YANGON UNIVERSITY OF ECONOMICS

DEPARTMENT OF COMMERCE

MASTER OF BANKING AND FINANCE PROGRAMME

ANALYSIS ON FINANCIAL PERFORMANCE OF MYANMAR AGRICULTURAL DEVELOPMENT BANK

MI MI HLAING

(EMBF 5th Batch)

DECEMBER, 2019

ANALYSIS ON FINANCIAL PERFORMANCE OF MYANMAR AGRICULTURAL DEVELOPMENT BANK

A thesis submitted as a partial fulfillment of the requirements for the Executive Master Degree of Banking and Finance

Supervised by,

Prof. Dr. Daw Soe Thu
Professor (Head)
Department of Commerce
Yangon University of Economics

Submitted by,

Mi Mi Hlaing
Roll No.25
(EMBF-5th BATCH)

DECEMBER, 2019

ACCEPTANCE

Accepted by the Board of Examiners of the Department of Commerce, Yangon University of Economics, in partial fulfillment for the requirements of the Executive Master Degree of Banking and Finance.

Prof. Dr. U Tin Win
(Chairman)
Rector
Yangon University of Economics

(Supervisor)
Prof. Dr. Daw Soe Thu
Professor
Department of Commerce
Yangon University of Economics

(Examiner)
Prof. Dr. Daw Aye Thu Htun
Professor
Department of Commerce
Yangon University of Economics

(Examiner)
Daw Khin Nwe Ohn
Associate Professor
Department of Commerce
Yangon University of Economics

(Examiner)
Daw Yee Yee Thein
Associate Professor
Department of Commerce
Yangon University of Economics

December, 2019

ABSTRACT

The main objective of the study is to evaluate financial performance of Myanmar Agricultural Development Bank. The financial soundness and stability of the Bank are measured by using CAMEL theory. The Bank is measured its Capital adequacy, Assets Quality, Management Efficiency, Earning Ability and Liquidity. The research method is descriptive method by using the secondary data of financial returns of MADB during the financial year 2009 to 2018 (Mini-budget: April to September in 2018). This result shows that overall financial performance of MADB especially in Capital Adequacy, Management Efficiency, Liquidity are fair position and need to improve them for not to descend position in Assets Quality and Earning Ability that are satisfactory positions. In brief, the result of this study reflects the bank's performance that is flawed to supervisory concern and needs to improve risk management practice, credit size, profitability, sustainability of the bank and significant non-compliance with laws to regulations.

ACKNOWLEDGEMENTS

First and foremost, I would like to thank Prof. Dr. U Tin Win, Rector of Yangon Institute of Economics and Prof. Dr. Daw Nilar Myint Htoo, Pro Rector of Yangon University of Economics, for permitting me to attend this valuable EMBF Programme.

I would like to thank most gratefully to Prof. Dr. Daw Soe Thu who is program Director of EMBF Programme, Head of Department of Commerce and my thesis supervisor, Yangon University of Economics for her monitoring and kindly guidance to accomplish this paper.

My deep and sincere gratitude goes to U Min Thu, Managing Director of Myanmar Agricultural Development Bank who allowed and encouraged me to get quality information and relevant primary data easily accessible for this thesis paper. My special thanks go to U Aung Kyaw Oo and Daw Ohnmar Kyaw, General Managers of Myanmar Agricultural Development Bank, for providing me with necessary data.

I would like to express deep appreciation goes to all teachers who teach us in every subject and support their knowledge and wisdom in studying Executive Master Degree of Banking & finance Curriculum.

I would like to my deepest gratitude to my family for supporting me to study EMBF Progrmme at Yangon University of Economics.

I am grateful to my classmates & colleagues who help me widely social net-work and wealth of suggestion for my improvement.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Abbreviations

MADB	- Myanma Agricultural Development Bank
GDP	- Gross Domestic Product
JICA TSL	- Japan International cooperation Agency (Two Step Loan)
MEB TSL	- Myanma Economic Bank (Two Step Loan)
UFIRS	- Uniform financial Institutions Reporting System
FFIEC	- Federal Financial Institutions Examination Council (1979)
CAR	- Capital Adequacy Ratio
NPL	- Non-performing Loans
NCUA	- National Credit Union Administration
OREOS	- Other real estate owned (OREOs)
UBB	-Union Bank of Burma
SOB	- State Owned Bank
2018-Mini	- The beginning year of closing budget year change (April to September in spite of April to March)

CHAPTER (1)

INTRODUCTION

Agriculture is a major source of livelihood throughout the world, especially for the majority of poor people in rural areas. A key challenge for the majority of these farmers is access to finance Lack access of finance in agricultural sector is impediment to farmers in improving the efficiency of their productions and adopting better technologies. As agricultural sector contributes about 40% of worldwide employment and a 100% food production increase will be required in developing countries to feed the 2050 population. Investment in agriculture sector is critical for driving global economic growth. The issues of food security, increased poverty in developing nations and overall imbalanced of agriculture dependent economics have highlighted the urgent need for development in that sector. There is the most important to increase need to invest in agriculture especially in rice cultivation. The development of agriculture requires financial services that can support larger agricultural investments and agriculture related infrastructure that require long-term funding. Agricultural finance & investments are strategically important for eradicating extreme poverty and boosting shared prosperity globally. There are estimated 500 million smallholders farming households representing 2.5 million people relying to varying degrees, on agricultural production for their livelihoods.

Myanmar is an agro based country and the majority of people are working in the agricultural sector. Myanmar Financial Sector includes Banks, Insurance Companies, International financial Organization such as PACT, Microfinance institutions, Pawn Shops, and other Loan Sharks. There are 24 local banks and 13 foreign branched banks, 4 state owned banks 10 Semi-government banks. Currently, State owned-banks account for half of total banking sector assets in Myanmar. The State-owned banks are critical role for economic growth. Myanma Economic Bank is only commercial Bank and mainly performs at the state Economic Enterprises and Co-operative sector. It carried out Treasury Banking services and it gets customer trust mostly in saving deposits than the other private banks.

Myanmar Foreign Trade Bank conducts all foreign exchange transitions in accordance with external trade which is controlled by the state. Myanma Investment and commercial Bank (MICB) mainly contributes in incorporate and investment banking to local customers and foreign companies. Among them, Myanma Agricultural Development Banks is critical role supporting to farmers in the agricultural sector. The state shall be the sole shareholder of the Bank. The Bank was established by Myanma Agricultural Development Bank Law. Currently Myanma Agricultural Development Bank has a number of challenges that need to be addressed if it is to fulfill such as limited range of financial products, weak credit analysis and policies, unsustainable funding model, information technology and operations. Myanma Agricultural Development Bank is still being performed to be safe, secured & modernized bank.

1.1 Rationale of the study

In Myanmar, it is estimated that in agricultural sector represents between 35 to 40 percent of gross domestic product (GDP) and up to 70 percent of labor force is directly (or) indirectly engaged in agricultural activities or depend on agriculture for the income. Myanma Agricultural Development Bank provides loans to farmer to cover a fraction of the production costs for up to their first 10 acres. Myanma Agricultural Development Bank mainly support seasonal loans (up to 1 years) using rudimentary cultivation techniques that prevent them from reaching high yields for their crops. Previously, Myanma Agricultural Development Bank did not support widely medium (or) large holder farmers engaged on commercial agricultural (or) other agribusiness firms, traders, exporters and other type of firms along the entire value chain although the Myanma Agricultural Development Bank law allows it to lend for production, processing storage distribution and marketing activities relating to the agricultural and livestock enterprises in accordance with its client’s growth and diversification on their business activities.

But, Myanma Agricultural Development Bank is now starting first step supports JICA two step loans, MEB TSL for rural socio economic enterprises. During the past three years, Myanma Agricultural Development Bank has grown rapidly. Myanma Agricultural Development Bank loan portfolio grew 470 percent within few years. It is increased in loan rate per acre and not by a substantial expansion in the number of customers the institution serves (or) a significant increase in the number of acres financed by Myanma Agricultural Development Bank. The main aim of the bank shall be to effectively support the development of agricultural livestock and rural socio- economic enterprises in the country by providing banking services.

This study is to intend to evaluate the financial soundness of Myanma Agricultural Development Bank.

1.2 Objectives of the Study

The main objectives of the study are as follows:

(i) To study financial returns of MADB during the financial year (2009-2010) to (2018-Mini).

(ii) To analyze the financial performance of Myanma Agricultural Development Bank

1.3 Scope and Method of the Study

This study focuses on financial performance of Myanma Agricultural Development Bank measuring by CAMAL theory. The research is descriptive research method. It is used the secondary data based on the financial returns of Myanma Agricultural Development Bank from (2009-2010) to (2018 Mini-Budget) and books related in financial field, internet website, rules and regulations of CBM.

1.4 Organization of the study

It concludes five main chapters. In Chapter 1, there is consists introduction with the rationale of the study, the Objective of the study, Scope & method the study and Organization of the study. Chapters 2 consists literature review. Chapter 3 mainly describes background study on Myanma Agricultural Development Bank. Chapter 4 describes analyze on financial performance of Myanma Agricultural Development Bank based on CAMEL rating theory. Chapter 5 describes the conclusion of the study including findings, suggestions and recommendations from the result of the study.

CHAPTER II

LITERATURE REVIEW

In this study, to evaluate the financial health of Myanma Agricultural Development Bank by measuring "CAMELS" rating system. Thus, this chapter includes important role of banking sector in Economic Development and Myanma Agricultural Development Bank's role in Myanmar Economy.

2.1 Financial Performance evaluation in banking Sector

Banking Sector is an important role in economic development. So, the Financial Performance of the bank needs to be strong in Economy. This sector plays a key role in the wellbeing of the economy. A weak banking sector could not jeopardize the long-term sustainability of economy, and it can trigger the financial crisis. So, it is very important thing that evaluate financial performance in banking sector. If the banking sector performance is strong, there will progress in Economy else, the economy will downgrade in the country. CAMELS Rating System has become a concise and important tool to measure the performance of banking sector for examiners and regulators.

In Myanma Banking sector there are many challenges among local banks and also foreign banks. The Central Bank of Myanmar is currently updating the rules and regulations in accordance with the International Standards not only operations of banks and but also accounting standards. Banking sector is accepted to makes strides forward this year as fierce competition forces banks in Myanmar to level up. This year foreign banks will be free to expand across the country. There are 13 International Banks from China, Japan, Singapore, Malaysia and Vietnam with branches in country currently listed with the CBM, while 49 other banks have representative offices here. This move is expected to spur local banks to becoming more competitive and eventually help support growth in the Myanmar economy as more firms gain access to funds. It also encourages arriving at a same time when the insurance industry is opening up to foreign providers. In any country, financial services sector occupies a unique place among all business sectors. It plays a vital role for overall economic development seeding groups in other sectors by providing the necessary fund to various economic agents, namely private individuals and corporation. It is also in itself a key business sector contributing a large number of well qualified and high sectors in the world in terms of revenues. Myanmar will be no exception. The creation of a sound, inclusive and successful banking sector cannot be taken out of the country development equation, no matter what the other priorities may be.

2.2 CAMELS Rating System

This section emphasize on the definition of CAMELS rating system. CAMELS are a recognized international rating system that bank supervisory authorities use to measure and examine the financial health of all the banks. This component includes The Uniform Financial Institutions Rating System (UFIRS) and rating system on CAMELS theory from Central Bank of Myanmar which is supervisory body for financial institutions in Myanmar. By using this theory, it will measure financial soundness of the bank's financial overall condition and to analyze the weak and soundness of financial sector. The Uniform Financial Rating System (UFIRS) was adopted by the Federal Financial Institutions Examination Council (FFIEC) on November 13, 1979.Over the years, the UFRIS has proven to be an effective internal supervisory tool for evaluating the soundness of financial institutions on a uniform basis for identifying those institutions requiring special attention or concern. In 1979, the rating system has been revised including sixth component addressing sensitivity to market risks, reference to the quality of risk management processes in the management component, and the identification of risks elements within the composite and component rating descriptions.

Under the UFRIS, each financial institution is assigned a composite rating of six essential components of an institution financial institutions and corporations. These components factors address the adequacy of capital, the quality of assets; the capability of management and the quality of level of earnings the adequacy of liquidity and the sensitivity to market risk. Evaluations of the components take into the consideration of market size and sophistication, the nature and complexity of its activities, and its risk profile. Composite and component ratings are assigned based on a 1 to 5 numerical scale. A 1 indicates the highest rating, strongest performance and risk management practices, and least degree of supervisory concern, while a 5 indicates the lowest rating weakest performance, inadequate risk management practices and, therefore, the highest degree of supervisory concern. The composite rating generally bears a close relationship to the component ratings assigned. The composite rating is not derived by computing and arithmetic average of the component ratings. Each component rating is based on the qualitative analysis of the factors comprising that component and its interrelationship with the other components. When assigning the composite rating, some components may be given more weight than others depending on the situation at the institution. Generally, assignment of composite rating may incorporate any factor that bears significantly on the overall condition and soundness of the financial institutions. Assigned of composite and component ratings are disclosed to the institution's board of directors and senior management. The ability of management to respond to changing circumstances and to address the risks that may arise from changing business conditions, or the initiation of new activities or products, is an important factor in evaluating a financial institutions overall risk profile and the level of supervisory attention warranted. So, the management component is given special consideration when assigning a composite rating. The ability of management to identify, measure, monitor, and control the risks of its operations is also taken into accounts when assigning the component rating.

Barretal, (2002) states that "CAMELS" rating system has become a concise and indispensable tool for examiners and regulators. The ratings are assigned based on a ratio analysis of the financial statements, combined with onsite examinations made by a designated supervisory regulator. In the US these supervisory regulators include the Federal Reserve, the Office of the comptroller of the Currency, the National Credit Union Administration, the Farm Credit Administration, and the Federal Deposit Insurance Corporation. Ratings are not released to the public but only to the top management to prevent a possible bank run on an institution which receives a CAMELS rating downgrade. Institutions with the deteriorating situations and declining CAMELS ratings are subject to ever increasing supervisory scrutiny. Failed institutions are eventually resolved via a formal process designed to protect retail depositors.

2.3 The Components of "CAMELS" Rating Framework

The components of a bank's condition that are assessed

- (C)Capital adequacy
- (A)Assets Quality
- (M)Management Capability
- (E)Earnings Ability
- (L)Liquidity (also called asset liability management)

- (S)Sensitivity (sensitivity to market risk, especially interest risk)

Ratings are given from 1(best) to 5(worst) in each of above categories.

2.3.1 Capital Adequacy

Capital adequacy is the capital expected to maintain balance with the risks exposure of the financial institutions such as credit risk, market risk and operational risks, in order to absorb the potential losses and protect the financial institution's debt holder. References are made in this letter to the five net worth categories which are "well capitalized", "adequately capitalized", "undercapitalized", significantly undercapitalized" and "critically undercapitalized". Examiners assess institutions capital adequacy through capital trend analysis. Examiners also check if institutions comply with regulations pertaining to risk-based net worth requirement. To get a high capital adequacy rating, institutions must also comply with interest and dividend rules and practices. Other factors involved in rating and assessing an institutions capital adequacy are its growth plans, economic environment, ability to control risk, and loan and investment concentrations. By Steven Nickolas (Updated May 14, 2019), Under Basel III. The minimum capital adequacy ratio that banks must maintain 8%. The capital adequacy ratio measures a bank's capital in relation risk weighted assets. The capital-to-risk **weighted assets ratio promotes financial stability and efficiency in economic** throughout the world.

Ratings on CAR

Rating 1 (Well capitalized)

Meet their risk based net requirement. Further, there should be no significant asset quality problems, earnings deficiencies, or exposure to credit or interest rate risk that could negatively affect in capital.

Rating 2 (Adequately capitalized)

Also there should be no significant problem asset quality problems, earnings deficiencies, or exposure to credit or interest rate risk that could negatively affect capital.

Rating 3 (Undercapitalized)

There may be significant problem asset quality problems, earnings deficiencies, or exposure to credit or interest rate risk that could negatively affect capital.

Rating 4 (Significantly undercapitalized)

There may be appropriate for a credit union that does not have sufficient capital based on its capital level compared with the risks present in its operations.

Rating 5 (Critically undercapitalized)

Such credit unions are exposed to levels of risks sufficient to jeopardize their solvency.

In Myanmar, the relations between the risks weighted assets and the capital and reserve of the financial institutions shall not exceed ten times. (Article 31, the Financial Institutions in Capital of Myanmar Law). According to the existing method of calculation prescribed by the Central Bank of Myanmar the risk weight given for each type of asset is as follows. (Table 2.1)

Thus, the capital adequacy standards applied in Myanmar confirm to those adopted the Basel Committee. But, it is a little difference among nations according to the local regulators and Central Banks which set the minimum capital ratio. The capital adequacy ratio was set by CBM at 10%. The capital adequacy of an institution is rated based upon, but not limited to an assessment of the following evaluation factors:

Table (2.1) Risk Weighted Assets

No	Risk weighted Assets	Risk Weight %
I	Loans, Bills Discounted and securities	
	Mortgage	50
	Secured	50
	Unsecured	100
II	Due from the Banks	
	Residual maturities up to one year	20
	Residual maturities over one year	100
III	Cheques, Bill and all receivables	20
IV	Fixed Assets	20
V	Other Assets	100

Source; Financial Institutions Supervision Department of Central Bank of Myanmar (2011)

Thus, the capital adequacy standards applied in Myanmar conform to those adopted the Basel Committee. However, it is important to know that in some countries the required minimum capital may vary depending on the local regulars and the bank might like to have as high a capital ratio as possible. The capital adequacy ratio was set by CBM at 10%.

The capital adequacy is quite different from one institution to another institution. It is depending on the other factors. They are the level of quality of capital and the overall financial condition of the institution. Examiners also check if institutions comply with regulations pertaining to risk-based net worth requirement. To get the high capital adequacy rating, institutions must also comply with interest and dividend rules and practices. Other factors involved in rating and assessing an institution's capital adequacy are its growth plans, economic environment, ability to control risk, and loan and investment concentrations.

Table (2.2) Capital Adequacy Analysis

Ratios	**Formula**	**Criteria (%)**
Capital Adequacy Ratio	$\frac{\text{(Tier1capital*-goodwill)+Tier 2 capital**}}{\text{Risk weighted assets}}$	Bad – Good 7.5 -22
Equity to Capital Deposits	Equity/ Total Deposits	Bad- Good 7- 23

Source; Financial Institutions Supervision Department of Central Bank of Myanmar (2011)

Note * Tier 1 Capital= Paid-up share capital/common stock +disclosed reserve

** Tier 2 Capital= Undisclosed reserves+ Asset revaluation reserves + General provision/general loan loss reserves +Hybrid (debt/equity) capital instruments + Subordinated debt

2.3.2 Asset Quality

Asset quality is the major risk of the banks. The main assets of bank are loans. If these loans are the highest default risk and it cause an increasing number of non-performing loans shows a deterioration of asset quality.

Poor asset quality is the major cause of most bank failure. Every bank should have credit risk management department and they should monitor the NPLS. The credit analysis should carry out the asset quality assessment and evaluating the quality of loan portfolio using termed analysis and peer comparison.

Actually, Asset quality covers an institutional quality, which reflects the earnings of the institution. Assessing asset quality involves rating investment risk factors that company may face and comparing them with the company's capital earnings. This shows the stability of the company when faced with particular risks. Examiners also check how companies are affected by the fair market value of investments when mirrored with the company's book value of investments. Thus, asset quality is reflected by the efficiency of an institutions investment policies and practices.

All banks are required to build up and maintain a general provision account amounting to at least 2 percent of total outstanding loans and advances at the end of the year and they also required maintaining specific provision for doubtful and or bad loans on case by case basics. CBM issue new instruction 17/ 2017 dated on 7 July 2017 for provision of doubtful debts and bad debts shown in financial statements instead of CBM instruction No.6 dated on (31.8.1995).

Table (2.3) Non – Performing loans/ advance Classification

Non -performing Loan and advance	Period Days	Provision on shortfall in Security Value (%)
Standard Loan	0-30 days	0%
Watch Loan	31-60 days	5%
Sub- standard Loan	61-90 days	25%
Doubtful Loan	91-180 days	50%
Bad-debt loan	Above 180 days	100%

Source; Financial Institutions Supervision Department of Central Bank of Myanmar (2017)

Asset quality is high loan concentrations that present undue risk to the credit union:

- The appropriateness of investment policies and practices
- The investment risk factor when compared capital to and earnings structure ;and

- The effect of fair market value of investment vest book value of investments.

The asset quality rating is a function of present conditions and the likelihood of future deterioration or improvement based on economic conditions, current practices and trends. The examiner assesses credit union's management of credit risk to determine appropriate component rating for Asset Quality. Interrelated to the assessment of credit risk, the examiner evaluates the impact of other risks such as interest rate, liquidity, strategic, and compliance. The quality and trends of all major assets must be considered in the rating. This includes loans, investments, other real estate owned (OREos), and any other assets that could adversely impact a credit union's financial condition.

Ratings on Assets Quality

A rating 1 reflects high asset quality and minimal portfolio risks. In addition, lending and investment policies and procedure are in writing, conducive to safe and sound operations and are followed.

A 2 rating is high quality assets although the level and severity of classified assets are greater in a 2 rated institution. Credit unions that are 1 and 2 rated will generally exhibit trends that are stable or positive.

A rating 3 is a significant degree of concern, based on either current or anticipated asset quality problems. Credit unions in this category may have only a moderate level of problem assets. However, these credit unions may be experiencing negative trends; inadequate loan underwriting, poor documentation, higher risk investments, inadequate lending and investment controls and monitoring that indicate a reasonable probability or increasingly higher levels of problem assets and high-risk concentration.

Asset quality rating of 4 and 5 represent increasingly severe asset quality problems. A rating of 4 indicates in high level of problem assets that will threaten that institution's viability if left uncorrected. A 4 rating should also be assigned to credit unions with moderately severe levels of classified assets combined with other significant problems such as inadequate valuation allowance, high- risk concentration, or poor underwriting, documentation, collection practices, and high risk investments. Rating 5 indicates that the credit union's viability has deteriorated due to the corrosive effect of its asset problem on its earning and level of capital.

2.3.3 Management Quality

Management quality is management assessment determines whether an institution is able to property react to financial stress. This component rating is reflected by management's capability to point out, measure, look after and control risks of the institution's daily activities. It covers management's ability to ensure the safe operation of the institution as they comply with the necessary and applicable internal and external regulations. Management is the most forward looking indicator of condition and a key determinant of whether a credit union possess the ability to correctly diagnose and respond to financial stress. The management component provides examiners with objective, and not purely subjective, indicators. An assessment of management is not solely dependent on the current financial condition of the credit union and will not be an average of other component ratings. Reflected in this component rating is both the board of directors' and management's ability to identify, measure, monitor, and control the risks of the credit union's activities, ensure its safe and sound operations, and ensure compliance with applicable laws and regulations. Management practices should address some or all of following risks: credit, interest rate, liquidity, transaction, compliance, reputation, strategic, and other risks. And the main part of management is internal control systems. Effective internal control system enhances the safeguards against the system malfunctions, errors in judgment and fraud. Without proper controls in place, management will not be able to identify and track its exposure to risk. Controls are essential to enable management to ensure that operating units are acting within the parameters established by the board of directors and senior management. There are seven aspects of internal controls deserve special attention: information systems, segregation of duties, audit program, Record keeping, protection of physical assets, education of staff, succession planning, for sustainability.

The other key factors of management are to consider when assessing the management of a credit union include, but are not limited to:

- Adequacy of the policies and procedures covering each area of the credit union's operations
- Budget performance compared against actual performance
- Effectiveness of systems that measure and monitor risk
- Risk taking practices method of control to mitigate risks

- Integration of risk management with planning and decision making
- Responses to examination and audit suggestions , recommendations, or requirements
- Compliance with laws and regulations
- Adequacy of the allowance for loan and lease losses account and other valuation reserves
- Appropriation of the products and services offered in relation to the credit union's size and management experience
- Loan to share ratio trends and history
- Market penetration
- Rate structure and
- Cost- benefit analysis of major service products

The boards of directors and management have a fiduciary responsibility to the members to maintain very high standard of professional conduct:

1. Compliance with all applicable state and federal laws and regulations. Management should also adhere to all laws and regulations that provide equal opportunity for all members regardless of race, color, religion, sex, national origin, age, or handicap.
2. Appropriateness of compensation policies for senior management. Management contracts should not contain provisions that are likely to cause undue hardship on credit union. The boards need to ensure performance standards are in place of the CEO/Manager and senior management and an effective formal evaluation process is in place and being documented.
3. Avoidance of conflicts of interest. Appropriate policies and procedures for avoidance of conflicts of interest and management of potential conflicts of interest should in place.
4. Professional ethics and behavior: management should not use the credit union for unauthorized or inappropriate personal gain. Credit union property should not be used for anything other than authorized activities. Management should act ethically and impartially in carrying out appropriate credit union policies and procedures.

Ratings on Management Quality

In this view, there are five ratings: 1, 2, 3, 4, and 5

Rating 1 is indicates that management and directors are fully effective. They are responsive to changing economic conditions and other concerns and are able to cope successfully with existing and foreseeable problems that may arise in the conduct of the credit union's operation.

Rating 2 minor deficiencies are noted, but management produces a satisfactory record of performance in light of the institution particular circumstances.

Rating 3 management indicates that either operating performance is lacking in some measures, or some other conditions exist such as inadequate strategic planning or inadequate response to NCUA (national credit union administration ,established in 1934, one of independent federal agency created by United States Congress to regulate ,charter, and supervise federal credit unions) supervision. Management has either characterized by modest talent when above average abilities are needed or is distinctly below average for the type and size of the credit union. Thus, management's responsiveness or ability to correct less than satisfactory conditions is lacking to some degree.

Rating 4 and 5 Management indicates that serious deficiencies are noted in management's ability or willingness to meet its responsibilities. Either management is considered generally unable to manage the credit union in a safe and sound manner or conflict-of interest situations exist that suggest that management is not properly performing its fiduciary responsibilities. In such case, there need to be strengthened or replaced before sound conditions can be achieved. A management rating 5 indicates it applicable to those instances where incomplete or self- dealing has been clearly demonstrated. In such case, it may be occurred problems resulting from management weakness. It may need to motivate some administrative action to be initiated, including replacement of management, in order to restore safe and sound operations.

2.3.4 Earnings Ability

Earnings ability ratios are the ability of generate earning of its organization by comparing its expense and other relevant costs incurred during a specific period of time.

In evaluating and rating, it is not enough to review past and present performance alone. Examiners evaluate Core earnings: long run earnings ability of a credit union discounting temporary fluctuations in income and on time item. Examiners also consider the interrelationships with other risks areas such as credit and interest rate.

The key factors of earning ability to consider when assessing the credit union's earnings are:

- Level, growth, trends, and stability of earnings, particularly return on average assets.
- Adequacy of valuation allowances and their effect on earnings
- Adequacy of budgeting systems and forecasting processes, and management information systems, in general
- Future earnings prospects under a variety of economic conditions
- Net interest margin
- Net non- operating income and losses and their effect on earnings
- Quality and composition of assets
- Net worth level
- Sufficiency of earnings for necessary capital formation and
- Material factors affecting the credit union's income producing ability such as fixed assets and other real estate owned (OREOs)

Ratings on Earnings Ability

It is also **rating 1 to 5**. Rating 1 indicates strong earnings that reflect to maintain to adequate capital and loan allowance and support operations.

Rating 2 indicates that it is positive and relatively stable. It can provide its level of earnings and it is adequate in view of asset quality and operating risk.

Rating 3 indicates that projected earnings are not fully sufficient to provide for the absorption of losses and the formation of capital to meet and maintain compliance with regulatory requirements. Such institutions need to consider to inconsistent earnings trends, chronically insufficient earnings or less than satisfactory performance on assets.

Rating 4 indicates the development of downward income or a substantial drop in earnings from the previous period, and a drop in projected earnings is anticipated. Here, the examiner should consider all other relevant qualitative and quantitative measures if it is necessary.

Rating 5 may present a distant threat to the credit union's solvency through the erosion of capital. Its situation would normally be assigned to credit unions that are unprofitable to the point that capital will be depleted within twelve months.

Table 2.4 Earning Ability Analysis

Ratios	Formula	Criteria
Interest margin*1 on earning assets*2	Interest margin/Earning assets	Bad - Good 1-12
Return on Asset (ROA)	Net Profit/Total Assets	Bad - Good 1-4
Return on Equity (ROE)	Net Profit/Equity	Bad - Good 10-40

Source: Financial Institutions Supervision Department of Central Bank of Myanmar (2011)

Note: Interest margin * 1 = Interest on loans + Interest on Investment + Interest on Cash with other Banks

Earning Assets * 2 = T- bonds + Total Loans

2.3.5 Liquidity Ratio

Liquidity depends on Assets and Liability Management (ALM). ALM is the process of evaluating, monitoring, and controlling balance sheet risk. A sound ALM process integrates strategic, profitability, and net worth planning with risk management. ALM covers both interest rate and liquidity risk and also encompass strategic and reputation risks. Liquidity is the risk of evaluation on its present and anticipated cash flow need: funding and demand, share withdrawals, and the payment of liabilities and expenses. Poor management of excess funds makes the liquidity risk. It need to consider about short-term, volatile sources of funds, including any undue reliance on borrowings, availability of assets readily convertible to cash, and technical competence relative to liquidity and cash flow management. In such case, it needs to review the impact of excess liquidity on the credit union's net interest margin which is indicator of interest rate risk. The key factors in evaluating the liquidity management include:

- Balance sheet structure
- Contingency planning to meet unanticipated events
- Contingency planning to handle periods of excess liquidity
- Cash flows budget and projections and
- Integration of liquidity management with planning and decision making

Rating on Liquidity

Rating on liquidity is scored from 1 to 5. Rating is strong liquidity level, ALM management is well developed and it access to meet sufficient source of fund at present and future. A rating 2 indicates satisfactory level and A rating 3 indicates liquidity level and fund management practice need to improve. A rating 4 indicates deficient liquidity level. A rating 5 shows critical deficiency for liquidity and it need to immediate demand of external assistance to meet liquidity needs. (The United States, Uniform Financial Institutions Rating System 1997.)

Table 2.5 Liquidity Analysis

Ratios	Formula	Rating
Liquidity ratio	Current Assets/Current Liabilities	Bad – Good 20 - 45
Total loan to customer deposits	Total Loans / Total deposits	Bad – Good 95 - 75

Source; Financial Institutions Supervisions of Central Bank of Myanmar (2014)

2.3.6 Sensitivity to Market

Sensitivity to market covers how particular risk exposures can affect institutions. It can be assessed an institution's sensitivity to market risk by monitoring the management of credit concentrations. Agricultural lending, medical lending, credit card lending and energy sector lending are included in these loans. And, exposure to foreign exchange, commodities, equities and derivatives are also included in rating the sensitivity to market risk.

2.3.7 Overall Asset and Liability Management

It is measured by summarizing on six key components used to assess an institutions financial health and operations are: capital adequacy, asset quality, management capability, earnings quantity and quality, the adequacy of liquidity and sensitivity to market risk. Examiners will have regulatory concern if one more of the following circumstances exist:

- An overall ALM policy addressing interest rate risk , liquidity, and contingency funding is either nonexistent or inadequate
- The board has established unacceptable limits on its risk exposure
- There is noncompliance with the board's policies or limits.

There are weaknesses in the management measurement, monitoring, and reporting systems.

Financial ratios are measured by scores within 1 to 5 which is marked the significance by UFRIS. If financial ratios show between percentage bad and good, the following formula is used as inputs for calculating. Rating (1 to 5), composite range and description of UFRIS are as follows.

Table 2.6 CAMEL Composite Rating

Rating	Composite Range	Description
1	1.0 - 1.5	Strong
2	1.6 - 2.5	Satisfactory
3	2.6 - 3.5	Fair (Average)
4	3.6 - 4.5	Marginal
5	4.6 - 5.0	Unsatisfactory

Source; Uniform Financial Institutions Ratings System 1997

Rating on Composite Rating

Rating 1 indicates strong performance and risk management practices that consistently provide for safe and sound operations. These banks and institutions are in substantial compliance with laws and regulations. Such institutions give no cause for supervisory concern.

Rating 2 reflects satisfactory performance and risk management practices that consistently provide for safe and sound operations. These banks and institution are in substantial compliance with laws and regulations.

Rating 3 reflects performance that is flawed to some degree and is of supervisory concern. Risk management practices may be less than satisfactory relative to the banks or credit union size, complexity, and risk profile. These banks and credit unions may be in significant noncompliance with laws and regulations.

Rating 4 refers to performance that is of serious supervisory concern. There may be significant noncompliance with laws and regulations. Such banks and institutions in this group require close supervisory attention.

Rating 5 considered unsatisfactory performance that is critically deficient and in need of immediate remedial attention. It is threatened for the viability of the bank or credit union. Banks and institutions in this group have a high probability of failure and will likely require liquidation and the payoff shareholders, or some other form of emergency assistance, merger, or acquisition.

CHAPTER III

BACKGROUND STUDY ON MYANMAR AGRICULTURAL DEVELOPMENT BANK

This Chapter consists of discussion on general situation of Myanma Agricultural Development Bank. It concludes historical background of Myanma Agricultural Bank, Mission, Aims and Objectives of MADB, Organization Structure of the Bank, Capital and Profit Allocation of MADB and financial services provided by the bank and objectives of the Bank.

3.1 Profile of the Myanmar Agricultural Development Bank

Myanmar Agricultural Development Bank was established in 1953 as State Agricultural Bank. Then, It's was transformed as Agricultural Finance Division (UBB). And, It was renamed Myanma Agricultural Bank in 1975. Then, in 1990, it was called Myanma Agriculture and Rural Development Bank. And then, It's was named as Agricultural Finance Division in 1967, Myanmar Agricultural Bank in 1975, Myanma Agricultural and Rural Development Bank in 1990. The Current name is Myanma Agricultural Development Bank in 1997. In 1997 the bank was transferred under the Ministry of Agriculture and Irrigation. Then, in 2017 MADB has been undertaken under the Ministry of Planning and Finance.

Myanmar Agricultural Development Bank's head Office is situated in No26/42, Pansodan Road, Kyauktada Township in Yangon. Myanmar Agricultural Development Bank has tenure over 66 years providing a wide range of banking services in rural areas of Myanmar. There are 226 Branches: (208) Township Branch Banks, (17) State / Regional Banks and (1) Bank of banking services in Yangon. To expand Banking services and provide loans for famers and rural socio economic enterprises, it is performing JICA Two Step Loans and MEB Two Step Loans provided by JICA.

Mission, Aims and Objectives of MADB

As one of state-owned banks, Myanmar Agricultural Development Bank is dedicated to provide banking services and to develop the rural socio economic enterprises, to ensure a trust worthy, reliable and successful relationship with all stakeholders especially for farmers. Actually, Myanma Agricultural Development Bank is a dominant role to develop the national Economy of Myanmar that is agricultural country.

Mission Statement of MADB

To effectively support the development of agricultural livestock and rural socio economic enterprises in the country by providing banking services.

Aims and Objectives of MADB

- To Provide loans in a simple procedure
- To promote rural banking
- To encourage saving habit
- To support rural socio economic development
- To Cultivate habit of using banking services
- To develop banking services

3.2 Capital and Profit Allocation of MADB

The State shall be the sole shareholder of the Bank. The authorized capital of the Bank shall be one thousand million kyats of which sixty million kyats shall be fully paid-up by the State. The balance of the authorized capital may be subscribed by the State as required. The authorized and paid–up capitals of the bank may be increased with the approval of the Government. No reduction of these capitals shall be made. The Bank shall establish a Reserve Fund with an initial contribution of twenty million kyats from the State. At the end of the financial year an amount equal to twenty five percent of the net profit shall be allocated in multiples of one million kyats to the reserve fund until it amounts to 100 percent of the paid-up capital of the Bank. With the approval of the Government, the amount transferred to the Reserve Fund may be increased to exceed the annual prescribed percentage or the total amount of the reserve fund may be increased beyond the paid-up capital of the Bank. The reserve fund may be applied to meet any deficits in the operations of the Bank. At the end of the financial year, the balance of net profit after appropriation for fund required for the operations of the Bank shall be in multiples of one million Kyats to the Government as soon as possible.

3.3 Organization Structure of MADB

Myanmar Agricultural Development Bank is under the Ministry of Planning and Finance (MOPF). The Board of Director is the top management level. The Deputy Minister of MOPF is Chairman of BOD and Managing Director of MADB is the secretary of the Board. The others are Director Generals of Department of planning, Agriculture Department, Irrigation and water Resource Utilization Department, Settlement and land records Department, Agriculture Mechanization Department, Co-operative Department, Livestock and Procurement Department, Ministry of Natural Resources and Environment Conversation. There are 237 Officers and 2340 Staffs, the total 2577 in MADB. Organization Chart of MADB (September, 2019) is shown in **Appendix C.**

3.4 Financial Services of MADB

Myanmar Agriculture Development Bank gives banking services under the own law of MADB, established in 1990. The Bank shall have the right to conduct the following business:-

(a) Advancing annual, short-term and Long-term loans to State-owned agricultural organizations, livestock organizations, cooperative societies, private persons, village banks, farmers, entrepreneurs and labourers, on such terms and conditions as may be necessary;

(b) Receiving deposits on the basis of rural development, making loans and advances or allowing, overdrafts with or without security;

(c) Organization, reorganization and supervising village banks prescribing their functions and duties;

(d) Selling and buying drafts, telegraphic transfers, payment orders and other kinds of remittances;

(e) Borrowing money in or outside the country for carrying out the functions of the bank;

(f) Undertaking matters relating to the smooth function of the Bank business, rendering and acquiring management and technical expertise and consultancy in connection with or in support of such matters;

(g) Performing such business as may be approved by the Ministry.

Operating under the MADB law and instruction of Central Bank of Myanmar, there are several loans disbursed to farmers for cultivating multiple crops. In order to make farmers free from financial problems in their Agricultural works and to promote Agricultural productions, there are two types of loans: Seasonal loans and development loans. Seasonal loans means responsible for repayment within one year. They are three categories: Monsoon Loans, Pre-monsoon loans and Winter Loans. Development loans are called term loans. In this loan have two types of categories: Short – term loans and Long- term loans. Short – term loans is loans which disburse up to four years and Long-term loans is above four years.

The seasonal loans (Monsoon, Pre-monsoon, winter) are disbursed for the crops: Paddy, Ground nut, Pulses, Sesame, Cotton, Jute, Maize, Mustard, Sugarcane. Term loans disburse for the following items: Pump set, Power tiller, Tractor, Green Tea, Coffee, Orchid, Rubber, Palm Oil, Citronella Grass, Solar salts.

Table 3.1 Loan Rate per Acre by Type of Crops

No.	Crops' Name	Rate per acre (MMK)
1	Paddy	150,000
2	Ground Nuts	100,000
3	Sesame	100,000
4	Multiple Beans	100,000
5	Cotton	100,000
6	Pulses	100,000
7	Mustard	100,000
8	Jute	100,000
9	Sugarcane	100,000

Source; Seasonal Loan Department of MADB (2019)

3.4.1 Credit Policy and Interest Rate

The Credit Policy of MADB is as follows,

Previously MADB disburse loans to the village banks organized famers through the accountability of the village bank committee. In 1998, MADB disburse loans to the farmers by the loans inspection committee who include the Chairman, secretary and 3 members. Up to 2018, MADB disburse loans by the group liability without taking any collateral. Then, in 2018 the bank disburse directly to the individual famer at MADB cash counter taking From (7) which is land Cultivation Certificate. To get the MADB's Loans, the famer has sufficient repayment capacity and actual cultivating on their lands. The bank disbursed its loans according to the need and demand of clients for the priority of farmers who cultivate small plots not more than 10 acres.

Table 3.2 Loan Rate per Acre by Types of Crops (20.9.2019)

Financial Year	Paddy (MMK per Acre)	Other Crops (MMK per Acre)	Sugarcane (MMK per Acre)	Loans Amount (MMK in billion)
2009-2010	10,000	6,000	6,000	93
2010-2011	20,000	10,000	10,000	191
2011-2012	40,000	10,000	10,000	353
2012-2013	80,000	10,000	100,000	558
2013-2014	100,000	20,000	100,000	1,159
2014-2015	100,000	20,000	100,000	1,167
2015-2016	100,000	20,000	100,000	1,091
2016-2017	150,000	20,000	100,000	1,631
2017-2018	150,000	50,000	100,000	1,707
2018-Mini	150,000	50,000	100,000	1,300
2018-2019	150,000	100,000	100,000	2,018

Source; Seasonal Loans Department of MADB (2019)

Interest Rate

There is not sufficient to get source of funds from saving deposits from farmers and borrowers. MADB borrows from Myanmar Economic Bank and relend to farmers. The main source of operating fund gets from MEB. The Interest Rate of MADB is 8% per annum for seasonal and Term loans to farmers. The Interest Rate from MEB is 5% per annum. The Interest Rate on saving deposits is 8% per annum.

3.4.2 Financial Condition of MADB

According Myanmar Agriculture Development Bank law Section (7) Authorized Capital is 1000 million kyats and paid up Capital of MADB is 60 million kyats. Agriculture Capital was gradually increased from 1000 million kyats to 20000 million kyats. To date of Authorized Capital stands at 20000 million kyats.

In accordance with section (a) clause (a) of the law, the state contributed 20 million kyats to the Reserve Fund and funds equivalent to 25% of the Financial Year's Net profit were allocated in multiples of one million kyats to the Reserve Fund. The Summary of reserve fund for financial Year 2018(Mini) shows stands at 9407 million kyats. The Paid-up capital is up to 9500 million kyats in 2018 (Mini). Financial Viability for the year from 2009-2010 & 2018 (Mini) is Shown in Comparison to within 10 years.

Table 3.3 Financial Status Comparison for 2009-2010 & 2018(Mini-Budget)

(Kyats In Million)

No.	Particulars	2009-2010	2018 (Mini-Budget)
1	Capital	2,000.00	9,500.00
2	Reserve Fund	507.00	9,407.00
3	Village Bank& Other Deposits	40,760.13	28,680.29
4	Saving Deposits	507.65	653.94
5	Demand Deposits	27.19	215.35
	Total	**43,801.97**	**48,456.58**

Source; Annual Return of MADB (2009-2010 to 2018-Mini)

3.5 Study on Financial Returns of Myanma Agricultural Development Bank

According the study on Financial Return of Myanma Agricultural Development Bank during the financial year (2009-10) to (2018 Mini-Budget), the researches emphasizes on situation of Net Profit and State Contribution. The initial year in 2009-10 the bank's profit is 85.34 million kyats. In 2013-14, the bank gets maximum profit. Then the profit decreases next year and the bank faced with the loss because of NPL. The bank contributed State Contribution 17637 million kyats which is the maximum amount.

Table 3.4 Profit and State contribution of MADB during the Financial Year (2009-10 to 2018 Mini-Budget)

(Kyat in Million)

Sr, No	Financial Year	Profit	State Contribution	Remark
1	2009-2010	851.34	639	
2	2010-2011	2,669.85	2,002	
3	2011-2012	8,484.63	6,363	
4	2012-2013	9,335.02	7,001	
5	2013-2014	23,516.78	17,637	
6	2014-2015	7,218.54	5,413	
7	2015-2016	(10,823.56)	-	
8	2016-2017	14,376.96	10,782	
9	2017-2018	(53,447.26)	-	
10	2018(Mini-Budget)	(10,838.42)	-	

Source; Annual Returns of MADB

According to the study, MADB maintains the profit except three fiscal years (2015-2016), (2017-2018) and (2018 Mini-Budget). In these years, risk weighted assets value of the bank critically increased because of NPL. The bank contributed state contribution to the State except these three years. Because of the State is only one share holder of the bank, the bank needs to claim the loss supporting to the State. The bank needs to promote profitability by reducing NPL and operational risk to strengthen financial performance.

CHAPTER IV

ANALYSIS ON FINANCIAL PERFORMANCE OF MADB

This chapter intends to explore financial performance of MADB by presenting the CAMEL rating framework. Data are used from annual return of MADB from 2009 to 2018 Mini fiscal year to implement the CAMEL model by analyzing the Bank's overall performance on Capital, Assets, Management, earning and liquidity.

4.1 Analysis on Capital Adequacy of MADB

Capital adequacy ratio is the most important for the bank expressed the percentage of its risk weighted assets. The capital adequacy ratio (CAR) is used to protect depositors and promote the stability and financial system all over the world. The ratio is used CAR and Core capital / total deposits. The Basel committee set as the norm of capital adequacy percentage is 8%.

Table 4.1 MADB's capital adequacy component rating is 2.28 and CAR is 4.30 by calculating using by the financial data of MADB for past 10 years. The average rating of these two components is 3.29 and it is the range of rating 3 and 3.5.

In making assessment of capital adequacy under the table 4.1, , the financial soundness indicators such as core capital and total deposits ratio is 2.28 from 2009 to 2018 mini and it's rating is 2. A rating of 2 indicates superior quality of the bank. The assessment of CAR rating is 4.3 and it indicates the level of risk sufficient to jeopardize their solvency. But, the average rating of capital adequacy on both of table 4.1 is rating 3.

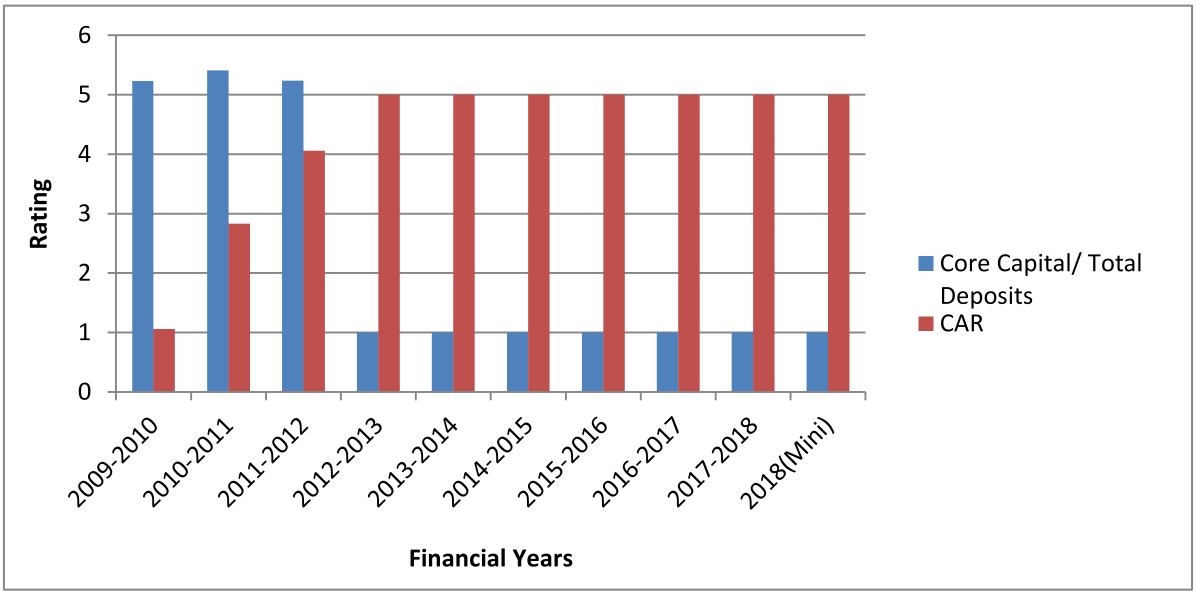
The total deposits of MADB is significantly decreased in total deposits in 2012 -2013. In 2011-2012 total deposit amount is 87616.26 million kyat and in 2012-2013 it decreased the amount to 14555.97 million kyats. (See in appendix B-1). During one year the farmers withdraw their deposits nearly 63 million kyats at the same time. This period is political change period from the military government to democracy government. The famers urgently demand to withdraw their deposits through the senate.

Table 4.1 Aggregate CAMEL Rating for Capital Adequacy

Financial Year	Core Capital/ Total Deposits	CAR
2009-2010	5.23	1.06
2010-2011	5.41	2.83
2011-2012	5.24	4.06
2012-2013	1	5
2013-2014	1	5
2014-2015	1	5
2015-2016	1	5
2016-2017	1	5
2017-2018	1	5
2018(Mini)	1	5
Average	2.28	4.30
Average Rating	3.29	
Rating Scale	3	

Source- Own Calculation based on Appendix A-1

Figure 4.1 Aggregate CAMEL Rating for Capital Adequacy



Source; From table 4.1

The standard norm of average capital is 10% which is appreciable. According the study core capital by total deposit ratio is over rating 5 and during this year total deposit is more than equity capital and in 2012/13 total deposit is critically decreased from 87 billion to 14 billion and this period is changing the political affairs from the military government to civil government. The farmers were urgently demand to withdraw their deposits through the Senate in 2017 /18.It was decreased in deposits because of JICA project loans and the farmers need to deposit to the bank for their credit appraisal. In 2018 it upgrade to 29 billion (see the appendix B1) of collecting compulsory saving 1% on their getting loans. Car ratio is rating 1.06 in the initial year 2009/10 and rating 5 in 2018 mini. At the beginning year of analysis 2009, equity capital is 2507.34 million and it increase up to 18907 million in 2018 mini. Though the equity capital is increased year by year, in the other site risk weighted assets that indicate the increase of NPL is very high position. So, Car ratio rating is significantly decreased. (See appendix B1). Aggregate CAMEL rating for capital adequacy rating is 3 and it is fair position for the Bank.

4.2 Analysis on Asset Quality of MADB

The quality of assets is very important for the bank sustainability. Poor asset quality is expressed to the bank failure and it tends to the Non- performing loans percentage. The most important asset quality is measured by NPL/ Total loans, NPL-Provision/loans, Provision/NPL, NPA/Total assets.

In Table 4.2 NPL/Loans rating is 2.04, NPL-Provision /Total loans rating is 1, Provision/ NPL rating is 1.01, NPA/Total assets rating is 4.06 by calculating using financial data for past 10 years annual report of MADB. By seeing this table ,there is 0 NPL in 2009 to 2012 financial year .The bank collects fully recovery on its loan. But from 2012 it began overdue loans 6.48 million and it loan was disbursed the beginning period of government change. NPL increased slightly year by year and the bank couldn't collect on its loans.

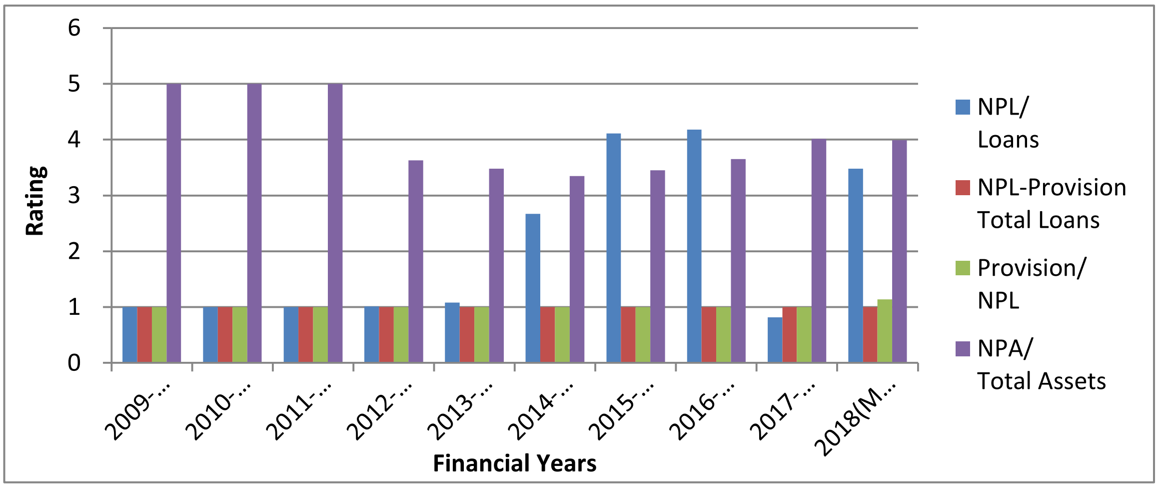
The Quality of Assets is to determine the level of financial strength. Assets quality rating is a function of present conditions and future deterioration (or) improvement.

Table 4.2 Aggregate CAMEL Rating for Assets Quality

Financial Year	NPL/ Loans	NPL-Provision / Total Loans	Provision/ NPL	NPA/ Total Assets
2009-2010	1	1	1	5
2010-2011	1	1	1	5
2011-2012	1	1	1	5
2012-2013	1.01	1	1	3.63
2013-2014	1.08	1	1	3.48
2014-2015	2.67	1	1	3.35
2015-2016	4.11	1	1	3.45
2016-2017	4.18	1	1	3.65
2017-2018	0.82	1	1	4.01
2018(Mini)	3.48	1	1.14	3.99
Average	2.04	1	1.01	4.06
Average Rating	2.02			
Rating Scale	2			

Source; Own Calculation based on Appendix A-2

Figure 4.2 Aggregate CAMEL Rating for Assets Quality



Source; From table 4.2

According to Table 4.2, This table measure assets Quality by four indications: NPL/Loans, $\frac{\text{NPL}-\text{Provision}}{\text{Table Loans}}$, Provision /NPL and NPA/ Total Assets. NPL/Loans of MADB Average Rating is 2.04, NPL-Provision/Total Loans Rating is 1, Provision /NPL

Rating is 1.01 and NPA/Total Assets Rating is 4.06. The average rating of Assets Quality is 2.04(2).

In viewing of loan extension, MADB's Loans are increased year by year. Till 2011-2012 MADB had no NPL. The Bank collects fully recovery and after that NPL amount increased year by year and NPL/Total loans position decreased. But, According to the instruction of CBM, The bank makes sufficient provision, and NPL-Provision/Total Loans Rating is 1. NPA/Total Assets rating is the bad rating in initial your 2009-2010 because of insufficient total Assets.(See Appendix B)

Even though Loans are increased by increasing total assets, MADB can maintain its assets quality in Rating 2.

4.3 Analysis on Management Efficiency of MADB

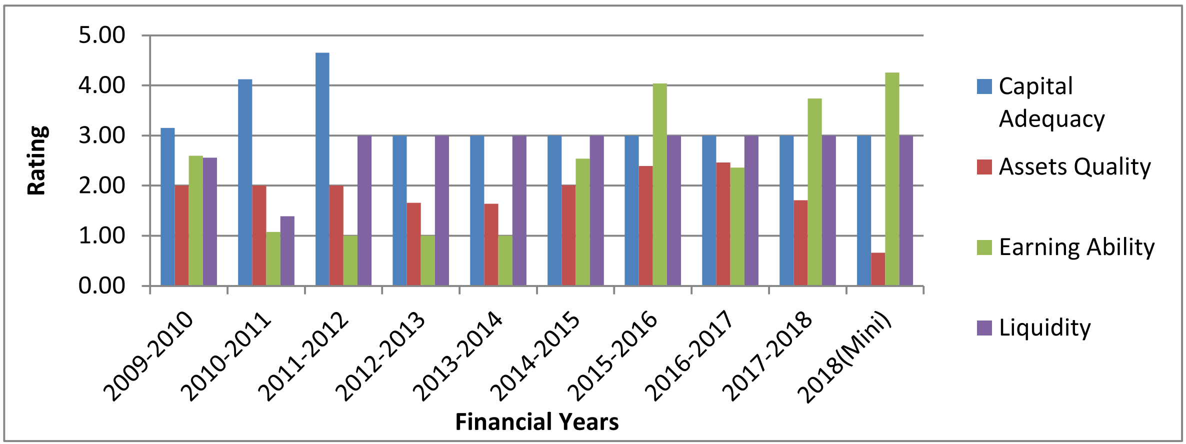
Management Efficiency is the most important role of the CAMEL model that represents the sustainability growth of the bank. Vision Mission and goals set by Management are the way of guideline for the organization and ensures achieves them. Table 4.3 shows MADB's Capital Adequacy Assets Qualify, Earning Ability and liquidity and it's average rating during 2009 to 2018 (Mini).

Table 4.3 Aggregate CAMEL Rating for Management Efficiency

Financial Year	Capital Adequacy	Assets Quality	Earning Ability	Liquidity
2009-2010	3.15	2	2.60	2.56
2010-2011	4.12	2	1.08	1.39
2011-2012	4.65	2	1	3
2012-2013	3	1.66	1	3
2013-2014	3	1.64	1	3
2014-2015	3	2.01	2.54	3
2015-2016	3	2.39	4.04	3
2016-2017	3	2.46	2.36	3
2017-2018	3	1.71	3.74	3
2018(Mini)	3	0.66	4.26	3
Average	3.29	1.85	2.36	2.80
Average Rating	2.58			
Rating Scale	3			

Source; Own Calculation based on Table 4.1, 4.2, 4.4, 4.5

Figure 4.3 Aggregate CAMEL Rating for Management Efficiency



Source; from table 4.3

MADB's Capital Adequacy Component rating is 3.29, Asset Quality rating is 1.85, Earning Ability is 2.36, and liquidity is 2,80 and the average rating of Management Efficiency is 2.58, it is in the range between 2.6 and 3.5. Board of Directors and Management are fair (average).

4.4 Analysis on Earning Ability

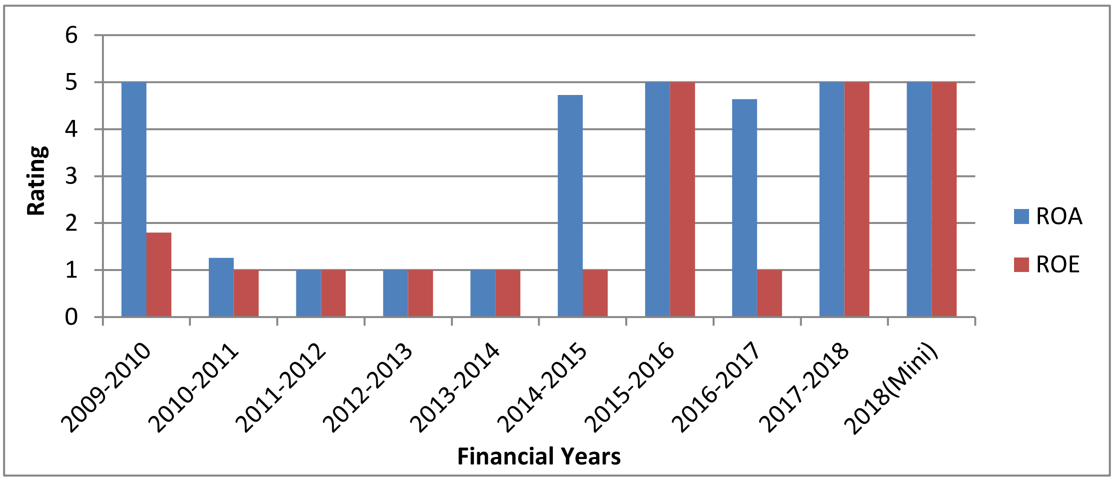
Earning Ability of the Bank is very critical indicator reflects quality of the bank's profitability and sustainable growth not only for short-term but also for a Long-Term. To measure aggregate CAMEL rating for earning ability, there are three determinants: ROA, ROE & Interest Margin on Earning Assets.

Table 4.4 Aggregate CAMEL Rating for Earning Ability

Financial Year	ROA	ROE	Interest Margin on Earning Assets
2009-2010	5	1.80	1
2010-2011	1.26	1	1
2011-2012	1	1	1
2012-2013	1	1	1
2013-2014	1	1	1
2014-2015	4.73	1	1.90
2015-2016	5	5	2.13
2016-2017	4.64	1	1.45
2017-2018	5	5	1.23
2018(Mini)	5	5	2.80
Average	3.36	2.28	1.45
Average Rating	2.36		
Rating Scale	2		

Source; Own Calculation on Appendix A-4

Figure 4.4 Aggregate CAMEL Rating for Earning Ability



Source; From table 4.4

Table 4.4 shows MADB's ROA rating is 3.36. ROE is 2.28. Average rating for earning ability is 2.36(2).

Return on Assets ratio is bad in 2009-2010. During 2010-2019, It is significantly increased in earning ability because of increased seasonal Loans rate and Loans amount. From 2014, it's decreased in ROA because of increasing NPL in seasonal loans and the Bank face the loss in 2015-2016, 2017-2018 & 2018(Mini). Return on Equity rating is the worst in 2015-2016, 2017-2018, 2018(Mini) that the bank occurred in loss. (See Appendix A-4). Interest Margin on Earning Assets rating is 1.45. The sources of fund gets, from MEB by 5% interest rate and disburse to customers 8% interest rate. Interest Margin on Earning Assets recovered the major interest to MEB. Earning Assets rating (2) refers it is positive and relatively stable.

4.5 Analysis on Liquidity of MADB

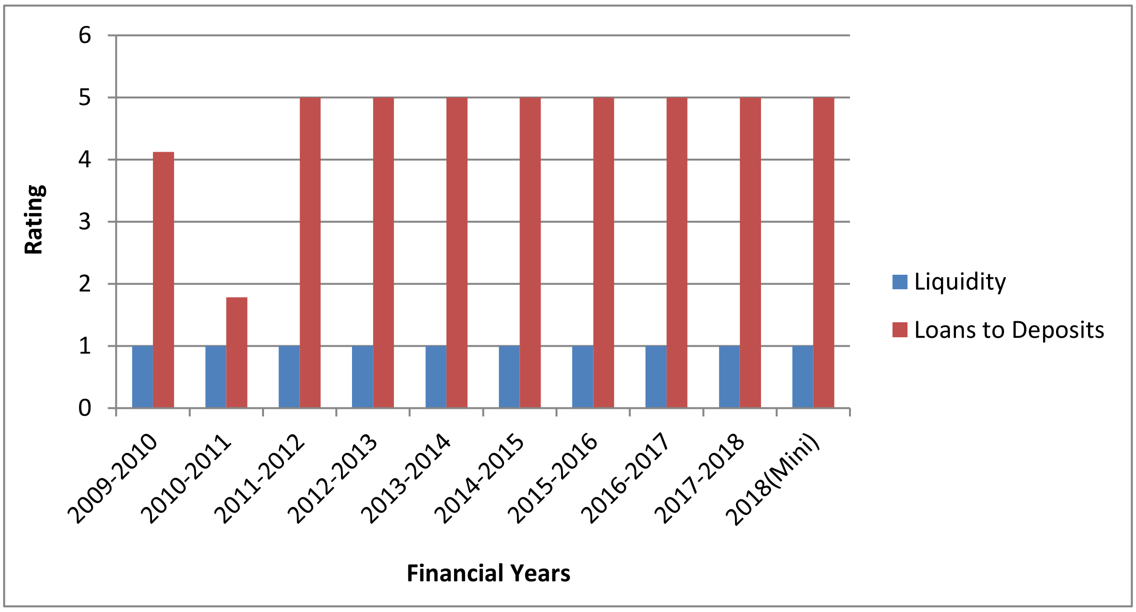
The Liquidity of the bank is the crucial role of the bank. There should be adequacy of Liquidity sources compared to present & future needs. A Liquid Assets is one that trades in an active market and thus can be quickly inverted to cash at the going market price. It is essential item with the capacity to maintain the confidence of depositors which is the most valuable intangible assets of the commercial banking business. Liquidity is the most dominant factor in ALM.

Table 4.5 Aggregate CAMEL Rating for Liquidity

Financial Year	Liquidity	Loans to Deposits
2009-2010	1	4.12
2010-2011	1	1.78
2011-2012	1	5
2012-2013	1	5
2013-2014	1	5
2014-2015	1	5
2015-2016	1	5
2016-2017	1	5
2017-2018	1	5
2018(Mini)	1	5
Average	1	4.59
Average Rating	2.80	
Rating Scale	3	

Source; Own Calculation on Appendix A-4

Figure 4.5 Aggregate CAMEL Rating for Liquidity



Source; From table 4.5

In Table 4.5 Liquidity Ratio is good position from 2009 to 2018(Mini). In 2011-2012, Current Liabilities (Total Deposit) is 87.626 Billion. Bad In 2012, 2013, of decrease (14.555) Billion, because the farmers urgently demurred to get withdraw their deposits through the parliament. Actually, it is more than increasing in current Assets, decreasing in Current Liabilities (Total Deposits).

Loans to Deposit Ratios (in Appendix A-5) is 49.38 and after that situation, there increases year by year rapidly. Seasonal Loans amount increase year by year, in some year, there increase double amount but in the other side the bank (and not get deposit and after the government change, There Significantly decrease in deposit by withdraws simultaneously. However, The Bank authorities endeavor to get high deposit and to decrease loans to Deposits position by extending on disburse JICA TSL by getting deposit collateral and 1% on Seasonal Loans. Loans to Deposits rating are the 4.12 in 2009-2010 and Total Loans is half of total deposits. After that, in 20.10.2011 Loans amount increase and loans to deposits rating is 1.78. Next years, deposits decrease year by year and loans increase year by year according the loans instruction (or) authorized permission of government. The bank needs to promote deposits for loans to maintain fair position. The average loans deposits rating is 4.59 and liquidity rating is 1. Average Raping is 2.8 and Rating scale is 3.80 (3) (Fair)

4.6 Aggregate CAMEL Composite Rating

In Table 4.6 if shows Aggregate Camel rating indicated on Capital Adequacy, Assets Quality, Management Efficiency, Earing anility and liquidity. Aggregate CAMEL Composite Rating is 2.6 and of is between 2.6 & 3.5, Rating 3(Fair).

Table 4.6 Aggregate CAMEL Rating for MADB during the period to 2009-2018(Mini-Budget)

Sr.	Financial Soundness Indicator Rating	(10)Years Average Component Ratios	Description
1	Capital Adequacy	3	Fair
2	Assets Quality	2	Superior
3	Management Efficiency	3	Fair
4	Earning Ability	2	Superior
5	Liquidity	3	Fair
	Aggregate CAMEL Composite Rating	3	Fair

Source; Own Calculation on Table 4.1, 4.2, 4.3, 4.4, 4.5

CHAPTER V

CONCLUSIONS

The objective of the study is to evaluate financial performance of MADB. And, the results of the study intend to be described safe & soundness of MADB financial performance with regard to CAMEL rating.

5.1 Findings

Five indicators of financial soundness regarded by 'CAMELS' Rating System; Capital Adequacy, Assets Quality, Management Efficiency, Earning Ability and liquidity represent the current position of MADB and point to the future needs to reform in such criteria to develop banking activities. Capital Adequacy is in Rating 3. That means MADB depends on undercapitalized and, it face with significant problem, asset quality problems, earnings deficiencies and credit risk, interest rate risk that could negatively effect in Capital. Then, there is rating 2 in Asset Quality of MADB that measures in four criteria NPL/ Loans, NPL- provision/ Total loans, Provision / NPL , NPA/ Total Assets.

The rating 4 exists in NPA/ Total Assets. Total Assets are significantly increased in seasonal loans but Non-financial Assets are not increased accordingly to the total Assets Aggregate Camel rating is 2 and it shows trends that are stable is positive.

The components of aggregate CAMEL rating for Management Efficiency are CAR, Assets Quality, Earning Ability and Liquidity. Average Rating is 3. There expressed ability to correct less than satisfactory condition. Its responsiveness is lacking to some degree especially on CAR and Earning Ability. Thus, they need to promote earning ability in several ways and rise up the capital adequacy of MADB.

Aggregate CAMEL rating for Earning Ability that reflects ROA, ROE and interest margin on earning assets is 2. Thus, MADB provided its level of earnings is adequate in view of asset quality and operating risks.

Aggregate CAMEL ratings for liquidity indicate in liquidity & loans to deposit. Both two inclinators are two much than good position and Bad position. That means irregular situation in few deposits and too much loans, But, Average rating scale is 3 that reflects liquidity level of MADB. A rating 3 indicates liquidity level and fund management practice need to improve.

Aggregate CAMEL Composite Rating of MADB is (2.6) (between 2.6 and 3.5). So, Aggregate CAMEL Composite Rating is 3. Rating 3 reflects performance that is flawed to some degree and is of supervisory concern. Risk management practices are less than satisfactory relative to the credit size especially in NPL, complicity, and risk profile.

5.2 Suggestions

The facts mentioned above in findings reflect on the component rating of each financial indicator that is found on rating (3) in CAMEL composite rating in MADB. It means in the Fair (Average) level. It refers that reflects performance that is flawed to some degree and is of supervisory concern in Capital Adequacy, Management Efficiency and liquidity. It refers the capital Adequacy is needed to assess in accordance with CBM regulations to meet Minimum Capital Amount (20 billion). Retained earnings are insufficient to maintain adequate capital levels according to the MADB Law because 75% of the profit is to be contributed to the government. Earning Ability is slightly low from fiscal year (2014-2015). So, the bank need to review fully dependent on the constant interest rate set by the government both for funding and loans.

Liquidity rating is '3'. MADB should review liquidity risk management framework. This review should need the liquidity requirements including either quantitative (or) qualitative requirements (or) both. Liquidity needs of the banks reflect the strategy takes into account the institution's risk profile link to market and macroeconomic conditions. The bank should review the position and plan of liquidity to confirm its ability to manage asset & liability in any time and relative impact on MADB's profitability and liquidity. At the current situation, MADB face a number of weakness and it need to be addressed of it is to fulfill its mandate.

Lack of diversification of bank portfolio – high volume loan amount disburse to farmers who owns up to 10 acres and still need to disburse to large forms engaged in commercial agriculture (or) other agribusiness firms. And, the Bank need to serve traders, supporters, exporters, transport firms, warehouses, equipment sellers and other type of firms along the agricultural value chairs. And, it needs to disburse more widely in various crops not only depending on paddy crops. The bank needs to extend the Risk

Management Department and need to analyze on each loans on each crops according to the region occurring the high NPL. MADB does not conduct any risk analysis nor does of take any measure to mitigate its risk exposure. MADB need to protect on loans disbursed to the occurrence of natural disasters, Plagues and commodity price the situations. The corporate Governance of the bank is week and of has only pre - audit & pest – audit department. It still need the Internal audit committee and NED (Non-Executive Directors) who are submit the actual pros and cons of MADB transparently MADB files are not digitalized and operates a rudimentary It and physical infrastructure. Reporting process for management and clients is very late connection due to the absence of IT. Now, the bank is beings started on IT platform and still need to emerge the complete system in IT not only in operating but also in reporting.

CBM, one of regulator for all banks instruct rules, regulations and instructions. But, the nature of MADB is quite different on other commercial banks. So, CBM need to exempt MADB in Some issues. For example CBM set the NPL loans and advance for standard loan, watch loan, Sub – Standard loan, Doubtful & Bad Debt loan by days (0 days to 180 days). The Nature of MADB repayment capacity is based on crops cultivation and reaping. It takes the time over 180 days. After one year, the farmers get their income from crops and within one year they are difficult to repay. CBM needs to review on their instructions instead of "These, regulations shall apply to all banks", they need to consider separately the specific provisions for the impairment is to be made against all outstanding balance of loans and advances for MADB. MADB needs to perform as a commercial bank by making multiple products like BAAC, (Bank for Agriculture and Agricultural Co-operatives in Thailand and the other land, according to the MADB law, by taking the grants from outside the country and abroad if need to support the long-term loans to the farmers and entrepreneurs like JICA & MEB TSL.

Under the current law MADB need to contribute 75% of Net Profit as a contribution to the State to fulfill the capital needs and maintain sustainable fund by maximizing the Net Profit. The bank need to review accounting and policies and procedure in present policy (GAAP) and adopt the international accounting standard (IAS and IFRS and annually publish information that fairly reflects their financial condition and performance and need to bear an independent external auditor's opinion. By adopting the Int'l accounting standards (IAS & IFRS) mentioned above, there is adequate governance and oversight of internal and external audit function. The bank needs to review the current human resources capacity and need to upgrade responsible capacity for each level to top management.

5.3 Need for further Study

The scope of this paper is to discuss and using the CAMEL rating system in evaluating the bank's performance in Myanmar. But, it may be very in different situations based on various countries, various types of organizations such as companies, bank, micro finance institution and etc. Moreover, MADB is only one of Agricultural Bank in Myanmar and there is no competitive organization in Myanmar. And, this paper is to discuss only one point of view using financial data of MADB during the ten years (2009-10 to 2018 Mini). Actually, MADB is one of SOB and it is driven under the rules and regulations of Ministry (MOPF) and CBM. Then, MADB's capital fulfillments, credit policy and its interest rate, its loan recovery and etc. are concern within the government policy and farmers behavior link to economy. Therefore, it will need the further research reflects the rural socio economic life status of farmers and their attitude in important areas causing to NPL and related the government economic policy and guidelines as a reference to expand the scope and improve results of the research. The suggestion for further research brings additional opportunities to further findings and support to improve the financial performance of MADB through the CAMEL rating approach.

REFERENCE

1. ADAM HAYES (Updated May 19, 2019) *Corporate Finance and Accounting Financial Ratios*
2. Barretal 2002, *Camel Model Analysis of Selected Public and Private*
3. Beatriz Armendariz, Janathon Morcluch (2005), *Massachusetts Institute of Technology: The Economic of Microfinance* 2nd ed.
4. Beaver, W. (1977), *"Financial Statement Analysis",* Handbook of Modern Accounting, eds Davidson, S. and Weil, R., 2nd ed. McGraw-Hill
5. BRIAN BEERS (Updated April 4, 2018). *PERSONAL FINANCE IN BANKING (How is Capital Adequacy of a Bank Measured)*
6. Central Bank of Myanmar (7 July 2017). *Notification 16, 17, 18, 19*
7. Central Bank of Myanmar. *Financial Institutions Law*
8. Hutchinson, P., Meric, I., and Meric, G. (1988), "*The financial characteristics of small firms which achieve quotation on the UK unlisted securities market",* Journal of Business Finance and Accounting 15/1, 9-19.
9. Jocelyn Alma Badiala: *An APRACA Fin Power Publication with Special Sponsorship of the International Fund for Agricultural Development (IFAD)*
10. Lin Lin Hlaing (Master of Thesis for Banking and Finance Yangon University of Economics, 2nd Batch 2016). *Employee perception on Financial & Non-Financial Reward:* KANBAWZA BANK
11. Ma Sein Sein Aye (Master of Thesis for Banking and Finance Yangon University of Economics, 2nd Batch 2016).*A Study on Financial Performance of Myanmar Citizens Bank*
12. Myanmar Agricultural Development Bank (2009 to 2018-Mini), *MADB Annual Returns*
13. Muhammad Yunus (1999). *Published in United State by Public offers: Banker to the poor* , Publisher PublicAffairs (First ed.)
14. Myanmar Agricultural Development Bank (established in 6th July 1990) *The Myanmar Agricultural Development Bank Law*
15. Steven Nicolas (Updated May 14, 2019). *Minim Capital adequacy ratio Under Basel iii*

16. Yadanar Oo (Master of Thesis for Banking and Finance Yangon University of Economics, 2nd Batch 2016). *The Study on Financial Soundness of Myanmar Oriental Bank Limited*

Appendix A.1

Capital Adequacy Sub-Parameter Ratios

Financial Year	Equity Capital / Total Deposits	CAR
Critical Value %	**Bad - Good** **7 - 23**	**Bad - Good** **7.5 - 22**
2009-2010	6.07	21.77
2010-2011	5.35	15.35
2011-2012	6.04	10.91
2012-2013	52.41	7.28
2013-2014	112.19	5.61
2014-2015	130.56	5.09
2015-2016	125.47	4.36
2016-2017	155.57	3.21
2017-2018	97.18	2.57
2018(Mini)	63.98	2.04

Source; Own Calculation based on Appendix-B

Appendix A-2

Assets Quantity Sub-Parameter Ratios

Financial Year	NPL/ Total Loans	NPL-Provision / Total Loans	Provision/ NPL	NPA/ Total Assets
Critical Value %	**Bad - Good 5-0**	**Bad - Good 10-0**	**Bad - Good 40-100**	**Bad - Good 20-2**
2009-2010	0	0	100	60.12
2010-2011	0	0	100	48.45
2011-2012	0	0	100	27.57
2012-2013	0.003	-3.03	903.25	7.67
2013-2014	0.10	-2.46	2,563.21	6.34
2014-2015	2.09	-1.01	148.58	5.20
2015-2016	6.11	-0.10	101.56	6.05
2016-2017	3.98	-2.11	152.99	7.86
2017-2018	10.23	-3.76	136.76	11.05
2018(Mini)	15.60	0.33	97.88	10.95

Source; Own Calculations based on Appendix-B Table-1

Appendix A-3

Management Efficiency Overall Ratios

Financial Year	Capital Adequacy	Assets Quality	Earning Ability	Liquidity
2009-2010	13.92	40.03	31.99	62.44
2010-2011	10.35	37.11	50.42	68.33
2011-2012	8.48	31.89	69.15	98.92
2012-2013	29.84	226.97	47.28	713.56
2013-2014	58.90	641.79	64.25	1,881.45
2014-2015	67.83	38.72	18.95	2,474.28
2015-2016	64.92	28.40	-21.46	2,659.43
2016-2017	79.39	40.68	29.03	4,346.26
2017-2018	49.87	38.57	-92.07	3,194.09
2018(Mini)	33.01	31.19	17.29	2,772.52

Source; Own Calculation based on Appendix-B

Appendix A-4

Earning Ability Sub-Parameter Ratio

Financial Year	ROA	ROE	Interest Margin on Earning Assets
Critical Value%	**Bad - Good 1 - 4**	**Bad - Good 10 - 40**	**Bad - Good 1 - 12**
2009-2010	1.67	33.95	60.37
2010-2011	3.80	84.09	63.36
2011-2012	7.30	160.22	39.92
2012-2013	4.46	122.36	15.02
2013-2014	5.00	174.09	13.68
2014-2015	1.20	47.14	8.52
2015-2016	(1.59)	(70.68)	7.88
2016-2017	1.27	76.04	9.77
2017-2018	(3.89)	(282.69)	10.36
2018(Mini)	(0.60)	(57.32)	6.04

Source; Own Calculation based on Appendix-B

Appendix A.5

Liquidity Sub-Parameter Ratios

Financial Year	Liquidity Ratio	Loans to Deposit Ratios
Critical Value %	**Bad - Good 20 - 45**	**Bad - Good 95 - 75**
2009-2010	75.49	49.38
2010-2011	75.57	61.09
2011-2012	101.72	96.12
2012-2013	99.53	1,327.58
2013-2014	106.39	3,656.51
2014-2015	105.40	4,843.15
2015-2016	107.10	5,211.75
2016-2017	107.96	8,584.55
2017-2018	112.10	6,276.08
2018(Mini)	111.76	5,433.28

Source; Own Calculation based on Appendix-B

Appendix B-1

Financial Data for Analyzing Financial Performance of MADB (Contd…)

(Kyats in Million)

Sr.	Financial Year	Total Deposit	Risk Weighted Assets	Equity Capital	Total Loans	Provision	NPL
1	2009-2010	41,294.98	11,515.74	2,507.34	20,392.08	1,704.34	-Nil-
2	2010-2011	59,308.40	20,676.78	3,174.85	36,236.86	2,226.10	-Nil-
3	2011-2012	87,616.26	48,545.39	5,295.63	84,221.67	3,474.43	-Nil-
4	2012-2013	14,555.97	104,846.75	7,629.02	193,243.32	5,853.11	6.48
5	2013-2014	12,040.90	240,650.45	13,508.78	440,277.83	11,287.35	440.36
6	2014-2015	11,728.81	301,005.54	15,313.54	568,044.25	17,631.68	11,867.10
7	2015-2016	12,204.24	351,598.91	15,313.00	636,054.26	39,525.91	38,919.16
8	2016-2017	12,153.98	589,670.69	18,907.96	1,043,364.40	63,468.02	41,482.45
9	2017-2018	19,454.16	734,765.18	18,907.00	1,220,960.35	170,951.09	124,998.75
10	2018-Mini	29,549.60	927,865.46	18,907.00	1,605,512.49	245,290.47	250,600.38

Source; Annual Reports of MADB

Appendix B-2

Financial Data for Analyzing Financial Performance of MADB (Cont.…)

(Kyats in Million)

Sr.	Financial Year	N.F.A	Earning Assets	Total Assets	Net Profit
1	2009-2010	30,742.48	20,392.08	51,134.56	851.34
2	2010-2011	34,051.85	36,236.86	70,288.71	2,669.85
3	2011-2012	32,053.54	84,221.67	116,275.21	8,484.63
4	2012-2013	16,049.18	193,243.32	209,292.50	9,335.02
5	2013-2014	29,815.78	440,277.83	470,093.61	23,516.78
6	2014-2015	31,139.83	568,044.25	599,184.08	7,218.54
7	2015-2016	40,969.25	636,054.26	677,023.51	(10,823.56)
8	2016-2017	89,036.14	1,043,364.41	1,132,400.55	14,376.96
9	2017-2018	151,739.33	1,220,960.35	1,372,699.68	(53,447.26)
10	2018-Mini	197,444.28	1,605,512.49	1,802,956.77	10,838.42

Source; Annual Reports of MADB

Appendix B-3

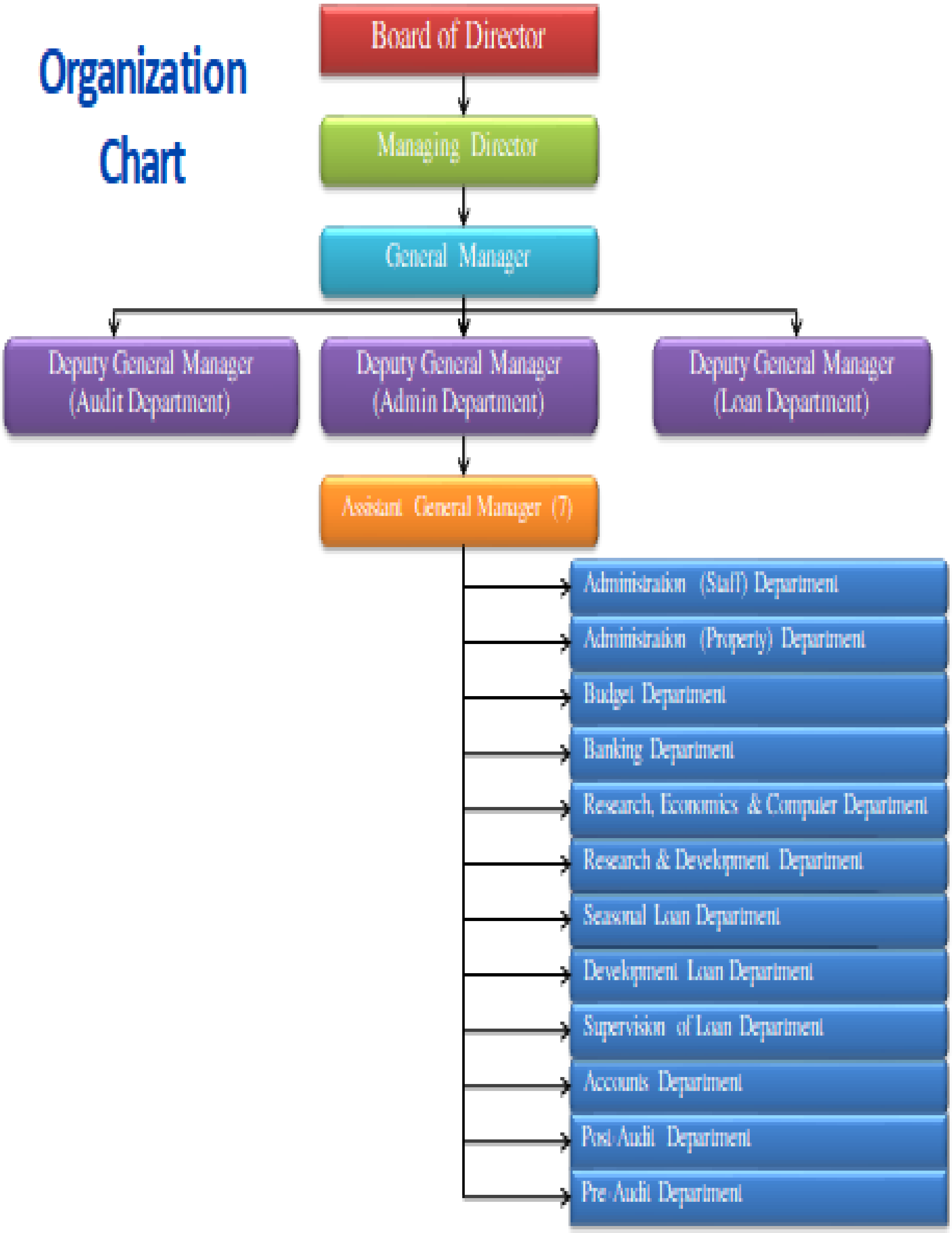
Financial Date for Analyzing Financial Performance of MADB (Cont.….)

(Kyats in Million)

Sr.	Financial Year	Current liability	Interest Income	Current Assets	Remarks
1	2009-2010	43,128.65	12,311.75	32,558.34	
2	2010-2011	61,555.59	22,960.47	46,521.33	
3	2011-2012	100,509.27	33,626.30	102,245.26	
4	2012-2013	189,636.96	29,026.39	188,745.90	
5	2013-2014	435,243.14	60,227.43	463,059.49	
6	2014-2015	563,041.90	48,389.60	593,487.21	
7	2015-2016	618,266.05	50,126.10	662,168.78	
8	2016-2017	1,035,097.07	101,940.39	1,117,543.06	
9	2017-2018	1,161,620.18	126,528.67	1,302,288.04	
10	2018-Mini	1,483,900.12	97,075.23	1,658,478.85	

Source; Annual Reports of MADB

Appendix-C


Organization Chart
Board of Director
Managing Director
General Manager
Deputy General Manager (Audit Department)
Deputy General Manager (Admin Department)
Deputy General Manager (Loan Department)
Assistant General Manager (7)
Administration (Staff) Department
Administration (Property) Department
Budget Department
Banking Department
Research, Economics & Computer Department
Research & Development Department
Seasonal Loan Department
Development Loan Department
Supervision of Loan Department
Accounts Department
Post Audit Department
Pre Audit Department