dependent variable (performance) and independent variables (Performance measurement criteria, Monitoring & Follow up and Government policy), reliability test, Hypothesis test, model summary, ANOVA and correlation coefficient had been developed.

# 4.6. Reliability Test

Reliability test refers the degree that items are independent measures of the same concept; they will be correlated one another. As Bryman (2007) explained reliability is "the consistency of a measure of a concept". Internal consistency testing measure the agreement between the result of different questions measuring the same construct. Stevens (2002).

A researcher has developed a questionnaire to measure how the independent variables affecting the performance of PRLRP activities. In this study each question was a five point scale items (Strongly agree, Agree, Neutral, Disagree, Strongly disagree) rated from the highest to lowest point. For the reliability test the researcher distributed 30 questionnaires to the respondents to check the consistency of the instrument by using Cronbanch's Alpha.

#### **Table:8 Reliability Statistics**

| Cronbach's Alpha | N of Items |  |  |  |
|------------------|------------|--|--|--|
| 0.811            | 4          |  |  |  |

#### Source: Own Survey 2015

The internal consistency can also considered to be satisfactory for all factors (Cronbach's alpha; alpha > 0.7) Sekaran 2003. Note that a reliability coefficient of 0.7 or higher is considered as "acceptable "in most social science research situations. From table 11 result obtained the Cronbach's alpha is 0.811 (81%) which means it is in the acceptance range that indicates good internal consistency reliability.

After the variables internal consistency checked by reliability test, it was done the hypothesis analysis by the help of bivariate correlations between the independent variables and multiple regression.

# 4.7. Hypothesis Testing

The researcher has attempted to prove the strength of relationship between the variables that characterize the factor affecting performance of PRLRP. In order to demonstrate Pearsons (r) correlation was developed.

#### **Table:9** Correlations

|             |                     | Performance<br>Measurement<br>Criteria | Monitoring and<br>follow up | Government Policy |
|-------------|---------------------|--|-----------------------------|-------------------|
| D. f.       | Pearson Correlation | .555**                                 | .543**                      | .493**            |
| Performance | Sig. (2-tailed)     | 0.00                                   | 0.00                        | 0.00              |
|             | Ν                   | 110                                    | 110                         | 110               |

\*\*. Correlation is significant at the 0.01 level (2-tailed). Source: Own Survey 2015

# **Hypothesis** 1

From the above table 9 all the independent variables (Performance measurement criteria, monitoring & follow up and government policy) are positively correlated with the dependent variable (Performance of PRLRP).

Performance measurement criteria had statistically significant relationship with the performance of PRLRP (r = 0.56, P< 0.01). As a matter of fact the result is in lined with Hypothesis 1, Hi: Performance measurement criteria have a direct relationship with the performance of PRLRP. Therefore the null hypothesis is rejected and the alternative hypothesis is accepted.

# **Hypothesis 2**

The study also revealed that there was statistically significant relationship build with the performance of PRLRP at the level of alpha of 0.01  $_{2 \text{ tailed}}$  (r = 0.54, P < 0.01). It is also in lined with Hypothesis 2,

Hi: Monitoring and follow up activities have relationship with the performance of PRLRP. Therefore the null hypothesis is rejected and the alternative hypothesis is accepted.

# Hypothesis 3

Compared with the above two independent variables government policy is less by smaller amount. However it had statistically significant relationship with the performance of PRLRP (r = 0.49, p < 0.01). Similarly, the study proved to accept hypothesis 3 (H1: Government policies

on primary area of the bank's service have relationship with the performance of PRLRP) and reject the null hypothesis.

All in all the performance of measurement criteria, monitoring & follow up and government policy had positive statistically significant relationship with the performance of PRLRP activities at 1 % level.

# 4.8. Multiple regression analysis

Under the multiple regression analysis two or more independent variables are exist to explain the dependent variable. To do so the study incorporated five assumptions.

## • Normality of the distribution

Skewness and kurtosis are statistics that describe the shape and symmetry of the distribution, and indicates the normality of the distribution. For both Skewness and kurtosis the range of normality is (-1.0 to + 1.0).

|                          | Ν         | Skewness  |            | Kurtosis  |            |
|--------------------------|-----------|-----------|------------|-----------|------------|
|                          | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| Performance              | 110       | 520       | .230       | .326      | .457       |
| Performance Measurement  | 110       | 657       | .230       | .928      | .457       |
| Criteria                 | 110       | 037       | .250       | .928      | .437       |
| Monitoring and follow up | 110       | 667       | .230       | .466      | .457       |
| Government Policy        | 110       | 255       | .230       | 183       | .457       |
| Valid N (listwise)       | 110       |           |            |           |            |

**Table:10 Descriptive Statistics** 

#### Source: Own Survey 2015

As depicted from the above Table 10, all the variables are within the range of statistic normality (-1.0 to + 1.0). So the study kept the requirement of normality. The figures from 2 up to 5 are attached in the Appendix A.

## • Linear relationship

Linear relationship explained where the relationship between the variables can be represented by a straight line.

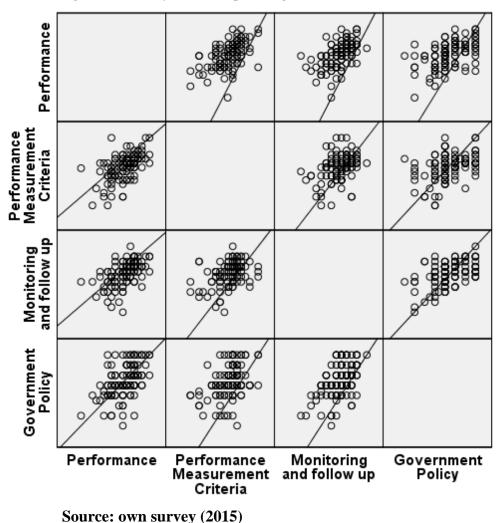


Figure 6: Linearity relationships among variables

The dependent and independent variables illustrated above confirmed that more or less there are linear relationships within the variables.

### • Homoscedasticity (equal variance)

With the help of Graph 6 to check the assumption is usually evaluated by visual inspection of the scattered plot. The study revealed that the relationship between the dependent variable "performance of PRLRP" and the independent variables "performance measurement criteria, monitoring & follow up and government policy" are linear and had equal/uniform variance. However, inspection of the plots shows good variability in the plots and we will proceed with the analysis assuming homoscedasticity is not a major problem.

#### • Independent of residuals

Residuals are the prediction errors or differences between the actual score for a case and the score estimated by the regression equation. To test for the presence of serial correlation among the residuals the Durbin-Watson statistic is preferred in this research.

The value of the Durbin-Watson statistic ranges from 0 to 4. As a general rule, the residuals are not correlated if the Durbin-Watson statistic is approximately 2, and an acceptable range is 1.50 - 2.50. Considering this as a benchmark in Table 15 model summary illustrated under, the researcher obtained the Durbin-Watson statistic value of 1.743 which satisfies the assumption range of 1.50 to 2.50.

# • Multicollinearity

In regression it occurs when independent variables in the regression model are more highly correlated with each other than with the dependent variable. When the independent variables in the model are highly correlated with one another, they are basically measuring the same thing. The one way of assessing multicollinearity, is examine the correlations among the independent variables. If they are larger than 0.90, we would be concerned about multicollinearity.

|                       |                     | Performance<br>Measurement<br>Criteria | Monitoring and<br>follow up | Government<br>Policy |
|-----------------------|---------------------|--|-----------------------------|----------------------|
|                       | Pearson Correlation |  | .398**                      |                      |
| Performance           | Sig. (2-tailed)     |  | 0                           |                      |
| Measurement Criteria  | Ν                   |  | 110                         |                      |
|                       | Pearson Correlation |  |                             | .508**               |
| Monitoring and follow | Sig. (2-tailed)     |  |                             | 0                    |
| up                    | Ν                   |  |                             | 110                  |
|                       | Pearson Correlation | .411**                                 |                             |                      |
|                       | Sig. (2-tailed)     | 0                                      |                             |                      |
| Government Policy     | Ν                   | 110                                    |                             |                      |

**Table:11 Correlations Matrix within predictors** 

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

Source: Survey Own 2015

From the above Table 11, Correlation Matrix, the independent variables correlations among each other were exhibited:

Correlation between PMC and monitoring & follow up was 0 .398 Correlation between PMC and government policy was 0.411 Correlation between monitoring & follow up and government policy was 0.508 From these result none of the coefficients are greater than0.90, so we assume multicollinearity is not a problem.

Another way of assessing multicollinearity is to examine, the tolerance values (TV) and Variance Inflation Factor (VIF) for each independent variable. Multicollinearity exists when Tolerance Value is below 0.10; and the average VIF is larger than 2.5. By referring the upcoming table of Coefficient in the next section, it was proved that there is no multicollinearity problem.

|       |  | Collinearity Statistics |       |  |  |
|-------|--|-------------------------|-------|--|--|
| Model |  | Tolerance               | VIF   |  |  |
|       | (Constant)                             |                         |       |  |  |
|       | Performance<br>Measurement<br>Criteria | 0.783                   | 1.277 |  |  |
|       | Monitoring and follow up               | 0.699                   | 1.431 |  |  |
| 1     | Government Policy                      | 0.691                   | 1.448 |  |  |

a. Dependent Variable: Performance

By referring the above Table of Collinearity Statistics, it is proved that for each predictor the Tolerance Value (TV) is above 0.1 and Variance Inflation Factor (VIF) is blow 2.5. Therefore in this study there is no multicollinearity problem at all.

# 4.9. Results of Multiple Regression Analysis

The researcher has gone through satisfying all the assumption of multiple regression stepwise. The study results are explained using model summary, ANOVA, and Coefficient tables.

#### > Model Summary

Table 13: Model Summary<sup>b</sup>

| Model | R                 | R Square | Adjusted R      | Std. Error of the | Durbin-Watson |
|-------|-------------------|----------|-----------------|-------------------|---------------|
|       |                   |          | Square Estimate |                   |               |
| 1     | .676 <sup>a</sup> | .457     | .441            | .25398            | 1.743         |

a. Predictors: (Constant), Government Policy, Performance Measurement Criteria, Monitoring and follow up

b. Dependent Variable: Performance

#### Source: Own Survey 2015

As illustrated by model summary the correlation coefficient (r) valued is 0.68 and represents strong relationship between the dependent variable (performance of PRLRP) and the predictors. The coefficient R square has the value of 0.46 and expresses that 45.7 % of the variation of performance on PRLRP activities can be explained by the independent variables.

#### > ANOVA (Overall Model Fit)

Table 14: ANOVA<sup>a</sup>

| Model |            | Sum of Squares | df  | Mean Square | F      | Sig.              |
|-------|------------|----------------|-----|-------------|--------|-------------------|
|       | Regression | 5.750          | 3   | 1.917       | 29.715 | .000 <sup>b</sup> |
| 1     | Residual   | 6.837          | 106 | .065        |        |                   |
|       | Total      | 12.588         | 109 |             |        |                   |

a. Dependent Variable: Performance

b. Predictors: (Constant), Government Policy, Performance Measurement Criteria, Monitoring and follow up

#### Source: Own Survey 2015

Table 14, determined the existence of relationship between the dependent variable and the independent variables throughout the overall fit of the regression model. In this case, the probability of the F statistic for the regression analysis is 0.000, less than the level of significance of 0.05 with 95% confidence interval. Therefore the value of F (29.72) and statistical significant (sig = 0.000; P < 0.05) tells about the regression model is valid and justify that there are significant relationships between the independent variables and the dependent variable.

## > Coefficients

| Model |                                     | Unstand<br>Coeffi |            | Standardized<br>Coefficients | t     | Sig. | Collinearity | Statistics |
|-------|-------------------------------------|-------------------|------------|------------------------------|-------|------|--------------|------------|
|       |                                     | В                 | Std. Error | Beta                         |       |      | Tolerance    | VIF        |
|       | (Constant)                          | 2.107             | .239       |                              | 8.808 | .000 |              |            |
| 1     | Performance<br>Measurement Criteria | .232              | .053       | .355                         | 4.383 | .000 | .783         | 1.277      |
|       | Monitoring and follow up            | .214              | .060       | .304                         | 3.546 | .001 | .699         | 1.431      |
|       | Government Policy                   | .120              | .054       | .193                         | 2.245 | .027 | .691         | 1.448      |

a. Dependent Variable: Performance

The Beta standardized coefficients of performance measurement criteria, monitoring & follow up and government policy are positive and valued 0.355, 0.304 and 0.193 respectively. On the other hand the unstandardized B Coefficient is referring the slope of the predictors. This result indicating that:

For every one unit increase in performance measurement criteria, there would be a 0.232 unit increases in performance of PRLRP. For this independent variable the magnitude is positive which had better value than government policy and with slight variation of monitoring and follow up.

For every one unit increase in, monitoring & follow up, there would be a 0.214 unit increases in performance of PRLRP. Its magnitude is positive and explains the dependent variable higher than government policy.

For every one unit increase in, government policy, there would be a 0.120 unit increases in performance of PRLRP. Of course it has positive magnitude, but the amount that expresses dependent variable is the lowest among the rest of the independent variables.

All the above three statements support the research hypothesis that, the level of performance measurement criteria, monitoring & follow up and government policy are statistical significant

predictors of the dependent variable. The general regression equation from research result obtained is:

$$\begin{split} P_i &= \alpha + \beta_1 PMC_i + \beta_2 MF_i + \beta_3 GP_i + e \\ & \text{Where} \quad P_i = \text{Performance of PRLRP (DV)} \\ & \alpha = \text{the intercept term} \\ & \beta_1, \beta_2, \beta_3 = \text{Partial regression coefficient of independent variables.} \\ & \text{PMC} = \text{Performance measurement criteria} \\ & \text{MF} = \text{Monitoring and follow up} \\ & \text{GP} = \text{Government Policy} \\ & e = \text{Error Term} \end{split}$$

 $P_i = 2.107 {+} 0.232 PMC + 0.214 MF + 0.120 GP$ 

# **CHAPTER FIVE**

## SUMMARY, CONCLUSION AND RECOMMENDATIONS

### **5.1 Summary of Findings**

The main objective of the study was to over view the performance of Project Rehabilitation and Loan Recovery Process at head office level in Development Bank of Ethiopia during the year 2009/10 to 2014. The study wanted to identify the actual performance of PRLRP in relation to monitoring and follow up activities, government policy and performance measurement criteria towards the ultimate goal of the bank. The problems discussed in the form of secondary data analysis and hypothesis test using primary data.

According to the secondary data analysis the document obtained the alternative recovery mechanisms, date entered to rehabilitate, duration in PRLRP and category of the sector. However, the document did not include default loan projects name, amount that explain cost incurred to the project due to the policy of the bank that keeps the financial secrecy. Therefore cases had been checked the existence of loan recoverable problems in Bank's primary areas of Commercial Agriculture, Agro-Process Industries and Manufacturing & Extracting Industries. Based on PRLRP unit records, all incoming default loan projects grouped as: solved, foreclosure/write - off and pending.

- Regarding to Commercial Agriculture, out of the 19 resolved default loan projects which stayed for the last five years 15 projects were got solution by applying alternative mechanisms (additional loan, rescheduling, management intervention, loan settlement and loan transfer) and transferred to the normal status.
- Out of 17 projects of foreclosure/write-off, 5 of them are Commercial Agriculture specifically four from Floriculture which took the majority and one form Agricultural production valued Br. 67, 385,761 and Br 7,597,627 respectively. The total amount valued is Br 74,983,388.
- Out of 15 default loan pending projects 3 of them are Commercial Agriculture waiting solution. The number of days in PRLRP for each projects are 131, 1332, and 131 respectively.

- Regarding to Manufacturing and Extracting Industries out of the 19 resolved default loan projects 4 projects were got solution by applying alternative mechanisms (additional loan, rescheduling, management intervention, loan settlement and loan transfer) and transferred to the normal status.
- In the case of foreclosure/write-off, Manufacturing and Extracting Industries counts 12 out of 17 projects. Since the cases already closed the organization provide information in monetary terms which included principal and interest. Projects within the period of the last five years and got order to foreclose/write-off by top management worth Br. 1,046,737,769 (863,456,617 + 183,281,152 (Principal + Interest). It implies that this sector had critical loan recoverable problems.
- In the case of default loans pending projects, again Manufacturing and Extracting Industries took a share of 12 out of 15. The maximum and the minimum waiting days of the project are 2091 and 136 respectively, on average sick projects are waiting 3.19 years to be cure or die.
- Regarding to Agro-Processing Industries, based on the report generated from PRLRP there
  is no project or company exhibited under the category of Agro-processing Industries.
  Therefore there is no way to check the existence of recoverable problems unless
  otherwise, specified by the responsible body.
- Therefore from the above secondary data analysis primary areas of the bank in relation to default loan, recoverable problems has been checked and identified under the category of Commercial Agriculture and Manufacturing & Extracting Industries.

Considering to the primary data, structured questionnaires were developed and distributed to the related departments for their valuable respond. After the information gathered from the respondents analysis were carried out by adopting hypothesis, descriptive analysis and multiple regression using SPSS version 20.0.

### Hypothesis Test

Before testing the hypothesis the data was checked its reliability with 30 respondents and the result showed cronbach's alpha 0.811. Therefore, if the reliability coefficient of 0.7 or higher it is

considered as "acceptable "in most social science research situations. Due to this fact the internal consistency of the data is reliable.

Reliable data was tested by applying Pearsons (r) correlation. The results obtained were:

- Performance measurement criteria had statistically significant relationship with the performance of PRLRP (r = 0.56, P< 0.01).
- Monitoring & follow up had statistically significant relationship with the performance of PRLRP (r = 0.54, P < 0.01).
- Government Policy had statistically significant relationship with the performance of PRLRP (r = 0.49, p < 0.01).

All the above three hypothesis are accepted and the null hypothesis has been rejected.

Multiple Regression Analysis

In this research the analysis was developed between the dependent variable (performance of PRLRP) and the independent variables (performance measurement criteria, monitoring & follow up and government policy). In order to apply this analysis the five assumptions were checked.

- ✓ Normality of the distribution: the shape and symmetry of the distribution indicates the normality of the distribution. For both Skewness and kurtosis of the data are within the range of normality (- 1.0 to + 1.0).
- ✓ Linear relationship: From the previous correlation there were a linear relationship between the dependent variable and the independent variables.
- ✓ Homoscedasticity (equal variance): There is no such kind of problem exist, even if it evaluated and inspected the scattered plot by visual.
- ✓ Independent Residuals: It is the prediction errors or differences between the actual score for a case and the score estimated by the regression equation. Based on the standard given, the Durbin-Watson statistic value was 1.743 which satisfies the assumption range of 1.50 to 2.50.
- ✓ Multicollinearity: It occurs when independent variables in the regression model are more highly correlated with each other than with the dependent variable. In

this research the Tolerance Value is above 0.10; and the average VIF is smaller than 2.5. Therefore there is no multicollinearity problem.

It was observed that the above five assumptions were proved and successful to the next step.

- Model Summary: there is a strong relationship between the dependent variable and the independent variables of correlation coefficient (r) 0.68 and the R square value 45.7% of the variation of dependent variable was explained by the independent variables.
- ANOVA: There is a relationship between the dependent variable and the independent variables with the probability of the F statistic for the regression analysis 0.000, Statistical significant (sig = 0.000; P < 0.05).</p>
- Coefficient: The Beta standardized coefficients of all the three independent variables are positive and the unstandardized B Coefficient shows a one unit change in Performance measurement criteria, monitoring & follow up and government policy will cause a change of 0.232, 0.214 and 0.120 respectively to the dependent variable.

## **5.2.** Conclusion

- The activity of the bank mostly based on lending money to the clients mainly for primary areas of investment in the country. The sectors are Commercial Agriculture, Manufacturing & Extracting Industries, Agro-processing Industries and service sectors. Performing loans due to various reasons becomes default loans (non performing loans). The sign of default loans identified first at Credit Process, based on the credit policy the projects examined exhaustively and then the most difficult once forward to the PRLRP for special treatment.
- Once a project is identified as sick, then different administrative mechanism applied depending on their specific nature to rehabilitate such as management intervention, loan repayment rescheduling additional loan and working capital, loan transfer to third party, debt restructuring as the macro-economic environment allows and combination of or package of two or more of the above. Meanwhile through process the non performing loan projects can be solved, foreclosed/write-off or pending. For this reason the department incurred default loan recoverable problems on the primary areas of the bank. As per the bank's record most of the time commercial Agriculture and M&EI projects got default.
- Respondents confirmed that the performance of PRLRP is really affected by monitoring & follow up, performance of measurement criteria and government policy. This result has been checked by descriptive analysis, document analysis and statistical analysis.
- From descriptive analysis respondents profile (demographic factors) had collected and briefly discussed on the proportion of male and female, classification of age, work experience, educational status, current job position and department.
- In the case of statistical analysis multiple regression was performed to prove the relationship between dependent variable and independent variables, and hence there was a direct and positive relationship among the variables that justify statistically significant. In general lending money to the clients in the appropriate way is the guarantee of getting back money with profit and it becomes means to existence of the bank.

## 5.3. Delimitation/Scope of the Study

This research is limited to Development Bank of Ethiopia, specifically in the performance measurement of Project Rehabilitation and Loan Recovery Process which is located at head office. The study has been conducted on the bases of the previous five years (2009/10 - 2014) data. The research applied both descriptive and explanatory analysis for interpreting the results of primary and secondary data. The variables that were involved in the study: performance of PRLRP as a dependent variable and performance measurement criteria, monitoring and follow up and government policy are as an independent variables. These variables were analysed by using SPSS version 20.0.

The problem faced in conducting this research was time constraints to address all aspects of PRLRP default loans recovery performance. Apart from this, financial institutions are very procedural and secretive in relation to financial transactions especially seeking information in loan lending activities, so some sort of limitations were encountered during data collection process.

### 5.4. Recommendations

Based on the research findings the following recommendations are forwarded:

- Credit policy of the bank basically followed the interest of government priority areas to the development of the country, to meet the target result requirements from clients and the procedure of the bank deviate in most cases, at last the projects become default. In other words the selection of projects to be financed based on government priority rather than repayment performance of the sectors. So there is a need to consider the overall capacity of the borrowers and the credit policy of the bank along with priority areas of the business and it should be given high emphasis before the loan is disbursed and further study must carried out on some government and bank's requirements specially on Floriculture. Additionally, for the borrowers who already take loans from the bank, provision of entrepreneurship trainings during follow up or with in some arranged time will help the borrowers to repay their loan successfully.
- Sick loan projects under the custodian of Project Rehabilitation and Loan Recovery Process administered their activities by providing alternative rehabilitate mechanisms to the most valuable projects of Commercial Agriculture, Manufacturing & Extracting Industries, Agro-Process Industries and service sector. However, loan recoverable problems observed frequently and projects stayed for a long time. Once the project entered into PRLRP, it is an additional cost to the bank. Therefore this should be resolved by avoiding the event defaults i.e. Misappropriation of investment (project) funds, over invoicing, presentation of falsified documents, misrepresentation, enter into other loans with other financial institutes for the same project without the consent of DBE, adverse material changes which affect the execution or implementation of the project.
- As statistical analysis result concerned all the independent variables (Performance measurement, monitoring & follow up and government policy) had a direct effect on the performance of Project Rehabilitation and Loan Recovery Process. It is also tested that the variables are statistically significant. Therefore the department should give prior

attention on the above variables. In addition, qualification of staffs to be employed in the project should be considered on the credit policy of the bank as a basic requirement for loan provision and as well minimizing the entrance of new default projects.

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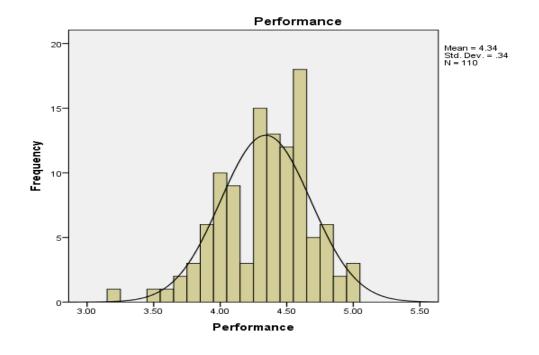
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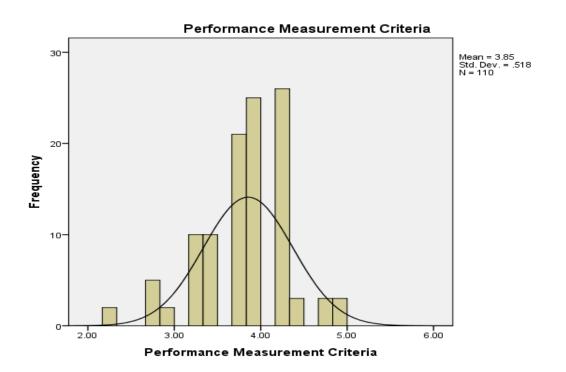
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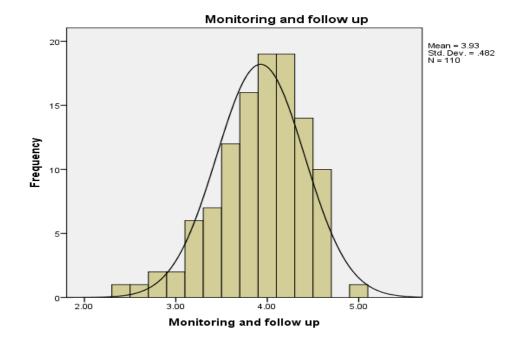
# **APPENDIX A**



## **Figure 2: Normal Distribition of Performance**

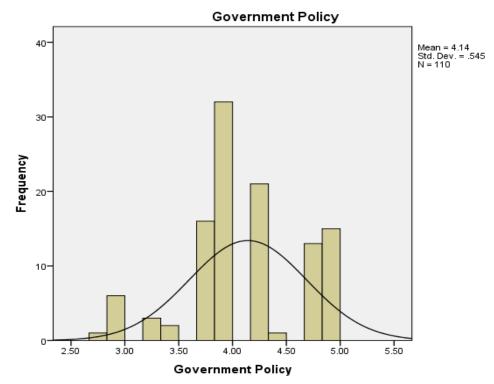
Figure 3: Normal distribution of PMC





## Figure 4: Normal Distribution of Monitoring & follow up

Figure 5: Normal distribution of government policy



# **APPENDIX B**

St. Mary's University

#### **School of Graduate Studies**

#### Department of Master of Business Administration

#### Questionnaire for Employees of Development Bank of Ethiopia

Dear respondents,

I am a post graduate student at St.Mary's University. This questionnaire is prepared to collect data for my dissertation project on the topic of **"The performance of project rehabilitation and loan recovery process: In the case of Development Bank of Ethiopia"** in partial fulfilment of the requirement MA in Business administration. The questionnaire has been designed in such a way to minimize time required for completion. I am kindly requesting you to respond for the given questions based on the experience you have while working in the bank. Your responses are strictly confidential and will be used only for the academic purpose of this study.

Thank you in advance for your assistance and cooperation!

#### Feleke Tsegaye 0912 71 08 45 (E-mail: feleke.mengistu@yahoo.com)

### Part I: Profile of Participants

#### Direction for filling the questionnaire

Please put a tick mark ( $\sqrt{}$ ) in the boxes corresponding to your response. Make your response confidential: please don't mention your name or any other identification.

| 1. | Gender: Male 🗌 Female 🗌   |
|----|---|
| 2. | <b>Your age group in years:</b> $20 - 29 \square$ $30 - 39 \square$ $40 - 49 \square$ 50 and above $\square$  |
| 3. | Marital Status: Single 🗌 Married 🗌 Divorced 🗌 Widowed 🗌   |
| 4. | Educational Status : College Diploma 🗌 First Degree 🗌 Masters Degree 🗆  |
| 5. | PhD  PhD  PhD  PhD  PhD  PhD  PhD  PhD  |
| 6. | Blow $3 \square 3-5 \square 5-10 \square 10-15 \square$ Above $15 \square$<br><b>The position that currently you are working in Development Bank of Ethiopia:</b> |
| 7. | Junior Officer Senior Officer Principal Officer Manager<br>Department in which you are working:   |

# Part II. Performance Management

This questionnaire is prepared based on a five point Likert scale. Please indicate to what extents do you agree or disagree with the following statements. If the statement strongly matches with your response, choose **5** (Strongly Agree), if you discreetly agree on the idea, choose **4** (Agree), if you do not have any response on the point, choose **3**(Neutral), if you discreetly disagree with the statement, choose **2** (Disagree) and if you completely differ with the statement, choose **1** (Strongly Disagree).

| No. | Particulars  | Level of Agreement |   |   |   |   |  |  |
|-----|--|--------------------|---|---|---|---|--|--|
|     |  | 5                  | 4 | 3 | 2 | 1 |  |  |
|     | Performance Measurement criteria   |                    |   |   |   |   |  |  |
| 1   | Project rehabilitation and loan recovery process have strict performance criteria to measure its efficiency.   |                    |   |   |   |   |  |  |
| 2   | There are measurement standards from the Credit Process to transfer sick loan<br>to be recovered / foreclosure in the prior areas of Commercial Agriculture<br>projects, Agro-Processing industries and Manufacturing and extracting<br>industries |                    |   |   |   |   |  |  |
| 3   | Default loan customers are the result of low quality performance of loan procedural activities set by the bank.  |                    |   |   |   |   |  |  |
| 4   | The number of default loans increases in Development Bank of Ethiopia is<br>due to lack of conformance with the services that are provided and the<br>requirement of the customers.  |                    |   |   |   |   |  |  |
| 5   | The gap between the desire plan and the real performance of each loan activity is measured and to take proper action to narrow the gap by managers are slow in terms of speed.   |                    |   |   |   |   |  |  |
| 6   | Project Rehabilitation officers' follows their own standards and practices of sick loans assessment and analysis.  |                    |   |   |   |   |  |  |
|     | Loan monitoring and follow up  |                    |   |   |   |   |  |  |
| 7   | The Project Rehabilitation and Loan Recovery Process Sub-Unit have procedures and guidelines which help to monitor and follow up.  |                    |   |   |   |   |  |  |
| 8   | Loan monitoring tools has an effect on the existence of Non- Performing<br>Loan which at the end forward to Project Rehabilitation & Loan Recovery<br>Sub-Units.   |                    |   |   |   |   |  |  |

| 9                 | There are problems on follow up activities of customers' repayment and loan     |  |  |  |  |  |  |
|-------------------|---|--|--|--|--|--|--|
|                   | recovery process.   |  |  |  |  |  |  |
|                   |   |  |  |  |  |  |  |
| 10                | The procedures of receiving and forwarding default loans by Project             |  |  |  |  |  |  |
|                   | Rehabilitation & Loan Recovery Sub-unit are not more convenient for             |  |  |  |  |  |  |
|                   | monitor and follow up activity.   |  |  |  |  |  |  |
| 11                | Administering and handling default loans to be recoverable for Commercial       |  |  |  |  |  |  |
|                   | Agriculture Projects are difficult.   |  |  |  |  |  |  |
| Government policy |   |  |  |  |  |  |  |
| 12                | 12 Government policy supports huge projects to be rehabilitating enough         |  |  |  |  |  |  |
|                   | because of their wide contribution to the nation.                               |  |  |  |  |  |  |
| 13                | Some of the loan customers have lost their collaterals to the bank and the      |  |  |  |  |  |  |
|                   | bank becomes a loser due to failed loan payments caused by using the loop       |  |  |  |  |  |  |
|                   | hole of government policy.  |  |  |  |  |  |  |
| 14                | Sometimes government policy may not be updated to the current banking           |  |  |  |  |  |  |
|                   | services, specifically which affects the performance of loan recovery and       |  |  |  |  |  |  |
|                   | project rehabilitation.   |  |  |  |  |  |  |
|                   | Performance of PRLRP  |  |  |  |  |  |  |
| 15                | I clearly Know the bank's vision, mission and strategic goals.                  |  |  |  |  |  |  |
| 16                | My objectives support the bank's mission, strategic, goal, and objectives.      |  |  |  |  |  |  |
| 17                | I am clear with my duties and job responsibilities.                             |  |  |  |  |  |  |
| 18                | The processes that are used to get projects under recovery are taking much      |  |  |  |  |  |  |
|                   | time.   |  |  |  |  |  |  |
| 19                | Project rehabilitation mechanisms need to revise in the areas of Agro -         |  |  |  |  |  |  |
|                   | processing industry.  |  |  |  |  |  |  |
| 20                | Inadequate market information is forward by credit process units for a new      |  |  |  |  |  |  |
|                   | area of businesses causes Non Performing Loan and also creates obstacle for     |  |  |  |  |  |  |
|                   | the performance of loan recovery process.                                       |  |  |  |  |  |  |
| 21                | Project Rehabilitation process unit accept sick loan projects based on          |  |  |  |  |  |  |
|                   | predefined standards and intensive study on the business matter but there is an |  |  |  |  |  |  |
|                   | existence of default loans for a long period of time.                           |  |  |  |  |  |  |
| 22                | Customers are incapable of loan payments can be given an alternative of         |  |  |  |  |  |  |

|    | project rehabilitation mechanisms.  |  |  |  |
|----|---|--|--|--|
| 23 | There is a chance of the project to turn back from Non Performing Loan to<br>normal status after serious support by project rehabilitation and loan recovery<br>process sub unit. |  |  |  |
| 24 | Collateral used for loan acquisition is not highly enough for default loan payment.   |  |  |  |

My deepest thank for giving your prompt response and contribution. (If you have any opinion, please don't hesitate to forward it by this No. 0912-71-08-45)