EFFECT OF NON-PERFORMING LOANS ON FINANCIAL PERFORMANCE OF AYA BANK

This thesis paper is submitted as a partial fulfillment towards the requirements for the degree of Master of Banking and Finance (MBF)

Supervised by	Submitted by
Daw Khin Nwe Ohn	Phyo Phyo Khaing
Associate Professor	Roll No. MBF 48
Department of Commerce	EMBF (5th Batch)
Yangon University of Economics	(2017-2019)

DECEMBER 2019

ABSTRACT

The objectives of the study are to explore the major causes of non-performing loans and to examine the effect of non-performing loans on financial performance of AYA bank. AYA bank has 258 branches and 507 credit officers. The study selected sample 100 credit officers from 55 branches which is 20% from target population. The study used random sampling method to select the sample and used the structured questionnaires to collect the data. Descriptive statistics was used to explore the causes of non-performing loans and multiple linear regressions were used to analyze the effect of non-performing loans on financial performance. As a result, the study revealed that borrowers can't afford to pay the interest rate and the additional charges to get the loan, weakness in credit risk assessment procedure, lack of contact with borrowers within the lending period and insufficient insurance on collateral were the major causes of non-performing loans. Analyzing the effect of non-performing loans on financial performance, it is found that asset quality of bank is satisfied and there is no sharply increase in liability of bank by provision. Moreover, it also found that interest margin has been increasing and bank can generate the return. This study suggested that bank should make quality loan because the lending capacity is increasing year by year. To lend the more quality loan, bank should establish effective risk assessment procedure and frequent contact with borrowers to check whether they use the loan as proposed purpose or not. Moreover, bank should have the credit history of borrowers and made sufficient insurance on collateral to recover from the loan loss.

ACKNOWLEDGEMENTS

Primarily, I would like to express my gratitude to Prof. Dr. Tin Win, Rector of Yangon University of Economics, and Prof. Dr. Nilar Myint Htoo, Pro-Rector of Yangon University of Economics for giving me the opportunity to do this thesis as requirement of master degree.

I would also like to acknowledge and thank Prof. Dr. Soe Thu, Professor and Head of the Commerce Department, Yangon University of Economics, for helping me to accomplish this study and for her invaluable advices, thoughtful comment and support for my research.

I would like to express my sincere thanks and deep respect to my supervisor, Daw Khin Nwe Ohn, Associate Professor, Department of Commerce, Yangon University of Economics, for her kind guidance, great supervision and invaluable suggestions and for spending her precious time in reading and correcting this paper to accomplish on time. Then I would like to thank all Professors and Lecturers who taught us fruitful subjects and gave invaluable lecture for the period of my academic years.

Finally, I would like to thank my friends and my family for their support during all my years of academic studies.

TABLE OF CONTENTS

			Page
ABSTRACT			**i**
ACKNOWLEDGMENT			**ii**
TABLE OF CONTENTS			**iii**
LIST OF TABLE			**vi**
LIST OF FIGURES			**vii**
LIST OF ABBREVIATIONS			**viii**
CHAPTER	**1**	**INTRODUCTION**	1
	1.1	Rationale of the Study	2
	1.2	Objectives of the Study	3
	1.3	Scope and Method of the Study	3
	1.4	Organization of the Study	3
CHAPTER	**2**	**LITERATURE REVIEW**	
	2.1	Loan Classification and Provisioning	4
	2.2	Non-Performing Loans	6
	2.3	The Important of NPLs in Commercial Banks	7
	2.4	Causes of Non-Performing Loans	8
		2.4.1 Interest Rate and Fees	8
		2.4.2 Loan Size and Appraisal Technique	9
		2.4.3 Repayment Capacity and Monitoring	9
		2.4.4 Collateral Value and Collateral Type	10
	2.5	Financial Performance of a Bank	10
	2.6	Non- Performing Loans and Financial Performance of Commercial Banks	11

Page

			Page
	2.7	Determinants of Financial Performance of Banks	12
		2.7.1 Capital Adequacy	12
		2.7.2 Liquidity Management	13
		2.7.3 Leverage	14
	2.8	Previous Studies	14
	2.9	Conceptual Framework of the Study	16
CHAPTER	**3**	**BACKGROUND STUDY OF AYA BANK**	
	3.1	Profile of AYA Bank	18
	3.2	Types of Loan Product	19
	3.3	Lending Procedure of AYA Bank	21
	3.4	Credit Monitoring of AYA Bank	23
	3.5	Debt Recovery of AYA Bank	23
CHAPTER	**4**	**EFFECT OF NON-PERFORMING LOANS ON FINANCIAL PERFORMANCE OF AYA BANK**	
	4.1	Research Design	24
	4.2	Demographic Data of Respondents	25
	4.3	Occurrences of Non-Performing Loans	26
	4.4	Causes of Non-Performing Loans	28
	4.5	Assessment of the Reliability of the Scale	32
	4.6	Financial Performance of AYA Bank	33
	4.7	Effect of Non-Performing Loans on Financial Performance of AYA Bank	34

			Page
CHAPTER	**5**	**CONCLUSION**	
	5.1	Findings	37
	5.2	Suggestion	38
	5.3	Needs for Further Study	39
REFERENCES			41
APPENDIX			ix

LIST OF TABLES

Table No.	Particular	Page No.
2.1	Loans Classification and Provisioning	6
4.1	Number of Respondents by Gender	25
4.2	Number of Respondents by Year of Experience in Current Organization	25
4.3	Number of Respondents by Year of Experience in Credit Department	26
4.4	Number of Respondents by Delinquent Loan Type	26
4.5	Number of Respondents by Delinquent Collateral Type	27
4.6	Number of Respondents by Delinquent Stage	27
4.7	Number of Respondents by Default Type	28
4.8	Interest Rate and Penalty Fees	29
4.9	Loan Size and Appraisal Techniques	30
4.10	Repayment Capacity and Monitoring	30
4.11	Collateral Value and Collateral Type	31
4.12	Results of Cronbach's Alpha Value	32
4.13	Financial Performance of AYA Bank	33
4.14	Regression Analysis of Effect of Non-Performing Loans on Financial Performance	34

LIST OF FIGURES

Figure No.	Particular	Page No.
2.1	The Effect of NPLs on Financial Performance of Banks	15
2.2	Conceptual Framework of the Study	16

LIST OF ABBREVIATIONS

NPL	Non-Performing Loan
GDP	Gross Domestic Product
CBM	Central Bank of Myanmar
CAR	Capital Adequacy Ratio
SME	Small and Medium Enterprise
ROI	Return on Investment
ROE	Return on Equity
ROA	Return on Asset
UNGC	United Nations Global Compact
IFRS	International Financial Reporting Standards
HP	Hire Purchase
MFI	Micro Finance Institution

YANGON INSTITUTE OF ECONOMICS

DEPARTMENT OF COMMERCE

MASTER OF BANKING AND FINANCE PROGRAMME

EFFECT OF NON-PERFORMING LOANS ON FINANCIAL PERFORMANCE OF AYA BANK

PHYO PHYO KHAING

(EMBF 5 th BATCH)

DECEMBER, 2019

CHAPTER (1)
INTRODUCTION

Commercial banks play a crucial role in the financial sector of any country in the world due to their financial intermediation. Lending is the core function of commercial bank and most of the income or revenue can generate from it. Therefore, quality loans are important for banks and healthy loan portfolio is vital for banks. Some of the borrowers become defaulters and absent to pay the charges upon the loan. Finally, these loans become as non-performing loans (NPLs) unfortunately and bad debt with adverse consequences. Non-performing loans are also described as loans in arrears for at least ninety days (Guy, 2011). If the banks accumulated a large amount of non-performing loans, the banks deteriorated in interest income. As a result of non-performing loans, they can decline the assets quality of banks and it can increase the liability of banks.

The issue of default loans threatens the sustainability of banks and it becomes an increasing problem for banking sector. Non-performing loans can deteriorate the bank's balance sheet and it can adversely affect the financial performance. Good financial performance of commercial banks can result a sound and sustainable financial sector. In a country, the sound financial sector is essential for economic development. Poor financial system can lead to downturn economy. When the banks cannot generate the income and cannot create sustainable development, it can become bank runs and financial crisis. So, NPLs are major issues for banks and should establish effective credit risk assessment to cover the effect of NPL. The causes of non-performing loans are multi-dimension and it cannot be uniform. There is a negative relationship between the non-performing loans and performance efficiency (Krueger et al, 1999).By managing the NPL effectively: it can improve the profitability of bank and economic efficiency.

There are many factors which can affect the financial performance of bank, apart from non-performing loans. Bank performance is determined by micro level factors (capital adequacy, liquidity and asset quality) and macro level factors (inflation and GDP).One of the obvious things to determine the financial performance is asset quality of bank and it is the one of the determinants factors of the healthiness of financial institution. The increase in the NPL ratio i.e., the total NPL to total gross loans has further been referred to as the failure of credit policy (Saba, Kouser, & Azeem, 2012). Therefore, poor management on NPLs, it can lead to banking failure and generate terrible effect on survival and growth of the whole banking system.

1.1 Rationale of the Study

Myanmar's banking sector is fast growing and some of the loans given out by banks become non-performing loans. NPL be a warning of the banks' success. Banks accept deposit from public and lend this deposit as loans to borrowers. Therefore, loans fully depend on public deposits. If the bank losses in lending, it will also threaten to loss the public deposit and sustainability of bank. As a result, it can also affect the operational efficiency of the bank, profitability and liquidity

In July2017, the CBM issued the new prudential regulation which is to implement the Basel II standards. The main objectives of this regulation is to shift from a collateral based lending to risk based lending system, which can shape the better financial system and develop the banking sector. One of the most important of the prudential measures is to design the banks shift away from their traditional lending style. In earlier period, banks gave out the loans by accepting the land and building as collateral and made only overdraft loans. Overdraft loans are short term loans and borrowers need to make renewal after one year. According to prudential regulation, banks shift away from granting only overdraft and need to manage the proper loan portfolio. Moreover, banks have to assess the credit risk, business plan and cash flow of borrowers before lending. While implementing the risk based lending system, banks can face many challenges especially loans default. As a result of complying CBM's regulation and changing the risk based lending system, the default amount of loan has increased immediately and the percentage of NPL has increased significantly.

AYA bank is one of the leading banks and it also encountered with the challenge of a growing non-performing loan portfolio. The ratio of NPL is associated with the soundness of bank. The higher NPL ratio can affect the performance of bank. NPL ratio has a strong negative relationship with asset quality, operational efficiency and financial performance. The poor asset quality has a negatively effect on profitability and it can diminish the interest income due to increase loan provisioning.

The healthiness and soundness of banking system can determine from the percentage of NPLs. The higher non-performing loans describe that banks have weakness in credit collection. That may lead to deteriorate the revenue and finally it can become

bank closures. Therefore, the study focuses on identifying the causes of non-performing loans and the effect of NPLs on financial performance.

1.2 Objectives of the Study

The objectives of this paper are as follows:

(i) To explore the major causes of non-performing loans in AYA bank.

(ii) To examine the effect of non-performing loans on financial performance of AYA bank.

1.3 Scope and Method of the Study

The data collected for the study consisted of primary and secondary data. Structure questionnaires were used in the primary data collection. This study adopted the random sampling method. AYA bank has (258) branches and (507) credit officers. The study selected (100) credit officers from (55) branches from the entire population of branches. This sample forms about 20% of the total population and they had varied experience in credit administration. The secondary data were obtained from website and published annual reports of AYA bank. The secondary data covered a period of five years from years 2014 to 2018. The study adopted regression analysis and focused to find out the effect of non-performing loans on financial performance of AYA bank.

1.4 Organization of the Study

This paper organized into five chapters: Chapter 1 consists of introductory elements to provide basic understanding as rationale of the study, objectives of the study, method of the study. Chapter 2 reviews literature on non-performing loans, how loans are classified and provisioning, causes of NPLs and determinants of financial performance of banks. Chapter 3 includes the brief profile of AYA bank and its products. Chapter 4 of the thesis will present analysis part of the study on causes of NPL, the effect of non-performing loans on financial performance. Chapter 5 contains findings, suggestions and areas for further study.

CHAPTER (2)
LITERATURE REVIEW

Literature review involved examination of books, magazines, journals and past studies that have been done on nonperforming loans and their effect on financial performance of organizations as well as the various theories that support the study.

2.1 Loan Classification and Provisioning

Assets are classified into five categories (i) standard (ii) watch (iii) substandard (iv) doubtful (v) bad debt. All loans and credit facilities should be classified in the following manners.

(i) **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.

(ii) **Watch Loans:** The financial position of the borrower is currently adequate but potential weaknesses exist and if not corrected, will result in a deterioration of the borrowers' 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 irregular loans or watch loans.

(iii) **Sub-standard Loans:** When loans not adequately secured, the borrower's 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, such loans are defined as sub-standard loans.

(iv) **Doubtful Loans:** A loan classified as doubtful has all the characteristics of sub-standard loan and credit weakness making full collection questionable and the principal or interest has not been repaid for a period of 91 to 180 days from the due date, such loans are defined as doubtful loans.

(v) **Bad Debt Loans:** Certain assets are considered uncollectible and such little value that the continued definition as bankable assets is not warranted. This classification does not mean that an asset has absolutely no recovery or salvage value, but rather that it is neither practical nor desirable to defer the process of writing it off, even though recovery may be possible in the future. Non-performing assets that are at least 181 days past due are also classified as losses, unless such assets very well secured.

A bank shall make adequate provisions for impairment of loan, advances and other assets on and off-balance sheet whenever impairment occurs. The specific provisions for the impairment is to be made against all outstanding balance (principal and interest) of the loans and advances, not just the past due portion.

In July 2017, the Central Bank of Myanmar ('CBM') introduced a fresh set of four regulations (Notification16-19/2017 pertaining to capital adequacy, asset classification and provisioning, large exposure and liquidity ratio requirement respectively).The four regulations would eventually send shockwaves through the banking industry.

The new Asset Classification and Provisioning Regulations(Notification 17/2017) stated at section 11 that a bank shall ensure that all overdraft loans(such term not being defined) in its books are cleared/paid off in full for a period of two weeks annually. Section 12 went on to state that if an overdraft loan is not cleared/paid in full, such loan must be immediately classified and made specific provision for per the manner mentioned at section 5 in the Regulation.

Section 5 classified loans and advances and specific provisions. A bank shall classify and make specific provisions in the following manners:

Table 2.1 Loans Classification and Provisioning

Sr.No	Classification of Loans/ Advances	Days Past Due	Provision 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.	Bad Debt	Over 180 days past due	100%

Source: Central Bank of Myanmar

2.2 Non-Performing Loans

A loan is non-performing when payments of interest and principal are past due by 90 days or more, or at least 90 days of interest payments have been capitalized, refinanced or delayed by agreement, or payments are less than 90 days overdue, but there are other good reasons to doubt that payments will be made in full. It is a worldwide issue that NPLs affects the stability of financial markets in general and the viability of the banking industry in particular. Njure(2014), argues that initially, NPLs may not seem to have a serious negative effect. Banks remain liquid and depositors retain their confidence in the system. Overtime, however, the size of the problem grows, especially if banks are allowed to accrue interest on their non-performing loans. It may also be that at least 90 days of interest payment have been capitalized, refinanced or delayed by agreement, or payment are less than 90 days overdue, but there are other good reasons to doubt that payment will be made in full. Therefore, the bank has always given provision for the loans that the principal and interest has not yet paid according to the original agreement.

Alton and Hazen (2001) described non-performing loans as loans that are ninety days or more past due or no longer accruing interest. Caprio and Klingebel (1990) cited in Fofack (2005), consider non-performing loans as loans which for a relatively long period of time do not generate income, that is both the principal and interest on these loans remain unpaid for at least 90 days. Non-performing loans may also refer to one that is not earning income and full payment of principal and interest is no longer anticipated,

principal or interest is 90 days or more or the maturity date has passed and payment in full has not been made.

Non-performing loans (NPLs) are important because they affect the financial intermediation of commercial banks which constitute the bank's main source of their income, and ultimately, the financial stability of an economy (Fafack, 2013). For this reason, NPLs have increasingly gained attention recognizing that a consequence of large amount of NPLs in the banking system is bank failure as well as a symptom of economic slowdown. This is largely because the financial performance of any commercial bank is measured in terms of profitability and NPLs have a direct- adverse impact on the bottom line due to the provision which the bare forced to make on account of NPLs (Ezeoha, 2011).

According to Hou(2012), a simple definition of non-performing loans is: A loan that is not earning income and full payment of principal and interest is no longer anticipated. Loans whose interest or principal payments are longer than three months in arrears of lending conditions are eased. The banks make 5%, 25%, 50% and 100% provision for the unsecured portion of the loans classified as substandard, doubtful and bad debt respectively.

2.3 The Important of NPLs in Commercial Banks

Non-performing loans (NPLs) are important because they reflect the credit quality of the loan portfolio of banks, and in aggregate terms, reflect the credit quality of the loan portfolio of the banking sector in a country. The maintenance of asset quality, efficiency and profitability is a vital requirement for the survival and development of commercial banks. The weakening of a bank's asset quality is not only financial threatening for the banking system but this may also lead to a decrease in economic efficiency, impair social welfare and weaken economic activity (Ghosh, 2015). Loans are the main asset class from which banks generate their major portion of income and also constitute the greatest risk to banks. According to Messai and Jouini (2013) , the decrease in the quality of loans is the key source to issues in the banking system of most advanced economies. Mwengei and Garissa (2013) highlighted that prevalence of NPLs poses as a main risk to the banking sector.

According to Khemraj and Pasha (2009), there have been significant indications that the financial crises in East Asia and Sub-Saharan Africa were signaled by high level of NPLs. Since NPLs signify bad loans in which borrowers have been unsuccessful in meeting their payment obligations, the theme of NPLs has attract attention in recent decades. Increasing levels of NPLs are an indicator of a vulnerable financial system and furthermore a worrisome sign to bank authorities and regulators (Farhan, 2012). Additionally, an increase of NPLs in the credit portfolio may also hinder banks from achieving their set targets and objectives.

NPLs can be attributed to management efficiency in terms of evaluating borrowers and determination of quality/ riskiness of loans extend. All the losses arising from NPLs are summed up to the final financial performance of an entity. The non-payment of interest or principal reduces cash flow for the lender, which can disrupt budgets and decrease earnings. Loan loss provisions, which are set aside to cover potential losses, reduce the capital available to provide subsequent loans. Once the actual losses from defaulted loans are determined, they are written off against earnings which consequently sum up in the final financial performance (Umar and Sun, 2016).

2.4 Causes of Non-Performing Loans

This section described the causes of non-performing loans : (i) interest rate and fees (ii) loan size and appraisal techniques (iii) repayment capacity and monitoring and (iv) collateral value and collateral type.

2.4.1 Interest Rates and Fees

Lending money is perhaps the most important of all banking activities, for the interest charged on loans is how the banks earn cash flows. Interest rate is the price a borrower pays for the use of money they borrow from a lender/ financial institutions or fee paid on borrowed assets (Collins and Wanjau, 2014). Cost of loan includes the principal repayments and interest rates are agreed at the same time of the loan application. Bank lends a certain percentage of the customer deposits at a higher interest rate than it pays on such deposit. Interest rate is normally differentiated according to creditworthiness of borrowers and objectives of financing. Any increase in lending rate weakens the loan repayment capacity of the borrower thereby resulting to an increase in the bad loans and

NPLs with the banking sector. Many researchers found that lending interest rate has a direct positive relationship with NPLs (Khemra and Pasha,2009 ; Farhan et al., 2012).

2.4.2 Loan Size and Appraisal Technique

Loan size and loan policies are believed to influence default of loans to a great extent. Well formulated loan policies are believed to have inversely proportional relationship with loan default. Whereas poor loan policies are believed also to have directly proportional relationship with loan default. Preliminary loan appraisals determine whether a loan will be defaulted or not. The default mostly arises involves when customers use false information or means to acquire loans from the lending institutions. These might also include accepting or giving securities whose values have been impaired and overstated. Some borrowers who might have falsified their past business performance records in order to obtain loans would not be able to repay easily later. It can be ascertained from the above mentioned that initial loan appraisal includes the core five ingredients of loan appraisal. This comprises of tests on accuracy, collaterals, honesty, capacity and cash flow to determine credit worthiness and the probability of loans default (Nsobilla, 2015).

Credit appraisal techniques are methods that are employed by commercial banks when assessing the credit worthiness of a prospective borrower. These techniques usually vary, depending on determinants such as the size and maturity of the loan, the operation record of the business, security offered and previous relations with the borrower. Successful and effective credit appraisal process determines the success of the credit appraisal process would contribute to high levels of non-performing loans. Weak credit appraisal process is one of the factors that lead to high levels of non-performing loans (Kanyiri,2005)

2.4.3 Repayment Capacity and Monitoring

The repayment period of loans is determined on the basis of the liquidity position of each borrower and the economic life of the investment. Repayment schedules must be made flexible so that it should be adjustment to borrower's cash flow pattern. In addition to this credit policy instruments, some relevant lending principles are used by banks as their guiding principles (Zena, 2013).These include borrowers' perceived need, competence or repayment capacity and personal character. According to William (2014),

there are certain criteria that most lenders require the business owner to meet in order to successfully acquire the funds needed for the business. These hurdles or requirements are generally categorized as: good credit, equity, experience, business plan and collateral.

The banks, which incur more expenses on monitoring and assessing the borrowers, are less efficient in financial operations but these banks have lower NPLs (Hughes et al,1996).The banks need to give their borrowers full attention, so they are not relaxed at any stage about repayment of their loans. It has been seen that less monitoring of borrowers lead to NPLs (Agresti et al,2008).

2.4.4 Collateral Value and Collateral Type

Collateral, according to William (2007), is any asset of value that can be pledged by the borrowers as security that the loan will be re-paid in full and with interest. Collateral assets can be in the form of real property owned, inventory of the business, cash savings or deposits, stocks/ bonds equity in home equipment and like assets both tangible and non-tangible. The value to be placed on a collateral asset in the securing of a business loan is usually estimated or appraised by the lending institute. Collateral is something valuable which is pledged to the bank by the borrower to support the borrower's intention to repay the money advanced. Security is taken to mitigate the bank's risk in the event of default and is considered a secondary source of repayment (Koch & MacDonald, 2003). Rose and Hudgins (2005) define secured lending in banks as the business where the secured loans have a pledge of some of the borrower's property (such as home or vehicles) behind them as collateral that may have to be sold if the borrower defaults and has no other way to repay the lender.

2.5 Financial Performance of a Bank

Financial performance, in broader sense, refers to the degree to which financial objectives being or has been accomplished and is an important aspect of financial risk management. It is the process of measuring the results of a firm's policies and operations in monetary terms. The study of the stability of the financial sector has become the basis of most macroeconomic policy across the globe, (Vogiazas & Nikolaidou, 2011). This is especially true for economies world over because of the global financial crisis. According to Waweru and Kalani (2009), crises do not occur without warning signs of financial crises are proxies for the vulnerability of the banking and corporate sector. The most

obvious indicators in the view that can be used to predict banking crises are those that relate directly to the soundness of the banking system. It is the goal of every banking institution to carry out its operations profitably so as to maintain stability and sustainable growth (Warue, 2013). This goal is, however, usually deterred by a variety of macro and micro-economic factors (Warue, 2013).

The size of non-performing loans in commercial banks defines how viable they are. Non-performing loan serves one of the major financial performance determiners of commercial banks. According to Mwangi (2014), there is an opposite relationship between banks financial performance and non-performing loans. NPL in loan portfolio affect operational efficiency which in turn affects profitability, liquidity and solvency position of banks.

2.6 Non-Performing Loans and Financial Performance of Commercial Banks

Over the past, a strong association has been established between NPLs and banking crises. In a majority of the economies that have collapsed over the years, financial crises were preceded by credit risk. According to Khemraj (2005) and Vhimisai (2012), banking crises in East Asia and Sub- Saharan African countries were preceded by high NPLs.

Loan performance is tightly linked to the economic cycle. Thus, increase in NPLs increased the severity of the recession for a number of countries (Khemraj, 2005). In the United States, the level of non-performing loans started to increase substantially in 2006 in all sectors before the sub-prime mortgage market collapsed in August 2007 (Greennidge & Grosvenor, 2010). In the study of the Japan bubble burst, Nishimura (2001) concluded that some of the loans made to companies became non-performing. The Pakistani banking system is another illustration of the woes that face financial institutions of many developing economies. Like other countries in its category, the most destructive problem facing Pakistan in regards to its banking sector is the enormous amount of NPLs (Farhan, 2012). According to Masood (2009) in Farhan (2012) the volume of Non-performing loans in Pakistan are harming the Pakistani banking sector and hampering the country's economy (Khemraj, 2014).

On the other hand, Berger and DeYong (1996) also suggest that efficiency of the banking firms might affect the non-performing loans in the banking industry. The bad

management hypothesis was developed to explain this relationship. Auronen (2013), argued that bad management of the banking firms will result in banks inefficiency and affect the process of granting loans. The banks' management might not thoroughly evaluate their customers' credit application due to their poor evaluation skills. In addition, the problem of asymmetric information between lenders and borrowers further complicates the matter, (Fofact, 2013). Besides that, the management might not be efficient in managing loan portfolios. Consequently, this leads to lower credit ratings for the approved loans and high probability of default resulting in higher non-performing loans. Therefore, banks poor quality management, the quality of assets and others factors might lead to high non-performing loans.

2.7 Determinants of Financial Performance of Banks

High returns and minimal costs are the major objectives of the business organizations; this is achieved by designing good corporate strategies aimed at improving the financial performance. Financial performance plays a vital role in realizing this objective. It will test the strength and weakness of the commercial banks.

Alanazi et al., (2011) state that the financial performance is a subjective measure of how well a firm can use assets from its primary mode of business to generate revenues. Financial performance, in a broader sense, refers to the degree to which financial objectives being or has been accomplished and is an important aspect of finance risk management. It is the process of measuring the results of a firm's policies and operations in monetary terms. It is used to measure firm's overall financial health over a given period of time and can also be used to compare similar firms across the same industry or to compare industries or sectors in aggregation (Kilama, 2011). There are several indicators to measures the financial performance such as liquidity, efficiency and leverage but for this study, non-performing loans, capital adequacy ratio, liquidity ratio and leverage ratio has been prioritized.

2.7.1. Capital Adequacy

Capital is the amount of owner's equity fund available to support the bank's business and act as a buffer in case of adverse situation (Athanasoglou et al. 2005). Banks capital creates liquidity for the bank since customer deposits are fragile and prone to bank runs. Moreover, larger equity capital for the banks reduces chances of financial distress

(Diamond, 2000). Capital adequacy is the level of capital required by the banks to curtail such risks as credit, market and operational risks they are exposed to.

Capital adequacy is judged on the basis of CAR (Capital Adequacy Ratio) (Dang 2011). Capital adequacy ratio illustrates the internal strengths for a bank to survive during loss crisis. It also has a direct effect on the profitability of banks since it determines the expansion ability to risky but profitable portfolios (Sangmi and Nazir, 2010).

Capital is the amount of own funds that a bank has to fund its activities and can be used as a safeguard in case of unfavourable changes in the environment (Athanasoglou et al., 2008). Ongore and Kusa (2013) explain that enough capital is necessary for liquidity purposes as bank deposits can be susceptible to bank runs. Capital adequacy is ,thus, an indication of a bank's capital strength in terms of insolvency risk. Capital adequacy ratio (CAR) is commonly expressed by the sum of Tier I Capital and Tier II Capital as a percentage of a bank's risk weighted assets (Swarnapali, 2014). Capitalization is another indicator of capital adequacy measured by the ratio of shareholders' equity to total assets of a bank (Onuonga, 2014). This shows the extent to which a bank's assets are financed by the owners' funds (Obamuyi, 2013 With regards to the relationship between capital adequacy and bank performance, generally banks with low capital ratio are considered more risky than those with higher capitalization, especially in the case of a financial crisis, and thus adverse implications for bank performance (Onuonga, 2014).

2.7.2 Liquidity Management

Liquidity is one of the factors that determine a bank's performance level. It refers to the capability of a bank to fulfill its short term obligations, mainly of depositors. Liquidity in the banking system is defined by the Basel Committee on Banking Supervision (BCBS)as the ability of a bank to have available cash or to readily find cash in order meet its obligations when they come due, without incurring any unexpected losses(BCBS, 2008). The banks' assets and the related liquidity obligations are very important because they can determine the weaknesses and strengths that are related to the ability of the institution to settle its obligations at a timely manner. In addition, a solvent bank can settle its liabilities when they come due by selling off its assets. If a bank has high liquidity then these sells will not incur any unexpected losses but on the other hand, if the bank has liquidity problems then the sale of these assets could lead to insolvency. Cash holdings in currency or on accounts at any

central bank can be sources of liquidity and in addition, another form of liquidity are highly creditworthy securities like government bills and other securities with short-term maturities. Moreover, short-term securities are relatively safer than other and can be traded in liquid markets which means that these securities can be sold at large volumes without incurring losses due to price changes.

According to Dang (2011), sufficient liquidity is positively correlated to banks' profitability. Some of the ratios that can explain liquidity strength are; customer deposit to total assets ratio and total loans to customer deposits. Insider lending and director's imprudent appropriation of loans and other funds have led to their failure.

2.7.3 Leverage

Financial leverage describes the relation between owner's funds and borrowed funds that makes up a firms capital structures. Financial leverage can also be defined as utilization of a third party's funds to finance a firm that might lead to an increase in operating profit and taxes (Barakat, 2014).

Debt leverage is measured by the ratio of total debt to equity (debt/equity). It shows the degree to which a business is utilizing borrowed money. Leverage is not necessarily a bad thing as it can be useful to fund company growth and development through the purchase of assets. However, if the company has too much borrowing, it may not be able to pay back all of its debts.

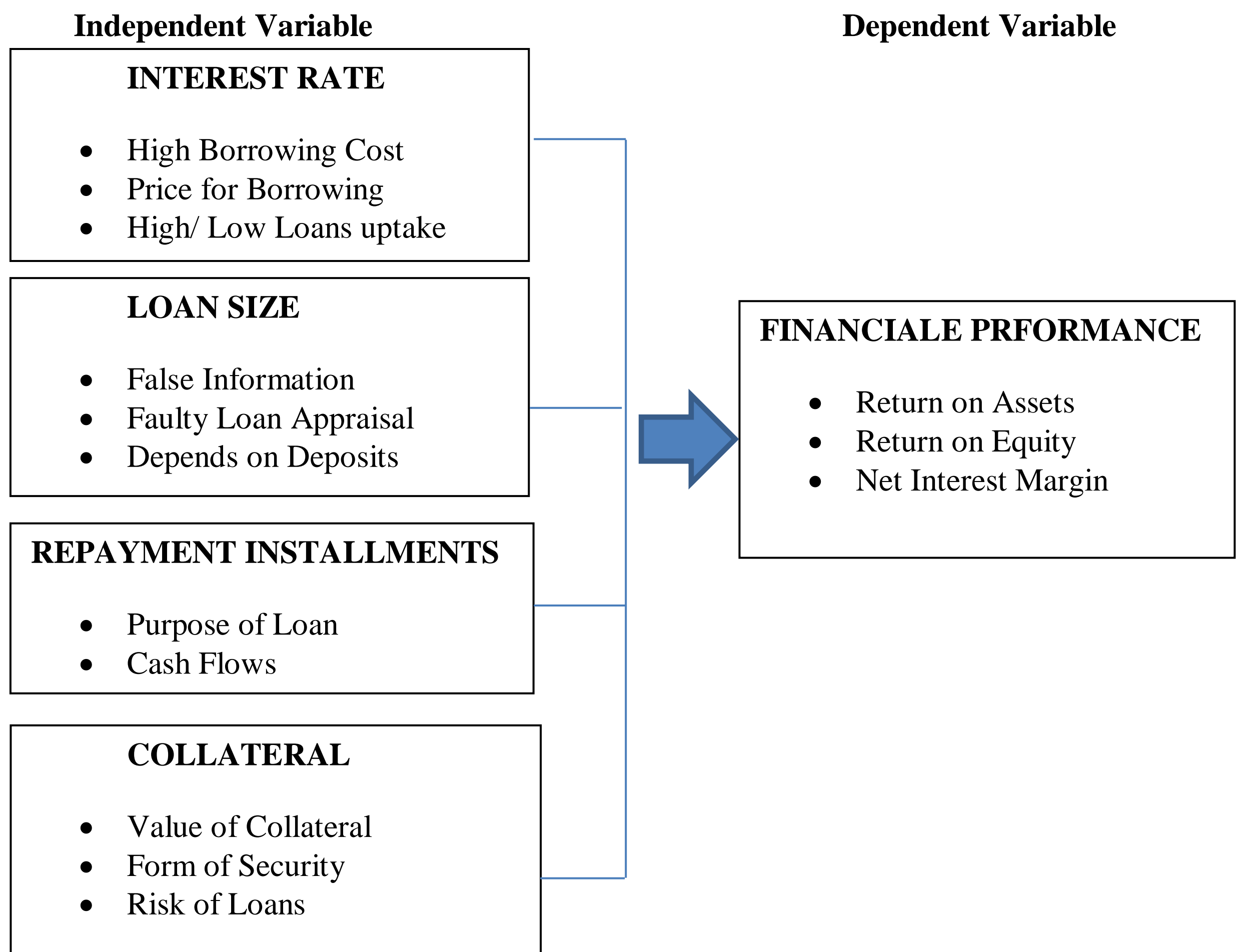
The trade-off theory (TO) (Bradley, Jarrell and Kim, 1984; Harris and Raviv, 1991) suggests that every firm has a specific optimal debt-to-equity ratio determined by balancing the present value of expected marginal benefits of leverage (ex. tax savings due to paid interests) against the present value of expected marginal costs of leverage.

2.8 Previous Studies

Omwenga and Omar (2017) analyzed the effects of non-performing loans on financial performance of bank. In this study, the interest rates, loans size, repayment installments and collateral are independent variable and financial performance of bank is dependent variables. The conceptual framework can be seen in Figure (2.1). The diagram shows that the independent variables have significant effect on performance of commercial bank. The high interest rate causes borrower to default on repayment of loans

though majority of them are willing to repay. Many commercial banks have earned little on interest income, however, commercial banks have diversified in other income generating activity to cushion on reduced interest income. The bigger the size a commercial bank lends out, the more interest income they earn. The more loans are repaid without defaulting, the more liquid the commercial bank is and more they are able to lend to individuals and corporate. The borrowers were motivated to repay their loans on time because of fear of being black listed by the credit reference bureau. This implies that independent variables namely interest rates, loan size, repayment installments and collateral have significance on effects of non-performing loans on the financial performance of commercial bank.

Figure 2.1 The effect of NPLs on financial performance of banks

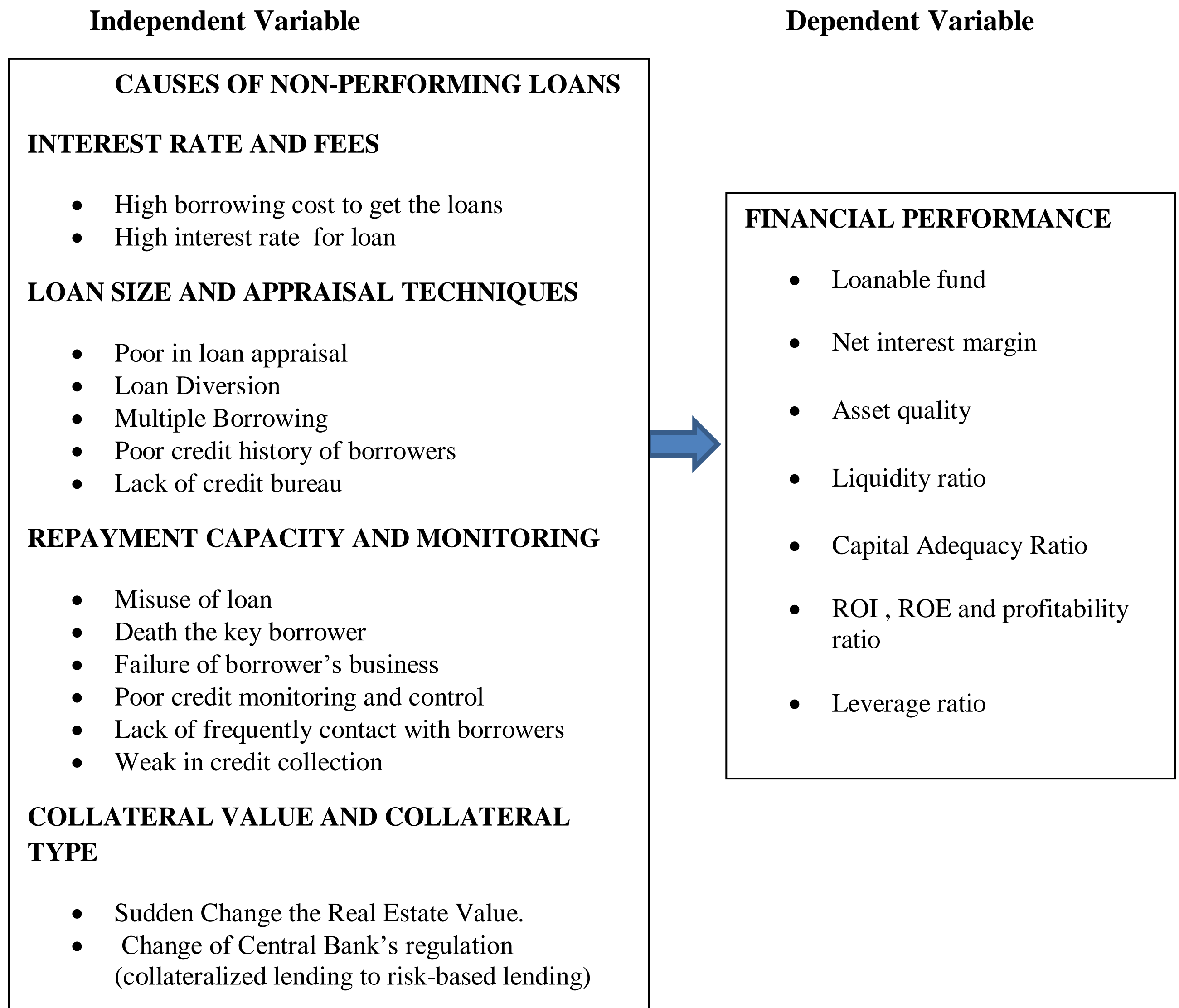


Source: Omwenga and Omar (2017)

2.9 Conceptual Framework of the Study

The conceptual framework for the study is constructed by considering the independent factors described above.

Figure 2.2 Conceptual Framework of the Study



Source: Adoption by Omwenga and Omar (2017)

The main concept of the above conceptual framework is same as the previous study. Weak credit analysis might have also been caused by staff Fernandez et al., (2000) and Waweru & Kalani (2009) found that most banking crises have directly led to the inadequate management of credit risk by institutions and lack of skills amongst loan officers respectively. Richard (2011) found that weak credit analysis at the application stage followed by lack of integrity of borrowers. Change in country policies, business

failure and death of the key borrowers are also the significant factors for loan default. Nasaka (2017) found that non- performing loans negatively affects a bank's lending capacity due to diminished core capital. It also have a negative effect on the bank's profits through increased provisions. Non-performing loans negatively affects the shareholder's funds hence resulting to insolvency.

The conceptual framework for this proposed study is constructed as shown in Figure (2.2). According to the Figure, interest rates or fees, loan size , appraisal technique, repayment capacity, monitoring , collateral value and collateral type are the influencing factors for causes of loan default and it can effect on financial performance of a bank. To evaluate the farm performance, the paddy yield per acre is used to measure in the study. To evaluate the financial performance, Return on Asset (ROA), Return on Equity(ROE) , Capital Adequacy Ratio (CAR), Liquidity Ratio and Leverage Ratio (Debt to Equity) are used to measure in the study.

CHAPTER (3)
BACKGROUND STUDY OF AYA BANK

In this chapter, the background history of AYA bank, types of loan product, lending policy and credit monitoring and debt recovery of AYA Bank are presented.

3.1 Profile of AYA Bank

AYA Bank was licensed by the Central Bank of Myanmar on 2nd July, 2010 with Kyats (55) billion paid up capital, and relicensed under the Financial Institution Law 2016 as a full service universal bank. It has become the second largest bank in Myanmar, with (258) branches, (1.4) million customer, Kyats (4.7) trillion customer deposits and (150) Kyats billion Shareholders' Equity. Top hundred depositors represent about six percent (6%) of total customer deposits, underlining the general public's confidence in the bank.

AYA Bank's Principal Activities are as follows;

Borrowing or raising of money

Lending or advancing of money either secure or unsecured

Receiving securities or valuables for safe custody

Collecting and transmitting money and securities

Providing International Banking Services

Cash management system

Internet banking

Mobile banking

As a member of the UN Global Compact (UNGC), AYA Bank is committed to implement global standards in Corporate Governance and compliance best practices in its management and operations. Since 2014-15, AYA Bank is the only bank in Myanmar to be International Financial Reporting Standards (IFRS) complaint and the only one audited under International Standards of Auditing (ISA) by a big-four international firm. For the years ahead, the bank will continue to extend its branch network throughout Myanmar while concurrently investing in state-of-the-art Core Banking, Digital Banking and Fintech Platforms. AYA Bank aims to provide uniform Omni Channels interface offering innovative products and services across all customer segments.

The organization structure of AYA bank consists of corporate banking department, treasury department, finance department, human resources department, credit department, international banking department, digital banking department, marketing department, core banking department, banking operation department, administration department, information and technology department and risk management department. A credit committee was formed with the top management from credit department, corporate banking department, risk management and legal consuls.

The main products of AYA Bank are as follows:

- Deposit
- Loan and Advances
- Remittances
- Cash Management
- Card Payment
- E-banking services
- Trade Services
- AYA Royal Banking
- Foreign Exchange Service
- Correspondents Bank
- Safe Deposit Boxes

3.2 Types of Loan Product

Lending is a primary source of revenue or income among the core functions of AYA bank. AYA bank offered the loans for corporate and retail customers. The followings are credit facilities offered by AYA bank.

(i) **Overdraft:** When the bank allowed overdraft facilities to the borrower, the borrower's current account becomes overdraft account. The bank marked approved credit amount in borrower's current account. The borrower has freedom to deposit and withdraw the money any time without earlier notices. The major advantage of overdraft facilities is that the borrower can make several withdrawals up to approved credit limit. Therefore, bank collects the interest upon the borrower' withdrawal balance. This type of loan was offered to corporate customers. The customer needs to give his ownership as

collateral. Overdraft facility is short term and therefore, the loan is rolled over after one year.

(ii) **Demand Loan:** It also offered for corporate customer to increase business growth and to make additional investment in working capital. Demand loan was approved up to three years based on the cash flow and repayment capacity of borrowers. Not like as overdraft facility, demand loan was not allowed several withdrawals. Disbursement is one time and bank collects the interest upon approved limit amount.

(iii) **Lien Letter:** It was offered to individual customer who wants to borrow money by giving their saving deposit accounts as collateral. After approved the loan to customer, bank control the customer's deposit account and obtain that deposit balance when the customer fail to repay the loan.

(iv) **Gold loan:** This is short term loan and period may be 30 days, 90 days or maximum up to one year. The borrower gives the gold as collateral.

(v) **Project Loan**: This type of loan was provided for long term financing. Financing may be government or private project for business's infrastructure, industrial projects and public services based on the cash flows of the projects.

(vi) **Education Loan:** It provides financial support for diploma, degree and post graduate programme from local private or overseas institutions. The customers need to submit their monthly income for borrowing.

(vii) **Hire purchase (HP) Loan:** Hire purchase is a retail product and customers need to submit their monthly income for borrowing. Bank provides financing to purchase electronic goods, vehicle, agricultural farm equipment etc. Its repayment program is monthly installment.

(viii) **Auto Loan:** This type of loan was provided to buy the used car or brand new car. Customers must submit their monthly income for borrowing. Bank approved the loan amount based on monthly income of customer. Like as HP loan, repayment program is monthly installment.

(ix) **Home Loan:** This type of loan was provided to purchase a residence. Customers can choose any type of residence as they like. Like an auto loan, approved loan amount was based on monthly income of customer and loan tenor. This is long term loan and can approve up to 15 years.

(x) **SME Loan:** This type of loan was provided to small and medium enterprise for fixed assets financing. The aim of SME loan is to encourage to start the new business and to promote national GDP.

(xi) **Syndicated Loan:** Syndicated loans are large-volume loans issued by a consortium consisting of at least two credit institutions, often investment banks which offer corporate finance solutions. In syndicated loan, a group of lender offered financing to single borrower with same loan agreement. The primary reason of syndicated loan is to share risks among the participants.

(xii) **Micro Finance Institution (MFI) Loan:** This type of loan was provided to Micro Finance Institution for financing. MFI will lend the grass root people from this funding.

3.3 Lending procedure of AYA Bank

Lending procedure of AYA bank includes finding prospective loan customers, evaluating customer's character and lending purpose, making site visit and evaluating the business and property condition, evaluating customer's financial condition, submitting to credit committee and signing the loan agreement.

(i) **Finding prospective loan customers:** Most of the loans arise from a direct request from customers. They approached to branches and asked to fill out a loan application. On the other hand, corporate and business unit team goes to customers' market area and finds the prospective loan customers. After getting the final agreement from customer to fill out the loan application, they give the customer information to loan officers for personal contact.

(ii) **Evaluation customer's character and lending purpose:** When the customer decided to request the loan, loan officers made personal interview with the

customers. Personal interview is important because it provides an opportunity for the loan officer to assess the customer's character. Customer character is one of the major factors for credit analysis. To become a good and quality loan, banks make the credit analysis based on the 5 Cs of the borrowers. These 5 Cs are character, capacity, capital, collateral and condition. If the customers have sincerity in lending purpose and good character, the credit officer will approve the loan request.

(iii) **Making site visit and evaluating the business and property condition:** After accepting the loan application from customer, loan officers make site visit to assess the customer's business condition and collateral location. Sometimes, the collateral may be gold, account receivable and personal guarantees. If the collateral is real property, bank assesses its location. Loan officer asks the questions to clarify the condition of the business and the property.

(iv) **Evaluating customer's financial condition:** If the condition of business and property is good and title clear, loan officers ask the crucial documents to assess the financial condition. Customers need to submit the complete financial statement, tax demand notes, business license, Board of directors' resolution for borrowing. Bank will make financial analysis of customer. If the cash flow is sufficient to repay the loan and collateral value is cover the risk, bank will submit the loan application to credit committee.

(v) **Submitting to credit committee and signing the loan agreement:** Loan officer will submit the loan application with financial documents and ownership documents to credit committee. If the credit committee approves the customer request, the loan officer will make the property to be pledged as collateral. After getting the approval from credit committee, loan officer will make to assess the title clearance with the lawyer and the collateral valuation with assessor. And then, loan officer makes make to get insurance coverage. Finally, customer will sign on the loan agreement and bank will maintain ownership documents with proper records. After signing the agreement, customer can withdraw the approved loan amount.

3.4 Credit monitoring of AYA Bank

To minimize the credit losses, bank should have effective monitoring system. Moreover, sufficient training was provided to monitoring staff to assess the early indication of deteriorating the financial health of a borrower. Credit monitoring team checks the following conditions of borrowers in daily:

(i) Cash deposit and withdrawal of borrowers
(ii) Collateral valuation not to occur security shortfall
(iii) Insurance life and coverage
(iv) Loan extension condition of customer who will be expire within one month

If some of following events occur, credit monitoring team will generate the report and submit to management and take the necessary action to collect the loan:

(i) Over limit upon approved limit
(ii) Default to repay the interest or principal
(iii) Insurance expired
(iv) Collateral value significantly decreased
(v) Overdue the loan expired date

3.5 Debt Recovery of AYA Bank

If the borrowers fail to repay the loan, loan collection team will contact the borrower and negotiate the repayment as initial debt recovery action.. First, collection team will send the reminder letter to customer. After that, collection officer will make the call to borrower and make an appointment for negotiation. Successful negotiation with the borrowers will result the partial repayment or fully repayment or repayment at a grace period. Sometimes, bank will provide revised repayment schedule and re-aging the loan by the borrowers' condition. If the initial debt recovery action is unsuccessful, loan collection team will transfer loan case to legal team. Legal team will send the lawyer notice to borrowers. Finally, legal team will decide to take the legal action and to recover the debt through the court.

CHAPTER (4)
EFFECT OF NON-PERFORMING LOANS ON FINANCIAL PERFORMANCE OF AYA BANK

This chapter contains the analysis of causes of non-performing loans and the effect of non-performing loans on financial performance of AYA Bank.

4.1 Research Design

This study focuses on the effect of non-performing loans on financial performance of AYA bank. In this study, 100 credit officers from 55 branches were selected and it represented 20% sample of the target population 507 credit officers from 258 branches. Simple random sampling method was used to choose the sample.

This study involves four main independent variables: interest rates and penalty fees, loan size and appraisal techniques, repayment capacity and monitoring and collateral value and collateral type. The financial performance of the bank is dependent variable. The questionnaires consist of four parts. The first part includes the questions on the background information of the respondents. The second part states the occurrence of NPL in AYA bank. The third part consists of questions to measure independent variables that are causes of NPL. The fourth part includes questions to measure the dependent variables namely financial performance. In this study, a 5-point Likert scale ranging from 1 (Strongly Disagree), 2 (Disagree), 3 (Uncertain), 4 (Agree), 5 (Strongly Agree) is used to find out this study. The translation of level ranking was analyzed by Best (1997:174).

The overall average mean among 1.00-1.80 is lowest effectiveness

The overall average mean among 1.81 -2.61 is low effectiveness

The overall average mean among 2.62 -3.41 is average effectiveness

The overall average mean among 3.42-4.21 is high effectiveness

The overall average mean among 4.22 -5.00 is highest effectiveness

Data analysis was done by using Statistical Package for Social Sciences (SPSS Version 22.0) program.

4.2 Demographic Data of Respondents

Demographic characteristics of respondents are firstly analyzed. They are gender, year of experience in AYA bank and year of experience in credit department. These are presented and analyzed below.

4.2.1 Gender

In this study, gender can be classified into two groups, male and female. Table 4.1 describes the gender of the 100 respondents.

Table 4.1 Number of Respondents by Gender

Gender	Frequency	Percentage
Male	24	24.0
Female	76	76.0
Overall Average Score	100	100.0

Source: Survey Data, 2019

As shown in Table (4.1), 24 respondents are males and 76 respondents are females. Thus, the gender ratio of respondents is 24:76.

4.2.2 Year of Experience in Current Organization

In this study, year of experience in current organization is divided into three groups, consist of less than 3 years, 3 to 5 years and above 5 years.

Table 4.2 Number of Respondents by Year of Experience in Current Organization

Age (in year)	Frequency	Percentage
Less than 3	9	9.0
3 – 5	45	45.0
Above 5	46	46.0
Overall Average Score	100	100.0

Source: Survey Data, 2019

As shown in Table (4.2), above 5 years of experience in current organization represent 46% which is the largest group of all. 45 % of respondents are 3 to 5 years of experience in current organization and 9% have less than 3 years of experience in current organization. So, based on the sample data, it can say that the majority respondents are above 5 years of experience.

4.2.3 Year of Experience in Credit Department

In this study, year of experience in credit department is divided into three groups, consist of less than 3 years, 3 to 5 years and above 5 years.

Table 4.3 Number of Respondents by Year of Experience in Credit Department

Year	Frequency	Percentage
Less than 3	21	21.0
3 – 5	51	51.0
Above 5	28	28.0
Overall Average Score	100	100.0

Source: Survey Data, 2019

As shown in Table (4.3), 51% of respondents represent 3 to 5 years of experience in credit department which is the majority respondents. 21% represent less than 3 years of experience and 28% represent above 5 years of experience in credit department.

4.3 Occurrences of Non-Performing Loans

In this study, the occurrences of non-performing loans were analyzed by loan type, collateral type, delinquent stage and default type.

4.3.1 Delinquent Loan Type

The following Table (4.4) describes the occurrence of non-performing loans by loan types of the 100 respondents.

Table 4.4 Number of Respondents by Delinquent Loan Type

Loan Type	Frequency	Percentage
Overdraft	57	57.0
Demand Loan	33	33.0
Term Loan	9	9.0
Hire Purchase	1	1.0
Overall Average Score	100	100.0

Source: Survey Data, 2019

According to above table (4.4), overdraft loan type is the highest delinquent type and which represent 57% of all. Demand loan, term loan and hire purchase represent 33%, 9 % and 1% respectively.

4.3.2 Delinquent Collateral Type

The following Table (4.5) describes the occurrence of non-performing loans by collateral type of the 100 respondents.

Table 4.5 Number of Respondents by Delinquent Collateral Type

Collateral Type	Frequency	Percentage
Land and Building	89	89.0
Cash Margin	1	1.0
Contract Guarantee	7	7.0
Unsecured Collateral	3	3.0
Overall Average Score	100	100.0

Source: Survey Data, 2019

According to above table (4.5), land and building is the highest delinquent collateral type and which represent 89% of all. Cash margin, contract guarantee and unsecured collateral represent 1%, 7% and 3% respectively.

4.3.3 Delinquent Stage

The following Table (4.6) describes the most occurrence delinquent stage in selected branch.

Table 4.6 Number of Respondents by Delinquent Stage

Stage	Frequency	Percentage
Doubtful Stage	34	34.0
Bad Debt Stage	66	66.0
Overall Average Score	100	100.0

Source: Survey Data, 2019

According the Table (4.6), it could be observed that 66 respondents, the most occurrence of delinquent stage is Bad Debt stage. Doubtful delinquent stage represents 34 respondents.

4.3.4 Default type

The following Table (4.7) describes the most occurrence default type in selected branch.

Table 4.7 Number of Respondents by Default Type

Default Type	Frequency	Percentage
Default to extend the loan term and default to repay principal	15	15.0
Default to repay the interest only	25	25.0
Default to repay the principal and interest	60	60.0
Overall Average Score	100	100.0

Source: Survey Data, 2019

According the Table (4.7), most of the default type occurred due to customers default to repay the interest and principal which represented 60% of respondents. 15% represented default to extend the loan term and repay the principal. 25% represented default to repay the interest only.

4.4 Causes of Non-Performing Loans

In this study, the respondents were requested to explore the causes of non-performing loans. The data collected were summarized into strongly disagree, disagree, neutral, agree, and strongly agree based on a five-point Likert scale. Thus, each factor has been described in term of the mean value and the standard deviation of each statement. It can be assumed that the factors will strongly causes of non-performing loans if the mean values indicate above 3 and the causes will be weak factors if the mean value indicate less than 3.

4.4.1 Interest Rate and Penalty Fees

The study was to establish interest rate and penalty fees is the causes of NPLs. The following Table (4.8) describes the mean value and standard deviation for each statement concerning interest rate and penalty fees.

Table 4.8 Interest Rate and Penalty Fees

No	Statement	Mean	Std. Dev
1	Customers cannot afford to pay the interest rate for borrowing.	4.15	.757
2	Customers are unable to pay the penalty fees upon defaulted loan amount.	3.98	.778
3	Customers felt service charges as burden for loan extension and they defaulted the principal.	3.77	.679
4	Customers were charged more interest rate for unsecured collateral.	3.82	1.048
5	Borrowers cannot afford to pay the additional charges to get the loan (e.g processing fees)	4.25	.845
Overall Average Score		**3.99**	

Source: Survey Data, 2019

Table (4.8) shows whether interest rate and penalty fees can cause the non-performing loans. From the study finding, the respondents strongly agreed that borrowers cannot afford to pay the additional charges to get the loan (e.g processing fees) and customers cannot afford to pay the interest rate for borrowing as shown by mean of 4.25 and 4.15 with standard deviation of 0.845 and 0.757.

The study found that most of the respondents agreed that customers were unable to pay the penalty fees upon defaulted loan amount and customers were charged more interest rate for unsecured collateral as described by mean of 3.98 and 3.82 with standard deviation of 0.778 and 1.048. The respondents agreed moderate that customers felt service charges as burden for loan extension and they defaulted the principal as shown by mean of 3.77 with standard deviation of 0.679.

From the above finding, it can be seen clearly that high interest rate and fees is high causes of the non-performing loans by the overall average mean value is 3.99.

4.4.2 Loan Size and Appraisal Techniques

The study sought to find the loan size and appraisal technique is the causes of NPLs. The following Table (4.9) describes the mean value and standard deviation for each statement concerning loan size and appraisal technique.

Table 4.9 Loan Size and Appraisal Techniques

No	Statement	Mean	Std. Dev
1	Weakness in credit risk assessment procedure.	3.80	1.035
2	Customer did not use all the loan amount as proposed purpose (loan diversion)	3.63	.812
3	Customer makes multiple borrowing in different banks	3.31	1.022
4	Lack of Credit Bureau and difficulty to require borrowers' credit history.	3.15	.796
5	Borrowers conceal with vital data in loan application.	3.05	.821
Overall Average Score		**3.39**	

Source: Survey Data, 2019

From above table findings, most of the respondents agreed that weakness in credit risk assessment procedure and customers did not use all the loan as proposed purpose (loan diversion) are the factors which can cause the non-performing loans as indicated by a mean of 3.80 and 3.63 with standard deviation of 1.035 and 0.812. On whether customer makes multiple borrowing in different banks, lack of Credit Bureau and difficulty to require borrowers' credit history and borrowers conceal with vital data in loan application, most of the respondents agreed as described by mean 3.31, 3.15, 3.05 with standard deviation of 1.022,0.796 and 0.821. According to findings, it can conclude that weakness in credit appraisal techniques and improper loan size can be the average causes of the non-performing loans as show by overall average mean of 3.39.

4.4.3 Repayment Capacity and Monitoring

In this part, the study sought to find the repayment capacity and monitoring is the causes of NPLs. The following Table (4.10) describes the mean value and standard deviation for each statement concerning the repayment capacity and monitoring.

Table 4.10 Repayment Capacity and Monitoring

No	Statement	Mean	Std. Dev
1	Borrower makes misuse of loans.	3.13	.895
2	Death of the key borrower and guarantors refused to repay the loans.	3.61	.886
3	Lack of contact with borrowers within the lending period.	3.92	.837
4	Borrower simultaneously operates the multiple business and weakness in business knowledge.	3.88	.742
5	Poor credit monitoring and credit collection technique.	3.82	.783
Overall Average Score		**3.67**	

Source: Survey Data, 2019

From above table findings, majority of the respondents agreed that lack of contact with borrowers within the lending period, borrower simultaneously operates the multiple business and weakness in business knowledge and poor credit monitoring and credit collection technique as indicated by a mean of 3.92, 3.88 and 3.82 with standard deviation of 0.837, 0.742 and 0.783. On whether death of the key borrower and guarantors refused to repay the loans and borrower make misuse of loans, most of the respondents agreed with mean of 3.61 and 3.13 with standard deviation of 0.886 and 0.895.

As per the Table, most of the respondents answered that customer repayment capacity and credit monitoring within the lending period can be high cause of the non-performing loan as show by overall average mean of 3.67.

4.4.4 Collateral Value and Collateral Type

In this part, the study finds out the collateral value and collateral type are the causes of NPLs. The following Table (4.11) describes the mean value and standard deviation for each statement concerning the repayment capacity and monitoring.

Table 4.11 Collateral Value and Collateral Type

No	Statement	Mean	Std. Dev
1	Real Estate value changes suddenly by political condition	4.08	.761
2	Insufficient insurance on collateral.	4.15	.833
3	Change of Central Bank's regulation and more emphasize in risk –based lending.	3.74	.883
4	Collateral damaged by natural disaster.	3.23	.930
5	Lack of collateral valuation regularly.	3.49	.810
Overall Average Score		**3.74**	

Source: Survey Data, 2019

From above table findings, majority of the respondents agreed that insufficient insurance on collateral and real estate value changes suddenly by political condition as indicated by a mean of 4.15 and 4.08 with standard deviation of 0.883 and 0.761. On whether the change of Central Bank's regulation and more emphasize in risk –based lending, lack of collateral valuation regularly and collateral damaged by natural disaster, most of the respondents answered with mean of 3.74, 3.49 and 3.23 with standard deviation of 0.883, 0.810 and 0.930. As per the Table 4.13, the average mean is 3.74 in which most of the respondents answered that if collateral value did not cover the loan

amount and collateral type was unsecured, it could be high cause of the non-performing loans.

4.5 Assessment of the Reliability of the Scale

Likert scales has widely used in this study. Therefore, before they are used, it should be checked their reliability of each dimension. Reliability refers to the extent to which data collection techniques and analysis procedures will yield similar findings to those of prior researchers. Measurements of reliability provide consistency in the measurement of variables. Internal consistency reliability provides consistency in the measurement of variables. Internal reliability is most commonly used psychometric measure assessing survey instruments and skills (Zhang, Waszink & Wijngaard, 2000). Cronbach alpha is the basis formula for determining reliability based on internal consistency (Kim & Cha, 2002).

In this study, Cronbach's alpha value is used as a measure of the internal consistency of the scales used in the questionnaire. If alpha is low, then at least one of items are unreliable and must be identified via item analysis procedure. However, as per DeVellis (2003), the Cronbach's alpha value should ideally be above 0.7. In this study, studies scales were tested for internal consistency reliability using Cronbach's alpha test as depicted in following Table.

Table 4.12 Results of Cronbach's Alpha Value

Scale	Type of Scale	No. of Items	Cronbach's Alpha
Interest Rate and Penalty Fees	5-point Likert	5	.760
Loan Size and Appraisal Techniques	5-point Likert	5	.718
Repayment Capacity and Monitoring	5-point Likert	5	.799
Collateral Value and Collateral Type	5-point Likert	5	.712
Financial Performance	5-point Likert	10	.845

Source: Survey Results, 2019

The results of the Cronbach's alpha value for all scales are range between .712 to .845, suggesting very good internal consistency and reliability for the scale with this sample since all scales are greater than 0.7.

4.6 Financial Performance of AYA bank

These 10 variables were used to investigate the financial performance of AYA bank. The following Table (4.13) describes the mean value and standard deviation for each statement concerning financial performance.

Table 4.13 Financial Performance of AYA bank

No	Statement	Mean	Std. Dev
1	Bank has improvement in lending amount and loanable fund is sufficient for future lending.	3.53	.915
2	There is no significant decline in interest income by suspension of defaulted interest.	3.46	.926
3	Asset quality of bank is satisfied and there is no sharply increase in liability of bank by provisioning.	3.74	.705
4	Bank can manage the liquidity creation and has sufficient liquidity ratio.	3.59	.780
5	Bank makes well-capitalised and maintains sound capital adequacy ratio.	3.46	.771
6	ROI and ROE are satisfied and profitability ratio can be satisfied by shareholders.	3.37	.812
7	Bank can access easily to capital market because of low leverage ratio.	3.27	.851
8	Banks have sound financial system which can result to prevent the collapse of bank.	3.39	.803
9	Net interest margin has been increasing and bank can generate the return.	3.67	.753
10	Banks can manage to maintain the reserved ratio defined by CBM.	3.48	.771
Overall Average Score		**3.49**	

Source: Survey Data, 2019

The respondents were requested to indicate the extent the financial performance of AYA bank. From the study finding, the respondents strongly agreed that asset quality of bank is satisfied and there is no sharply increase in liability of bank by provisioning and net interest margin has been increasing and bank can generate the return as indicated by a mean of 3.74 and 3.67 with standard deviation of 0.705 and 0.753. The study further found that most of the respondents agree that bank can manage the liquidity creation and has sufficient liquidity ratio, bank has improvement in lending amount and loanable fund is sufficient for future lending and banks can manage to maintain the reserved ratio defined by CBM as indicated with a mean of 3.59, 3.53 and 3.48 with standard deviation

of 0.780, 0.915 and 0.771. The study also found that there is no significant decline in interest income by suspension of defaulted interest, bank makes well-capitalized and maintains sound capital adequacy ratio and bank has sound financial system which can result to prevent the collapse of bank with mean value of 3.46, 3.46 and 3.39 with standard deviation of 0.926 ,0.771 and 0.803.The study also further found that ROI and ROE are satisfied and profitability ratio can be satisfied by shareholders and bank can access easily to capital market because of low leverage ratio as indicated by a mean of 3.37 and 3.27 supported by a standard deviation 0.812 and 0.851 respectively.

4.7 Effect of Non-Performing Loans on Financial Performance of AYA Bank

In this expression, independents variables are causes of non-performing loans and dependent variables is financial performance of AYA bank. This study evaluated the independent variables and dependent variables by using questionnaire based on Likert scale. This study was conducted to examine the effects of non-performing loans on financial performance of AYA bank. To explore the study objective, multiple regression analysis was applied in this study.

Table 4.14 Regression Analysis on Effect of Non-Performing Loans on Financial Performance

Variable	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	VIF
	B	Std. Error	Beta			
(Constant)	.599	.341		1.756	.082	
Interest Rate and Penalty Fees	-.012	.092	-.013	-.129	.889	1.919
Loan Size and Appraisal Techniques	.332	.095	.357	3.503	.001	1.876
Repayment Capacity and Monitoring	.242	.113	.219	2.130	.036	1.906
Collateral Value and Collateral Type	.249	.102	.249	2.446	.016	1.874
Adjusted R^2	.453					
F value	21.457 (.000)					
Durbin Watson	1.828					

Source: Survey Data, 2019

According to the table (4.14), multi linear regression equation becomes with absolute value model,

$$\text{Financial Performance} = .599 - .012X_1 + .332X_2 + .242X_3 + .249X_4$$

Whereas X_1= Interest Rate and Penalty Fees

X_2= Loan Size and Appraisal Techniques

X_3= Repayment Capacity and Monitoring

X_4= Collateral Value and Collateral Type

From the finding in table 4.14, the study found that holding interest rate and penalty fees, loan size and appraisal techniques, repayment capacity and monitoring and collateral value and collateral type constant was 0.599. The constant value 0.599 represents a positive constant value which shows that if the interest rate and penalty fees have a value of zero and other factors remain constant, then the financial performance will be increase 0.599. This means, if there is additional interest rate and penalty fees per unit, assuming other variable remain constant, the financial performance will decrease by 0.12. This relationship was not significant as shown by the p-value of 0.889 which is more than 0.05, the critical value at 5% level. However, a unit increase in loan size and appraisal technique, the financial performance will be increase 0.332. This relationship was significant as shown by the p-value of 0.001which is less than 0.01, the critical value at 1% level. Similarly, a unit increase in repayment capacity and monitoring will lead to an increase on financial performance by 0.242. This relationship was significant as shown by the p-value of 0.036 which is less than 0.05, the critical value at 5% level. The study also showed that a unit increase in collateral value and collateral type will lead to an increase in financial performance by 0.249. So, this relationship was significant as shown by the p-value of 0.016 which is less than 0.05, the critical value at 5% level. It can also be interpreted that there is no effect on financial performance due to interest rate and penalty fees. However, loan size and appraisal technique, repayment capacity and monitoring, collateral value and collateral type can be effect the financial performance of bank.

Variance Inflation Factors (VIF) shows that there is lack of multi collinearity amongst the independent variables as the VIF values were below the critical value of 10.

Interest rate and penalty fees is 1.919, loan size and appraisal techniques is 1.876, repayment capacity and monitoring is 1.906, collateral value and collateral type is 1.874.Based on the result, this study is lack of multi collinearity problem.

According to Table 4.14, adjusted R^2 illustrates the strength of the relationship between financial performance and independent variables (interest rate and penalty fees, loan size and appraisal techniques, repayment capacity and monitoring, collateral value and collateral type). It can be deduced that 45% of the changes of financial performance brought about by interest rate and penalty fees, loan size and appraisal techniques, repayment capacity and monitoring, collateral value and collateral type. The study also used Durbin Watson test to check for the presence of auto correlation. The result of the study is 1.828 and it tends to 2. Therefore, this study can be concluded that there was no autocorrelation.

The study can be concluded that the performance of the regression model, the value of adjusted R2 is 0.453 that revels 45.3% of total variation in financial performance is explained by four factors: interest rate and penalty fees, loan size and appraisal techniques, repayment capacity and monitoring, collateral value and collateral type. The value of F=21.457 is significant at P=0.000<0.05.Thus, the regression model is statistically significant at 1% level with financial performance.

CHAPTER (5)
CONCLUSION

This study describes to examine the causes of non-performing loans in AYA bank and to analyze the effect of non-performing loans on financial performance. This chapter contains findings and recommendations and needs for further research of the study.

5.1 Findings

The study was about the effect of non-performing loans on financial performance of AYA bank. The secondary data used in the study was obtained from website and published annual reports. AYA bank has 258 branches and 507 credit officers. The study selected sample 100 credit officers from 55 branches which is 20% from target population. Structured questionnaires were used to collect the data. Collected data was analyzed by using multiple regression analysis and descriptive statistics was used.

The study examined some demographic variables such as gender, years of experience in AYA bank and years of experience in credit department. According to study findings, most of the respondents are female and most respondents have worked above 5 years of experience in AYA bank. Moreover, the most also have worked between 3 to 5 years of experience in credit department.

According to the analysis of the occurrences of non-performing loans, the study result described that overdraft loan type was the highest delinquent loan type and most of the delinquent collateral type was land and building. The study also found that most of the delinquent stage was bad debt stage and the most delinquent cause was customer defaulted to repay the principal and interest.

In the next section, the study revealed the causes of non-performing loans in AYA bank. In this section, the analysis is based on four main factors: (i) interest rate and penalty fees (ii) loan size and appraisal techniques (iii) repayment capacity and monitoring (iv) collateral value and collateral type. According to result, interest rate and penalty fees was the highest mean value amongst the four factors. Therefore, it can be assumed that interest rates and penalty fees were the major causes of non-performing loans. The study also used five questionnaires to analyze each main factor. Under interest rate and penalty fees, borrowers cannot afford to pay the additional charges to get the loan

were the major causes of non-performing loans. Meanwhile, weakness in credit risk assessment procedure is also the major causes of non-performing loan under loan size and appraisal techniques. On the other hand, lacking of contact with borrowers within the lending period also had the highest mean value under repayment capacity and monitoring. Therefore, it described the major cause of non-performing loans. Similarly, the study revealed that insufficient insurance on collateral is the major causes of non-performing loans under collateral value and collateral type.

In next section, the result of the study was described for the relationship between financial performance and causes of non-performing loans. According to Pearson Correlation analysis, interest rate and penalty fees had weak relationship with financial performance. However, loan size and appraisal technique, repayment capacity and monitoring and collateral value and collateral type had strong relationship with financial performance.

From the analysis of effect of non-performing loans on financial performance of AYA bank, most respondents strongly agreed that the statement asset quality of bank is satisfied and there is no sharply increase in liability of bank by provision. Moreover, most of the respondents strongly agreed that the statement interest margin has been increasing and bank can generate the return. Therefore, it can be concluded that non-performing loans did not have sharply effectiveness on financial performance.

5.2 Suggestions

In Myanmar's banking sector, the most common loan type was the overdraft and the most acceptable collateral was land and building in earlier years. Therefore, the result of the study described the highest delinquent loan type was overdraft and highest delinquent collateral type was land and building. In July 2017, CBM issued new regulation concerning about shifting from collateralized lending to risk based lending. This regulation also directed to lend as demand loan instead of overdraft. Moreover, it also directed to keep the suitable loan portfolio year by year. Overdraft loan type is short-term loan and it needs to roll over after one year. The study found that most of the overdraft occurred default, so, bank can affect in financial performance of bank. The bank should comply CBM's regulation to keep the proper loan portfolio instead of lending only overdraft. The proper loan portfolio can be managed the occurrence of non-performing loans.

According to finding the causes of non-performing loan, bank should maintain credit risk assessment procedures; need frequently contact with borrowers during the lending period to prevent the cause of non-performing loans. Moreover, banks should make sufficient insurance on collateral. The most important finding was to adopt the credit risk assessment and maintain the relationship with the borrowers because most of the delinquent stage is bad debt. So, bank should make proper credit monitoring to reduce the bad debt loans.

While analyzing the effect of non-performing loans on financial performance of AYA bank, it described the asset quality of bank is satisfied. It means the lending capacity of the bank is increasing year by year, so, bank should make quality loan with borrowers to reduce the non-performing loans and to improve the financial performance of AYA bank. To make the lending quality loan, bank should establish effective risk assessment procedure and frequent contact with borrowers to check whether they use the loan as proposed purposed or not. Moreover, bank should have to get the credit history and credit worthiness of borrowers from Credit Bureau. In Myanmar, Credit Bureau is still processing, consequently, banks will get the support of it later. Furthermore, bank should practise the strong credit monitoring, risk assessment and make sufficient insurance on collateral to approach and improve the financial performance.

5.3 Needs for Further Study

This study only focused on causes of NPLs and the effect of non-performing loans financial performance of AYA bank. The study area covers AYA bank only. Thus, the result for the study may not reflect the overall banks in Myanmar. Therefore, if further study can be conducted on more sample size and whole Myanmar banking areas. Moreover, this study only concentrated on bank and customer level causes only. Therefore, future research should focus on macro level causes and should find out its effect on financial performance.

REFERENCES

- Ahmad, F., & Bashir, T. (2013). Explanatory Power of Bank Specific Variables as Determinants of Non-Performing Loans: Evidence from Pakistan Banking Sector. Non-Performing Loans: Evidence from Pakistan Banking Sector, 1220-1231.
- Alanazi, A. S., Liu, B., & Forster, J. (2011). *The financial performance of Saudi Arabian IPOs. International Journal of Islamic and Middle Eastern Finance and Management, 4(2), 146-157.*
- Alton, R. G., & Haxen, J. H. (2001). As Economy Founders, Do We See a Rise in Problem Loans?, Federal Reserve Bank of St. Louis.
- Anne, W. M., (2008).Relationship between Credit Appraisal Process and the Level of Non-Performing Loans of the Women Enterprise Fund Loans Offered Through Financial Intermediaries in Kenya, University of Nairobi.
- Athanasoglou, P., S. Brissimis and M. Delis. (2008). Bank-specific, Industry-specific and Macroeconomic Determinants of Bank Profitability, Journal of International Financial Markets, Institutions, and Money, 18, 121-36.
- Berger, N., A. and De Young, R. (1997). *Problem Loans and Cost Efficiency in Commercial Banks, Washington DC. Journal of Banking and Finance, Vol. 21, 1997.*
- Bradley, M., G. Jarrell, and E.H. Kim. *On the Existence of an Optimal Capital Structure: Theory and Evidence, Journal of Finance 39, July 1984, pp. 857-878.*
- Caprio, G., J. & Klingebiel, D. (1996). Bank Insolvency: Bad Luck, Bad Policy or Bad Banking, Annual World Bank Conference on Development Economics.
- Choudhury, T., A. and Adhikary, B., K.(2002). Loan Classification, Provisioning Requirement and Recovery Strategies: A comparative Study on Bangladesh and India, Seminar Paper, Bangladesh Institute of Bank Management.
- Collins, N.J., & Wanjau. K., (2014). *The effects of Interest Rate Spread on the Level of Non-Performing Assets: A Case of Commercial Banks in Kenya. International Journal of Business and Public Management, 1 (1), 56-101.*

- Dang. U., (20111). The CAMEL rating system in banking supervision. A case study.
- Diamond, D. W., & Rajan, R. (2000). *A Theory of Bank Capital, The Journal of Finance 55 (6):2431-2465.*
- Ebba, M., K. (2016).The Relationship between Non-performing Loans and Financial Performance of Commercial Banks in ETHIOPIA , Unpublished MBA Research Paper, University of Nairobi.
- Ezeoha, A., E. (2011). *Firms versus Industry Financing Structure in Nigeria. African Journal of Economics and Management Studies, 2(1), 42-55.*
- Farhan, M., Sattar, A., Chaudhry, A., H. & Khalil, F. (2012). *Economic Determinants of Non-Performing Loans: Perception of Pakistani Banker. European Journal of Business and Management. 4 (91):87-99.*
- Fofack, H. (2005). Non-Performing Loans in Sub- Saharan Africa: Causal Analysis and Macroeconomic Implications.
- Ghosh, A. (2015). *Banking-Industry Specific and Regional Economic Determinants of Non-Performing Loans: Evidence from US States. Journal of Financial Stability.20:93-104.*
- Greenidge, K. and Grosvenor, T. (2010). *Forecasting non-performing loans in Barbados. Journal of Business, Finance and Economics in Emerging Economies, 5, 80-107*
- Guy, K. (2011). Non-Performing Loans, Economic Review. Vol.32, No.1, pp7-9.
- Harris, M. & Raviv, A. (1991). *The Theory of Capital Structure, The Journal of Finance, Vol.46, No.1.pp297-355.*
- Hou, Y. (2012). The Non-Performing Loans: Some Banks-Levels Evidence. Birmingham: University of Birmingham: University of Birmingham.
- Hughes, J., P, Lang, W., Mester, L. J., & Moon, C. G. (1996). Efficient Banking Under Interstate Branching, Journal of Money, Credit and Banking.

- Kanyiri, R., W. (2015). Strategic Responses of Commercial Banks in Kenya to the Challenges on Non-Performing Loans. University of Nairobi, Retrieved from http://www.unonbi.ac.ke.
- Kemunto, N., O. & Omar, N. (2017). *Effects of Non-Performing Loans on the Financial Performance of Commercial Banks in Kenya, Imperial Journal of Interdisciplinary Research (IJIR) , Vol-3, Issue-5, Jomo Kenyatta University of Agriculture and Technology.*
- Khemraj, T. & Pasha, S. (2005). The Determinants of Non-Performing Loans: an Econometric Case Study of Guyana. Financial Stability Unit of the Bank of Guyana Working Paper.
- Khemraj, T.& Pasha, S. (2011). The Determinants of Non-Performing Loans: an Econometric Case Study of Guyana. Financial Stability Unit of the Bank of Guyana Working Paper. No.53128.
- Koch, T., W & MacDonal, S., S (2003). Bank Management, Fifth Edition, Copyright 2003 by South-Western, a division of Thomson Learning.
- Krueger, Anne O., & Aaron Tornell, (1999). The Role of Bank Restructuring in the Recovery from Crises: Mexico 1996-98, NBER Working Paper No. 7042.
- Manyuanda, M., O. (2014). The Effect of Non-Performing Loans on the Financial Performance of Savings and Credit Co-Operative Societies in Nairobi County, Kenya, School of Business, University of Nairobi.
- Masood, O. (2009). Determinants of Non-performing Bank Loans and Bank Loan Recovery in Pakistan A survey approach. Euro-Mediterranean Economics and Finance Review, 89-104.
- May Kha Naing. (2016). Effect of Credit Risk Management on NPL loan in KBZ Bank, Yangon University of Economics, Department of Commerce, MBF Programme.
- Messai, A., S. & Jouini, F. (2013). *Micro and Macro Determinants of Non-Performing Loans, International Journal of Economics and Financial Issues. 3 (4):852-860.*

- Mwangi, J. (2014). *The Relationship Between the Level of Non-Performing Loans and the Financial Performance of Commercial Banks in Kenya. Journal of Banking and Finance, 1 (2), 17-23.*
- Mwengi, K., B & Garissa, O . (2013). Assessing the Factors Contributing to Non-Performing Loans in Kenya Banks, European Journal of Business and Management, Vol. 5, No. 32.
- Nishimura, K., Kazuhito I., and Yukiko O., (2001). The Disposal of Non-Performing Loans and its Potential Influence.
- Njure, K., C. (2014). The Relationship between the Profitability and Liquidity of Non-Financial Company Listed in Nairobi Securities Exchange, Kenyo, Nairobi University.
- Nsobilla, T. (2015). The Effect of Non-Performing Loans on the Financial Performance of Selected Rural Banks in the Western and Ashanti Regions of Ghana. Kwame Nkrumah University of Science and Technology, Retrieved from https://www. knust.edu.gh.
- Obamuyi, T., M. (2013). *An analysis of the deposits and lending behaviours of banks in Nigeria. International Journal of Engineering and Management Sciences, 46–54.*
- Onuonga, S., M. (2014). *The Analysis of Profitability of Kenyas Top Six Commercial Banks: Internal Factor Analysis. American International Journal of Social Sciences 3(5): 94-103.*
- Peter, S., R. and Sylvia, C., H. (2015) . Bank Management and Financial Services.
- Rose, P. S & Hudgins , S. C, (2005). Bank Management and Financial Services.
- Saba, I., Kouser, R. & Azeem, M. (2012).*Determinants of Non-Performing Loans: Case of US Banking Sector. The Romanian Economic Journal. 15 (44): 125-136.*
- Sangmi, M., D. & Nazir, T. (2010). Analyzing Financial Performance of Commercial Banks in India: Application of CAMEL Model, Pak. J. Commer. Soc. Sci. 2010 Vol. 4 (1), 40-55

- Shwe Wutyi (2018), Risk Management on Syndicated Loans in AYA Bank, Yangon University of Economics, Department of Commerce, MBF Programme.
- Steven, F. (2008).The Management of Consumer Credit Theory and Practice.
- Swarnapli, N. (2014). Firm Specific Determinants and Financial Performance of Licensed Commercial Banks in Sri Lanka, Conference Paper, University of Ruhuna, Sri Lanka.
- Umor & Sun (2016). Non-Performing Loans (NPLs) , Liquidity Creation, and Moral Hazard: Case of Chinese Banks, China Finance & Economic Review, ISSN 2196-5633, Springer, Heideberg, Vol-4, Iss.1, pp 1-23.
- Vogiazas, S., D. & Nikolaidou, E. (2014). Investigating the Determinants of Non-Performing Loans in the Romanian Banking System: An Empirical Study with Reference to the Greek Crisis. Economic Research International, 4, (1), 67-72.
- Vong, P., I, & Chan, H.,S , (2009). *Determinants of Bank Profitability in Macao. 30th Anniversary. Journal of Banking and Finance Conference, Beijing.*
- Wanjira, T., L.(2010).The Relationship between Non-performing Loans Management Practices and Financial Performance of Commercial Banks in KENYA, Unpublished MBA Research Paper, University of Nairobi.
- Warue, B., N. (2013). The effects of Bank Specific and Macroeconomic Factors on Non Performing Loans in Commercisl Banks in Kenya: A comparative Panel Data Analysis. Advances in Management & Applied Economics, vol.3, vol.2,135-164.
- Waweru, N., M. & Kalani, V., M. (2016), *Commercial Banks Crises in Kenya: Causes and Remedies. African Journal of Accounting, Economics Finance and Banking Research,12-33.*

Websites

- https://en.wikipedia.org/wiki/Ayeyarwady_Bank
- https://www.ayabank.com/my_MM/investor-relations/annual-reports-mm/
- https://www.cbm.gov.mm/content/fiml-regulation

APPENDIX

QUESTIONNAIRE FOR CREDIT OFFICERS AND BRANCH MANAGERS

This study is a requirement for the partial fulfillment for the degree of Master of Banking and Finance (MBF). The purpose of this research is to investigate on the causes of non-performing loans and its effect on financial performance of bank. Please note that any information you give will be treated with confidentiality and at no instance will it be used for any other purpose other than for this project. Your assistance will be highly appreciated.

SECTION A: DEMOGRAPHIC DATA

Kindly answer all the questions by ticking in the boxes or writing in the spaces provided.

1. Gender: Male ☐ Female ☐

2. For how long you worked for your organization?

Less than 3 years ☐ 3-5 years ☐

Above 5 years ☐

3. What is your experience in the bank credit department?

Less than 3 years ☐ 3-5 years ☐

Above 5 years ☐

SECTION B : OCCURRANCES OF NON-PERFORMING LOANS

The followings are the analysis on the occurrances of non-performing loans. Please circle appropriate item.

(i) From 2014 to 2018, the following loan type is the highest delinquent in your division or branch.

(1) Overdraft

(2) Demand Loan

(3) Term Loan

(4) Hire Purchase

(5) Staff Loan

(ii) From 2014 to 2018, the following collateral type is the highest delinquent in your division or branch.

(1) Land and Building

(2) Cash Margin

(3) Contract Guarantee from Government and Private Corporation

(4) Gold

(5)Unsecured Collateral

(iii) The following delinquent stage is the most occurrence in your branch:

(1) Doubtful stage (default days 91-180)

(2) Bad Debt stage (default days above 181)

(iv) The following default type is the most occurrence in your branch:

(1) Customer default to extend the loan term and default to repay principal.

(2) Customer default to repay the interest only.

(3) Customer default to repay the principal and interest.

SECTION C : CAUSES OF NON-PERFORMING LOANS

The followings are factors as causes of non-performing loans. To what extent do you agree with the statement that these are cause of non-performing loans? Please tick appropriately on scale of 1-5, 1- Strongly Disagree, 2- Disagree, 3-Uncertain, 4- Agree, 5- Strongly Agree.

Sr. No	Statement	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
I	**Interest Rate and Penalty Fees**					
(i)	Customers can't afford to pay the interest rate for borrowing.					
(ii)	Customers unable to pay the penalty fees upon defaulted loan amount.					
(iii)	Customers felt service charges as burden for loan extension and they defaulted the principal.					
(iv)	Customer was charged more interest rate for unsecured collateral.					
(v)	Borrowers can't afford to pay the additional charges to get the loan (e.g processing fees)					

Sr. No	Statement	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
II	**Loan Size and Appraisal Techniques**					
(i)	Weakness in credit risk assessment procedure.					
(ii)	Customer didn't use all the loan amount as proposed purpose (loan diversion)					
(iii)	Customer make multiple borrowing in different banks					
(iv)	Lack of Credit Bureau and difficult to require borrowers' credit history.					
(v)	Borrowers conceal vital data in loan application.					
III	**Repayment Capacity and Monitoring**					
(i)	Borrower makes misuse of loans.					
(ii)	Death the key borrower and guarantors refused to repay the loans.					
(iii)	Lack of contact with borrowers within the lending period.					
(iv)	Borrower simultaneously operates the multiple business and weak in business knowledge.					
(v)	Poor credit monitoring and credit collection technique.					
IV	**Collateral Value and Collateral Type**					
(i)	Real Estate value change suddenly by political condition					
(ii)	Insufficient insurance on collateral.					
(iii)	Change of Central Bank's regulation and more emphasize in risk –based lending.					
(iv)	Collateral damaged by natural disaster.					
(v)	Lack of collateral valuation regularly.					

SECTION D: EFFECT OF NON-PERFORMING LOANS ON FINANCIAL PERFORMANCE

The followings are factors which describe the financial performance of bank. This section is to find out the financial performance factors which are the effectiveness of non-performing loans. Please tick appropriately on scale of 1-5, 1- Strongly Disagree, 2-Disagree, 3-Uncertain, 4- Agree, 5- Strongly Agree.

Sr. No	Statement	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1.	Bank has improvement in lending amount and loanable fund is sufficient for future lending.					
2.	There is no significant decline in interest income by suspension of defaulted interest.					
3.	Asset quality of bank is satisfied and there is no sharply increase in liability of bank by provisioning.					
4.	Bank can manage the liquidity creation and have sufficient liquidity ratio.					
5.	Bank makes well-capitalised and maintains sound capital adequacy ratio.					
6.	ROI and ROE are satisfied and profitability ratio can be satisfied by shareholders.					
7.	Bank can access easily to capital market because of low leverage ratio.					
8.	Bank have sound financial system which can result to prevent the collapse of bank.					
9.	Net interest margin has been increasing and bank can generate the return.					
10.	Banks can manage to maintain the reserved ratio defined by CBM.					