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CREDIT RISK ASSESSMENT PRACTISES ON LOAN PERFORMANCE OF YOMA BANK

KYU KYU SANN

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CREDIT RISK ASSESSMENT PRACTISES ON LOAN PERFORMANCE OF YOMA BANK

“A thesis submitted as a partial fulfillment towards the requirement for the degree of Mater of Banking and Finance (MBF)”

Supervised by:

Daw Htay Htay
Associate Professor
Department of Commerce
Yangon University of Economics

Submitted by:

Kyu Kyu Sann
Roll No. 35
MBF Day 1st Batch
Yangon University of Economics

DECEMBER, 2019

ABSTRACT

The thesis was focused on the study of credit risk assessment practices on loan of Yoma Bank and its effect. The two major objectives of the study are to identify the credit risk assessment practices on Loan in Yoma Bank and to evaluate the effect of credit risk assessment practices on loan performance in Yoma Bank. The primary data was collected by sampling method of survey questionnaires to 50 employees from credit risk department. Survey was conducted by using structured questionnaires and used descriptive analysis. The questionnaires were distributed to selected respondents from credit risk department of Yoma Bank. The study shows that a positive and significant correlation between loan performance and credit risk management practices in Yoma Bank. From the result of the study, the correlation analysis shows that Yoma bank has adopted adequate risk assessment practices and established strict credit evaluation before qualifying loans to customers. Yoma Bank should keep more developing on effective credit risk monitoring practices to improve loan performance. The effective credit risk assessment and management is the most important contribute to the success and the financial stability of the bank and an understanding of risk assessment practices help reduce the losses.

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LIST OF ABBREVIATIONS

AGDB	Asia Green Development Bank
BCC	Building Completion Certificate
CBM	Central Bank of Myanmar
CC	Credit Committee
CGI	Computer Generated Imagery
CRD	Credit Risk Department
FRD	Financial Regulatory Department
FMI	First Myanmar Investment
GIZ	Gesellschaftfür Internationale Zusammenarbeit
HP	Hire Purchase
IFC	International Finance Corporation
JICA	Japan International Cooperation Agency
LC	Letter of Credit
LIFT	Livelihoods and Food Security Fund
LTV	Loan to Value Ratio
MFI	Microfinance Institutions
MMK	Myanmar Kyat
NPL	Non-Performing Loan
NGO	Non-Governmental Organization
SME	Small and Medium Enterprises
UNOPS	United Nations Office for Project Services
YB	Yoma Bank Limited

CHAPTER 1

INTRODUCTION

Financial institutions are performing a key role in economic growth for the country; specifically commercial banks play a vital role in the economic resource allocation of countries. In Myanmar, after 2010 elections began an aggressive reform aimed at making more development process and the economy more open and market oriented. Banking sector development in particular has become a major focus of recent reforms, given the role that a well-functioning financial sector plays in enabling the growth of the private sector. Despite recent progress, a number of challenges remain with respect to management of risks that banks are exposed. The memory of the 2003 banking crisis, which led to run on banks like Asia Wealth Bank (AWB), Myanmar Universal Bank and Myanmar May Flower Bank, is still strong and there is a lack of public trust in the banking system. For these reasons, banking regulations of Central Bank has deepened and strengthened of the banking sector to limit the potential risks to the banks. In the early 2010s, Myanmar banking sector was booming again to privately owned banks.

The primary objective of banks is to provide loans as it captures a large part of their income. The issue occurs when debtors cannot repay their loans, or in the worst case, these loans go default. It then depends on the financial situation of banks how to handle large default rates. Credit loans constitute a cornerstone of the banking industry. Credit is an amount that is granted by the banks to those applicants who requested credit; this should be repaid at time including the interest plus principal, (Hand & Henley, 1997). Credit defines as borrowing up to certain amount given by financial institutions like the bank to an individual of an organization. According to Lidger Wood (1993), credit defines as an expression of belief in a person's ability and willingness to repay a loan. Credit assessment is used to evaluate credit worthiness of borrowers, the ability of borrowers to honor its financial obligations.

One of the key sources of revenue for banks is generation of interest which is generated through credit advancement. But the necessary appraisal has to be made before advancing the credit to individuals and companies. Credit appraisal means an investigation or assessment done by the bank prior before providing any loans and advances, its funding pattern and further checks on the primary and collateral security cover available for recovery of such funds. Credit Appraisal is a process to ascertain the risks associated with the extension of the credit facility and better credit risk assessment should be advantageous for banks' performance.

The performance of credit department in good standing guarantees profitability and stability of a bank. On the other hand, poor bank performance leads to banking failure and financial crisis. Because of this the banks have to evaluate the risk on daily basis while lending. Therefore, screening the customer's financial history and financial background is a very significant factor before making any credit decision and is a key determinant in reducing credit risk (Bekhet and Eletter, 2012). The general risk the lending institutions having when giving credit is the credit risk. Credit risk is the most critical and the biggest challenge facing banks' management. Credit risk causes losses to the banks when a borrower defaults on the loans. In fact, risk estimate is a major factor contributing to any credit decision, and the inability to precisely determine risk adversely affects credit management. In addition, risk affects both approved and unapproved financing decisions. When credit manager approves a loan, he/she risks the possibility that the customer may be unable to repay his/her obligation. Conversely, when loan is rejected, there is a risk of losing a potentially profitable customer to competitors and the risk of opportunity cost. Hence, credit assessment evaluation is essential before making any lending decision.

1.1 Rationale of the Study

Credit risk decisions are key determinants for the success of financial institutions because of huge losses that result from wrong decisions. Poor evaluation of credit assessment can cause money loss. Wu et al. (2010) stressed that credit risk assessment is the basis of credit risk management in commercial banks and provides the basis for loan decision-making. The effective credit assessment is the capacity to the necessary information required before granting loans to clients. Inadequate and inaccurate credit assessment results in granting credit facilities to people who are not creditworthy. This subsequently leads to loan defaulting which is one of the major challenges of banks. Therefore the credit decision should be based on a thorough evaluation of the risk conditions of the lending and the characteristics of the borrower. Besides that, another way to evaluate the credit worthiness is having the credit scoring in banks that improves their risk assessment and hence increases the prediction accuracy of potential risks to banks.

In the banking sector, the clients demand for the loan on regular basis to meet their financial needs. The risk for commercial banks to increase the requested loan depends on how efficiently and accurately differentiates among good borrowers from the bad borrowers.

Therefore it is critical for commercial banks to provide efficient and effective services on customer credit related issues, maintain and improve service quality and optimum customer satisfaction with minimum risk. Derban et al, (2005) argues that borrowers should be screened by banks as a form of credit assessment. He further notes that an effective analysis should include qualitative and quantitative techniques when assessing the borrowers.

There are now 25 private banks in Myanmar, among them this paper only focus on the loans applications of Yoma Bank, one of the most early established private banks since 1993. However, Yoma Bank's business activities were severely limited and had to sustain on domestic remittances business following Myanmar banking crisis in 2003. A new chapter began for Yoma Bank in August 2012 when it regained its full banking license. Currently Yoma Bank is offering variety of products and services such as SME loan, corporate loan, contract financing loan, home loan, hire purchase, agricultural loan, trade finance loan, etc. This research is mainly focused on loan performance because of the credit assessment and impact on the bank is substantial. The credit risk exposure of the loans are more so as to the revenue for the bank in return. To minimize the credit risk of all types of loans, to increase the loan performance, assessing creditworthiness of borrowers by evaluating capacity of borrower's ability to meet the loan payments of interest and principal.

Therefore, this study aims to take in-depth analysis on credit assessment practices inYoma Bank to determine the creditworthiness of the borrowers where we are unable to assess reports from credit bureau and credit rating agencies such as Moody's, Fitch and S&P. Because of the increased competition in the market and growing burdens on banks for revenue generation have directed lending credit to debtors to explore more effective methods to attract new creditworthy customers and at the same time control losses by reducing the defaulted loans. By using the effective models in the credit risk assessment process to evaluate loan applications which can enhance credit processing, improve quality of loan and can also be a competitive advantage for Yoma Bank.

1.2 Objectives of the Study

The objectives of the study are as follow;

1. To identify the credit risk assessment practices conducted in Yoma Bank
2. To evaluate the effects of credit risk assessment on loan performance in Yoma Bank

1.3 Scope and Methods of the Study

Yoma Bank has 31 branches in 29 Townships running in Yangon Region. The study focused on credit risk assessment practices on loans performance in Yoma Bank. Survey questionnaires were collected from head office of Yoma Bank, especially from credit risk department that is the main department to evaluate the credit assessment on customer's creditworthiness and decision to grant credit to customers in accordance with Yoma Bank credit policies and procedures.

To achieve the objectives of this study, descriptive research method is mainly used. For more understanding, primary and secondary data were collected. The primary data was obtained by using predetermined questionnaires to 50 employees, 68% of total 73 employees who are working as managers, analysts, and team leads at credit risk department of Yoma Bank. The secondary data was obtained from previous relevant research papers, Annual Reports, Yoma Bank websites, published papers and other related websites.

1.4 Organization of the Study

This paper is divided into five chapters. Chapter one is introduction that explains the rationale of the study, objectives of the study, scope and methods of the study and organization of the paper. Chapter two describes the literature review concerning the evaluation of credit risk assessment practices on loan performance described. Chapter three describes effective credit risk assessment practices conducted in Yoma Bank and also in line with CBM regulation. Chapter four presents data analysis of credit risk assessment practices and its effects explored by using the primary data, secondary data. The conclusion, findings and recommendation are presented in chapter five of this study.

CHAPTER 2

LITERATURE REVIEW

This chapter summarizes the definition of credit risk assessment and management, credit assessment techniques which underline the evaluation of credit assessment practices and importance of credit risk assessment in banking sector and the effects on loan performance with presentation of conceptual framework of the study.

2.1 Definition of Credit Risk Assessment

Credit Assessment is the process through which the credit applicant presents the necessary documentation to the bank in order to obtain a loan, (Nsereko, 1995). The credit risk assessment is done by the bank prior to granting any loans and advances to the customers as the first stage. It involves determining the loan applicant's creditworthiness and reducing the default between the banks and the borrowers through the process of gathering, processing and analysing of quality information about the borrower. If the bank lending is not properly assessed, there is higher probability that the borrower will not be able to or willing to honor their loan repayment obligations, (Feder et al, 1980). The loss can also be resulted from the financial distress or insolvency of clients and usually leads to the critique on the implementation of financial institutions due to the inadequate credit risk assessment.

The credit risk assessment by means of monitoring the lending activity evaluation involves credit appraisal, a process to ascertain the risks associated with the extension of the credit facility. Risk Management in banking is defined as the development and execution of a plan to deal with potential losses. Risk management practices in the banking industry focus to manage an institution's exposure to losses of risk and to protect the value of its assets. The main objective of banking risk management is maintaining the acceptable profitability ratios of the safety and liquidity parameters in the management of assets and liabilities (minimize losses). An effective banking risk management must resolve a number of problems – from risk monitoring to its valuation.

2.2 Credit Assessment Techniques

The credit decision should be based on a thorough evaluation of the risk conditions of the lending and the characteristics of the borrower based on effective credit assessment techniques. There are various methods of assessing credit worthiness of borrowers such as 5C's, 5P's, CAMPARI and etc.

2.2.1 The 5C's of Credit

The 5C's of credit (i.e. Character, Capacity, Capital, Collateral and Conditions) is a subjective judgemental approach of assessing credit worthiness. Most of the banks use the 5Cs model of credit to evaluate a customer as a potential borrower because the 5Cs help the financial institutions to increase loan performance, as they get to know their customers better. They are defined as follows:

Character – refers to the trustworthiness and integrity of the borrowers. It is the obligation that a borrower needs to repay the loan, indication of the applicant's willingness and ability to repay. Having good reputation and borrowing history with good credit rating indicates the qualitative factors of the client. Therefore it is important to the bank to assess the client's credit history, work history and any proven experience which client has at running a business. Most of the banks in Myanmar look primarily at how the loan will be secured. While this is also important to the banks, the banks value the client personal experience and track record as well. The character assessment includes the industry skills and management experience of the client because the best business ideas and skills do not succeed without strong management. Since there is not an accurate way to judge character, the lender will decide subjectively whether or not the borrower is sufficiently trustworthy to repay the loan.

Capacity – determines to borrower's ability to generate cash flow to service the interest and principal of the credit facility. In the credit evaluation process, the bank looks at the future business plans and future cash flow to determine the strength and marketability of the business to ensure that the client is enough to repay the debt. Strong cash flow generated from borrower's business activities demonstrates capacity to repay the debt and mitigates the probability of default. Therefore it is important to the bank to access the capacity of the client through its historical financial statements and bank statements. The bank also needs to analyst the financial ratios such as Interest Coverage Ratio, Debt Coverage Ratio based on financial statements to determine the serviceability of the debt. The bank uses EBITA as the source of fund which is referred for the borrower a capability to repay the debts from core business.

Capital – is the amount of money the borrower invested in the business and an indication of how much you have at risk should the business fail. More capital represents the borrower's ability to withstand volatility and helps to decrease or eliminate unexpected losses. Capital is also a factor used in credit risk assessment to measure how much banks can fund the business with safe involvement and not to exceed certain leverage. Therefore the bank needs to understand the capital position of the prospective borrower's business or personal wealth.

Collateral–the form of security provided by the borrowers for the particular credit facility. Banks usually require collateral as a type of insurance in the event of default the loan with its cash flow. Banks require the sufficient collateral to mitigate the risk of default. A robust analysis of the collateral supporting a loan is an important step in granting a loan.

Conditions – refer the market conditions which borrower operates, the economic and political situations of the country, environmental regulations, social Legislation government associated and technology that affect the business. These factors are sometimes out of control and might affect the borrower ability to repayments. Strong industry growth or economic conditions support a business' ability to generate cash flow and repay the debt. When assessing a loan request, the bank makes sure to understand the market conditions in which the client is planning to operate the business based on the purpose of the loan.
(Jim Doyle, Governor and Mary P. Burke, Secretary, Department of Commerce and Ekhaa Boushnak, Mohamed A. Rageb, Aiman A. Ragab, Ahmed M. Sakr (2018) Factors Influencing Credit Decision for Lending SMEs: A Case Study on National Bank of Egypt)

2.2.2 The 5P's of Credit

Besides 5C's of credit evaluation, banks are nowadays using the 5P's of credit evaluation. The 5P's of credit is a method of evaluating credit applications which contains of People, Purpose, Payment, Protection and Prospective, (Federal Reserve Center, 2004).

- **People –** whether the borrower has a history of being honest, reputable and timely in servicing his or her financial obligations.
- **Purpose –** there should be a specific explanation of how the borrower is going to use the funds.

- **Payment** – knowing the purpose helps identify sources of repayment and aids in structuring the loan repayment schedule based on the timing of the borrower's receipt of funds.
- **Protection –** this is collateral and other secondary sources of loan repayment.
- **Prospective–** refers to how the loan will be supervised, and what the bank will do in the case of borrower defaults.

2.2.3 The CAMPARI of Credit

According to Business coaching (2008), the CAMPARI Model represents 7 variables the bank can use to evaluate credit applications. CAMPARI Model is also the extensive method of the 5C's credit evaluation. They include;

- **Character –** ability to pay and willingness to pay.
- **Ability to repay –** adequacy of cash to meet repayment.
- **Margin of finance–**the amount that the customer contributes from the loan.
- **Purpose** of the loan – the borrowers should disclose the utilization of the loan proceeds. Speculative purposes are considered risky and will not be entertained.
- **Amount** of the loan – the amount that the bank willing to fund to the customer. The amount should not be beyond the repayment capacity of the customer.
- **Repayment terms** - that is the structure, terms of principal and interest repayment.
- **Insurance–** in the event the borrower dies, the loan can be settled from insurance proceeds. In other way, the borrowers provide the security/collateral in the form of insurance for the applied loan.

2.2.4 Credit Scoring Method

While the 5Cs, 5Ps and CAMAPRI trigger the bank in evaluation, the bank can use another method to assess the creditworthiness of the client, which is the credit scoring approach. The elements and their corresponding weight vary from bank to bank.

A credit granting process comes in place when a company which needs a loan from a bank in an application demanding for a loan. This application then goes through some procedures or processing in the bank which evaluates the application using their individual evaluation method or credit scoring to determine the credit worthiness of the company. In a credit scoring model, analysts usually use their historical experience with debtors to derive a quantitative model for the segregation of acceptable and unacceptable credit applications.

Some banks do the evaluation using numbers (credit scoring) while others do so using subjective evaluation like personal ID of the company or the owner. Credit scoring is a statistical technology that quantifies the credit risk posed by a prospective or current borrower and seeks to rank them so that those with poorer scores are expected to perform worse on their credit obligations than those with better scores. Credit scoring has an advantage in that it saves time, cost and believe to increase access to credit, promote competition and improve market efficiency. Credit scoring reduces subjective judgment and possible bias during the credit assessment process (Holger Kraft, 2002). This shows that if a good credit scoring is taken by a bank before granting loans to customers, it can determine the ability of the customers to pay back the loans although in some cases it may not really be a guarantee since the future is uncertain. The way things or situations can be seen today may change tomorrow and obviously affect already taken decisions.

2.3 Importance of Credit Risk Assessment in Banking System

The major credit risk is assessed by the bank while assessing a credit proposal through Borrower Analysis. A thorough credit and risk assessment should be conducted prior to the granting of loans, and at least annually thereafter for all facilities. Overall performance and credit status of the allied concerns of the client is also assessed. Demand and supply of the concerned goods and services, demand and supply gap, contribution of the borrower in meeting the gap, strength and weakness of the borrower & their competitors to be accurately assessed by the bank. The results of this assessment should be presented in a credit application and is approved by Credit Risk Management (CRM). All banks should have established Know Your Customer (KYC) and Money Laundering guidelines which should be adhered to at all times. Credit applications should summaries the results of the risk assessment and include, as a minimum, the following details:

- Amount and type of loan(s) proposed.
- Purpose of loans.
- Loan Structure (Tenor, Covenants, Repayment Schedule, Interest)
- Security Arrangements

In addition, the following risk areas should be addressed:

Borrower Analysis*:* The majority shareholders, management team and group or affiliate companies should be assessed. Any issues regarding lack of management depth, complicated ownership structures or inter group transactions should be addressed, and risks mitigated.

Industry Analysis: The key risk factors of the borrower‘s industry should be assessed. Any issues regarding the borrower‘s position in the industry, overall industry concerns or competitive forces should be addressed and the strengths and weaknesses of the borrower relative to its competition should be identified.

Supplier/Buyer Analysis: Any customer or supplier concentration should be addressed, as these could have a significant impact on the future viability of the borrower.

Historical Financial Analysis: An analysis of a minimum of 3 years historical financial statements of the borrower should be presented. Where reliance is placed on a corporate guarantor, guarantor financial statements should also be analyzed. The analysis should address the quality and sustainability of earnings, cash flow and the strength of the borrower‘s balance sheet. Specifically, cash flow, leverage and profitability must be analyzed.

Projected Financial Performance: Where term facilities (tenor > 1 year) are being proposed, a projection of the borrower‘s future financial performance should be provided, indicating an analysis of the sufficiency of cash flow to service debt repayments. Loans should not be granted if projected cash flow is insufficient to repay debts.

Account Conduct: For existing borrowers, the historic performance in meeting repayment obligations (trade payments, cheques, interest and principal payments, etc.) should be assessed.

Adherence to Lending Guidelines: Credit Applications should clearly state whether or not the proposed application is in compliance with the bank‘s Lending Guidelines. The financial institution’s Head of Credit or Managing Director/CEO should approve Credit Applications that do not adhere to the bank‘s Lending Guidelines.

Mitigating Factors: Mitigating factors for risks identified in the credit assessment should be identified. Possible risks include, but are not limited to: margin sustainability and/or volatility, high debt load (leverage/gearing), overstocking or debtor issues; rapid growth, acquisition or expansion; new business line/product expansion; management changes or succession issues; customer or supplier concentrations; and lack of transparency or industry issues.

Loan Structure: The amounts and tenors of financing proposed should be justified based on the projected repayment ability and loan purpose. Excessive tenor or amount relative to business needs increases the risk of fund diversion and may adversely impact the borrower‘s repayment ability.

Security: A current valuation of collateral should be obtained and the quality and priority of security being proposed should be assessed. Loans should not be granted based solely on security. Adequacy and the extent of the insurance coverage should be assessed.

Name Lending: Credit proposals should not be unduly influenced by an over reliance on the sponsoring principal‘s reputation, reported independent means, or their perceived willingness to inject funds into various business enterprises in case of need. These situations should be discouraged and treated with great caution. Rather, credit proposals and the granting of loans should be based on sound fundamentals, supported by a thorough financial and risk analysis.

Credit risk is often considered as a consequence of systemic risk derived from the macro perspective. Systemic risk represents the larger financial problems caused by the inability of financial market participants to meet repayment obligations on extensions of credit (e.g. Fukuda, 2012)

2.4 Credit Risk Assessment Practices in Banking System

Banks have credit policies that guide them in the process of awarding credit. The method of assessment and evaluation of risk of each prospective applicant are part of a credit control policy (Payle, 1997).

Credit granting process should comprise a detail assessment and approval process that includes loan application forms, internal credit summary forms, internal manuals and loans files showing appraisal and approval of loans, criteria for approving loans, determining loan pricing policy and lending limits at various levels of the bank's management and for making arrangements methods and practices concerning revaluation of collateral and files related to collateral, administration and monitoring procedures including responsibilities, compliance and controls, a process for handling exceptions.

Lending process in a bank should include analysis of credit manuals and other written guidelines applied by various departments of the bank and of the capacity and actual performance of all departments involved in credit function. Credit function should cover origination, appraisal, approval, disbursement, monitoring, collection, and handling procedures for the various credit functions (Greuning and Bratanovic, 2003).Credit evaluation and approval is the process a business or an individual must go through to become eligible for a loan or to pay for goods and services over an extended period. It also refers to the process businesses or lenders undertake when evaluating a request for credit. Granting credit approval depends on the willingness of the creditor to lend money in the current economy and that same lender's assessment of the ability and willingness of the borrower to return the money or pay for the goods obtained-;plus interest-;in a timely fashion. Typically, small businesses must seek credit approval to obtain funds from lenders, investors, and vendors, and also grant credit approval to their customers.

(1) Credit Origination Practices (Loan Origination)

The main objectives of the underwriting process are to identify the degree of creditworthiness(determined by two critical factors – ability to pay, and willingness to pay) of the applicants and to provide the clients with the relevant information related to loan process. The latter becomes available to the borrower through the advice given by the loan officers and in the application form and other documents provided to borrower. The former ensures that the borrower is capable and willing to make regular and timely payments. In this regard, the stability of the borrower's employment (including regular income) is one of many issues which lenders shall verify at the time of the loan application.

(2) Credit Processing and Appraisal Practices

Loan processing is the pre-qualification screening criteria where all required information on credit is gathered and applications are screened. The criteria may include rejecting applications from blacklisted customers. In this connection, Banks should have a checklist to ensure that all required information is, in fact, collected. This would help institutions avoid processing and screening applications that would be later rejected.

The next stage is credit appraisal where the banks assess the customer's ability to meet his obligations. The bank follows an extensive process of credit appraisal before sanctioning any loan. Banks should be equipped with well-designed credit appraisal criteria to ensure that facilities are granted only to creditworthy customers who can make repayments from reasonably determinable sources of cash flow on a timely basis. Banks usually require collateral or guarantees in support of a credit in order to mitigate risk. Banks must have a policy for valuing collateral, taking into account the Central Bank of Myanmar guidelines dealing with the matter. Such a policy shall, among other things, provide for acceptability of various forms of collateral, their periodic valuation, process for ensuring their continuing legal enforceability and realization value.

The appraisal criteria look into the following issues while granting loan:

- Determining the amount and purpose of lending
- Determining credit worthiness of the applicant to assume the credit obligation;
- Understanding risk profile of the borrower
- Forecast operating environment of the borrower
- Inspection of the borrower's business premises as well as the facility that is the subject of the proposed financing
- Ensuring goodwill of applicant
- Ensuring adequacy and enforceability of collateral or guarantees
- Collecting information on shareholders, directors and beneficial owners for corporate customers; and management capacity of corporate customers.

(3) Credit Approval Practices

Approval authorities sanctioned by the board of directors are prudent credit practitioner. Who will cover new credit approvals, renewals of existing credits, and changes in terms and conditions of previously approved credits, particularly credit restructuring, all of which should be fully documented and recorded. Approval authorities of individuals should be commensurate to their positions within management ranks as well as their expertise. The approval process should be based on a system of checks and balances. Depending on the size of the financial institution, it should develop a corps of credit risk specialists who have high level expertise and experience and demonstrated judgment in assessing, approving and managing credit risk. An accountability regime should be established for the decision-making process, accompanied by a clear audit trail of decisions taken, with proper identification of individuals/committees involved. All this must be properly documented.

(4) Documentation Practices (Loan Documentation)

Documentation is an essential part of the credit process and is required for each phase of the credit cycle, including credit application, credit analysis, credit approval, credit monitoring, collateral valuation, impairment recognition, foreclosure of impaired loan and realization of security. Credit applications must be documented regardless of their approval or rejection. It is the responsibility of credit administration to ensure completeness of documentation (loan agreements, guarantees, transfer of title of collaterals etc) in accordance with approved terms and conditions. Outstanding documents should be tracked and followed up to ensure execution and receipt.

Documentation establishes the relationship between the financial institution and the borrower and forms the basis for any legal action in a court of law. Institutions must ensure that contractual agreements with their borrowers are vetted by their legal advisers. For security reasons, banks should create separate credit file and maintained for each customer (copies of critical documents i.e., those of legal value, facility letters, signed loan agreements) in credit files while retaining the originals in more secure custody. Credit files should also be stored ensuing safe custody measures such as securing them in fire-proof cabinets and should not be removed from the institution's premises.

A checklist should be maintained for identity of individual(s) and/or committee(s) involved in the decision-making process acknowledging them, the policies and procedures ranging from receiving the credit application to the disbursement of funds have been complied with.

(5) Credit Disbursement Practices (Loan Disbursement)

Once the credit is approved, the customer should be advised of the terms and conditions of the credit by way of a letter of offer. The duplicate of this letter is duly signed and returned to the bank by the customer. The Disbursement should be effected only after completion of covenants, and receipt of collateral holdings, insurance cover in the institution’s favour and the vetting of documents by a legal expert. In case of exceptions funds are to be released after prior approval from competent authorities to compliance with pre-disbursement conditions and approval by the relevant authorities in the financial institution.

(6) Credit Risk Monitoring

In order to safeguard, banks should ensure proper monitoring and control system in identifying potential losses at early stages alarming warning signals such as unauthorized drawings, arrears in capital and interest and deterioration in the borrower’s operating environment. After the loan is approved and draw down allowed, the loan should be continuously watched over. This helps in keeping track of borrowers’ compliance with credit terms, identifying early signs of irregularity, conducting periodic valuation of collateral and monitoring timely repayments. A proper credit risk monitoring system will provide the basis for taking prompt corrective actions when warning signs point to deterioration in the financial health of the borrower.

Extensively the credit monitoring activity of the banks aims at ensuring

- Funds proceeds are to be used only for the purpose stated in the customer’s credit application and advanced accordingly
- Financial condition of a borrower is regularly tracked and banks management should advised the borrower about his credit status
- Administering of collateral coverage is regularly assessed and related to the borrower’s financial health
- Identifying the contractual payment delinquencies
- Banks are vested with power to question the borrower to explain any major variances in projections provided in support of his credit application and the actual performance, in particular variances respecting projected cash flows and sales turnover.

(7) Collection Practices (Loan Collection)

Loan repayment determines the bank’s ability to grant further loans, the profitability and suitability of depositors. Banks must therefore be cautions in its loan administration. Repayment usually takes the form of periodic payments that normally include part of principal plus the interest in payment. The other common method of repayment is a lump sum with interest on maturity. Though customers’ records are used to determine the ability to service the loan; some customers have the tendency of hiding real position at hand. This makes it different for the banks to determine the true position as well as possible repayment. Some corporate bodies, small and medium scale enterprises repayment depends largely on collection period from debtors which determines the repayment pattern. The bank should be guided by the trend and the business lines of clients when granting credits.

Bruck (1997) contends that the administration of loan extend beyond the approval of loans. It requires control and supervision of outstanding loans to ensure their repayments. Repayment on group lending is made possible because the joint and several liability clauses which serves as a respite for a lender and mandates the lender to severally take an action against the group and to the extent of their personal estates to recover the loaned funds.

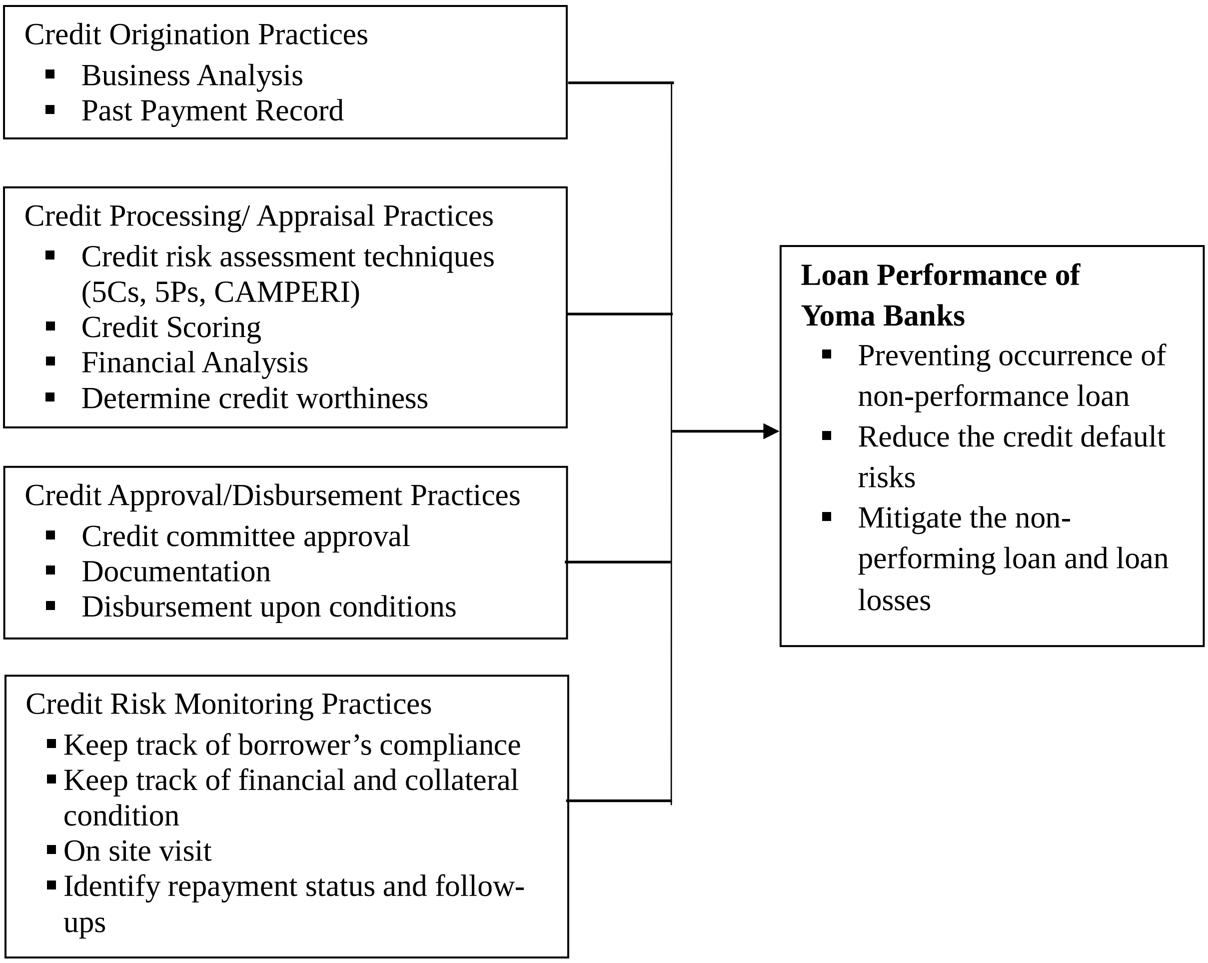
2.5 Conceptual Framework of the Study

The basis agreements were initiating from the paper with the title of credit risk assessment practices on loan performance in Yoma Bank. The independent variables and dependent variables were modified to match with the objectives of the study. The study adopted the following conceptual framework.

Figure 2.1 Conceptual Framework of the Study

Independent Variables **Dependent variable**

Credit Risk Assessment Practices



Sources: Adopted from Wahcira, Alexander Kinyuai,2017

CHAPTER 3

CREDIT ASSESSMENT PRACTICESIN YOMA BANK

This chapter describes the credit risk assessment practices of Yoma Bank and includes six sections. It starts with the general background of Yoma Bank, organization structure of the bank, types of lending products, loan assessment and evaluation process conducted in Yoma Bank, credit risk assessment practices in Yoma Bank and the guidelines and regulations of CBM.

3.1 General Background of Yoma Bank

Yoma Bank is one of Myanmar’s largest private banks, with over 3000 employees and 79 branches in 42 cities nationwide. Over the past few years, Yoma Bank has made significant investments in strategic priorities - people, corporate governance, and technology. The Bank was founded by Mr. Serge Pun and its first branch was opened in July 1993 in front of the iconic Aung San Stadium in Yangon.

Yoma Bank has invested heavily in technology to optimize its nationwide branch network and is recognized for its efficient remittance services. It was the first bank in Myanmar to use a computerized accounting system and pioneered wireless banking communications. By 2003 Yoma Bank had grown to be one of the biggest banks in the country with 41 branches in 24 cities providing secure and efficient banking services nationwide.

In 2003, Myanmar experienced a financial crisis which had a significant impact on the banking industry. This led to the closure of many private banks while Yoma Bank's business activities were severely limited and had to sustain on domestic remittances. Yoma Bank’s remittance service still remains to be the most reliable and trusted in the country.

Yoma Bank regained permission to operate under a full banking license on 23rd of August 2012. With more than 74 branches across Myanmar now, the Bank strives to become a leading SME Bank in Myanmar. Yoma Bank was the International Finance Corporation's (IFC) first direct investment in Myanmar in 2014 and it benefitted from a comprehensive 3-year advisory package to upgrade credit risk management, finance, treasury, product development and to procure a new core banking system (Misys Fusion Banking Essence). Yoma Bank also receives ongoing technical assistance from GIZ, the German development agency, to improve and expand our SME lending.

In 2015, Yoma Bank formed a strategic partnership with Telenor (Myanmar's largest foreign Telco) to develop nationwide digital financial services through the formation of Wave Money, a mobile financial services company. Yoma Bank has benefitted from a significant grant from LIFT, a multi-donor, UNOPS administered trust fund, to expand agribusiness finance to Myanmar's underserved agricultural community - a key segment in Myanmar's development. Technical assistance for this program is provided by Rabo Bank, a Dutch agricultural bank.

In 2018, Yoma Bank went through a comprehensive transformation, which included branch, cash management, and digital transformation in order to provide a better experience for its customers and increased returns for its shareholders. The transformation was undertaken to future-proof the Bank for years to come and to ensure long-term sustainability through the systems and processes implemented. Yoma Bank transformation includes the followings; Branch transformation, Cash Management transformation, Digital transformation, Corporate transformation.

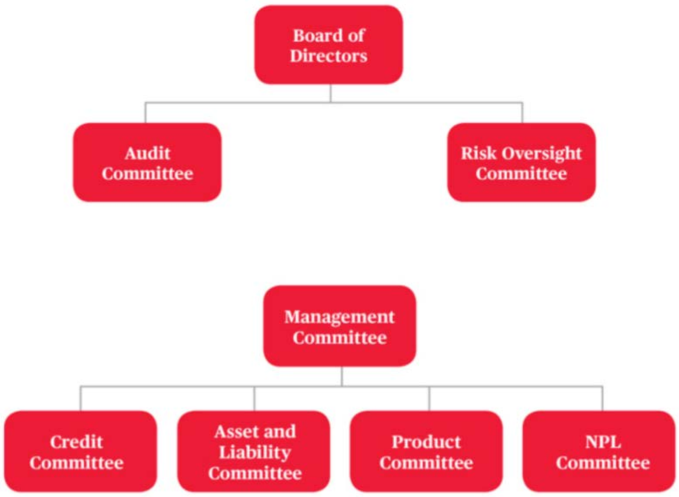
Yoma Bank seeks to minimize the adverse impacts of its lending activities and to help our customers establish responsible practices, Yoma Bank Environmental and Social (E&S) responsibility is one of the major challenge for the bank. Customers are increasingly facing challenges from operating and competing in a climate, the Environmental and Social (E & S) Policy of Yoma Bank is designed to help customers overcome those challenges of operating and competing in a climate of enhanced environmental and social responsibility. Incorporating international standards and best practices while being sensitive to the unique realities of Myanmar, the E & S Policy assists customers to put in place more responsible practices to adapt and operate successfully in a new environment.

Yoma Bank always tries to serve its customers in the best ways for their satisfaction with various products and services like retail banking, SME banking, Business banking and several types of loan products. With more than twenty years' experience in Myanmar's financial sector, Yoma Bank is well positioned to support the continued growth and financial inclusion of Myanmar. The bank's core values are customer focus, team work and people development and pride in the Organization.

3.2 Organization Structure of Yoma Bank

The organization structure of Yoma Bank is under the guidance and instruction of BOD with the bank's following organization structure.

Figure (3.1) Board Management Profile of Yoma Bank



Source: Yoma Bank, 2019

Yoma Bank aims to carry out all financial services as a commercial bank, investment bank, development bank, merchant bank or financier in any part of the world. However, according to the Financial Institutions of Myanmar Law, 1990, financial institutions have no right to operate other than activities specifically prescribed by the Central Bank of Myanmar. Yoma Bank Ltd gradually extended its financial institutions to meet its customers' requirements. However, after the Myanmar banking crisis in 2003, Yoma Banks license was limited stopping the bank from accepting deposits or issuing loans.

The Corporate Governance side, Yoma Bank has established committees for its internal controls and have a clear delegation of authority. Having appointed international standard board of directors, Yoma Bank established the following committees:

(1) Audit Committee:

The committee reviews the Bank's financial statements and ensure the Bank has suitable and efficient internal control system.

(2) Risk Oversight Committee:

Inclusive of member of directors whose task is to examine the bank risk appetite and Develop strategies of tackle the issues.

(3) Management Committee

Involve CEO and key positions holders of compliance, finance, technology and operation to discuss in details the challenging issues and find the solution.

(4) Credit Committee

The committee review the loans prepared by the credit team and assess the business against respective banking criteria and internal policies. The management and the employees of the bank always endeavour to provide the desirable financial services to their customers. The members assess the business the business with positive cash flow and to ensure the bank is lending to qualified borrowers. Yoma Bank has four credit committees such as Sub Credit Committee (SCC), Junior Credit Committee (JCC), Executive Credit Committee (ECC) and Board of Directors.

(5) Product Committee

They are responsible for assessing current bank's product in line with the environment and effectiveness and seek out innovative products that serve specific needs. Recently the committee approved supply chain financing and home loan.

(6) Asset and Liability Committee

The committee is responsible for the overall financial management of the bank and serves to oversee and monitor the bank's liquidity. It also ensures that the banks business lines operate within its overall objectives and adhere to the risk guidelines set by the Board of Directors.

(7) Non-performing Loan (NPL) Committee

Overview the current industries challenges and borrowers' circumstances which lead inabilities to pay the loan and impact on the bank's balance sheet. Committees seek to mitigate the workout plan to tackle issues.

The above committee members work in unity to underscore the bank's reputations as 'The Responsible Bank' and result in the strongest corporate governance bank in Myanmar.

Operating banking with accelerating momentum in Head Office with various departments under the management and control of management which comprising of Chief Executive Officer, Chief Finance Officer, Chief Performance Officer, Chief Operation

Officer, Chief Risk Officer, Chief Technology Officer, Chief Compliance Officer, Deputy Chief Audit Officer and Executive Director of corporate secretary office.

According to the organization structure, Yoma Bank has 14 departments. They are Administration, Business Financing, Cash Management, Client Relationship, Compliance, Communication, Credit Administration, Credit Risk, Finance, Human Resources, Information and Technology, International Banking, Internal Audit and Yoma Performance and Development Centre.

Mission, Vision, Motto and Values of Yoma Bank

The mission is to bring responsible banking to the country with a strong emphasis on good corporate governance, environment and social standards, and risk controls.

By achieving its mission, Yoma Bank realize the vision to deliver the benefits of responsible banking to all the people of Myanmar.

The previous motto was “Yoma Bank, Your Bank”. Yoma Bank believes that the customers are the reason they exist in the industry. When Yoma Bank opened in new chapter, Bank management decided to change the motto to “Yoma Bank, The Responsible Bank”. The new motto came alive since 2013 as Yoma Bank wish to emphasize the importance of good practices and professional ethics and to notify customers, employees and other interest groups that the bank follows good banking practices.

The bank offers integrity through strong corporate governance and offers service through investment in people and training. Yoma Bank has proven stability through over twenty five years’ operating in Myanmar and value people through the Yoma Performance and Development Centre.

3.3 Types of Lending Products in Yoma Bank

Yoma Bank ensures to work with its customers to provide the loan that suits with its borrowers’ business goals. The Bank mainly focus the business loans and personal loans into various classes which was categorized by the amount of loan applied and the purpose of the loans, namely Corporate Loans, SME Loans, Agri-Financing Loan, Hire-purchase Loan and Mortgage Loans and Microfinance Loan.

(1) Corporate Loans

Corporate loans are classified by amount of the loans based on the borrowers' businesses, financial aspects and purpose of the loan. The loan amounts of MMK 1 Billion and above are considered as corporate loans. Yoma Bank corporate loans are intended to finance a range of business purposes including single asset purchases, long term business expansion plans or working capital requirements. Corporate loans are types of business loans and straightforward way to obtain the capital the business needs for the borrowers. The tenor of the loan is usually one-year with fixed interest rate. Loan can be granted to borrowers up to 3 years based on the purpose of loan utilization.

Corporate Loans include overdraft, term loans and project financing loans. Overdraft loans are short-term line of credit to help the customers' immediate working capital requirements as the loan tenor is one-year basis. With interest calculated daily on the portion of the limit used, the borrower only needs to pay the amount used. Overdraft loans are not required to repay principal where the term loans are required to make monthly principal repayment as well as interest. The approved loans are reviewed annually.

(2) Small and Medium Enterprises Loans (SME Loans)

Yoma Bank offers different types of SME loans to achieve sustainable growth and development for Myanmar SMEs. SME Credit Business is a scalable working capital loan for small business customers of Yoma Bank, with loan amounts that increase as the customer's business grows. The types of SMEs loan provided by Yoma Bank are SME Express Loans, Distributor Loans, Invoice Financing Loans and Transactor Loans.

SME Express Loans nature is similar to corporate loan with the facility amount up to MMK 1 Billion. SME loans are based on cash flow lending principles as the borrower has to meet financial related conditions to qualify the products. Yoma Bank's Distributor Loans can help distribution companies solve short-term cash flow issues by providing advance payments for outstanding invoices. With the loan amount of up to three times a company's historic monthly sales towards the client, a Distributor Loan can help sustain the cash flow of the business needs to grow. The maximum tenor of Distributor Loan is 24 months with interest 16% per annum. Yoma Bank also offers Invoice Financing as part of Supply Chain Financing that is a convenient business loan available for the suppliers or distributors of Yoma Bank's clients, helping sustain and manage the cash flow to expend the business. Transactor Loans is type of SME loans based on the transaction made by the clients on their bank statement. The more transactions they made, the more financing the clients will receive with no addition security required.

Yoma Bank also offers semi-secured SME loans as Smart SME Finance which is semi-secure transaction-based products. Smart SME Finance primarily aims to provide additional financial services to the business or customers of the bank. It also aims to fill the financing gap between the requested amounts against the approved amount as often loan amounts are reduced due to insufficient collateral provided by the borrower. With the initial loans of up to 5 Million Kyats to renewals as high as 10 Million Kyats, SME credits can help the business grow the enterprise without requiring collateral, extensive paperwork or guarantees.

(3) Agri-Financing Loans

Agricultural development is one of the major driving forces of the economy and the foundation for broad-based development that is needed to uplift the wellbeing of majority of the Myanmar people. Hence, Yoma Bank involves in this value change through offering Seasonal Credit Facility (Loan/Overdraft) for Paddy and Rice Mill traders, processors, input suppliers, contract farming companies and large holder farmers and corn traders especially in Ayeyarwaddy, Bago, Yangon and Sagaing regions where the major production of paddy and milled rice. Paddy and Milled Rice are the largest production volume among all the crops in Myanmar. The applicable seasons for Agri-Financing are monsoon season May to Oct (6 months) and summer season Nov – Apr (6 months).

(4) Hire Purchase Loans

Yoma's HP products were introduced in 2014 as a financing solution to customers who wish to purchase Equipment and/or motors as modes of transportation. HP allows the buyer to pay for an Asset over a certain period of time whilst enjoying the use of the product. Upon full settlement, the buyer can obtain ownership of the item. Yoma's HP is mostly use for the financing of motorbikes, cars, commercial vehicles, construction and agricultural Equipment, Medical devices and Hospital equipment and Factory Machinery. All assets must be purchased from Yoma Bank authorized dealer. This service is eligible for individuals or organizations to HP products by paying down-payment 10% to 50% depending on the product. The tenor can be as long as five years although the majority of HP loans feature one year tenor.

(5) Mortgage Loans (Home Loan)

Yoma Bank offers home loan products to the public for residential property (Land and Building), condominium, mini condominium and apartments. The main purpose of offering this product is to support the emerging middle class by making home purchases more affordable. Loan tenor is up to 25 years and various types of interest plan to the customers of Yoma Bank. The bank offers to its customers with maximum LTV 70% for all four home loan products. The standard home loan is offered only to construction completed building units. However, a BCC (building completion certificate) from City Development Council will be exempted for eligible developers for an extended period of 12 months.

Qualifying income is based on verified income available to all adults in the household who enter into home loan obligation contract. Total monthly debt repayment to total monthly income (DTI) ratio must not exceed 45%. It is subject to the changes in regulation and guideline issued by Central Bank of Myanmar.In addition to the relevant down payment, Borrowers are responsible for paying all related fees and charges, tax and stamp duties. An interest rate of 13% per annum and principal due amount is payable monthly on the loan amount borrowed. Interest rate is subject to changes in CBM’s regulation.

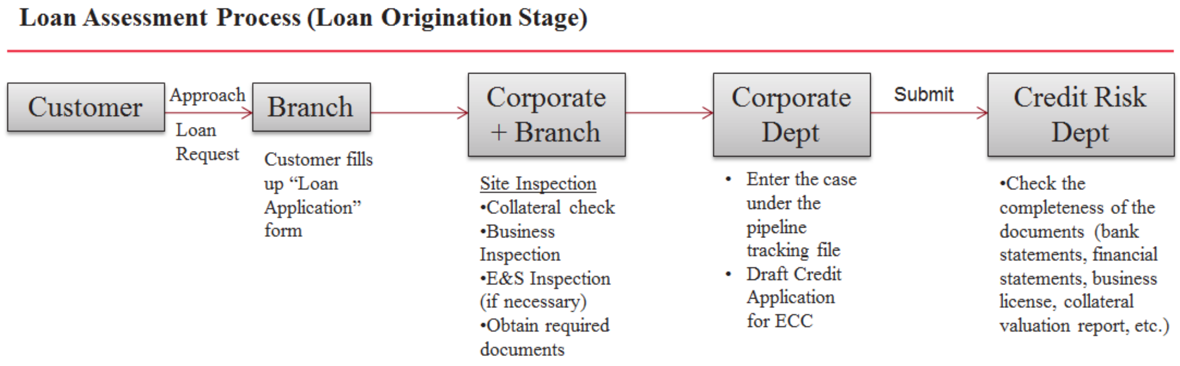
(6) Microfinance Loans

Yoma Bank back-to-back facility is the most effective way to protect microfinance (MFI) institutions from currency fluctuations and foreign exchange risk. As a leader in MFI services, Yoma strives to help the microfinance industry reach its full potential in the Myanmar business world. Expand the business with the support of Yoma Bank back to back facility. Yoma Bank has taken the lead regarding lending to microfinance institutions (MFIs).

Eligible prospective clients are MFIs, as regulated by the Financial Regulatory Department (FRD) of the Ministry of Finance. MFIs need to hold an MFI license or a (I) NGO license as regulated by the Ministry of Home Affairs. As MFIs face restrictions in the deposits they can accept from customers, they rely on equity and (foreign) loans for funding. As of 2016, Yoma Bank has developed a semi-secured loan product to support MFIs in their growth trajectory and to hedge their foreign currency exchange risk. The loan structure and repayment can be different by case, such as fully amortized loan, partially amortizing with the bullet payment at the end of the loan tenor or interest only during the loan term with the bullet payment at the end. Maximum loan tenor is three years.

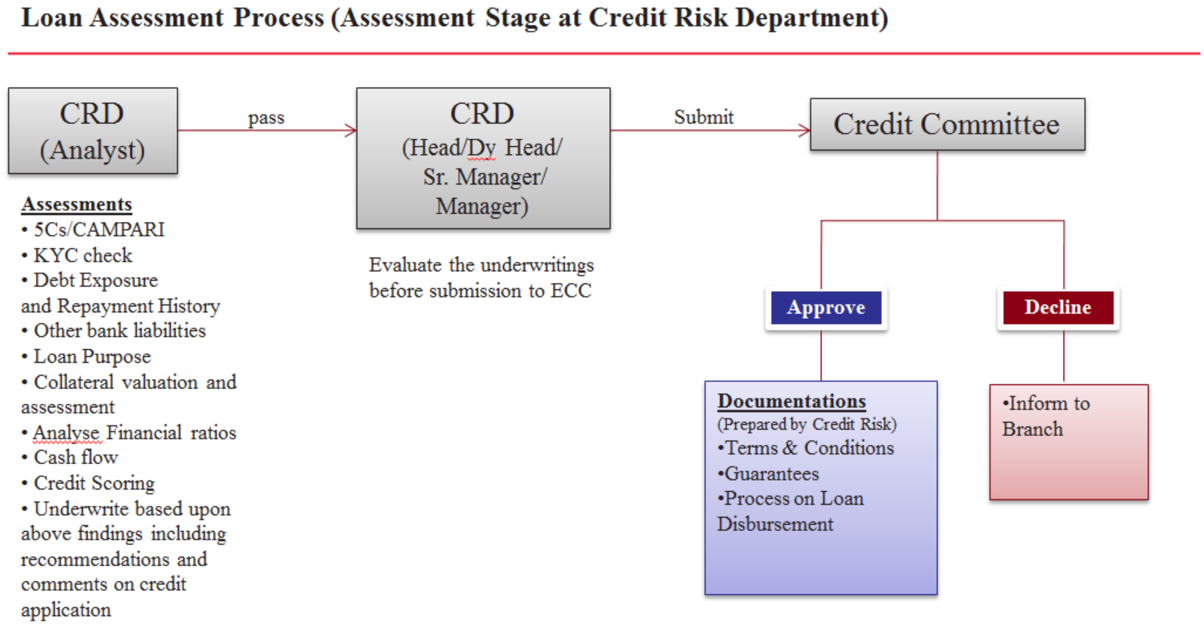
3.4 Credit Assessment and Evaluation Process Conducted in Yoma Bank

Figure (3.2) Loan Assessment Process (Loan Origination Stage)



Source: Yoma Bank, 2019

Figure (3.3) Loan Assessment Process (Assessment Stage at Credit Risk Department)



Source: Yoma Bank, 2019

The Yoma Bank Credit Committees review and approve requests for customers' credit based on the requested amounts and criteria set by the credit policies of the bank upon evaluation of credit assessment of the applications done by credit risk department. To ensure that the quality of the loan portfolio is sound and within the approved credit risk profile, the credit committee will periodically review the portfolio. In addition, credit committees ensure compliance with Central Bank of Myanmar (CBM). The executive and junior credit committees hold on a weekly basis. Sub-credit committee is having on a daily basis.

Documentation and Disbursement take place after the loans were approved by respective credit committee.

3.5 Credit Risk Assessment Practices in Yoma Bank

The risks are calculated on the borrower's ability to repay the loan. Credit risk assessment in Yoma Bank involves Character, Capacity to repay, Credit History, Business and management experience, Vulnerability of the business to external risks and Collateral, and concludes with the findings and recommendation. Yoma Bank has a dedicated department only for assessing the credit risk of its current and potential consumers.

Credit facilities are heavily secured with Collaterals as Land, building and machinery and personal guarantors. To mitigate the security risk, personal guarantees and corporate guarantees are obtained in lending when the collateral pledged is not enough to cover the security. Yoma Bank also requires bank statements for minimum of 12 months and above from the borrowers to substantiate the business cash flow situation before availing credit facilities to them. This is an effective tool for monitoring the cash flow of the business. Due to the help of technology, analysts can now obtain the data quickly and assess customers risk profile. Besides security and cash flow analyses, Yoma Bank credit risk assessment involves business and industry analyse, historical financial analyse including the applicant's working capital, loan structure and name lending adhering the lending guidelines.

Credit default risk is the risk of loss which arises from the debtor being unlikely to repay the amount in full or when the debtor is more than 90 days past is the due date of credit payment, it gives rise to credit default risk. The Credit default risk impacts all the sensitive transactions which are based on credit like loans, derivatives or securities. Credit default risk is also checked by banks before approving loan.

Upon non-payment on due date of any interest or principal due, the Bank will immediately contact the borrower to inquire into the reasons for the default and agree on a plan to eliminate the delinquency. Yoma Bank's recovery team will take over the collection responsibilities of delinquent loans. Despite the fact that the Recovery Team has taken over responsibility for the collection of the delinquent accounts, the business unit shall support the Recovery Team by providing valuable information and by helping communicate with the borrower.

3.6 The Guidelines and Regulations of CBM

According to the Central Bank of Myanmar notification (17/2017) issued on 7 July, 2017, a bank shall make adequate provisions for impairment of loans, advances and other assets on and off-balance sheet whenever the impairment occurs. The specific provisions for the impairment is to be made against all outstanding balance (principle and interest) of the loans and advances, not just the past due portion.

Table (3.4) Classification of Loans and Advances and Specific Provisions

Sr. No.	Classification of loans/ advances	Days past due	Provisions on shortfall in security value
(a)	Standard	30 days past due	0%
(b)	Watch	31 to 60 days past due	5%
(c)	Substandard	61 to 90 days past due	25%
(d)	Doubtful	91 to 180 days past due	50%
(e)	Loss	Over 180 days past due	100%

Source: CBM, 2017

Loans are classified periodically in accordance with the regulations stipulated by the Central Bank and the terms and timelines of the Central Banks must be adopted.

Standard Loans: When loan is repaid in due time as determined in the contract (at the maturity date) and the financial position of the borrower is sound and payment is made in accordance with the term of the loans. The bank is to classify those loans as standard loans.

Watch Loans: The financial position of the borrower is currently adequate but potential weakness exist and if not corrected, will result in a deterioration of the borrower's financial position at a future time and principal or interest are delinquent for a period from 31 days to 60 days from the due date, those loans are defined as Watch loans.

Sub-standard Loans: When loans not adequately secured, the borrowers financial position is not satisfactory, the principal or interest has not been repaid for a period of 61 to 90 days from the due date, there is no transaction (exception of interest and bank charges) for a period of 61 to 90 days in the customer's account, such loans are defined as Sub-standard loans.

Doubtful Loans: A loan classified as doubtful has all of the characteristics of a substandard loan and credit weakness making full collection questionable and the principal and interest has not been paid for a period of 91 to 180 days from the due date, and there is no transaction (exception of interest and bank charges) for a period of 91 to 180 days in the customer's account, such loans are defined as doubtful loans.

Loss Loans: Certain assets are considered uncollected and worthless and their continuation as bankable assets is not warranted. Bad loans classified when they have the following characteristics; the financial position of the borrower clearly discloses an incapability to fulfill the conditions of repayment, the borrower has been declared a bankrupt and it involved in a liquidation process where creditors have summited their claims, and the principal and interest has not been paid for a period exceeding 181 days past due are also classified as loss loan. According to the CBM Notification No.17/2017, non-performing loans mean a loan or advance that is no longer generating income and which is classified doubtful or loss.

Delinquent loans which have been restructured should continue to be reported as 'delinquent' and at the level of delinquency which existed prior to the restructuring for a period of 6 months (the qualifying period). Once the Borrower has demonstrated ability to service the revised Terms and Conditions of the restructure over the 'qualifying period', the loan status will be returned to 'current', after which the loan should be subject to the normal ageing process for reporting purposes in the event of any subsequent default.

While the rules of the Control of Money Laundering Law waited to be enacted, Licenses of the two suspicious banks, Asia Wealth Bank and Myanmar May Flower Bank were revoked in 2005. In reports circulated that military intelligence was investigating individuals who allegedly took out large loans immediately prior to the crisis in the banks. The Irrawaddy cited reports that bank owners lent large sums of money to close friends, including members of the military, despite their lack of involvement in legitimate business dealing. Anonymous analysts were also cited as suggesting that this lending "might be one reason for the banks' lack of liquidity".

Furthermore, the CBM also requires banks to meet the following key ratios and limits. First, regarding secured exposure to a single exposure, no customer's borrowing should exceed 20% of capital and reserves. Unsecured exposure to a single borrower not permitted by CBM, Aggregate of top 10 debtors should not exceed 30% of total loan portfolio. The banks may consider exceeding the single borrower exposure ceiling under the following circumstances with the approvals of Central Bank:

1) the exposure is secured by cash collateral,

2) the exposure is secured by sovereign guarantee,
3) the exposure is secured by Central Bank Guarantee and,
4) the exposure is secured by other bank’s guarantee or standby LC.

Second, in terms of reserve requirements, 5% of deposits have to be kept as reserves of which 25% in the form of cash at hand and another 75% shall be deposited at CBM. Third, the liquidity ratio is set at 20% (liquid assets to current liabilities). And finally, the capital adequacy ratio is fixed at 8%.

The financial Institutions Supervision Department within CBM is in charge of supervision of the local banks. If a bank is not in line with CBM’s prudential ratios and limits, a penalty of one-fifth of 1% of the shortfall amount will be charged (however, this practice is not always enforced with state-owned banks). This study examines to ensure that focused bank (Yoma Bank)’s credit risk management practices compliance with CBM Law and other regulations.

CHAPTER 4

ANALYSIS OF CREDIT RISK ASSESSMENT ON LOAN PERFORMANCE OF YOMA BANK

This study presents the results obtained from the analysis of credit risk assessment on loan performance of Yoma Bank with four sections. The first section is concerned about research design for this study and the second section mentioned demographic characteristics of respondents. The credit risk assessment practices on loan in Yoma Bank are described in third section. In the last section, the effectiveness of credit risk assessment practices on loan performance of Yoma Bank is analysed.

4.1 Research Design

Research design is essentially the blue print of conducting the entire study (Ngechu, 2006). The study adopted descriptive research design as it explains the current status of a phenomenon and is concerned with finding out the what, where and how of a phenomenon (Ngecha, 2004). The objectives of the study are to identify the credit assessment practices conducted in Yoma Bank and to evaluate the effects of credit risk assessment on loan performance in Yoma Bank. To carry out these objectives, the primary data collection is used to obtain information and opinions directly from the employees who are working in the credit risk department of Yoma Bank. The study adapts the questionnaires from various part studied related to the topic and mainly used Likert scale measurement for all the variables constructed 48 questions was made to collect data.

The questionnaires were organized into two sections. Section one consisted of 5 questions regarding the demographic characteristics of employees and one question related to credit techniques used by credit staffs. Section two was designed to the practices of credit risk assessment and loan performance of Yoma bank in the proposed theoretical framework. A five-point Likert scale has been used in this section to measure credit risk assessment practices on loan performance. The scaling for independent factors is: 1 for not important to 5 for very important and the scaling for dependent factors is: 1 for strongly disagree to 5 for strongly agree were used to measure respondents agreement with the concepts under investigation questions.

As sampling method, the target population comprised of credit staffs including senior positions in risk management department at Yoma Bank. In this research, 50 employees, 68%

of total 73 employees who are working as managers, analysts, and team leaders have been approached to obtain the sampling data. After collecting the required data, the data were analyzed by using the SPSS version 22.

4.2 Demographic Characteristics of the Respondents

This section presents the profiles of selected sample employees in credit risk department in Yoma Bank. The profiles cover the employees’ gender, age, level of education, designation and working experience. All the data obtained from the questionnaires collected are interpreted and summarized in frequency distribution and percentage distribution. The frequency analysis of selected employee’s demographic data is illustrated through the table of frequency counts, and their respective percentage.

(1) Gender of Respondents

The question of gender was considered important in the study primarily because it could help the researcher get a balanced view from both males and females. Total 50 employees were responded. Table (4.1) shows the gender of respondents.

Table (4.1) Gender of Respondents

Gender	No. of Respondents	Percentage
Male	14	28.0
Female	36	72.0
Total	50	100.0

Source: Survey Data, 2019

According to the Table (4.1), the majority of the respondents were female staffs comprising 72% while there were male respondents by 28%. Therefore, this result captured that more female participated than male from credit risk department and also indicates the most dominant working group of the employees at that department in Yoma Bank.

(2) Age Group of Respondents

Ages of respondent are divided by three groups. They are age under 30 years, age between 31 and 40 years and Age over 40 years. Table (4.2) respectively shows the frequency distribution of age in year.

Table (4.2) Age Group of Respondents

Age	No. of Respondents	Percentage
Under 30 years	28	56.0
31 to 40 years	20	40.0
Over 40 years	2	4.0
Total	50	100.0

Source: Survey Data, 2019

Table (4.2) states the frequency distribution of age. The study shows that majority of the respondents were in the age of under 30 years representing 56%, followed by 40% employees fall between 31 and 40 years, and 4% of employees fall age over 40 years, respectively in term of percentage share. Therefore, the result indicates the fact that the majority working force in credit risk department of Yoma Bank.

(3) Educational Qualification of Respondents

The study sought to establish the level of education of the respondents which is a way of measuring competence. There are three levels among the respondents in the sample: Bachelor, Master Degrees and Ph.D. The following Table (4.3) shows the level of education and qualification of the respondents and their percentage.

Table (4.3) Educational Qualification of Respondents

Education	No. of Respondents	Percentage
Bachelor	36	72.0
Master	14	28.0
Ph.D.	0	0.0
Total	50	100.0

Source: Survey Data, 2019

As the result of Table (4.3), it shows that most of the respondents hold bachelor degrees with 72% and remaining 28% are holding in master degrees in different field of study. However, none of the respondents included Ph.D education level. This indicates that most of the management and operational personnel have a good level of and, they are well equipped with the information concerning risk assessment practices and understood the subject matter of the study and thus gave relevant information.

(4) Designation of Respondents

Designation status is divided into four categories; Deputy Head, manager, Team Lead and Analysts (comprising junior analysts and senior analysts). Table (4.4) shows the number of designation of respondents.

Table (4.4) Designation of Respondents

Designation	No. of Respondents	Percentage
Analyst	31	62.0
Team Lead	10	20.0
Manager	7	14.0
Deputy Head	2	4.0
Total	50	100.0

Source: Survey Data, 2019

As a result of Table (4.4), majority of respondents were Analysts representing 62% of all respondents. The remaining were Team Lead with 20%, Manager Position with 14% and Deputy Head of Department with 4%. According to the study, that most of the employees in credit risk department of Yoma Bank are Analysts, which also indicates that, in credit department has good numbers to analysts to assess the credit applications and fair numbers of mid and top management to review and decision making for credit application.

(5) Working Experience of Respondents

The length of continuous service in the bank determines to a larger degree the extent to which one is aware of the issues sought by the study. Table (4.5) shows the number of respondents by working experience.

Table (4.5) Working Experience of Respondents

Service Year	No. of Respondents	Percentage
Less than one year	6	12.0
1 – 3	17	34.0
3 – 5	15	30.0
5 – 10	9	18.0
10 years and above	3	6.0
Total	50	100.0

Source: Survey Data, 2019

From this study, most of the respondents have worked in credit department of Yoma bank for more than 3 years with 54% of the total respondents. And it could be that most of the staffs acquired sufficient experience to perform risk management activities. Less than 3 years' services indicate (46%) that the organizations have good succession plan for the risk management practice which is an important factor for Yoma Bank long term sustainability.

(6) Credit Assessment Techniques Used by Respondents

The technique of credit assessment is considered vital for credit risk assessment practices. Therefore, the study carried further analysis to the relative preference of the credit assessment processes used by credit analysts of Yoma Bank. Table (4.6) shows appraising techniques used by the respondents.

Table (4.6) Credit Assessment Techniques Used by Respondents

Type of Credit Appraisal	No. of Respondents	Percentage
5Cs	37	74.0
5Ps	1	2.0
CAMPARI	11	22.0
Credit Scoring	1	2.0
Total	50	100.0

Source: Survey Data, 2019

Table (4.6) reveals that most of the analysts responded using 5Cs of credit which representing 74% of all respondents. The CAMPARI method was also considered preferred mode of assessment, with 22% of respondents. The purpose of loan, margin of financing amount and the loan structure are considered important to monitor the credit from being default, some of analysts are beginning to use CAMPARI rather than traditional techniques 5Cs. Increased use of CAMPARI by Yoma Bank to assess borrowers was expected to lead to a further improving in loan performance.

4.3 Analysis on Credit Risk Assessment Practices of Yoma Bank

Credit risk is the potential that a bank borrower will fail to meet its obligations in relation to lending and other financial transactions. Yoma Bank is one of the many other banks and financial institution that lend money for individuals and businesses for profitability. The large stake of Yoma Bank profit is received from the interest income of lending money and related fees. But bank has a challenge of collecting money they lend which can lead to credit risk. Credit risk assessment is the process of controlling the impact of credit risk related events and involve from credit origination to monitoring and collection. Consequently, credit risk assessment and management practices are major impact on bank performance.

This section addresses the findings in respect to objective one which is to identify the credit risk assessment practices of loan in Yoma Bank. This study implies the different variables factors to investigate credit risk assessment practices: credit risk origination, Credit appraisal, credit approval and disbursement and credit risk monitoring. The practice assessment statements were ranked in terms of their means and standard deviation as a way of interpreting results.

(1) Credit Origination Practices

Banks may face different types of risks that may have potentially adverse effect on their businesses. Credit origination practices which involves the loan applications forms with borrowers' information is vital for credit risk assessment as these practices are later determined by two factors, the ability to pay and willingness to pay of the applicants.

Table (4.7) Credit Origination Practices

No	Statement	Mean	Std. Dev
1	Business and collateral inspection of the applicant should be conducted by Relationship Managers	4.20	.606
2	RMs to check years of business experiences of the loan applicants	4.12	.480
3	The profile of the management team of companies applying for loans	3.88	.773
4	Collecting information on shareholders, directors and beneficial owners for corporate customers; and management capacity of corporate customers.	4.00	.571
5	RMs and loan officers to ensure that the borrower is capable and willing to make regular repayments.	4.30	.580
6	Examines the borrower's business income and growth in the past three years	4.40	.700
7	Ensures credit repayment history/ Past Payment Record of the applicants	4.26	.487
Overall Mean		**4.17**	

Source: Survey Data, 2019

Credit origination practices are examined by Relationship Managers and loan officers to ensure the accuracy of the entire credit application submitted. They are measured by seven statements via five-point Likert scale. Table (4.7) shows the result of the respondents referencing to the loan origination practices.

As a result of Table (4.7), examining the borrower's business income and growth in the past three years is the most important factor with showing the highest mean scores of 4.40, followed by the loan officer to ensure that the borrower is capable and willing to make regular repayments is the second highest scores of 4.30. The overall mean score of credit origination practices is resulted good stand at 4.17 which reveals that the participants in Yoma bank have comprehensive knowledge and understanding on credit origination. It is the indication that these practices determine the borrower's repayment capacity and willing to make regular and timely payments and that will eventually effect on loan performance.

(2) Credit Processing/Appraisal Practices

Credit processing and appraisal practices are one of the main components of effective risk management of the bank. This section contains the findings in respect of credit screening and is measured by ten statements via five-point Likert scale. Table (4.8) shows the result of the respondents.

Table (4.8) Credit Processing/Appraisal Practices

No	Statement	Mean	Std. Dev
1	Checking the applicant's credit history whether the applicant is under blacklisted or under CBM watch-list or NPL client	4.46	.542
2	Determine the loan applicant's ability to repay a loan based on credit repayment history	4.12	.521
3	Determine the amount and purpose of loan to examine risk which has to be perceived after the loan disbursed	4.48	.646
4	Understanding risk profile of the borrower	4.08	.566
5	Forecast business operating environment of the borrower	3.92	.695
6	Ensuring adequacy and enforceability of collateral or guarantees	4.00	.495
7	Examine Financial Ratios (Debt coverage ratio, Interest coverage ratio, debt-equity ratio)	4.16	.681
8	Analysing Business and Industry risk of the borrowers	4.12	.521
9	Credit Scoring to identify credit risks and determine financial requirements on credit application	4.08	.566
10	Estimates the impact and frequency of identified risk factors	4.08	.665
Overall Mean		**4.15**	

Source: Survey Data, 2019

As a result of Table (4.8), the study findings revealed that determine the amount and purpose of loan to examine risk which has to be perceived after the loan disbursed to a very large extent representing 4.48 and checking the applicant's credit history whether the applicant is under blacklisted or under CBM sanctioned list or NPL client is representing 4.46 while forecasting business operating environment of the borrower has the lowest score 3.92. The overall mean score of credit processing/ appraisal practices is 4.15. It shows that all respondents are fairly agreed the credit processing/ appraisal practices on the effect on loan performance. Yoma Bank has implemented internal credit scoring with the information perceived from credit appraising of the traditional 5Cs or CAMPARI credit which is the key function of credit risk analysis practices.

(3) Credit Approval and Disbursement Practices

This section involves the findings in respect to credit approval and disbursement practices which sought to access the influence of credit risk control on loan performance of Yoma Bank. Credit approval and disbursement are one of the main effective credit risk management practices after assessing creditworthiness of the borrowers thoroughly. Table (4.9) shows the results of the respondents regarding the practices of loan approval and disbursement.

Table (4.9) Credit Approval and Disbursement Practices

No	Statement	Mean	Std. Dev
1	Evaluate the amount of the financing needs compared to the business size, in terms of capital, total debts and total assets.	4.06	.586
2	Evaluate the level of all debts, including the proposed loan request, compared to the equity should tell how heavy the debt burden is.	3.98	.622
3	Evaluate the impact and frequency of each identified risk factors relating to business risk, industry risk, security risk, historical financial analysis, projected financial performance and mitigating factor	4.04	.605
4	Credit applications must be documented upon approval (loan agreement, guarantees and transfer of title of collaterals)	4.48	.544
5	checklist should be maintained for identity of individual(s) and/or committee(s) involved in the decision-making process	4.02	.473
6	Disbursement should be effected only after completion of covenants, and receipt of collateral holdings, insurance cover in the institution's favor	4.26	.723
Overall Mean		**4.14**	

Source: Survey Data, 2019

As a result of Table (4.9), the study indicates regarding the activities of the risk control across the organization and whether it is in line with the regulatory body and organization risk management framework. The study findings show that evaluate the amount of the financing needs compared to the business size, in terms of capital, total debts and total assets as the highest mean score in approval practise and credit applications must be documented upon approval (loan agreement, guarantees and transfer of title of collaterals) was the highest mean score for disbursement practices. Most respondents agreed with the credit approval and disbursement practices based on the overall mean score is 4.14, which had an effect on loan performance of Yoma bank.

(4) Credit Risk Monitoring Practices

To achieve the effective loan performance, private banks need to regularly monitor the status of borrowers and re-evaluate individual credits and commitments, and their rating. Monitoring is the last step in the credit risk management process. Table (4.10) shows the results of the respondents regarding the function of credit risk monitoring. All the question statement covered to address the necessary actions for monitoring credit risk practices.

Table (4.10) Credit Risk Monitoring Practices

No	Statement	Mean	Std. Dev
1	After the loan is approved, the loan should be continuously watched over.	4.18	.523
2	Monitoring practice include keeping track of borrowers' compliance with credit terms, identifying early signs of irregularity, conducting periodic valuation of collateral and monitoring timely repayments.	4.16	.584
3	Financial condition of a borrower is regularly tracked and banks management should advised the borrower about his credit status	4.12	.521
4	collateral coverage is regularly assessed and related to the borrower's financial health	4.08	.340
5	Funds proceeds are to be used only for the purpose stated in the customer's credit application and advanced accordingly	4.38	.602
6	Relationship Manager need to continuous dealing with the customer and unexpected site visit to the proposed project.	4.12	.435
7	Identifying and monitoring the contractual payment delinquencies	4.18	.482
8	Monitoring periodic repayment of principal plus the interest	4.34	.557
Overall Mean		**4.20**	

Source: Survey Data, 2019

As a result of Table (4.10), the findings show that the similar responses from the employees resulting in all the mean values are above 4. Out of the questionnaires, funds proceeds are to be used only for the purpose stated in the customer's credit application and advanced accordingly is the highest mean score with 4.38 which reveals that monitoring of misusing the loan proceeds have impact on loan performance. The overall average score is 4.20, which is more than the midpoint on the five-point Likert scale and that indicates credit risk monitoring practices are the important factors to effect on Bank performance.

4.4 Summary Analysis on the Credit Risk Assessment Practices

Table (4.11) shows the summary analysis on the credit risk management practices on loan in Yoma bank.

Table (4.11) Summary analysis on Credit Risk Assessment Practices

Sr.	Practices	Mean Value
1	Credit Origination Practices	4.17
2	Credit Processing/Appraisal	4.15
3	Credit Approval and Disbursement	4.14
4	Credit Risk Monitoring	4.20
Overall Mean		**4.16**

Source: Survey Data, 2019

The above table (4.11) shows credit risk assessment practices on loans in Yoma Bank. As resulted overall mean value from Table (4.12), the overall mean score for credit risk monitoring practices on loan is highest ranking with M=4.20 which means that all the respondents are strongly agreed the credit monitoring practices have the dominant effect on loan performance in Yoma Bank. However, the similar ranking from respondents resulting in all the practices which means that Yoma Bank has credit staff with unique and sound knowledge on credit assessments practices. That was due to credit analysis receiving regular training on credit appraising and analysing financial situation of the borrowers. In regards to the total average mean value, M=4.16 and overall score from each practice are strongly agreed on the effect of loan performance in Yoma Bank.

4.5 Analysis on Loan Performance of Yoma Bank

This section contains an analysis on the loan performance of Yoma bank in term of credit risk assessment practices.

Table (4.12) Loan Performance of Yoma Bank

No	Statement	Mean	Std. Dev
1	Efficient credit risk management practices have been vital in preventing occurrence of bad debt and non-performing loans.	4.14	.670
2	The financial success of a bank depends on the effectiveness of credit management practices as most of the income from interest is earned on loans extended.	4.22	.790
3	Credit Analysis practice that can help to mitigate the level of risk by ensuring that borrowers are credit worthy before giving out credit.	4.18	.438
4	Credit Scoring practices can be measured the level of default by the borrower.	4.10	.416
5	By using of the credit analysis model, the bank can know the borrower's characteristics and that can effect on loan performance of a bank.	4.28	.497
6	Credit risk assessment practice can predict accurately the future capability of a borrower to meet his/her financial obligation and that can reduce the default risk in the future.	4.20	.535
7	Effective credit risk assessment practice is to identify all possible risks that are either inherent in any banking operations that may affect the bank.	4.50	.544
8	In mitigation practice, a bank can be mitigated the non-performing loan and loan losses by insurance and by taking the sufficient collateral for the loan amount	4.04	.493
9	The bank's deposit will be increased because of decrease in Non-performing loan status that can effect on loan performance in financial institutions.	4.28	.730
10	Effective monitoring practice ensures that the bank understands the current financial condition of the borrower, monitors compliance with the existing terms and conditions,	4.24	.517
Overall Mean		**4.22**	

Source: Survey Data, 2019

The effectiveness of credit risk assessment and management practices has a great impact on the performance of the loan in Yoma Bank. This study analyzes the effect of credit risk assessment practices on the loan performance of Yoma Bank. To analyse the loan performance in Yoma Bank, questions were prepared into tem statements and the results show with the overall mean score and standard deviation in the Table (4.12). Respondents were asked to indicate the extent to which they agreed to statements relating to agreement of each factors on a five-point Likert scale (5= strongly agree, 1 = strongly disagree).

As a result of Table (4.13) the overall mean score of loan performance of Yoma Bank in term of credit risk practices is 4.05. It can be concluded that all respondents are strongly agreed the credit risk assessment practices have dominant effect on loan performance of Yoma Bank.

4.6 Effect of Credit Risk Management Practices on Loan Performance of Yoma Bank

To examine the effect of credit risk assessment practices on loan performance of Yoma bank, statistical analysis of this section is included multiple linear regression analysis. It is important to consider which factors of credit risk assessment practices out of the four factors can significantly explain loan performance of Yoma Bank. In order to do this, the multiple linear regression model is applied to analyze the effect of credit risk management practices on loan performance of Yoma Bank. The output from generating multiple linear regression models is shown in Table (4.13). Details outputs can be seen in the appendix II.

One star (*) indicated the significant at 10% level, double star (**) indicated the significant at 5% level and triple star (***) indicated the significant at 1% level for t value and F value. The above results show that all the coefficients in the model are jointly significant at 1% level, which is indicated by the value of F-statistic (F = 37.963). Three credit risk practices in the model namely credit risk approval and credit risk monitoring practices are major significant factors on loan performance.

Table (4.13) Effect of Credit Risk Management Practices on Loan Performance

Credit Risk Assessment Practices	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
	B	**Std. Error**	**Beta**		
(Constant)	1.219	.315		3.876	.000
Credit Origination	.060	.091	.076	.665	.509
Credit Appraisal	-.170	.114	-.171	-1.499	.141
Credit Approval	.332**	.120	.411	2.768	.008
Credit Risk Monitoring	.495***	.115	.566	4.311	.000
N = 50Adj R^2 = .751 F = 37.963* (p-value = 0.000)**					

Source: Survey Data,2019

The magnitude of each coefficient indicates the amount of how much the score of the dependent variable will change if the score of an independent variable increases by 1 unit while other things remain unchanged. That is, if the score of credit origination practices increases by 1 unit, while other thing remains unchanged, the level of loan performance will increase by .060unit. If the score of credit appraisal practices increases by 1 unit, while other thing remains unchanged, the level of loan performance will increase by .170unit. If the score of credit approval practices increases by 1 unit, while other thing remains unchanged, the level of loan performance will increase by 0.332unit.

In terms of the magnitude of the standardized coefficient, credit risk monitoring (beta = 0.495) is relatively the most significant in explaining the loan performance and followed by credit approval practices with the second most significant (beta= 0.332) on loan performance of Yoma Bank. As the performance of the regression model, the model can explain about 75.1% of the variation of the loan performance and credit risk assessment practices.

CHAPTER 5
CONCLUSION

This chapter includes the conclusion which is based on the analysis of the results of the thesis. This chapter has been structured into three main sections: findings and discussion, recommendations and limitation for further study.

5.1 Findings

The study established that the main credit risk assessment practices conducted in Yoma Bank with background theory. The bank follows the guideline for soundness of credit risk assessment practices, state on reference theory. However, some factors are not yet described on its practice, such as credit bureau referencing. Credit information sharing through the credit reference bureaus would enable borrowers build a track record that can be used in accessing credit and thus bridge the information gap that exists between the Lenders and the borrowers. This will be especially pertinent to those borrowers in the informal who have a track record and good performance to use it to access credit. The study focuses on the credit risk assessment practices of Yoma Bank on loans. The result was based on the analysis of 68% of the total population of Credit Functions that provide the customers with credit facilities. Findings state that Yoma Bank use different credit risk management practices to ensure that techniques and assessment models manage the credit risk which have one main objective of reducing the amount of loan default which may be a principal reason for failure. Sound credit risk assessment and management practices have lower loan default ratio (bad loans).

As per research analysis, credit risk monitoring practices is mostly affected in loan performance of the Yoma Bank. The study concludes that Yoma Bank used a combination of methods to identify credit risk among the businesses. This includes checking of borrower's working experiences in operation, analyzing in financial position of borrowers carefully by calculating ratios and make industry comparison to identify risk and using the survey question for all possible risks, reviewing of past payment record, borrowers' relationship with Yoma, using audited financial statements, bank statements and identifying the risks of loss that it considers that the obligor is unlikely to pay its credit obligations. Among them, the popular method for the credit origination is reviewing the stability of the borrower's business income that is the highest mean score and the effectiveness way on the loan performance of the bank. Examining the profile of the management team of the borrowers' company was the least popular method in credit origination that is because most businesses do not have proper profile records concerning their businesses. However, starting from Aug 2018, all Myanmar Companies are required to register their company profiles on Myanmar Companies Online (MyCO). That would facilitate on credit assessing in future as RMs and analyses are able to check the applicant's profiles online.

Credit facilities in Yoma Bank are mainly secured with collaterals as land, building and machinery and personal guarantees or corporate guarantees. Personal guarantees and corporate guarantees are used in lending when the security pledged is not enough to cover the credit facilities. Bank also requires its customer to furnish bank deposits or current accounts for a period of twelve months or more before availing credit facilities to them to determine operating cash flow. The main source of repayment, cash flow generated by the business was the most popular method in risk controlling and mitigation of the Bank. Yoma bank also requires the method to follow up the financial statement periodically and visiting to customer premises (unexpectedly). Monitoring funds proceeds are to be utilized only for the purpose stated in the customer's credit application was the most commonly used method by Yoma Bank to monitor credit risk by misusing the loan proceeds. Evaluating the impact and frequency of each identified risk factors relating to business risk, industry risk, security risk, historical financial analysis, projected financial performance and mitigating factors is an effective tool for monitoring loan performance. Finally, the analysis found a positive relationship between loan performance and the credit risk assessment variables used in the study.

5.2 Suggestion

After reviewing the findings of this study, the following suggestion have been proposed to banking sector in order to improve loan performance provided by Yoma Bank in alignment with the perceptions of analysis. One of the key findings of the study was that banks usually relied on the previous historical records in determining creditworthiness of borrowers. This included records such as financial ratios and past credit history and past business performance, with highest mean score of 4.40 in credit origination practices. These factors accounted for more than 50% chance of qualifying for credit. The suggestion of the study is that the bank should integrate that would be more predictive of future performance in terms of financials and business because past historical performance may not always predict the ability of the borrower's future loan repayment abilities. It was revealed through the findings of the study that the effective credit appraisal practices are major impact on loan performance as well as bank performance.

Yoma Bank has been relying on the collaterals the secure the facilities when lending money rather than business cash flow. A better lending approach is to try to rely less on the collateral. Yoma Bank would still need collateral, but collateral is no longer the only criteria for approving or rejection a loan. In recent years, some of the banks in Myanmar are starting to lend with unsecured lending method (CGI) to Businesses and Yoma Bank is one of them. Besides unsecured lending, Yoma Bank now offers its customers with semi-secured loan which only need partial security in terms of land and building and other tangible assets. All of the credit risk assessment practices are important in banking industry.

Regarding of the respondents' survey result, they are friendly with three practices but the last practice (risk monitoring practice) is still weak and Yoma Bank need to put more effort in this credit monitoring. Though adequate precautions are taken during the assessment and sanction of a loan, a banker has to be more vigilant after sanction the loan. This is based on research findings and the bank would more come up with credit assessment practices and credit monitoring system which ensuring the bank's improving the strength of loan portfolio.

5.3 Limitation and Future Study

This study emphasized on the base of lecture notes of credit risk department and survey questions of various levels of operation and credit risk officers from Credit Functions. This study is just analyzed by using descriptive method with tables. Therefore, it is needed to continuous study by using more completely method with other analytical tools.

Credit risk assessment and management is the crucial management for not only banking industry also the whole financial institutions of Myanmar. Since this study just emphasize on Yoma Bank only, the study represented the whole banking system in Myanmar should be continuously performed.

REFERENCES

1. Anthony, A & Shadrach, O (2015), *"Determinant of Loan Default and Its Effect on Financial Performance of Commercial Banks in Ghana: A Case Study of Fidelity Bank Limited", Munich, GRIN Verlag,*
2. Beryl, A.P (2017), *"Effect of Credit Risk Management Practiceson Loan Portfolio Performance: A Case of National Bank, Eldoret Branch, Kenya", Bachelor of Commerce (Finance Opinion), The Catholic University of Eastern Africa*
3. Central Bank of Myanmar (2017), *"Central Bank of Myanmar Notification No. (17/2017)".*
4. *FMI annual report 2019*, https://fmi.com.mm/investors/annual-reports/
5. Hus Pyae Htun (2017), *"A study on Credit risk management of Co-operative Bank", Master of Banking and Finance Programme, Yangon University of Economics*
6. Khaing New Moe (2017), *"Customer Satisfaction Level of Retail Banking Practises in Yoma Bank", Master of Banking and Finance Programme, Yangon University of Economics*
7. May Kha Naing (2016), *"Effect of credit risk management on non-performing loan in Kanbawza Bank", Master of Banking and Finance Programme, Yangon University of Economics*
8. Ni Lar Hlaing (2015), *"Credit Risk Management of Myanmar Economic Bank", Master of Banking and Finance Programme, Yangon University of Economics*
9. OSEI, N. G (2015), *"Credit Appraisal Process and Repayment of Loan at GN Bank: A Case Study of Upper and Lower Denkyira", Master of Business Administration, Kwame Nkrumah University of Science and Technology*
10. Sasraku, D.A (2017) *"Credit Assessment Process and Loan Repayment – A Case Study of Fidelity Bank (HO- ACCRA), BSc. Business Administration (Banking & Finance), Catholic Institute of Business & Technology (CIBT), Ghana*
11. Srisai, C & Dr. Kankipati, S R (2014), *"Effective Credit Approval and Appraisal System: Loan Review Mechanism of Commercial Banks", Internal Journal of Innovative Research & Development, Vol 3 Issue 12*
12. U.S. Federal Trade Commission. "*A Guide to Building a Better Credit Record*. n.d."
13. www.yomabank.com
14. Zin Mar Lwin (2015), *"Credit Risk Management Practices in United Amara Bank Limited, Master of Banking and Finance Programme, Yangon University of Economics*

APPENDIX I

QUESTIONNAIRE

EVALUATON OF CREDIT ASSESSMENT PRACTISES ON LOAN PERFORMANCE IN YOMA BANK

PART A

Dear Respondents,

This questionnaire is a part of the special study, which is the curricular requirement of the students from Master of Banking and Finance, Yangon University of Economics, Myanmar. All information herein that the respondents provided in this survey questionnaire will be treated with utmost confidentiality. Please kindly answer all the questions in below survey questionnaire spread sheet. I am highly appreciated for your cooperation by spending your precious time answering it.

Please tick the choice that you made after reading the statements.

I. CHARACTERISTICS OF RESPONDENT

1. Gender of Respondent
   - a. Male ☐
   - b. Female ☐

2. Age of Respondent
   - a. Age under 30 years ☐
   - b. Age between 31 and 40 ☐
   - c. Age over 40 ☐

3. Educational Level
   - a. Bachelor ☐
   - b. Master ☐

4. Position of Respondent
   - a. Analyst ☐
   - b. Team Leader ☐
   - c. Manager ☐
   - d. Deputy Manager ☐

5. Year (s) of Service in the bank

a. Less than 1 year ☐
b. 1 – 3 years ☐
c. 3 – 5 years ☐
d. 5 – 10 years ☐
e. 10 years and above ☐

6. What type of credit appraisal techniques used by the bankto grant the loan?

a. 5C's: Capacity, Capital, Collateral, Condition and Character
b. 5P's: People, Purpose, Payment, Protection & Prospective
c. CAMPARI: Character, Ability, Margin, Purpose, Amount, Repayment & Insurance
d. Credit Scoring Model

PART B

This section concerns credit risk assessment practices by the bank.

A. Please indicate the extent to what are the main determinants that are used in the assessments of the credit worthiness of customers. Use a scale of 1-5 where,

1 - Not Important 2 -Least Important 3 - Not sure4 - Important 5 - Very Important

I. Credit Risk Assessment Practices

(A) Credit Origination Practices

Parameters	**1**	**2**	**3**	**4**	**5**
Business and collateral inspection of the applicant should be conducted by Relationship Managers					
RMs to check years of business experiences of the loan applicants					
The profile of the management team of companies applying for loans					
Collecting information on shareholders, directors and beneficial owners for corporate customers; and management capacity of corporate customers.					
RMs and loan officers to ensure that the borrower is capable and willing to make regular repayments.					
Examines the borrower's business income and growth in the past three years					
Ensures credit repayment history/ Past Payment Record of the applicants					

(B) Credit Processing/ Appraisal Practices

Parameters	1	2	3	4	5
Checking the applicant's credit history whether the applicant is under blacklisted customers or under CBM watch-list or NPL client					
Determine the loan applicant's ability to repay a loan based on credit repayment history					
Determine the amount and purpose of loan to examine risk which has to be perceived after the loan disbursed					
Understanding risk profile of the borrower					
Forecast business operating environment of the borrower					
Ensuring adequacy and enforceability of collateral or guarantees					
Examine Financial Ratios (Debt coverage ratio, Interest coverage ratio, debt-equity ratio)					
Analysing Business and Industry risk of the borrowers					
Credit Scoring to identify credit risks and determine financial requirements on credit application					
Estimates the impact and frequency of identified risk factors					

(C) Loan Approval/Disbursement Practices

Parameters	1	2	3	4	5
Evaluate the amount of the financing needs compared to the business size, in terms of capital, total debts and total assets.					
Evaluate the level of all debts, including the proposed loan request, compared to the equity should tell how heavy the debt burden is.					
Evaluate the impact and frequency of each identified risk factors relating to business risk, industry risk, security risk, historical financial analysis, projected financial performance and mitigating factor					
Credit applications must be documented upon approval (loan agreement, guarantees and transfer of title of collaterals)					
checklist should be maintained for identity of individual(s) and/or committee(s) involved in the decision-making process					

Disbursement should be effected only after completion of covenants, and receipt of collateral holdings, insurance cover in the institution's favour					

(D) Loan Monitoring/Collection Practices

Parameters	**1**	**2**	**3**	**4**	**5**
After the loan is approved, the loan should be continuously watched over.					
Monitoring practice include keeping track of borrowers' compliance with credit terms, identifying early signs of irregularity, conducting periodic valuation of collateral and monitoring timely repayments.					
Financial condition of a borrower is regularly tracked and banks management should advised the borrower about his credit status					
collateral coverage is regularly assessed and related to the borrower's financial health					
Funds proceeds are to be used only for the purpose stated in the customer's credit application and advanced accordingly					
Relationship Manager need to continuous dealing with the customer and unexpected Site Visit to the proposed project.					
Identifying the contractual payment delinquencies					
Monitoring periodic repayment of principal plus the interest					

II. Loan Performance in Yoma Bank

B. Please indicate the extent to what are the main determinants that are used in the assessments of the credit risk on loan performance. Use a scale of 1-5 where,

1 – Strongly disagree 2 – Disagree 3 - Not sure 4 - Agree 5 –Strongly agree

Parameters	1	2	3	4	5
Efficient credit risk management practices have been vital in preventing occurrence of bad debt and non-performing loans.					
The financial success of a bank depends on the effectiveness of credit management practices as most of the income from interest is earned on loans extended.					
Credit Analysis practice that can help to mitigate the level of risk by ensuring that borrowers are credit worthy before giving out credit.					
Credit Scoring practices can be measured the level of default by the borrower.					
By using of the credit analysis model, the bank can know the borrower's characteristics and that can effect on loan performance of a bank.					
Credit risk assessment practice can predict accurately the future capability of a borrower to meet his/her financial obligation and that can reduce the default risk in the future.					
Effective credit risk assessment practice is to identify all possible risks that are either inherent in any banking operations that may affect the bank.					
In mitigation practice, a bank can be mitigated the non-performing loan and loan losses by insurance and by taking the sufficient collateral for the loan amount.					
The bank's deposit will be increased because of decrease in Non-performing loan status that can effect on loan performance in financial institutions.					
Effective monitoring practice ensures that the bank understands the current financial condition of the borrower, monitors compliance with the existing terms and conditions,					

Thanks for taking of your time to complete the questionnaires.

APPENDIX II

Descriptive Statistics

	Mean	Std. Deviation	N
Loan Performance	4.2180	.32368	50
Credit Origination	4.1657	.40751	50
Credit Processing	4.1500	.32404	50
Credit Approval	4.1400	.40034	50
Credit Risk Monitoring	4.1950	.36957	50

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Credit Risk Monitoring, Credit Processing, Credit Origination, Credit Approval[b]	.	Enter

a. Dependent Variable: Loan Performance
b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.878[a]	.771	.751	.16149	1.954

a. Predictors: (Constant), Credit Risk Monitoring, Credit Processing, Credit Origination, Credit Approval

b. Dependent Variable: Loan Performance

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.960	4	.990	37.963	.000[b]
	Residual	1.174	45	.026		
	Total	5.134	49			

a. Dependent Variable: Loan Performance
b. Predictors: (Constant), Credit Risk Monitoring, Credit Processing, Credit Origination, Credit Approval

Coefficients[a]

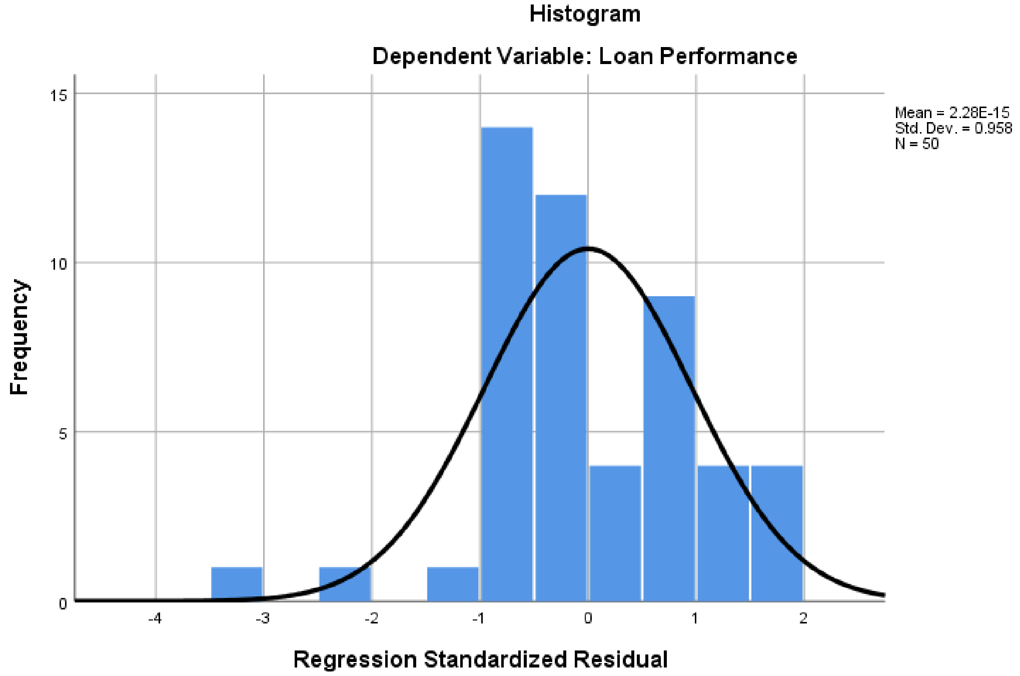
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.219	.315		3.876	.000		
	Credit Origination	.060	.091	.076	.665	.509	.388	2.580
	Credit Processing	-.170	.114	-.171	-1.499	.141	.392	2.550
	Credit Approval	.332	.120	.411	2.768	.008	.230	4.341
	Credit Risk Monitoring	.495	.115	.566	4.311	.000	.295	3.388

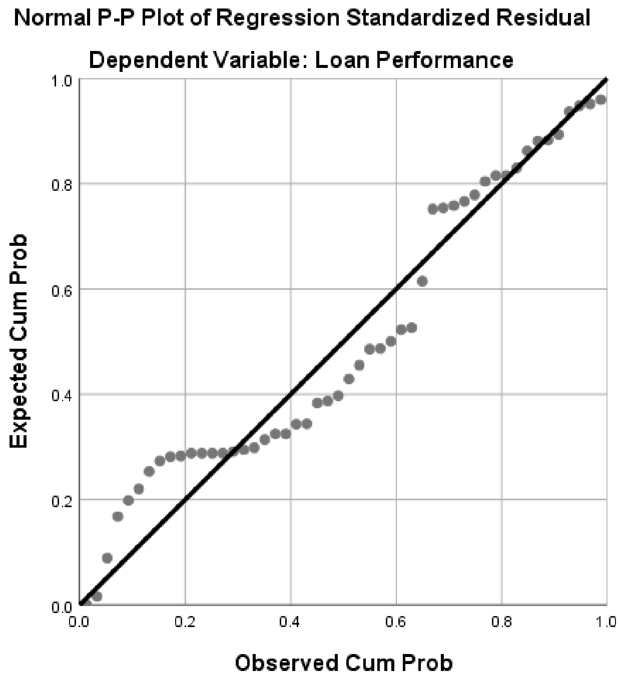
a. Dependent Variable: Loan Performance

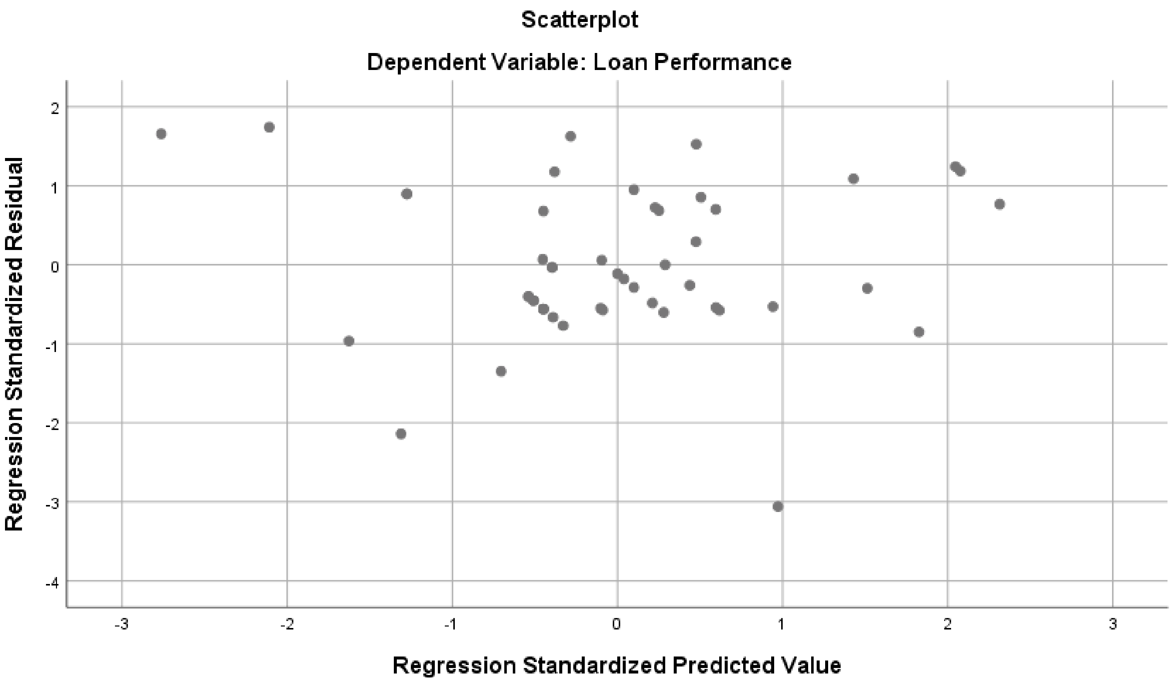
Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.4326	4.8761	4.2180	.28429	50
Residual	-.49430	.28121	.00000	.15476	50
Std. Predicted Value	-2.763	2.315	.000	1.000	50
Std. Residual	-3.061	1.741	.000	.958	50

Charts






Scatterplot
Dependent Variable: Loan Performance
Regression Standardized Residual
Regression Standardized Predicted Value
2
1
0
-1
-2
-3
-4
-3
-2
-1
0
1
2
3