

**YANGON UNIVERSITY OF ECONOMICS**  
**DEPARTMENT OF ECONOMICS**  
**PhD PROGRAMME**

**MEASURING PERFORMANCE OF PRIVATE BANKS**  
**IN MYANMAR**  
**(2012/2013 - 2016/2017)**

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## **Abstract**

The financial sector has a facilitating role in the growth of the real sector and likewise it is a source of fragility which has negative effects on the real sector of an economy. Therefore, the soundness of the financial system has become increasingly important in any economy over the recent years. The study aims to analyze the overall performance of selected Myanmar private banks from a financial aspect by using financial soundness indicators and from non-financial aspect in terms of customer satisfaction and employee satisfaction. Both qualitative and quantitative research methods are applied to measure the overall performance of selected private banks. Financial performances of selected private banks are measured through financial soundness indicators based on CAMEL framework. Nonfinancial performance of selected private banks is measured through surveys on bank employee satisfaction and customer satisfaction. From the financial aspect, Global Treasure Bank, Myanmar Oriental Bank and Small & Median Industrial Development Bank out of 7 selected private banks are financially sound with modest weakness and outperform their average rivals, whereas Kanbawza Bank, Ayeyarwaddy Bank, Co-operative Bank and Myawaddy Bank just meet the major regulatory standards and should be under cautious supervisory stance. From non-financial perspective, performance of all selected private banks is moderately good in terms of employee satisfaction and customer satisfaction. As overall performance measured through composite rating analysis which taking both financial and non-financial aspects into consideration, Global Treasure Bank and Small & Median Industrial Development Bank are in the group of better than average banks whereas Ayeyarwaddy Bank, Co-operative Bank, Kanbawza Bank, Myanmar Oriental Bank and Myawaddy Bank fall into the category of average banks.

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## Abbreviations

<b>ATM</b>	Automatic Teller Machine
<b>AYA</b>	Ayeyarwaddy Bank
<b>BIS</b>	Bank for International Settlements
<b>CAMEL</b>	Capital Adequacy, Asset Quality, Management, Earning, Liquidity
<b>CB</b>	Co-operative Bank
<b>CBM</b>	Central Bank of Myanmar
<b>CEO</b>	Chief Executive Officer
<b>CSR</b>	Corporate Social Responsibility
<b>FISD</b>	Financial Institutions Supervisions Department
<b>FY</b>	Fiscal Year
<b>GDP</b>	Gross Domestic Product
<b>GTB</b>	Global Treasure Bank
<b>KBZ</b>	Kanbawza Bank
<b>IMF</b>	International Monetary Fund
<b>MEB</b>	Myanma Economic Bank
<b>MFTB</b>	Myanma Foreign Trade Bank
<b>MICB</b>	Myanmar Investment and Commercial Bank
<b>MOB</b>	Myanmar Oriental Bank
<b>MWD</b>	Myawaddy Bank
<b>NPL</b>	Non Performing Loan
<b>RATER</b>	Reliability of Bank Services, Assurance, Tangible, Empathy, Responsiveness
<b>ROA</b>	Return on Asset
<b>ROE</b>	Return on Equity
<b>SMIDB</b>	Small & Medium Industrial Development Bank

## **Chapter 1**

### **Introduction**

#### **1.1 Rationale of the Study**

It is theoretically and empirically accepted that the role of financial system is very important for the economic growth of a country. Without a well-functioning financial system, a country could not achieve the sustainable economic growth. Whether it is market-based or bank-based, development of financial sector supports the growth of an economy.

In the literature of finance-growth nexus, there have been many evidences which show that two broad sectors of an economy- financial sector and real sector have mutual causality between each other. An economic analysis of financial sector demonstrates the important link between the financial sector and the performance of the aggregate economy. The financial sector is crucial in promoting greater economic efficiency by channeling funds from people who do not have a productive use for them to those who do. Indeed, the well-functioning financial sector is one of the key drivers of high economic growth whereas poorly performing financial sector is responsible for lower economic growth of an economy. Therefore, it is found that the important reason why many developing countries experience low rates of growth is that their financial sectors are less developed or developing at their nascent.

In a financial sector, both financial institutions and financial markets are indispensable for financial mobilization. Without these institutions and markets, financial resources would not be able to move well to productive uses. Among various financial institutions, banks are the largest financial intermediaries in their role of taking part in indirect finance. Being depository intermediaries, they accept deposit from saver-lenders and create credit for borrower-spenders who need fund for investment. In this context, banks play a role in financial mobilization and thereby enhance financial deepening which will in turn lead to well performance of real sector and economic growth as well.

In experiences of the developed countries, the financial sectors of those countries have developed firstly, and then their economies have developed consequently. In the other side, when a country faces the financial crisis, the economy will go down for a long time. Therefore, the financial sector development and stability

are very important for a country. The financial sector includes banks, finance companies, insurance companies, security companies and other financial institutions. Among financial institutions, the role of banks is very important for the financial sector development of a country.

The role of banks is vital for the development of financial system of a country. Indeed, every financial institution needs supporting from the banks for their daily business. For example, an insurance company needs various supporting from banks to deposit their clients' premium, to pay compensations for loss to their clients through banks. Another example is for a security company, it needs various supporting from the banks to make settlements for their clients and to deposit its funds at banks. Beside the financial sector, other sectors of the economy also need banking services. For example, a factory needs various services from the banks such as making payments to suppliers for purchasing raw materials, receiving money from buyers, paying salaries to their employee through banks. Therefore, the role of banking sector is back bone of the economy. As the banks can support to all economic sectors of a country, the failure of banking sector can distort the whole economy. Therefore, to maintain the stability of banking sector is also important for a country.

The intermediation functions of banks are important for the economic growth of a country. Firstly, banks accept deposits by offering interest on the deposits. In this way, banks help in mobilizing savings and develop a habit of thrift among people. Secondly, banks lend money to various borrowers such as business, households and even government. By paying interests on deposits they accept and taking interests on loans they create, banks make a profit by generating spread between lending rate and deposit rate. Besides this, banks have many sources of earnings by providing several services including remittance, custody service, paying bills for their bank customers, and so on. Mostly, banks operate their functions with their own capital, and funds they accepted from depositors. Therefore, banks need to perform well not only for their interest but also for the sake of depositor's interest. In this context, bank performance is very important for financial sector stability. This is because failure of a bank tends to lead the contagion effect on other financial institutions and financial markets. There has been some evidence of financial crisis that created adverse effects on real sector of the economy and growth performance of the economy as a whole.

Among banks, commercial banks create short, medium and long term credit. Such loans are created in various forms such as cash credit, discounting of bills,

overdraft facilities. Commercial banks are also offering consumer credit for the purpose of buying cars, computers, washing machines, etc. Banks also provide educational loan. Moreover, banks also invest their funds by purchasing corporate shares and long term government securities.

Another important function of commercial bank is development banking. Economic development of a country is largely conditioned by the availability of banking facilities in a country concerned. In other words, modern commercial banks perform certain functions that help in the process of economic development. The aforesaid functions are merely traditional functions. In addition to these, their constructive functions are of vital significance. Some countries' commercial banks help the government in various ways to implement long term plans. For instance, they give loans to certain priority sectors, open branches in unbanked and under-banked areas to help them develop economically. These are the developmental functions of commercial banks. Thus, banks are the instruments of social and economic progress.

The importance of banks and their roles are significantly different in different countries. Like other developing countries, Myanmar banking sector is quite dominant in its financial sector. Myanmar banking sector consists of 4 State-owned banks, 24 private banks and 13 foreign banks branches in March 2017. Although the private banks were not allowed to participate in Myanmar Banking Sector under the planned economy, the private banks have been allowed to participate in Myanmar Banking Sector since 1993 in line with the Financial Institutions of Myanmar Law, 1990. At the first stage, Myanmar Private Banks were allowed to operate the domestic banking services only. Then Myanmar Private Banks were also allowed to operate the foreign banking business like State-owned Banks. The size of deposits and loans of Myanmar Private Banks are growing year by year and the markets share of Private Banks are also increasing year by year. However, the bankruptcies of General Services Companies which were given the license by Ministry of Cooperative affected the Private Banks and Myanmar Private Banks faced with the bank run in 2003. Consequently, the public confidence on banking sector declined and the growth of banking sector was also slow at that period. Meanwhile, three private banks namely Asia Wealth Bank, Myanmar May Flower Bank and Myanmar Universal Bank were revoked the banking license following a money laundering investigation. At that time, Asia Wealth Bank was the largest commercial bank in Myanmar and because of that event, the public confidence also declined again. Therefore, bank supervision is very

important for banking sector development, banking sector stability and also for public confidence on banking sector.

According to the Central Bank of Myanmar, Quarterly Financial Statistics Bulletin (2018 Volume II), the private banks have 65.8 % of total deposits and 86.3 % of total loans of the banking sector in March, 2017. Therefore, private banks have a lion market share in Myanmar banking sector and it is important to maintain the growth and stability of these private banks is essential for the country. In this context, this study emphasizes on measuring performance of the private banks in Myanmar. Based on the analysis on performance of private banks, the study contributes policy recommendations to the development and stability of private banking sector and banking sector as a whole.

## **1.2 Objective of the Study**

The objective of the study is to determine overall performance of selected Myanmar private banks from the financial aspect by using financial soundness indicators and from non-financial aspect in terms of customer satisfaction and employee satisfaction.

## **1.3 Method of Study**

The qualitative and quantitative research methods are used for the study, based on both primary and secondary data. Primary data are collected from customers and employees of the selected private banks, Ayeyarwaddy Bank (AYA), Co-operative Bank (CB), Global Treasure Bank (GTB), Kanbawza Bank (KBZ), Myanmar Oriental Bank (MOB), Myawaddy Bank (MWD) and Small and Medium Industrial Development Bank (SMIDB) through structured questionnaires so as to measure customer satisfaction and employee satisfaction. These seven private banks are selected by random sampling method which is used by giving each bank with equal opportunity of being represented in the sample. The secondary data includes the statement of income and expenditure, Capital Adequacy ratio, Non-performing Loans ratio, Loans to Deposits ratio, Loans to Total Assets ratio, Return on Equity ratio (ROE), Return on Assets ratio (ROA), Reserve Ratio and Liquidity ratio which are collected from annual reports and websites of banks, published reports, documents, newspapers, journals, magazines, statistical reports and other internet sources from International Monetary Fund (IMF), World Bank and the CBM.

Questionnaires are used to obtain the data to analyze the non-financial measure. The responses from the questionnaires and interview questions are also included as primary data source used for qualitative aspect customers, staff and senior management positions of selected private banks. The questionnaires are also distributed to senior bankers and bank staffs to find out what factors determine the employee satisfaction.

In order to examine the performance of banks adopted by the seven selected banks, the data is collected via a survey. Survey was conducted to measure customer satisfaction level with services provided by selected private banks. Survey was also conducted to explore satisfaction of bank employee with their job.

For the comprehensive understanding of the performance of private banks, in examining the quantitative data, the Statistical Package for Social Sciences (SPSS) software is applied to analyze the data in this phase.

The targeted population is customers, staff and senior management positions of selected private banks. The questionnaires are distributed to 1140 people of targeted populations. This study is based on annual data for the five years from 2012/2013 to 2016/2017 for selected private commercial banks.

#### **1.4 Scope and Limitations of the Study**

This study focuses the performance of seven private banks, Ayeyarwaddy Bank (AYA), Co-operative Bank (CB), Global Treasure Bank (GTB), Kanbawza Bank (KBZ), Myanmar Oriental Bank (MOB), Myawaddy Bank (MWD) and Small & Medium Industrial Development Bank (SMIDB) during the period from 2012/2013 Fiscal Year (FY) to 2016/2017 FY. This study also mentions the financial performances (ROE and ROA) of Thailand banks, Singapore banks and Malaysia banks through their annual reports. To collect the survey data for non-financial performance, this study selected only the bank branches located in Yangon City. Limited numbers of banks (only seven private banks) were covered under the study. This study excludes the Sensitivity element from CAMELS approach in measuring the financial performance of selected private banks as well as the Corporate Social Responsibility element in measuring human aspect of selected private banks.

#### **1.5 Organization of the Study**

This thesis includes five Chapters and Chapter one is concerned with introduction and Chapter two explores literature review on function of financial markets, how to measure the financial performance of banks by using CAMEL framework, how to measure the non-financial performance of banks by using SERVQUAL model and Equity Theory. Chapter three explains the history of banking sector in Myanmar, overview of private banks in Myanmar, the regulatory measures, financial soundness indicator. Chapter four studies the financial performance of the selected private banks by using secondary data through CAMEL (Capital Adequacy, Assets Quality, Management, Earning, Liquidity) framework and measuring non-financial performance of selected private banks by using survey data through SERVQUAL model and Equity model. Chapter five is the Conclusion part of the study, in which policy recommendations are provided on the basis of findings.

## **Chapter 2**

### **Literature Review**

#### **2.1 Introduction**

The contemplating on execution of the banks is essential for banking sector of a nation as the job of banks is significant for the monetary development of that nation. Previously, the analysts made the investigation on bank execution from financial viewpoints, for example, Return on Equity (ROE), Return on Assets (ROA). Until further notice, the specialists make the investigation on bank execution from financial angles as well as human perspectives. This part ponders the writing on estimating execution of banks from both financial viewpoints and human aspects. In addition, this part examines the ROE and ROA of some ASEAN nations' banks through their yearly reports.

#### **2.2 The Role of Banks in Financial Sector Development**

Mishkin (2004) mentioned that “A healthy and vibrant economy requires a financial system that moves funds from people who save to people who have productive investment opportunities”. Generally, the banks are more important than other financial institutions in developing countries. Therefore, the banking sector is of paramount importance for the economic development of countries especially for developing countries because the banking sector is significantly dominant in the financial sector of those countries.

The banks can perform numerous jobs in the economy. To start with, banks execute as a connector between the depositors who have surplus cash and investors who need fund to broaden their business. Besides, banks make payments and settlements for their clients and it is significant for the economy. Third, banks provide banking services for insurance agencies and their customers. It implies that banks help the risks sharing for the organizations in the economy. Also, banks perform general financial administrations, for example, covering phone tabs, electric charges, rental expenses and others for organizations and people. Along these lines, the organizations cannot work well and the economy cannot have development without banks.

As the role of banks is important for the country, the preferment of banks is also important for that country. Therefore, the study on bank performance becomes necessary and many researchers have made studies on bank performance. Sharma



(2014) explained about the banking performance after a diverse range of studies and the researchers for measuring the performance of the banks that showed different perspectives with regards to the performance of the banks in different countries. Conventional approaches to assess the performance of banks for the most part utilize just a few factors, for example, Return on Assets (ROA) and Return on Equity (ROE) for estimating the financial performance of the banks. In any case, the greater part of the administrators of the organizations review that conventional frameworks of execution assessment have been commonly founded on financial related perspectives which are not finished in estimating the general execution of the association and in introducing a successful criticism. The financial measurements can assess the association's momentary profit yet can't access about aggressive circumstance and undermines long-term profit.

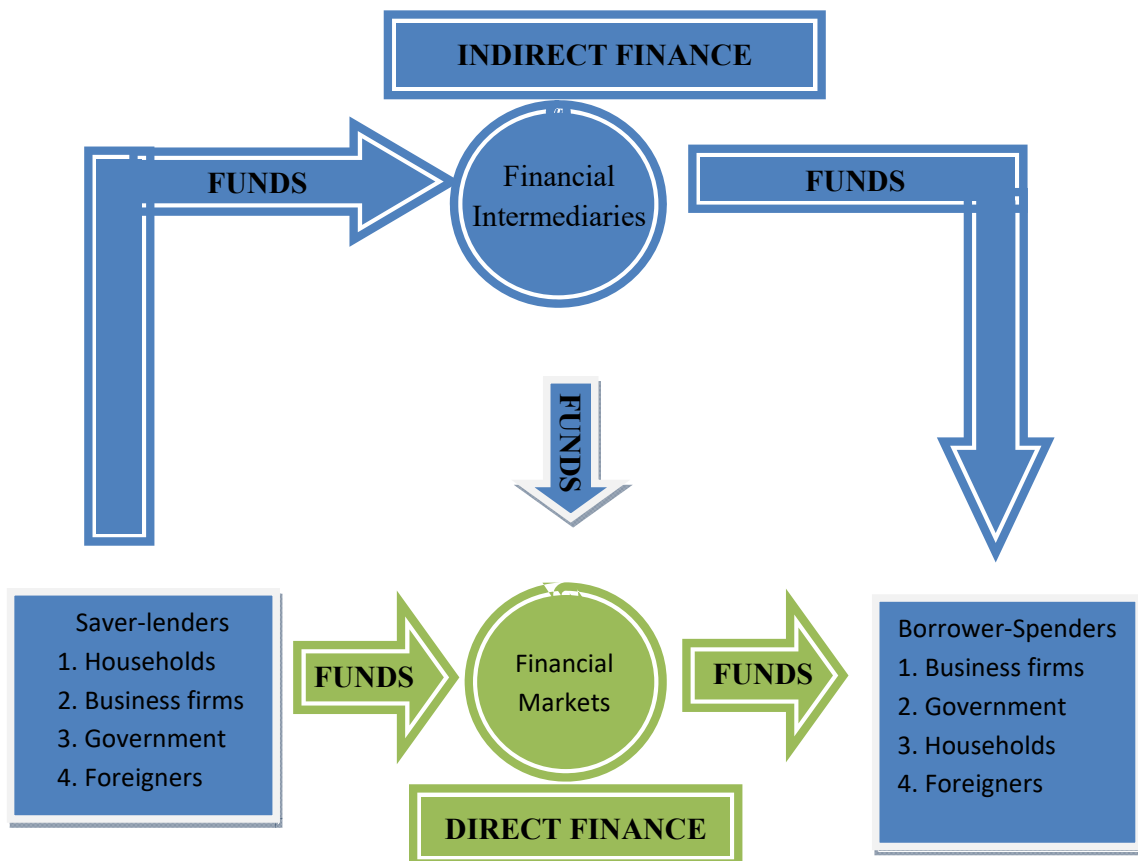
Non-financial measurements like customer's satisfaction, employee's satisfaction and corporate social responsibility can be important for key accomplishment of any bank. Consumer satisfaction is the way into the profitability of retail banking. Execution of banks relies on the productivity and level of fulfillment of its HR. Abnormal state of human capital productivity and representative fulfillment prompts the superior of the banks. It has additionally been found by the researchers that the banks which were socially dependable in their standard exercises, outflanked in their budgetary exhibition. There is a positive connection between the corporate social responsibility and the financial performance of the banks both in short and long runs. Thus, there are two main aspects from which one can measure the overall performance of the banks namely, (a) financial aspects and (b) human aspects. On literature review, the related theoretical literature and previous empirical research are reviewed with regards to financial aspects and human aspects on overall performance of a bank.

### **2.3 Function of Financial Markets**

Mishkin (2004) explains the function of financial markets that the financial markets are very important for the economy's functions. The financial markets perform the funds mobilization from households, firms, and governments that have excess funds by spending less than their income to individuals or businesses who have a shortage of funds because they wish to spend or invest more than their income. This mechanism within the economy is shown in Figure (2.1). The saver-lenders who have

surplus funds and who are lending funds are shown at the left and the borrower-spenders who would like to borrow for their investments are shown at the right. Generally, the principle saver-lenders are households and other saver-lenders are business firms Government and foreigners. And the principle borrower-spenders are business firms and other borrower-spenders are Government, households and foreigners. The arrows show that funds flow from savers to borrower-spenders via two ways.

**Figure (2.1): Flows of Funds through the Financial System**



Source: Mishkin ( 2004)

In direct financing, borrowers borrow funds directly from lenders by selling them securities through financial markets. The Security is a type of investment in a business firm or in Government Debt which can be traded on the financial markets and which produces an income for security buyer. For example, if a car company needs to borrow funds to pay for a new factory to manufacture new model cars, it might borrow the funds from savers by selling them a bond or a debt security that promises to make payments periodically for a specified period of time, or a stock, a security that grants the owner to a share of the business firm's profits and assets.

In indirect financing, borrowers borrow funds from financial intermediaries and savers save their surplus funds in financial intermediaries. If there is no financial market in the economy, those who would like to save their surplus fund could not save their funds and those who would like to borrow for their investment could not borrow from financial intermediaries. For example, a person has saved surplus fund however he cannot lend to any business as there are no financial markets in the country. Like this, a business firm cannot borrow the money to extend its business as there is no financial market in the country. However, if there are financial markets in the country, people can save his surplus money in a financial intermediary and he can get interest income from his deposit. Like this, a business firm can also borrow money from the financial intermediary to invest for its business. Moreover, another example is for consumption loans, that people could not buy a house although he has a good job after marriage. However, he negotiates with a bank to buy a house with a bank loan. After that he pays interest and principle to the bank for housing loan every month and after the maturity, he owns that house. Therefore, the financial intermediaries are very important for fund mobilization and they help the business firm to extend the business by lending the money and they also lend the consumer loans to the people who need temporary financial assistance. Moreover, the financial intermediaries accept the deposits from the public and give interest to depositors. It means that the financial markets support the win-win situation for lender-savers and spender-borrowers.

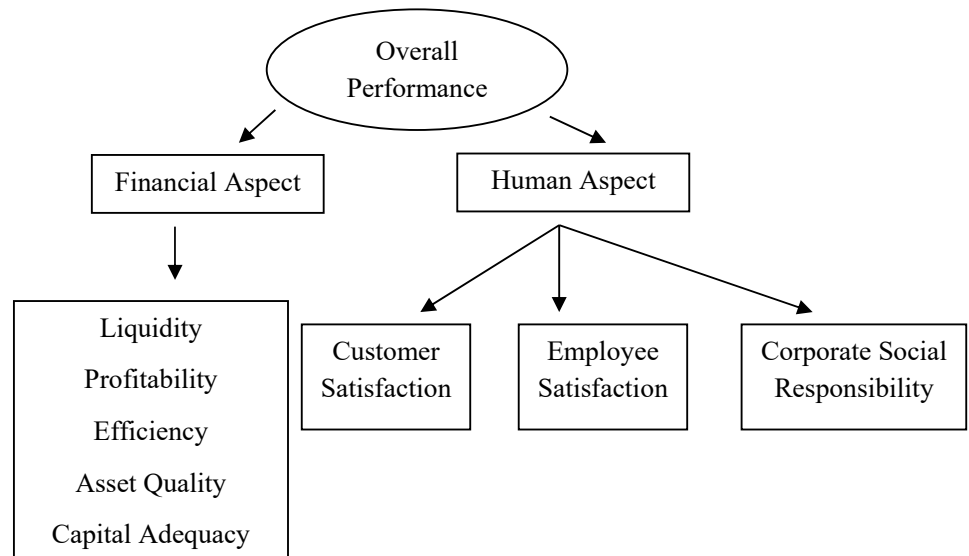
Therefore, well-functioning financial markets enhance the activities of the economy which provide economic growth by managing fund mobilization, thus, increasing public saving and investment. Moreover, the financial intermediaries provide also consumption loans to people who need to buy a car or an apartment. In other words, efficient financial markets are providing for everyone and that enhances the economic growth of the country.

#### **2.4 Overall Performance of Banks**

There are many views and aspects to measure the banking performance and the following conceptual model is useful to measure the overall performance of the banks. Normally, the financial aspect and human aspect could be used to measure the overall performance of the banks. Financial Aspect includes the five components, capital adequacy, asset quality, management control, earning ability and liquidity.

Those components are mutually related, for example, if the bank maintains its liquidity ratio and capital adequacy ratio at high level, that bank will get low level of profit. Human aspect includes three components namely customer satisfaction employee satisfaction and corporate social responsibility. Among those components, customer satisfaction and employee satisfaction are mutually related, for example, if a bank has employee satisfaction, that bank can get customer satisfaction because the employees who satisfy with their job will give the good service to their customers and the bank can get customer satisfaction. In the other side, a bank cannot achieve the employee satisfaction without salaries and bonus, and a bank cannot allow high salaries and bonus to its employee without appropriate profit. That bank needs customer satisfaction to have more customers' using bank services and having appropriate profits. Moreover, the financial performance and human performance are also mutually related. Figure (2.2) demonstrates the conceptual model by Sharma (2014) to measure the overall performance of the banks.

**Figure (2.2): Conceptual Model by Sharma**



Source: Sharma (2014)

## 2.5 Measuring Banks Performance by Financial Aspects

Financial performance of the banks is very important for the banking sector. Many researchers use several ways to measure the financial performance of the banks

and a common way is the method used by the Bank for International Settlements (BIS). The Basle Committee on Banking Supervision of the Bank of International Settlements has recommended the financial soundness indicators such as capital adequacy, assets quality, management quality, earnings and liquidity (CAMEL). These indicators can be used as criteria to assess financial performance of a financial institution. In order to measure the banks' overall financial performance, CAMELS supervisory rating system can be used and it was introduced first in USA for on-site monitoring. Currently, this rating system is being used for both on-site and off-site monitoring of the financial institutions. The sixth component, market risk (S) was introduced in CAMEL framework in 1997 and it became CAMELS framework. However, most of the developing countries are using CAMEL framework instead of CAMELS framework in measuring the performance of the banks. The Central Bank of Nepal, Kenya uses CAMEL framework instead of CAMELS framework. In Myanmar, the CBM also uses CAMEL supervisory framework for on-site and off-site supervision.

### **2.5.1 Capital Adequacy**

Dang (2011) explained how capital adequacy is very important for the banks to protect from risks exposure such as credit risk, market risk and operational risk. Moreover capital adequacy enhances the liquidity of the banks. Therefore, the banks are required to maintain the minimum capital adequacy by central banks or regulators. Whenever the researchers review the financial soundness of the banks, they analyze the paid-up capital, capital adequacy ratio, capital to deposit ratio ratios. Some central banks determine minimum free capital ratio for the bank. The free capital means the capital amount which is paid-up capital minus fixed assets value. If a bank uses its all of paid-up capital to buy fixed assets, that bank has no fund for its working capital. Unless a bank uses its paid-up capital to buy the fixed assets, that bank can use rest paid-up capital for bank's working capital.

The banks are required to maintain capital adequacy ratio at least 8% set by the Bank for International Settlement (BIS). However, depending on some countries' regulators and the local bank situation; the required minimum capital may vary among countries. For example, Myanmar banks are required to maintain capital adequacy ratio at least 10 percent. Capital component of the CAMEL model is scored from 1 to 5. In this matter, a rating of 1 indicates a strong capital level relative to the financial

institution's risk and rating 2 indicates that capital component of that bank is better than average bank. The rating 3 means that the bank's capital component is average level and rating 4 represents that the bank' capital is under average bank. The rating 5 indicates that bank faces a critical deficient level of capital and that bank needs immediate assistance to inject its paid-up capital.

### **2.5.2 Assets Quality**

Asset quality of a bank is very crucial to assess the financial soundness, solvency and liquidity of that bank. Among the bank's assets, the loan portfolio is main part of the bank assets. Therefore, to analyze the asset quality of the bank, how the quality of bank loans, how much percentage of NPL in loan portfolio of that bank and how sector wide and collateral wide of loan portfolio are needed to assess the asset quality of the bank. Meanwhile, the management on credit risk becomes important to maintain the asset quality of the banks.

Asset quality component of the CAMEL framework is scored from 1 to 5. In this matter, a rating of 1 indicates a good asset quality relative to the financial institution's risk and rating 2 indicates that asset quality of that bank is better than average bank. The rating 3 means that the bank's asset quality is average level and rating 4 represents that the bank' asset quality is under average bank. The rating 5 indicates that bank faces to take an action plan for its asset quality.

### **2.5.3 Management Quality**

Management quality of a bank generally explains its profitability, liquidity, asset quality, internal control, financial soundness, efficient operation in compliance with applicable laws and regulations and management quality depended on the decisions of board of directors and experts of bank staff.

Management quality component of the CAMEL framework has a score from 1 to 5. In this matter, a rating of 1 indicates a good management quality relative to the financial institution's risk and rating 2 indicates that management quality of that bank is better than average bank. The rating 3 means that management quality is average level and rating 4 represents that the bank's management quality is under average bank. The rating 5 indicates that bank faces to take an action plan for its management quality.

#### **2.5.4 Earnings Ability**

The banks are profit oriented organizations and they cannot survive without having sustainable profit. Traditionally, return on equity (ROE) and return on assets (ROA) have been used to measure the profitability of financial institutions. Currently, researchers use these ratios and operating expenses to total income ratio to assess the earning ability according to CAMEL framework. ROE ratio is the ratio between net profit and equity and this ratio should be from 40 percent to 10 percent and it also shows clearly how many times the bank gets profits from the equity of its bank. ROA ratio is the ratio between net profit and total assets and this ratio should be from 4 percent to 1 percent.

Earning ability component of the CAMEL framework has a score from 1 to 5. In this matter, a rating of 1 reflects strong earnings that are sufficient to maintain adequate capital and loan allowance, and support operations and rating 2 indicates that the earning ability of that bank is better than average bank. Rating 3 means that earning ability is average level and rating 4 represents that the bank's earning ability is under average bank. Rating 5 indicates that bank faces to take an action plan to increase profitability level and to protect the potential of loans loss.

#### **2.5.5 Liquidity**

Having adequate liquidity is essential for every business especially for the banks. If a bank face liquidity problem and that bank cannot solve it, it can spread to the whole banking sector because of the domino effect. Therefore, the banks are strictly required to maintain the minimum liquidity ratio by the central banks or regulators.

Liquidity component of the CAMEL framework is scored from 1 to 5. In this matter, a rating of 1 represents strong liquidity levels as the bank has sufficient funds to meet current obligation for the payment and rating 2 indicates that liquidity of that bank is better than average bank. The rating 3 means that liquidity is average level and rating 4 represents that the bank's earning ability is under average bank. The rating 5 indicates that bank faces to take an emergency plan to fulfill liquidity needs.

#### **2.5.6 Composite Rating Analysis of CAMEL**

Composite Rating Analysis is a comprehensive measurement to assess the financial performance of the banks. By studying one component of CAMEL, it is not

easy to mention whether the financial position of that bank is good or not. Therefore, Composite Rating Analysis is essential to assess the financial performance of the banks. After calculating the rating score for five components, the composite rating is the average of five components. Most of central banks use the composite rating analysis to assess the financial performance for the banks. Composite Rating Analysis is firstly used in US and it is overall analysis for CAMEL framework.

CAMELS framework is a common method for evaluating the soundness of financial institutions. Monetary authorities in the most of the countries are using this system to check up the health of an individual financial institution. In addition, International Monetary Fund is also using the aggregated indicators of individual financial institutions to assess the financial system soundness of its member countries as part of its surveillance work.

## **2.6 Empirical Study on Banking Performance**

Ongore and Kusa (2013) made the study on Determinants of Financial Performance of Commercial Banks in Kenya for the period from 2001 to 2000 and they studied on bank performance indicators such as NIM (Net Interest Margin), ROE (Return on Equity), ROA (Return on Asset), the determinants of bank performance such as Capital Adequacy, Asset Quality, Management Efficiency and Ownership Identity and Financial Performance of Kenya banking sector. According to their study, they found that the effect of ownership structure is scanty and capital adequacy, asset quality and management efficiency significantly affects the performance of commercial banks in Kenya. However, the effect of liquidity on the performance of commercial banks is not strong and the relationship between bank performance and capital adequacy and management efficiency was found to be positive and for asset quality, the relationship was negative. This shows that poor asset quality or high non-performing loans to total assets is related to poor bank performance.

Sharma (2014) made a study on Performance of Indian Commercial Banks and its Relationship with Human Aspects in Banking for the period 2009/10 to 2011/12. His study includes 15 public banks, 10 private banks and 5 foreign banks from Indian commercial banks and his study found that the analysis of financial parameters in the study revealed that Return on Assets (ROA) ratio is positively



related to liquidity, profitability and capital adequacy ratio while it is negatively related to the asset quality variable.

Among the studies on customer satisfaction, convenience and excellence, workforce and physical environment of banks are important factors and those factors are positively and significantly related to overall customer satisfaction. On the study of employee satisfaction, job-specific factors, management behavior, working environment, training and development opportunities, interpersonal relationship and compensation and other benefits are the main factors and those factors have a positive and significant relationship with the overall employee satisfaction in Indian banking sector.

Getahun (2015) analyzed the financial performance of fourteen commercial banks in Ethiopia for the period from 2010 to 2014. The objective of his study was to analyze the financial performance of Ethiopian Commercial Banks using CAMEL approach and rank the banks based on their performance as well as to test the existence of the relationship between the selected CAMEL factor measurements with the profitability measures. His empirical result indicates that capital adequacy, Asset Quality and Management efficiency have negative relationship whereas earning and liquidity shows positive relationship with both profitability measures with strong statistically significance except Capital Adequacy which is insignificant for ROA and Asset quality for ROE. The study suggests focusing and reengineering the banks internal drivers could enhance the profitability of commercial banks in Ethiopia.

Getahun used the conceptual framework CAMEL Model for his study and it based the relationship between CAMEL Model Factors such as Capital Adequacy, Asset Quality, Management, Earning, Liquidity and the Bank Performance factor such as ROA and ROE. His study found that the CAMEL model rating reveals that the banks under study had different rankings on the CAMEL model. This is mainly due to bank specific related factors and different business experience in the Banking industry.

## **2.7 ROE and ROA of Some ASEAN Banks**

To measure the financial performance of the banks, the ROE and ROA ratios are commonly used and the banks highlight these ratios in their annual reports.

Among the ASEAN countries, Singapore, Malaysia and Thailand banks are developed more than banks of other ASEAN countries. This study uses the annual reports of some ASEAN countries' banks and highlights the ROA and ROE of the banks.

**Table (2.1): Return on Equity (ROE %) of Singapore Banks**

Sr.	Name of Bank	2012	2013	2014	2015	2016	5 Year Average
1	OCBC Bank	17.9	11.6	14.8	12.3	10	13.32
2	UOB Bank	10.2	11	12.3	12.3	12.4	11.64
3	DBS Bank	11.2	10.8	10.9	11.2	10.1	10.84

Source: Annual Reports of OCBC, UOB and DBS (2016)

Table (2.1) mentions the ROE of Singapore Banks which are OCBC Bank, UOB Bank and DBS Bank from 2012 to 2016. The average ROE of Singapore Banks during this period are 13.32 %, 11.64 % and 10.84 %. Therefore, Singapore Banks have the ROE level above the minimum level of 10 %.

**Table (2.2): Return on Asset (ROA %) of Singapore banks**

Sr.	Name of Bank	2012	2013	2014	2015	2016	5 Year Average
1	OCBC Bank	1.69	1.05	1.23	1.14	1.03	1.23
2	UOB Bank	1.18	1.12	1.1	1.03	0.95	1.08
3	DBS Bank	0.97	0.91	0.91	0.96	0.92	0.93

Source: Annual Reports of OCBC, UOB and DBS (2016)

Table (2.2) shows the ROA of Singapore Banks during the period from 2012 to 2016. The average ROA ratios for this period are 1.23 % for OCBC Bank, 1.08 % for UOB Bank and 0.93 % for DBS Bank respectively. It means that two Singapore Banks have ROA level above the minimum level of 1%, and the remaining bank, DBS Bank has ROA level under the minimum level of 1 %.

**Table (2.3): Return on Equity (ROE %) of Malaysian Banks**

Sr.	Name of Bank	2012	2013	2014	2015	2016	5 Year Average
1	Maybank	11.9	8.5	6.1	16.4	16.0	11.8
2	CIMB bank	11.3	7.3	9.2	15.5	16.0	11.9
3	Public Bank Berhad	16.5	17.8	19.9	22.4	24.1	20.1
4	Hong Leong Financial Group Berhad	9.6	13.2	15.8	15.7	14.7	13.8

Source: Annual Reports of May bank, CIMB Bank, Public Bank Berhad and Hong Leong Financial Group Berhad (2016)

Table (2.3) describes the ROE of selected Malaysian Banks- May Bank, CIMB Bank, Public Bank Berhad and Hong Leong Financial Group Berhad during the period from 2012 to 2016. The average ROE of Malaysian Banks during this period are 11.8 % for Maybank, 11.9 % for CIMB Bank, 20.1 %for Public Bank Berhad and 13.8 % for Hong Leong Financial Group Berhad. Therefore, Malaysian Banks have ROE level above the minimum level of 10 %, and higher than Singapore Banks.

**Table (2.4): Return on Assets (ROA %) of Malaysian banks**

Sr.	Name of Bank	2012	2013	2014	2015	2016	5 Year Average
1	Maybank	1.60	1.08	0.69	1.64	1.46	1.29
2	CIMB bank	1.36	0.65	0.79	1.28	1.37	1.09
3	Hong Leong Financial Group Berhad	0.70	0.80	0.90	0.80	0.80	0.80

Source: Annual Reports of May bank, CIMB Bank and Hong Leong Financial Group Berhad (2016)

Table (2.4) shows the ROA of Malaysian Banks during the period from 2012 to 2016. The average ROA ratios of this period are 1.29 % for Maybank, 1.09 % for

CIMB bank and 0.80 % for Hong Leong Financial Group Berhad respectively. It means that two Malaysian Banks have ROA level above the minimum level of 1%, and the remaining bank has ROA level less than the minimum level of 1 %. According to the study, Hong Leong Financial Group Berhad Bank recorded the ROA ratios as less than 1 % for all the years under study.

**Table (2.5): Return on Equity (ROE %) of Thailand Banks**

Sr.	Name of Bank	2012	2013	2014	2015	2016	5 Year Average
1	Bangkok Bank	12.4	12.6	11.7	9.9	8.6	11.0
2	Krungthai Bank	16.6	16.5	15.0	11.6	12.1	14.3
3	Siam Commercial Bank	19.7	21.8	20.1	15.9	14.8	18.5
4	Kasikorn Bank	20.8	20.5	19.4	14.5	13.2	17.7
5	Bank of Ayudhya	13.5	10.1	11.2	11.6	10.7	11.4

Source: Annual Reports of Bangkok bank, Krungthai bank, Siam Commercial Bank, KASIKORN Bank and Bank of Ayudhya (2016)

Table (2.5) depicts the ROE of Thailand Banks which are Bangkok bank, Krungthai bank, Siam Commercial Bank, KASIKORN Bank and Bank of Ayudhya during the period from 2012 to 2016. The average ROE ratio of Thailand Banks during the period are 11.0 % for Bangkok Bank, 14.3 % for Krungthai Bank, 18.5 % for Siam Commercial Bank, 17.7 %for Kasikorn Bank and 11.4% for Bank of Ayudhya (Krungsri). Therefore, Malaysian Banks achieved the ROE ratio above 10%, the minimum level.

**Table (2.6): Return on Assets (ROA %) of Thailand Banks**

Sr.	Name of Bank	2012	2013	2014	2015	2016	5 Year
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							Average
1	Bangkok Bank	1.41	1.45	1.39	1.21	1.09	1.31
2	Krungthai Bank	1.11	1.45	1.24	1.02	1.17	1.20
3	Siam Commercial Bank	1.90	2.10	2.00	1.70	1.70	1.88
4	Kasikorn Bank	1.86	1.89	1.97	1.60	1.49	1.76
5	Bank of Ayudhya	1.45	1.05	1.19	1.28	1.19	1.23

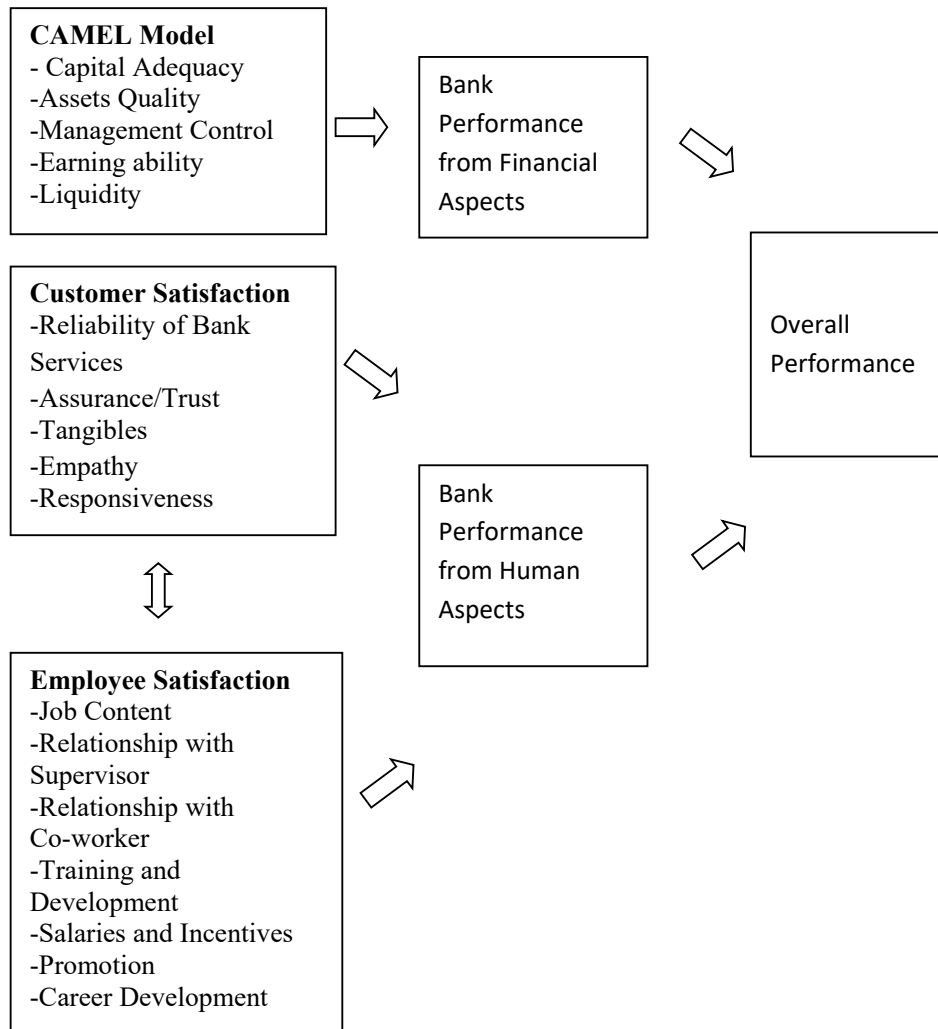
Source: Annual Reports of Bangkok bank, Krungthai bank, Siam Commercial Bank, KASIKORN Bank and Bank of Ayudhya (2016)

Table (2.6) shows the ROA of Thailand Banks during the period from 2012 to 2016. The average ROA ratio of Thailand Banks during the period are 1.31 % for Bangkok Bank, 1.20 % for Krungthai Bank, 1.88% for Siam Commercial Bank, 1.76% for Kasikorn Bank and 1.23% for Bank of Ayudhya respectively. It means that the Thailand Banks achieved ROA level above 1 %, the minimum level. Among selected Thailand banks, Siam Commercial Bank have the highest ROA ratio on average and it was followed by Kasikorn Bank with the second highest achieve ROA ratio.

## 2.8 Conceptual Framework

Most of the studies on measuring performance of banks are based on the financial performance and human aspect indicators such as customer satisfaction, employee satisfaction and corporate social responsibility. However, measuring corporate social responsibility of bank cannot be applied because only a few banks make Corporate Social Responsibility and most of the banks have not applied that issue yet. This study uses only CAMEL framework to measure the financial performance of private banks and Sensitivity element cannot be used in this study.

**Figure (2.3): Conceptual Framework of the Study**



Sources: Researcher's own construct

This study uses secondary data from Financial Institutions Supervision Department, Central Bank of Myanmar in order to measure the financial performance of private banks and also uses primary data from survey so as to measure customer satisfaction and employee satisfaction. Figure (2.3) is the proposed conceptual model for this study which measures overall performance of selected private banks of Myanmar. According to this model, financial performance will be measured through financial soundness indicators which composed of CAMEL framework. Both customer satisfaction and employee satisfaction also determine the bank performance. So, bank performance will be measured from human aspect by measuring customer satisfaction and employee satisfaction.

To study the financial performance of the banks, CAMEL which is a framework used by the central banks will be used to measure the financial performance of selected private banks of Myanmar banking sector.

To measure the non-financial performance of selected private banks of Myanmar, customer satisfaction will be measured through survey questions with the customers of the banks and the questionnaire is constructed based on SERQUAL model. The employee satisfaction will be measured through survey questions communicated with the employees of the banks and the questionnaire is constructed based on Equity Theory or Gap model.

Some researchers mentioned that employee satisfaction is very important and the bank cannot occupy customer satisfaction without having employee satisfaction. If the bank achieves customer satisfaction, the customers will come to the bank to take banking services and that bank will also achieve earning income and will have financial performance. Actually, customer satisfaction, employee satisfaction and financial performance are mutually related. Therefore, this study calculates customer satisfaction, employee satisfaction and financial performance of the selected Private Banks and it analyse the correlations among them.

## **2.9 Concluding Remarks**

Traditionally, in measuring the performance of banks, the ROE and ROA ratios are commonly used for measuring financial performance of the banks. Although these ratios cannot represent the potential profitability of the banks, they reflect present profitability of the banks. This chapter studied the ROE and ROA of some ASEAN countries' banks. The ROE and ROA ratios of these banks meet the normal ratios determined by respective Central Banks.

## **Chapter (3)**

### **Overview of Banking Sector in Myanmar**

#### **3.1 Introduction**

Like other developing countries, the job of banks is significant for the monetary development in Myanmar as the financial part is prevailing in money related area of the nation. Banking sector of Myanmar composes of the private banks, private banks is developing step by step in spite of the fact that they confronted a few emergencies in the most recent decades. This chapter thinks about the history of Myanmar's banking sector over the period and the regulations issued by the Central Bank of Myanmar.

#### **3.2 History of Banking Sector in Myanmar**

Myanmar banking sector has a long history. After gaining its Independence in 1948, there were significant developments in the banking sector with state owned banks, private banks and foreign banks and total banking services accounted for nearly one-third of Myanmar's GDP. Nevertheless, after the Revolutionary Council took state power in 1962, all financial institutions including domestic banks and foreign banks were nationalized in 1963 and restructured into a monolithic banking system which discharged central banking functions and commercial banking functions as well as undertaking insurance operations beginning from 1969. In 1976, the Myanmar government reorganized its financial system, replacing the monolithic banking system with a basic functional system for more effective management of financial activities. Under the new financial system, the Union of Myanmar Bank undertook central banking functions, while the Myanma Foreign Trade Bank took over foreign exchange operations. The Myanma Economic Bank served as a financier of economic enterprises, including those of the state, and the Myanma Agricultural Bank undertook crop financing as well as medium- and long-term lending for agricultural development. The insurance function was separated from the reorganized banking system to be taken over by the newly created Myanmar Insurance Corporation.

In 1988, when Myanmar set out to forge a market-oriented system, the existing financial system based on socialist economic principles was reformed to accommodate the new economic system. In order therefore for the financial sector to



assume the appropriate responsibilities, new laws were enacted. These include Foreign Investment Law (1988), Central Bank of Myanmar Law (1990), Financial Institutions of Myanmar Law (1990), Myanmar Agricultural and Rural Development Law (1990), New Saving Bank Law (1992) and Myanmar Insurance Law (1993). According to Financial Institutions of Myanmar Law, 1990, Myanmar private banks are allowed to perform banking business since 1993.

The private banks tried to develop their business by extending the branches and introducing new banking products such as Automated Teller Machines (ATMs), debit cards, credit cards and gift cards and others. However, the collapse of general services enterprises which were licensed by Ministry of Cooperatives led to a banking crisis through liquidity problem in 2003. At that time, most of depositors rushed to the banks and withdrew their money and consequently the banks faced liquidity shortage and it enhanced the depositors' worries more. While private banks tried to acquire liquidity through selling their properties, they also recalled their loans, which in turn forced individuals and companies to sell assets and suspend or closed down their business operations to meet their loan obligations. As one of the consequences, public trust in the banking sector has been severely affected by this banking crisis.

After the 2003 banking crisis, 3 private banks, Asia Wealth Bank, Myanmar May Flower Bank and Myanmar Universal Bank, following money laundering investigation their banking licenses were revoked. Asia Wealth Bank was a largest private bank in Myanmar banking sector and that was found to be of primary money laundering concern by the US Secretary of Treasury. Myanmar May Flower Bank was one of the largest banks in the country and which was the first bank in Myanmar to have 24-hour automatic teller machines and it was also the first to introduce computer networks for transactions back in November 1995. Though Myanmar Universal Bank was also one of the large banks but as mentioned earlier, its banking license was revoked following money laundering investigation.

After the first elected Government took over the state power, the Government enhanced financial sector development so as to support economic growth of the country. In line with the market oriented economy, the government amended the laws, as necessary. The Foreign Exchange Management Law was enacted in 2012 and Central Bank of Myanmar Law was also enacted in 2013. The new Central Bank of Myanmar Law stands the autonomy of Central Bank clearer than previous Central

Bank of Myanmar Law. The Foreign Exchange Management Law liberalized on current accounts transaction and allows the resident to hold foreign currency which is earned officially within a specific period.

As the private banks are allowed to perform foreign banking business; the Central Bank of Myanmar issued the authorized dealer license to private banks with effect from November 25, 2011. The authorized dealer banks are allowed to deal three types of foreign currencies, US dollar, Euro and Singapore dollar. To support the economic growth of the country more, the foreign bank branches are also licensed for banking business in Myanmar in 2013 and there are 13 foreign bank branches in Myanmar. However, the foreign bank branches have been allowed only whole sale banking (corporate banking) and they are allowed to establish only one branch. When private banks have experiences and capacity to perform foreign banking business, the foreign banks shall be allowed the retail banking business in foreign banking. According to the Central Bank's instruction, the foreign bank branches are allowed to deal with local corporate for foreign banking.

As the Financial Institutions of Myanmar Law (1990) could not cover and support to current financial institutions and supervision power to the Central Bank of Myanmar, the new Financial Institutions Law was enacted in January, 2016 with technical assistance by the World Bank. This law can facilitate the functions of financial institutions more and supervision to financial institutions by the Central Bank.

### **3.3 Overview of Private Banks in Myanmar**

Currently, twenty four private banks are participating in the banking sector. Myanmar Citizens Bank and First Private Bank were firstly given the banking license on May 25, 1992 according to the Financial Institutions Law of 1990. Co-operative Bank was secondly given the banking license on August 3, 1992. As a generation of 2010, AYA Bank, UAB Bank, AGD Bank and MAB Bank were immediately given the banking license on the same date, July 2, 2010. Among the private banks, some banks are operating as specialty banks. The first bank is SMIDB Bank established in 1996 by the Myanmar Industrial Development Council. The second bank is CB Bank which was formed in 2004 from the merger of CB Bank, the cooperative Farmers Bank and the Cooperative Promoters Bank. CB Bank gives the trade financing

services to exporter with effect from 2015. The third bank is the GTB Bank which found in 1996 to provide the financing to livestock & fisheries firm and other business. The fourth bank is the Construction and Housing Development Bank which established in 2013 to provide financing for construction projects.

The private banks extended their branches around the country and there are 1425 branches of private banks in the country. KBZ bank is the largest private bank in Myanmar in terms of number of branches and it has already established about 450 branches in the whole country and two representative offices abroad. CB bank is the second largest bank in term of number of branches and it has established 182 branches domestically. The private banks introduced new banking products such as corporate banking, international banking, trade finance, remittance services, hire purchase, financial solution, currency exchange, telephone and electricity charges billing, mobile banking, internet banking and other services. However, some constraints in infrastructure such as electric power, communication, and human resource shortage distort the development of the banking sector in Myanmar.

**Table (3.1): Sectoral Loan of Private Banks (March, 2018)**

Sr.	Sector	Amount (Kyat in billions)	Percent
1	Agriculture	331.6	2
2	Production	2024.4	10
3	Trade	6845.22	35
4	Transportation	426.1	2
5	Construction	3532.42	18
6	Services	2500.49	13
7	Other	3646.07	19
	Total Loan	19306.3	100.0

Source: Central Bank of Myanmar, Quarterly Financial Statistics Bulletin (2018 Volume III)

Table (3.1) explains the sector wide of private banks loans in Myanmar in March, 2018. In this explanation, the private banks extends their loans 35 % to trade sector, 18 % to construction sector, 13 % to services sector and 10 % to production sector. The private banks extend their loans only 2 % to agriculture sector. Although the State-owned Bank, Myanmar Agricultural Bank extends the loans to agriculture sector, the private banks should extend the loan to agricultural sector.

The size of private banks has been growing gradually in terms of number of branches and deposits. Total deposits of the private banks increased to kyat 28598 billion in 2017/2018 FY from kyat 4,000 billion in 2011/2012 FY. Therefore, total deposits of private banks increased 7.1 times during the period. Similarly, loans and advances of the private banks increased to kyat 19438 billion in 2017/2018 FY from kyat 2,200 billion in 2011/2012 FY stating that total loans and advances of private banks increased 8.8 times during this period. And total assets of the domestic private banks increased to kyat 33123 billion in 2017/2018 from kyat 4,300 billion in 2011/2012 FY such that total assets of private banks increased 7.7 times during the period.

**Table (3.2): Paid-up Capital of Private Banks and Foreign Bank Branches  
(March, 2018)**

Type of Bank	Number of Banks	Number of Branches	Paid-up Capital (kyat in million)	Average Capital (kyat in million)
Private Banks	24	1658	1182919.05	49288.29
Foreign Banks	13	13	1,646,791.70	126,676.28

Source: Central Bank of Myanmar, Quarterly Financial Statistics Bulletin (2018 Volume III)

Table (3.2) shows the average capital size of private banks and foreign banks in March, 2018. It is found that the average paid-up capital size of private banks is Kyat 49.2 billion and the average paid-up capital size of foreign banks is Kyat 126.7 billion. Actually, the foreign banks have only 13 branches and private banks have 1658 branches. Therefore, the private banks' paid-up capital size is less than foreign banks' paid-up capital size, on average.

Regarding the capital strength of the banks, Supervision Departments from Central Banks calculate the free capital ratios. Free Capital amount of a bank is the amount which is capital amount minus fixed assets amount. If a bank spends its much capital to buy fixed assets, that bank shall have less capital for the bank. Table (3.3) explains Fixed Assets to Capital Ratio of Myanmar Banking Sector in March, 2018. According to the table, State-owned Banks uses only 4 % of its capital to buy fixed assets and it left much capital for the bank. Like this Foreign Bank Branches uses only 1 % of its capital to buy fixed assets and it left much capital for the bank. However, Private Banks uses 80 % of its capital to buy fixed assets and it left small capital for the bank.

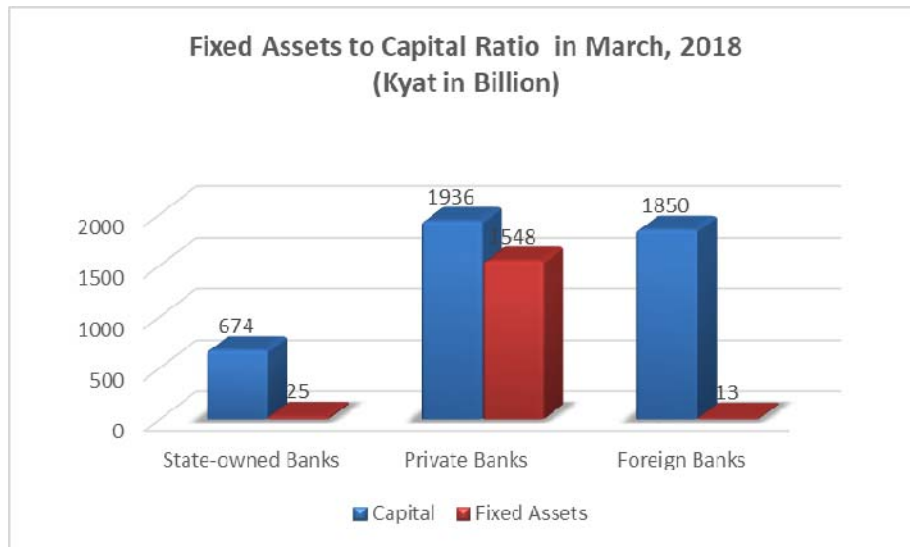
**Table (3.3): Fixed Assets to Capital Ratio of Myanmar Banking Sector in March, 2018**

Type of Banks	Capital (Kyat in Billion)	Fixed Assets (Kyat in Billion)	Fixed Assets to Capital Ratio (%)
State-owned Banks	674	25	4
Private Banks	1936	1548	80
Foreign Banks	1850	13	1

Source: Central Bank of Myanmar, Quarterly Financial Statistics Bulletin (2018 Volume III)

Figure (3.1) also shows the fixed assets to capital ratio of state-owned banks, private banks and foreign bank branches. Normally, fixed assets include properties (land and building), office machineries, furniture and motor vehicles and others. Therefore, if a bank uses its capital to buy much fixed assets, that bank cannot use this capital as working capital. Therefore, the banks need to balance their capital and free capital.

**Figure (3.1): Fixed Assets to Capital Ratio of Myanmar Banking Sector in March, 2018**



Source: Central Bank of Myanmar, Quarterly Financial Statistics Bulletin (2018 Volume III)

The private banks have been allowed to perform foreign banking business since 2012. The private banks extended foreign banking business counters and Money Changer counters. Currently, the Money Changer counters established by private banks are 911 counters in the country and there are also 425 Money Changer counters established by non-bank companies. The Money Changer Counters are dealing with their customers for five foreign currencies, US dollar, EURO, Singapore dollar, Thai Baht and Malaysian Ringgit. The Foreign Exchange Inter-bank Market was established on August 5, 2013 and the private banks are participating in that market and the total turnover amount was only USD 45.88 million in 2013/2014 FY. In the next 2014/2015 FY, it had improved to a certain extent in foreign exchange interbank market and the total turnover amount was USD725.88 million. Then, in 2015/2016 FY and 2016/2017 FY, it was USD 2603.88 million and USD 5599.69 million respectively. Therefore, the turnover amount of foreign exchange interbank market is increasing year by year and the foreign exchange interbank market has significant development.

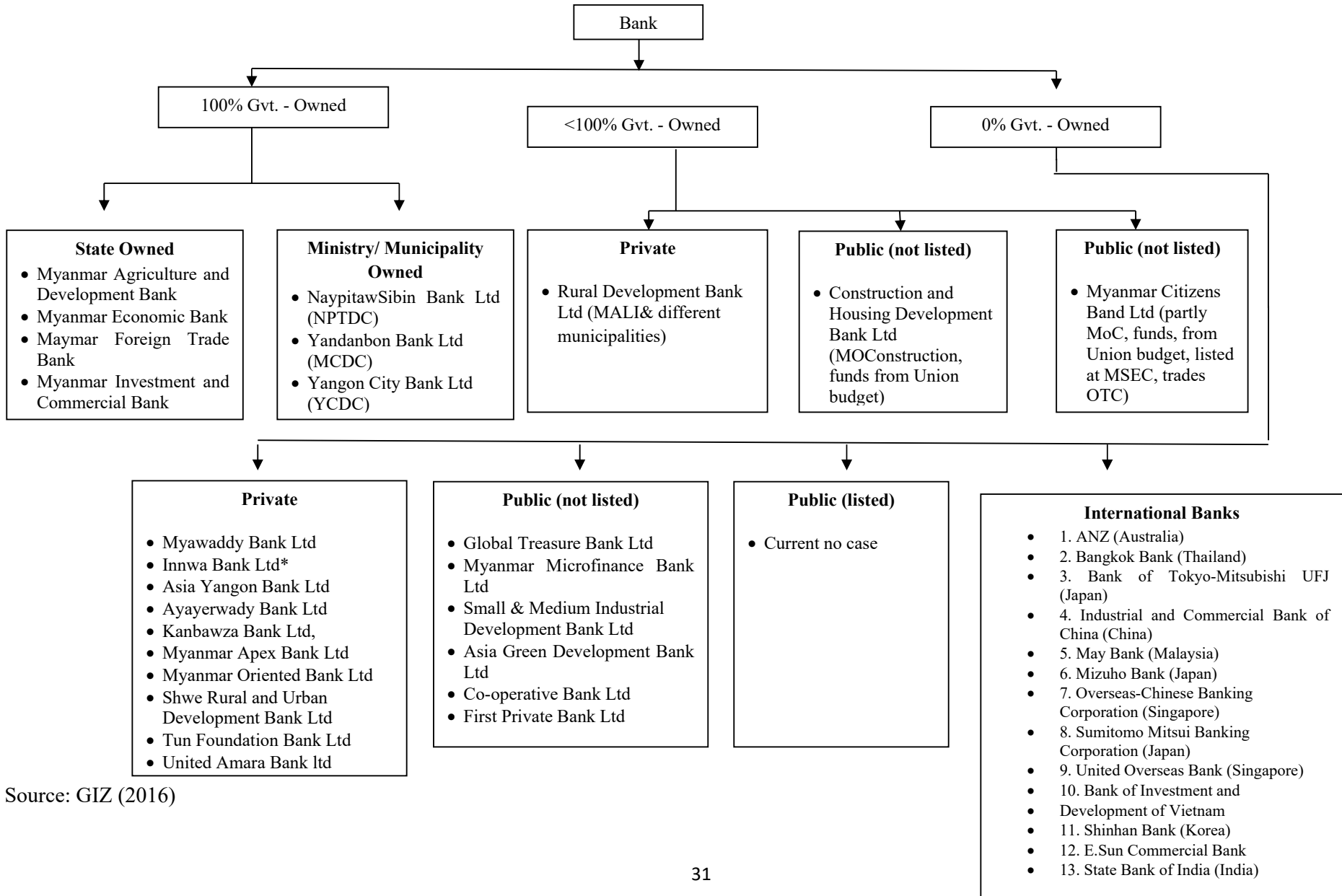
Although the private banks' participation in foreign exchange market is improving year by year, there is still existence of foreign exchange transactions in informal market (parallel market) and the transaction amount in this informal market

can be large and it cannot be estimated easily. Experts from IMF mission estimated that the foreign exchange transaction amount in the informal market can be larger than the transaction amount in the formal market. However, the government is considering organizing the participants from foreign exchange informal markets to participate in the formal market. In future, it is expected that the transaction amount in informal market will decrease and the transaction amount in formal market will increase.

The private banks accept various types of deposit such as current deposits, saving deposits and fixed deposits. Among the different types of deposit, the ratio of saving deposits to total deposits of private banks can be found as the highest. The private banks do not have the amount of long term deposits to an extent such as to lend the large amount of long-term loans to businesses. Moreover, some private banks do not follow the banking practice for fixed deposits function. For example, these banks allow their customers to withdraw fixed deposits before maturity and that behavior can affect the liquidity of the banks.

Among the private banks, most of them are established as a type of private company limited and only a few banks are established as public company limited. The most of shareholders of private banks which have established as the private companies are family members and the governance of those banks is also imperfect. Generally, the ownership and management of those banks are not clear and there is some conflicts at the banks' management.

**Chart (3.1): Types of Domestic Banks in Myanmar**



Source: GIZ (2016)



### **3.4 Regulations issued by the Central Bank of Myanmar**

The Central Bank of Myanmar (CBM) takes regulatory action on the operations of banks, the activities and functions of banks. The regulatory ratios are explained in this section.

#### **i) Reserve Requirement Ratio**

According to the CBM's instruction No. 1/2012 dated on May 21, 2012, the banks were required to maintain their reserve ratio at least 10% of total deposits. 75% of the required reserve is to be deposited with the Central Bank and 25% of the reserve may be maintained in the form of cash. At that time, the banks can present their holding amount of Government Treasury Bonds into reserve requirement calculation.

The CBM amended the instruction No. 1/2002 and the new instruction was issued on February 17, 2015. Due to that new instruction, the banks are required to maintain the reserve ratio at least 5% of total deposit and all reserve requirements must be deposited at current account of CBM in cash. The banks must inform the CBM about their reserve position on a weekly basis.

#### **ii) Provision on Total Loans**

According to the CBM instruction, the banks need to maintain the provision (reserve) to total loans ratio at least 2 percent. It means that the banks need to hold the reserve to fulfill the provision to total loans ratio at least 2 percent after closing profit and loss account at the end of fiscal year. Moreover, the banks can reserve the provision for NPLs from the bank profit.

#### **iii) Liquidity Ratio**

The Central Bank of Myanmar, Internal Audit and Bank Supervision Department issued an instruction to commercial banks concerning liquidity ratio. According to that instruction, banks are required to maintain the level of their liquid assets against their eligible liabilities at not less than 20%. The banks must inform the CBM about their liquidity position on a weekly basis.

The liquidity assets include excess cash in hand, reserve requirement, balance with the CBM, cheques, drafts and all receivables, bills discounted, with maturities to 3 months, investment securities and securities guaranteed by the government, due

from domestic banks and due from banks abroad. The liquidity ratio limits the banks how much amount they can lend to their customers. If the liquidity ratio is higher than the limit, the bank can continue their lending more. Unless the liquidity ratio is not at the limit, the bank should reduce their loan amount or change their assets to liquid assets.

**v) Capital Adequacy Ratio**

The CBM instructed to commercial banks with an instruction to maintain their capital adequacy ratio at least 10%. Normally, the capital adequacy ratio is a ratio between Tier 1 capital plus Tier 2 capital (Issued and paid up capital, Reserves and Retained profits) and risk weighted assets (loans and advances, due from banks, cheques, bills and receivables, fixed assets and other assets). The banks must inform their capital adequacy ratio to CBM on monthly basic. However, the CBM amended this regulation and it was used with effect from January, 2018. According to this regulation, the banks are required to maintain the Regulatory capital adequacy ratio at least 8 % and the minimum Tier 1 Capital Adequacy Ratio at least 4 %.

That instruction also limits the banks' lending amount and risk assets based on their capital amount. If capital adequacy ratio of a bank is lower than the limit, that bank may need to inject paid-up capital or to collect the loans to reduce the loans amount.

**vi) Lending Amount Limit**

The maximum lending amount of a bank is depended on the core capital amount of that bank. According to the financial Institutions Law (January 25, 2016), Para (59-a), a bank cannot lend more than 20% of its core capital to a single individual, an enterprise of an economic group. However, this determination shall not relate for government policy loan of state-owned banks.

**vii) Interest Rate Band**

According to the CBM's instruction, the banks are required to determine deposit interest rate that minimum rate shall be not less than 2% of CBM rate and the lending rate that maximum rate shall not be more than 3% of CBM rate. For the time being, the Central Bank of Myanmar liberalized the regulation on lending rates limit. According to previous regulation, the banks cannot charge on lending interest rate not more than CBM interest rate plus 3 (13%) on the loans. However, according to new

regulation, the banks are allowed to charge on lending interest rates by two types, 13% on collateral loan and 16% on non-collateral loan.

### **viii) Foreign Banking**

One regulation dealing with foreign exchange is that Authorized Dealer banks need to maintain their Net Open Position ratio at most 20 percent. Net Open Position (NOP) ratio is the ratio of the difference between foreign assets and foreign liabilities to bank capital. If a bank's NOP ratio is exceed the limitation 20 percent, that bank must sell their foreign exchange to CBM or other banks in the foreign exchange inter-bank market. The CBM announces daily reference rate and the banks and money changer counters have to set their buying and selling rates within +/-0.8 percent of CBM's reference rate. However, the regulation on the bank's setting the buying and selling rate within the range was removed by the Central Bank so as to enhance the Foreign Exchange Interbank market.

### **3.5 Banking Products in Banking Sector**

After having the banking license in 1993, the private banks started banking business with the traditional banking services such as deposit taking, lending loans, domestic remittance, payment order and some banking services. However, the competitiveness among the private bank is increasing s and they extended new branches and introduced the modern banking products such as ATM machines, Debit Cards, Credit Cards, corporate banking, international banking, trade finance, international remittance, hire purchase, financial solution, currency exchange, telephone and electricity charges billing, mobile banking, internet banking and other services.

### **3.6 The Financial Soundness Indicators (FSI)**

Like other central banks, the Central Bank of Myanmar supervises financial institutions and assesses them by using criteria of CAMEL rating system such as capital adequacy, assets quality, management quality, earnings and liquidity. The following detailed measurements can be found on CAMEL rating system.

#### **3.6.1 Capital Adequacy**

The first component of CAMELS framework is capital adequacy and it ultimately determines and shows how well financial institutions can manage with

shocks to their balance sheets. For the financial soundness of the bank, capital adequacy is so important for that bank. Due to the nature of the bank, the bank can have maturity mismatch between the deposits and loans and they can face the liquidity problem and the banks are recommended to inject high capital amount. The regulators also monitor the bank to maintain the required level of capital adequacy ratio. Capital Adequacy Ratio (CAR) can be defined as the ratio of bank's capital (Tier I capital and Tier II capital) and risk-weighted assets. Thus, it tracks capital adequacy ratios that take into account the most important financial risks (foreign exchange, credit and interest rate risks) by assigning risk weightings to the institution's assets.

For the purpose of capital adequacy measurement, bank capital is divided into Tier I and Tier II. Tier I capital is primary capital and Tier II capital is supplementary capital. In the Myanmar context, Tier I (core/primary) capital includes paid-up capital (common stock), surplus (share premium), retained earnings, statutory reserves, and profit and loss of current year if negative minus intangible assets. Tier II capital includes general loss reserve on credits, revaluation reserves on fixed assets, profit/loss of current year. Thus, the total capital of commercial banks is the sum of core capital and supplementary capital.

$$\text{CAR} = \frac{\text{Tier One Capital} + \text{Tier Two Capital}}{\text{Risk Weighted Assets}}$$

Leverage ratio can be used to measure the capital adequacy of a bank. This is the ratio of bank's book value of core capital to the book value of its assets. The higher ratio shows the higher level of capital adequacy. The U.S.A. Federal Deposit Insurance Corporation Improvement Act (FDICIA) of 1991 has fixed the five target zones: (i. 5 percent and above, ii. 4 percent and above, iii. under 4 percent, iv. under 3 percent, v. 2 percent and less, of leverage ratio). The leverage ratio falling in the first zone implies that bank is well capitalized. Similarly, the leverage falling in the second zone shows that bank is adequately capitalized. The leverage falling in the last three zones indicates that bank is inadequately capitalized and regulators should take prompt corrective action to bring the capital to the desirable level (Saunders and Cornett 2004).

The leverage ratio stated in the foregoing discussion is simply capital to assets ratio. In other words, assets are not risk adjusted. The 1993 Basel Accord enforced the capital ratio to risk adjusted assets of commercial banks. According to this accord, core capital must equal to or exceed 4 percent of the risk weighted assets of the commercial banks. Similarly, the amount of the supplementary capital should not exceed the amount of the core capital and the total capital must equal or exceed 8 percent of risk weighted assets (Saunders and Cornett 2004).

Regarding the Capital Adequacy of the banks, Financial Institutions Supervision Department (FISD) of the Central Bank of Myanmar overviews the three ratios of the banks such as Capital Adequacy Ratio, Core Capital to Total Deposits Ratio, Capital to Risk Weighted Assets Ratio. Table (3.4) explains the formulas and criteria for those ratios. Capital Adequacy Ratio is the ratio of the tier 1 capital plus tier 2 capital to risk-weighted assets. That ratio should be within the range of maximum 25 percentage for good and minimum 11 percentage for bad. Core Capital to Total Deposits Ratio is the ratio of the core capital to total deposits. That ratio should be within the range of maximum 23 percentage for good and minimum 7 percentage for bad. The Capital to Risk Weighted Assets Ratio is the ratio of core capital to risk weighted assets. That ratio should be within the range of maximum 22 percentage for good and minimum 7.5 percentage for bad.

**Table (3.4): Capital Adequacy Analysis**

Sr.	Ratios	Formula	Criteria (%)
1	Capital Adequacy Ratio	$(\text{Tier 1 Capital} + \text{Tier 2 Capital}) / \text{Risk Weighted Assets}$	Bad – Good 11 - 25
2	Core Capital to Total Deposits	$\text{Core Capital} / \text{Total Deposits}$	Bad – Good 7 - 23
3	Core Capital to Risk Weighted Assets	$\text{Core Capital (Tier 1 Capital)} / \text{Risk Weighted Assets}$	Bad – Good 7.5 - 22

Source: FISD, CBM (2017)

### **3.6.2 Asset Quality**

Credit risk is one of the factors that affect the health of an individual financial institution. The extent of the credit risk depends on the quality of assets held by an individual financial institution. Asset quality of a bank shows the soundness and solvency of that bank. When the banks make investments, they need to consider the quality of assets after investments. The quality of assets held by a financial institution depends on exposure to specific risks, trends in non-performing loans (NPLs), and the health and profitability of bank borrowers especially the corporate sector. A number of measures can be used to indicate the quality of assets held by financial institutions. ADB suggests these measures as loan concentration by industry, region, borrower and portfolio quality; related party policies and exposure on outstanding loan, approval process of loan, check and balance of loans; loan loss provision ratio; portfolio in arrear; loan loss ratio; and reserve ratio of checking the quality of assets of a financial institution.

The Central Bank of Myanmar uses composition of assets, NPL to total loan ratio as the indicators of the quality of assets of commercial banks. Any bank can grant the fund base loan to a single borrower or borrowers related to the same business group up to 20 percent of its primary capital (Financial Institution Law, Para 59-a). A bank needs to classify the loans into performing loans and NPLs. The loans that are not due and 6 months past due fall in the class of performing loans/performing assets and others in the NPLs. Further, NPLs are classified into three groups: substandard, doubtful, and bad debt/loss.

Commercial banks have to make 2 percent provision for total loan/performing loan, 25 percent for substandard loan, 50 percent for doubtful loan and 100 percent for bad loan (CBM, 2014).

**Table (3.5): Asset Quality Analysis**

Sr.	Ratios	Formula	Criteria (%)
1	NPLs to Total Loans	$NPLs / Total\ Loans$	Bad – Good 5 - 0
2	Provision to NPLs	$Provision / NPLs$	Bad – Good 40 - 100
3	NPLs to Total Assets	$NPLs / Total\ Assets$	Bad – Good 20 - 2

Source: FISD, CBM (2017)

Table (3.5) explains the specifications determined by the CBM to assess the asset quality of the banks;

- i) The NPLs to Total Loans Ratio should be within the range of maximum 5 percentage for bad and minimum 0 percentage for good.
- ii) The Provision to NPLs Ratio should be within the range of maximum 100 percentage for good and minimum 40 percentage for bad.
- iii) The NPLs to Total Assets Ratio should be within the range of maximum 20 percentage for bad and minimum 2 percentage for good.

### **3.6.3 Management Quality**

Generally, management is the administration of an organization, whether it is a business, a not-for-profit organization, or government body. Management includes the activities of setting the strategy of an organization and coordinating the efforts of its employees or volunteers to accomplish its objectives through the application of available resources, such as financial, natural, technological, and human resources. The term "management" may also refer to the people who manage an organization.

In larger organizations, there are generally three levels of managers, which are typically organized in a hierarchical, pyramid structure. Senior managers, such as the Board of Directors, Chief Executive Officer (CEO) or president of an organization, set the strategic goals of the organization and make decisions on how the overall organization will operate. Senior managers provide direction to the middle managers who report to them. Middle managers, examples of which would include branch

managers, regional managers and section managers, provide direction to front-line managers. Middle managers communicate the strategic goals of senior management to the front-line managers. Lower managers, such as supervisors and front-line team leaders, oversee the work of regular employees (or volunteers, in some voluntary organizations) and provide direction on their work.

Management involves identifying the mission, objectives, procedures, rules and manipulation of the human capital of an enterprise to contribute to the success of the enterprise. This implies effective communication: an enterprise environment (as opposed to a physical or mechanical mechanism) implies human motivation and implies some sort of successful progress or system outcome. As such, management is not the manipulation of a mechanism (machine or automated program), not the herding of animals, and can occur either in a legal or in an illegal enterprise or environment. Management does not need to be seen from enterprise point of view alone, because management is an essential function to improve one's life and relationship. Management is therefore everywhere and it has a wider range of application. Based on this, management must have humans, communication, and a positive enterprise endeavor. Plans, measurements, motivational psychological tools, goals, and economic measures (profit, etc.) may or may not be necessary components for there to be management. At first, one views management functionally, such as measuring quantity, adjusting plans, meeting goals. This applies even in situations where planning does not take place. From this perspective, the researchers consider management to consist of six functions such as forecasting, planning, organizing, commanding, coordinating and controlling.

A component of CAMELS framework is management and sound management is crucial for the bank performance however it is difficult to be measured. It is primarily a qualitative factor applicable to individual institutions. Several indicators, however, can jointly serve as an indicator of management soundness. Expenses ratio, earning per employee, cost per loan, average loan size and cost per unit of money lent can be used as a proxy of the management quality. ADB recommends cost per unit of money lent as a proxy of management quality.



**Table (3.6): Management Quality Analysis**

Sr.	Component Rating	Criteria (Rate)
1	Total Loans growth rate	Bad – Good 5 - 1
2	Total Assets growth rate	Bad – Good 5 - 1
3	Total Income growth rate	Bad – Good 5 - 1

Source: FISD, CBM (2017)

FISD of the Central Bank of Myanmar overviews the management quality of the banks with three rates such as total loans growth rate, total assets growth rate and total income growth rate. Table (3.6) explains the formulas and criteria for those ratios. The total loans growth rate should be within the range of maximum 5 percentage for bad and minimum 1 percentage for good. The total assets growth rate should be within the range of maximum 5 percentage for bad and minimum 1 percentage for good and the total income growth rate should be within the range of maximum 5 percentage for bad and minimum 1 percentage for good.

#### **3.6.4 Earning Performance**

Earning capacity or profitability keeps up the sound health of a financial institution. Chronically unprofitable financial institution risks insolvency on one hand and on the others, unusually high profitability can reflect excessive risk taking of a financial institution. There are different indicators of profitability. Return on assets, return on equity, interest-spread ratio, earning-spread ratio, gross margin, operating profit margin and net profit margin are commonly used as profitability indicators. The Central Bank of Myanmar uses Return on Asset (ROA) ratio as an indicator of profitability of a commercial bank. In addition, it uses the absolute measures such as Return on Equity (ROE) ratio and Operation Expense to Total Income ratio. Table (3.7) explains the formulas and criteria for those ratios. The Return on Asset ratio is the ratio of net profit to total assets and that ratio should be within the range of maximum 4 percent for good and minimum 1 minimum for bad. The Return on Equity ratio is the ratio of net profit to equity and that ratio should be within the range of maximum 40 percentage for good and minimum 10 percent for bad. The last ratio,

Operation Expense to Total Income is the ratio of operation expenses to total income and that ratio should be within the range of maximum 80 percentage for bad and minimum 5 percentage for good.

**Table (3.7): Earning Ability Analysis**

Sr.	Ratios	Formula	Criteria (%)
1	Return on Asset (ROA)	Net Profit / Total Assets	Bad – Good 1 - 4
2	Return on Equity (ROE)	Net Profit / Equity	Bad – Good 10 - 40
3	Operation Expense/Total Income	Operation Expense / Total Income	Bad – Good 80 – 5

Source: FISD, CBM (2017)

### 3.6.5 Liquidity

The liquidity management is a necessary function for the banks. When the banks make activities for earnings, they should maintain to have the liquidity assets level. Generally, the banks accept the deposits from the public and they have to pay interest for the deposits. After accepting the deposits, the banks create the credit or loans to businesses and they take the interest on those credit or loans. The margin between the interest income and interest expense is the earning for a bank. Actually, liquidity risk threatens the solvency of financial institutions. In the case of commercial banks, the first type of liquidity risk arises when depositors of commercial banks seek to withdraw their money and the second type does when commitment holders want to exercise the commitments recorded off the balance sheet. Commercial banks have to borrow the additional funds or sell the assets at force sale price to pay off the deposit liabilities. They become insolvent if sale price of the assets are not enough to meet the liability withdrawals. The second type of liquidity risk arises when demand for unexpected loans cannot be met due to the lack of the funds. Commercial banks can raise the funds by running down their cash assets, borrowing additional funds in the money markets and selling off other assets at distressed price. Both liability side liquidity risk (first type risk) and asset side liquidity risk (second type risk) affect the health of commercial banks adversely. But maintaining the high liquidity position to

minimize such risks also adversely affects the profitability of commercial banks. Return on highly liquid assets is almost zero. Therefore, commercial banks should strike the tradeoff between liquidity position and profitability so that they could maintain their health sound.

Commercial bank's liquidity exposure can be measured by analyzing the sources and uses of liquidity. In this approach, total net liquidity is worked out by deducting the total uses of liquidity from the total of sources of liquidity. Similarly, BIS maturity adhering model can be used to measure the liquidity of commercial banks. In addition, different liquidity exposure ratios such as borrowed funds to total assets, core deposit to total assets, loans to deposits, and commitments to lend to total assets are used to measure the liquidity position of a commercial bank (Saunders and Cornett, 2004). The Central Bank of Myanmar uses total loan to total deposit ratio, cash and equivalents to total assets ratio, cash and equivalents to total deposit ratio and the banks have to maintain the liquidity ratio at least 20 percent in Myanmar.

**Table (3.8): Liquidity Analysis**

Sr.	Ratios	Formula	Criteria (%)
1	Liquidity Ratio	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Bad –Good 20 - 45
2	Total Loan to Total Deposits	$\frac{\text{Total Loans}}{\text{Total Deposits}}$	Bad –Good 95 - 75
3	Total Deposits to Total Assets	$\frac{\text{Total Deposits}}{\text{Total Assets}}$	Bad –Good 60 - 80

Source: FISD, CBM (2017)

In analyzing liquidity of banks, FISD of the CBM overviews three ratios, namely Liquidity Ratio, Total Loans to Total Deposits Ratio and Total Deposits to Total Assets Ratio. Table (3.8) explains the formulas and criteria for those ratios. The Liquidity Ratio is the ratio of the current assets to current liabilities and that ratio should be within the range of maximum 45 percentage for good and minimum 20 percent for bad. The Total Loans to Total Deposits ratio is the ratio of total loans to

total deposits and that ratio should be within the range of maximum 95 percentage for bad and minimum 75 percent for good. The last ratio, Total Deposits to Total Assets Ratio should be within the range of maximum 80 percentage for good and minimum 60 percent for bad.

### **3.6.6 Composite Rating Analysis**

Composite Rating Analysis is useful to consider the soundness of a bank by the CAMEL approach. After calculating the financial indicators such as Capital Adequacy, Assets Quality, Management Quality, Earning Ability and Liquidity, the rating for each element may be different among the banks. For example, some banks' capital adequacy ratios are high while their earning ability are low level and some banks' earning ability are high rank while their liquidity ratio are low rank. Therefore, to compare the financial soundness of the banks, the composite rating analysis is necessary for measuring the financial performance of the banks.

In Myanmar, the Central Bank of Myanmar has used the composite rating approach to measure the overall financial performance of the private banks and to compare the level of banks since 2011. Due to the consideration of the FIRD of the Central Bank of Myanmar, the Financial Institutions which have Soundness in all Categories have Composite Rating Score (1). Regardless of whether there is some categories the Board of Directors and Management can execute the issue as an ordinary work process. Indeed, even in the Economic Crisis these Banks can withstand and adapt their concern without the External Crisis viable them. The Bank Monitoring Team sees these Banks as Safe, Secure and Firm bank as they adhere to the Rules and Regulations. These Banks likewise have Strong Institutions with Manageable Size and Capacity to adapt the troublesome circumstances.

The Financial Institutions, which have Soundness basically in most Categories, have Composite Rating Score (2). There are some Moderate shortcomings in Management Control which need to change the Supervision Capacity of Board of Director and Management group. These Bank have Manageable size Capacity to adapt the troublesome circumstances, adhere to the Rules, Regulations and can withstand the Financial Crisis, although Risk profile are satisfactory it is see as absence of Supervisory Concern.

The Financial Institutions which have to be monitor and check in one (or) more than one Component area is regard as Composite Rating Score (3). There are shortcoming in Management Supervision and cannot withstand Fluctuations of Economy. Banks with Composite score (3) have to confront the outside impacts more than Banks which have Composite score (1) and (2). Likewise as these Institutions don't adhere to Rules and Regulations, have blended reasonable size and limit with hazardous profile and less Soundness Management Control which prompted unsatisfactory. This bank should be Monitored and Checked with Formal and Informal requirement activities.

Financial Institution with no Safeness and Soundness is rated as Composite Rating Score (4). There are shortcomings in Capital, Management Control with unsuitable conditions which Board of Directors and supervisory crew cannot execute. These Institutions don't observe Rules and Regulations; have blended reasonable size and limit with dangerous profile and less Soundness Management Control which prompted unsuitable. This institution should be intently observed and take some Formal Enforcement Actions in certain territories.

**Table (3.9): Composite CAMELS and their Interpretation**

Rating Scale	Rating Range	Rating Analysis	Rating Analysis interpretation
1	1.0-1.4	Strong	Sound in every respect, no supervisory responses required.
2	1.6-2.4	Satisfactory	Fundamentally sound with modest correctable weakness, supervisory response limited.
3	2.6-3.4	Fair (watch category)	Combination of weaknesses if not redirected will become severe. Watch category. Requires more than normal supervision.
4	3.6-4.4	Marginal (some risk of failure)	Immoderate weakness unless properly addressed could impair future viability of the bank. Needs close supervision.
5	4.6-5.0	Unsatisfactory (high degree of failure evident)	High risk of failure in the near term. Under constant supervision/cease and desist order.

Source: Sarker A. (2005)

The Financial Institutions with no Safety, Soundness and shows worse conditions is rated as Composite Rating Score (5). There are shortcomings in Capital, Management Control with inadmissible conditions which Board of Directors and supervisory crew cannot execute. These Institutions don't keep Rules and Regulations; have blended reasonable size and limit with unsafe profile and less Soundness Management Control which prompted unsuitable. These variables made genuine negative conditions for Monitoring and Checking Team. For recuperation these sorts of Financial Institutions will need underpins from External Financial Institutes and others bolsters. Observing will likewise need to do progressing supervisory generally Banks with Composite rating (5) will lose Deposit Insurance Fund and will go to Bankrupt. Table (3.9) mentions the interpretation for Composite Rating score 1 to score 5.

This study analyzed the performance of private banks in Myanmar by using CAMEL rating system and the calculation on this analysis can be seen in the next chapter.

### **3.7 Concluding Remarks**

Under the planned economy, there were no private banks in Myanmar banking sector. After 1988, the Government made many reforms on financial sector and the private banks were allowed to operate banking business according to the Myanmar Financial Institutions Law (1990). Although the private banks faced liquidity crisis in 2003, the size of private banks has been growing gradually in terms of deposits and loans and advances. The total deposits of private banks increased 7.1 times and loans and advances of private banks increased 8.8 times during the period from 2011/2012 FY to 2017/2018 FY. Currently, the prices of real estate are falling and it is a challenge for the private banks because they extended the loans with the collateral of estate.

## CHAPTER (4)

### Analysis on Performance of Selected Myanmar Private Banks

#### 4.1 Introduction

This study analyzes the performance of private banks because the role of private banks is dominant in Myanmar banking sector. Although some researchers used only the methods to measure financial performance of the banks, this study uses the methods to measure performance of the banks from both financial aspects and human aspects. To analyze the performance of the banks from financial aspect, the CAMEL framework is used and to analyze performance of the banks from human aspect, the survey results on bank employee and bank customers are used in this study.

Some supervisory frameworks can be used to measure the financial soundness of the banks such as capital strength, profitability, liquidity, solvency and asset quality. The CAMEL framework which is explained in Chapter 2 is commonly used by Central Banks as a supervisory framework. However, it could not measure non financial performance and the human aspect for bank performance becomes useful to measure non financial performance. Currently, measuring the customer satisfaction, employee satisfaction and corporate social responsibility is commonly useful for non-financial performance of the banks.

#### 4.2 Measuring Bank Performance by Human Aspects

In measuring the performance of a bank, the view by human aspects is very important to measure performance of that bank for both the long term and short term. This common use in measuring the performance of banks includes three parts shown as follows.

- i Customer satisfaction
- ii Employee satisfaction
- iii Corporate social responsibility

Consumer satisfaction decides the market share of banking sector and furthermore makes gainfulness of the bank. Employee satisfaction improves the effectiveness of the bank or performance of the banks. It diminishes the expense of association and expands the productivity of association or banks. Corporate Social

Responsibility speaks to moral, good and devoted action of an association to society and how it supports the long haul improvement of the nation and diminishing neediness and great condition of the general public.

#### **4.2.1 Customer Satisfaction**

Consumer satisfaction is the judgment accepted out of the correlation of pre-buy desires with post-buy assessment of the item or administration experience, as characterized by scholarly writing. Consumer satisfaction has turned into a significant measurement for execution estimation especially for banking and fund industry. As most banks and finance organizations offer comparable items and administrations, improving consumer loyalty and unwaveringness is the most significant factor in keeping up just as expanding piece of the pie for these associations. Consumer loyalty gives a main marker of customer buy goals and dedication. Consumer loyalty information are among the most much of the time gathered pointers of market discernments.

Khondaker and Mir (2011) explained that consumer satisfaction can be characterized as the inclination or demeanor of a client toward an item or administration after it has been utilized. Consumer satisfaction involves the full gathering of client desires for specific items and administrations. Consumer satisfaction is decidedly identified with client reliability. To have Customer satisfaction, banks should concentrate on decreasing their procedural complexities and guaranteeing the conveyance of snappy administrations to client so as to hold existing just as pulling in new clients.

The banks' most significant service quality elements are close to home thoughtfulness regarding the customers, mistake free records, security in exchanges, unmistakable physical offices. Hennayake (2017) investigated the inlet between client desires and impression of service quality factors all through open, private and outside banks in India dependent on the SERVEQUAL model. SERVQUAL is a multidimensional research instrument (for example questionnaire or measurement scale) intended to quantify service quality by catching respondents' desires and observations along the five components of service quality.



Table (4.1) explains the summary of SERVQUAL items and the questionnaire comprises of 22 items, involving 4 things to capture tangibles, 5 things to capture reliability, 4 things for responsiveness, 4 things for assurance and 5 things to capture empathy.

**Table (4.1): Summary of SERVQUAL items**

Sr.	Dimension	No. of Items in Questionnaire	Definition
1	Reliability	5	The ability to perform the promised service dependably and accurately
2	Assurance	4	The knowledge and courtesy of employees and their ability to convey trust and confidence
3	Tangibles	4	The appearance of physical facilities, equipment, personnel and communication materials
4	Empathy	5	The provision of caring, individualized attention to customer
5	Responsiveness	4	The willingness to help customers and to provide prompt service

Source: Parasuraman, et al. ( 1985)

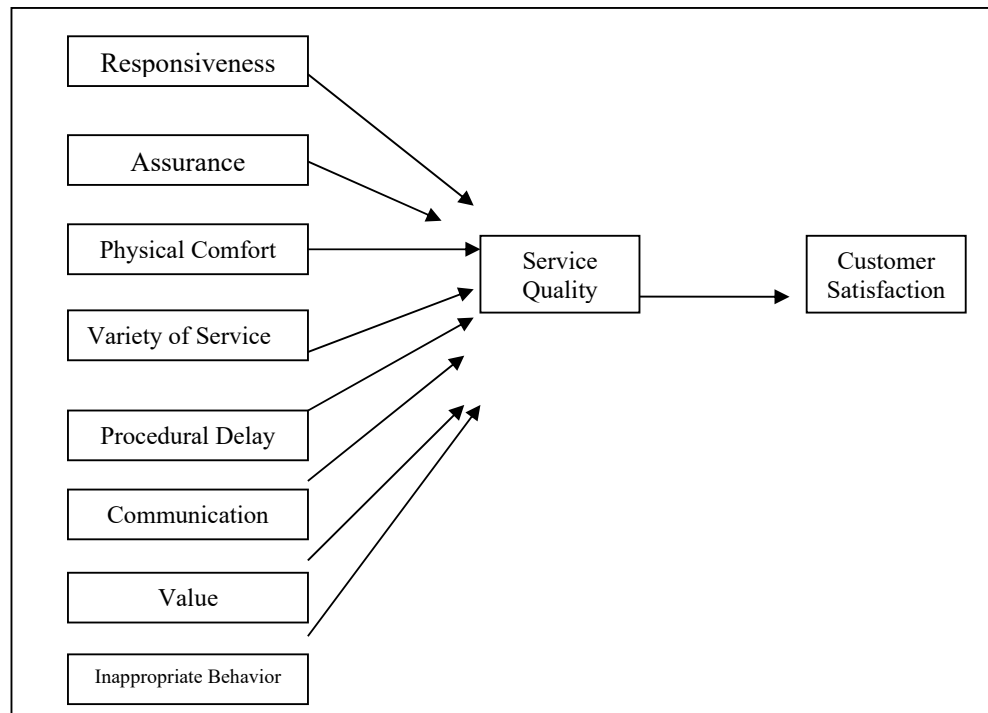
The SERVQUAL questionnaire has been depicted as "the most mainstream institutionalized questionnaire to quantify service quality." It is generally utilized by service firms, frequently related to different proportions of service quality and consumer satisfaction. The SERVQUAL instrument was created as a component of a more extensive conceptualization of how clients comprehend service quality. This conceptualization is known as the model of service quality or all the more prevalently as the holes model.

Parasuraman, Zeithaml and Berry (1985) developed the model of service quality, popularly known as the gaps model, in a systematic research program carried out between 1983 and 1988. The model distinguishes the chief measurements (or segments) of service quality; proposes a scale for estimating service quality

(SERVQUAL) and recommends potential reasons for service quality issues. The model's designers initially distinguished ten elements of service quality, yet in the wake of testing and retesting, a portion of the measurements were seen as auto connected and the complete number of measurements was diminished to five, to be specific - reliability, assurance, tangibles, empathy and responsiveness. Among understudies of showcasing, the mental aide, RATER, an abbreviation framed from the primary letter of every one of the five measurements (Reliability of Bank Services, Assurance, Tangible, Empathy, and Responsiveness) is regularly utilized as a guide to review.

The SERVQUAL model is the reason for a large portion of the SQ research about in light of the fact that it is valuable and thorough. In addition, the five components of the model have been redone by numerous analysts to make it operational in any financial and social setting. In light of the above restrictions of the SQ model, the examination recommended the need to investigate extra factors in setting up service quality criteria and their measures for the pertinent service industry.

**Figure (4.1): Model of Service Quality (SERVQUAL) or the Gaps Model**



Source: Khondaker and Mir (2011)

Irina (2010) explained that building more unique relationships with customers is vital for companies in highly competitive environment. Empirical study points out that the companies regard the implementation of Customer Relationship Management (CRM) as a factor that will allow them to survive in the new market conditions, favoring the relationship with their customers ( Mendoza, E. G., Quadrini, V., Rios-Rull, J. V., 2009). Already successful implementation projects of (CRM) not only provide proof for the concept but have also created important competitive advantage (Kotorov, 2003). His research presents a survey with the aim of evaluating the customers' satisfaction for the banks and it comprises elements like, appearance of the facility, attitude and behavior of staff, decor and atmosphere, business hours, interest rate and waiting time. Bank customers may regard some of the elements as being not equally important as the others.

#### **4.2.2 Employee Efficiency and Satisfaction**

The Banking sector is exceptionally mentally serious, where the primary resource of the banks is its human capital, as the expenses brought about on representatives are the major working cost in the banking sector. The human capital is a key scholarly and vital resource which expands the proficiency of banks. Execution of the banks relies on the productivity of its HR. Abnormal state of Human Capital Efficiency (HCE) prompts the superior of the banks. Effective workers are not an adequate model to gauge the presentation of the banks. It ought to likewise be guaranteed that representatives are effective and fulfilled both, in light of the fact that the disappointment of workers may transform their productivity into wastefulness whenever. Representative fulfillment is significant in accomplishing quality and benefit in the administration business. Representative fulfillment prompts higher administration quality and it impacts customer satisfaction straightforwardly. Service quality and consumer satisfaction in the long run lead to financial profits.

Khartabiel and Saydam (2014) explained the literature of Bellou and Adranikids that to increase the quality of services within the organization it must be organized to improve the efficiency of its employees by training and rehabilitation, and to improve their behavior, and achieve the common cooperation among workers in the organization as a team without internal conflict that may affect at the service

provided. This, therefore, can maintain a high level of internal service and leads to a high level of services provided to customers. Employee satisfaction is also related with the customer satisfaction. If the bank's employees do not have satisfaction, the employee cannot give good services to the bank's customers and the bank cannot give customer satisfaction. Consequently, the bank can lose customer loyalty.

Khartabiel and Saydam analyzed their study based on two inputs: internal input provided by the employees of the banks and external input provided by its customers. In order to be able to improve the outcome, the internal employees must be improved with inputs through training, incentives, increase coordination between bank employees and external customers in terms of happiness and loyalty that can be reflected on clients' satisfaction and loyalty. It is important to maintain good communication with customers so that they have preference to a particular bank based on the satisfaction with the service provided to them and show more loyalty in dealing with the bank.

Therefore, the bank which owns strong services will impact positively on the employees' behavior and gain more clients. Meanwhile the bank which has weak services will gain less customer loyalty. Hence, the powerful bank structure will have a pyramid shape at which employees and clients are on the top of the pyramid and managers are at the base.

Employee satisfaction is very important to have the bank efficiency. Man M., Modrak V., Dima C. and Pachura P. (2011) discussed that Job Satisfaction is a general expression of workers' positive attitudes built up towards their jobs. Workers maintain an attitude towards their jobs as a result of diverse features of their job, social status that they've gained about their jobs and experiences in their job environment. This attitude can be also negative towards work. If the economic benefits, the social status, the job's own specific characteristics and the job expectation employees hoped, are appropriate for employees' desires, there is job satisfaction. Positive attitudes of employees towards the whole business environment as a result their experiences of work-environment are called job satisfaction.

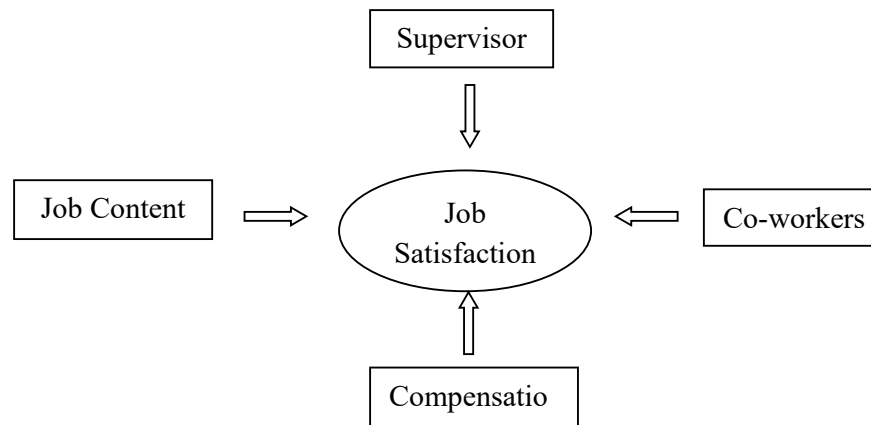
Employee satisfaction can be measured by Equity Theory which was firstly developed in the 1960s by J. Stacy Adams, a workplace and behavioral psychologist, who asserted that employees seek to maintain equity between the inputs that they

bring to a job and the outcomes that they receive from it against the perceived inputs and outcomes of others. Equity theory explains that subtle and variable individual factors affect each person's assessment and perception of their relationship with their relational partners. In any position, an employee wants to feel that their contributions and work performance are being rewarded with their pay. If an employee feels underpaid then it will result in the employee feeling hostile towards the organization and perhaps their co-workers, which may result in the employee not performing well at work anymore. It is the subtle variables that also play an important role in the feeling of equity. Just the idea of recognition for the job performance and the mere act of thanking the employee will cause a feeling of satisfaction and therefore help the employee feel worthwhile and have better outcomes.

San San Myint, Leamprecha, Pooncharoen and Rurkwararuk (2016) explained that employee satisfaction is the terminology that is used to describe whether employees are happy and contented and fulfilling their desires and needs at work. Employee satisfaction has been widely studied in the management literature due to its relevance to the physical and mental well-being of the employee and also its implications for such job-related behaviors as productivity, absenteeism, turnover and employee relation. Although employee satisfaction seems simple, its conceptual domain is broad because it includes all characteristics of job itself and the work environment which an employee finds rewarding, fulfilling and satisfying or unsatisfying. It is therefore, a complex phenomenon and it can be interpreted in different ways.

Locke and Edwin (1976) defined employee satisfaction as a pleasurable or positive emotional state resulting from the appraisal of one's job experiences as achieving or facilitating the achievement of one's job values. Therefore, employee satisfaction has to do with an individual's perception and evaluation of his job and this perception is influenced by the person's unique circumstances such as needs, values and expectation. Some researchers view employee satisfaction as a reaction to a job, arising from the comparison of what an individual seeks in a job with the actual outcomes that the job provides to the individual (Rothmann and Coetzer, 2002). Spector (1997) defined employee satisfaction as an individual's total feeling about their job and attitudes they have towards various aspects of the job.

**Figure (4.2): Proposed factors of employee job satisfaction**



Source: San San Myint, et al.( 2016)

Hoshi (2014) explained the view on employee satisfaction of many researchers, what the definitions of employee are and what the factors that affect job satisfaction. Abdullah (2015) considered some factors such as promotion, employee loyalty and acknowledgment of work which have an effect on employee satisfaction, but he found wages as the main factor for job satisfaction. Additionally, encouragement and salaries are the most important determinants of job satisfaction.

Due to the fact that identification or reward has been changed a lot, work motivation and satisfaction will be changed parallels, so the greater the focus on incentives and acknowledgment, the greater the positive impact on the job satisfaction level. In addition, it is positive and meaningful relationship between employee satisfaction and management behavior such as group work, leadership and independence positions. Moreover, special strategies and rules which are related to salaries, work environment, policy evolvment and the staff input, may lead to employee commitment, satisfaction. Employee who is more satisfied is more likely to be welcoming and observant. This manner attracts customers as compared to the employee not satisfied with his job.

### **4.2.3 Corporate Social Responsibility**

Su and Jie (2015) explained that plenty of studies had defined CSR from diverse perspectives. Mohr (1996) divided definitions of CSR into two types: multi-dimensional definitions and definitions based on social marketing. Multi-dimensional definitions list main social responsibilities for corporations, while social marketing concept views CSR according to its impacts on society. Dahlsrud (2008) conducts

comprehensive analysis on 37 definitions of CSR according to relevant literature from 1980 to 2003, and then group definitions on CSR into five dimensions, including: the environmental dimension, the social dimension, the economic dimension, the stakeholder dimension and the voluntariness dimension. In this paper, definitions on CSR are categorized into two perspectives based on previous studies: the stakeholder perspective and the social perspective.

The representative of the stakeholder perspective is described by Freeman (1984), he asserts that businesses have responsibilities for groups and individuals who can both influence and be influenced by business operation. Khoury G. M., Rostami J. and Turnbull P. L. (1999) explained that CSR encompasses relationship between a company and all of its stakeholders, such as customers, employees, communities, owners/ investors, government, suppliers and competitors. According to them, the major social responsibilities of corporations consist of community service, the improvement of relationship with employees, job creation, environmental protection and financial returns. Hopkins (2003) also defined CSR from the stakeholder perspective. He points out that CSR is to treat a company's stakeholders in a moral and responsible way in an effort to attain the two-fold goal of maintaining profit and improving the living standard of stakeholders inside and outside the company.

Hall (1993) explained that consumers' cognitive association of a company can become a source of sustainable competitive advantage and he find that for certain types of companies, fulfillment of CSR in environment can contribute to sustainable competitive advantage. He pointed that the analysis of (Porter and Kramer 2002), examines corporate philanthropy and challenges the view held by Friedman that managers are not supposed to use CSR as a tool to serve their own interests, corporate resources invested in CSR should be used to improve efficiency of the corporation. Porter and Kramer further explain that one implicit assumption of Friedman's argument is that a corporation's social goals and economic goals are separate, thus increasing spending on social activities will undermine economic benefits. However, Porter and Kramer are of the view that competitive context is integral to the success of a corporation, and the context can be improved through charitable causes carried out by the corporation, which can contribute to the integration of the corporation's economic goals and social goals. Meanwhile, they remind corporations to choose

charitable causes that are related to their business operation. Otherwise, it can only generate social benefits without bringing economic benefits.

Su and Jie (2015) briefed that a substantial number of existing literatures on CSR focus on the effects it produced. More empirical tests are needed to investigate determinants of CSR and resources utilized in the provision of CSR. Furthermore, the selection on dimensions of CSR in domestic empirical studies are primarily based on foreign literature, and choose dimensions such as community relations, employee relations, diversity, protection of consumer rights and interests, environment protection, product attributes and treatment of women and minority groups. However, the dimension like community relations may not be as influential in China as it is in the U.S. and other European countries, because the concept of community and community relations have not received adequate attention in China. Moreover, different stakeholders show interests to different dimensions of CSR. For instance, consumers may care more about protection of consumer rights and interests, whereas employees might be more interested in employee relations. Thus, future research can develop dimensions and scales that are congruent with the reality in China and examine the effect of different dimensions on different stakeholders.

### **4.3 Financial Performance of Selected Private Banks in Myanmar**

The banking sector is considered to be an important source of financing for most businesses. The increasing financial performance will lead to improved functions and activities of the organizations. This study aims to study the performance of Private Banks as the role of Private Banks is of crucial importance in Myanmar banking sector. Among the 24 Private Banks, 30 percent of Private Banks is selected for the study by sample random method. Those selected banks are AYA Bank, CB Bank, GTB Bank, KBZ Bank, MOB Bank, MWD Bank and SMIDB Bank.

Table (4.2) shows ownership type and number of branches of selected private banks. Among the private banks, there are three public banks and four private banks and all banks are private-owned banks.



**Table (4.2): Type of Selected Private Banks**

Sr.	Bank	Ownership	Number of Branches
1	Ayeyarwaddy Bank	Private	206
2	Cooprerative Bank	Public	183
3	Global Treasure Bank	Public	150
4	Kanbawza Bank	Private	443
5	Myanmar Oriental Bank	Private	41
6	Myawaddy Bank	Private	58
7	Small and Medium Industrial Development Bank	Public	19

Source: CBM website

In this study, the Financial Soundness Indicators (FSIs) are used to measure financial performance calculated as per five dimensions; capital adequacy, assets quality, management control, earning ability and liquidity ratios. The FSI has established twelve different categories of financial ratios to measure and rates the safety and soundness of the financial performance of private banks. The information necessary for computation of these ratios are collected from both on-site and off-site sources.

To monitor safety and soundness of private banks in Myanmar, the Central Bank of Myanmar started using CAMELS rating model since year 2011. This study follows closely the methodology of the CAMELS framework used by the Financial Institution Supervision Department, Central Bank of Myanmar. Nevertheless, this study considered only five components of the CAMELS framework leaving out "S"

which represent "sensitivity" to market risk. The rationale for omission of "S" in each consideration of financial performance was the fact that market risk for current financial market in Myanmar is minimal.

The twelve financial ratios of FSIs are related to each other. Comparison of ratios shows that if one ratio's score increases, another ratio's score will decrease. For example, if a bank requires to raise "capital adequacy" component such as core capital/total deposit ratio by raising "core capital", the "earning ability" component such as ROE (Net profit/core capital's ratio) score will decrease (or) by making total deposit low, the outcome ratio's score will be good. However, it will make total loan to total deposit ratio score decrease in "liquidity" component that banks cannot make every component ratio "even" in all sectors but twelve FSIs Ratios are good enough in balancing the calculations.

"Critical value" is the reference showing the percentage range of acceptable for each FSI's ratios. These references are issued and changed from time to time by Financial Institutions Supervision Department, Central Bank of Myanmar according to prevalent conditions of private banks in Myanmar.

Financial ratios are measured by scores ranging from 1 to 5. If the financial ratio is shown as bad (or) worse percentage as norms in critical value, it will be regarded as score 5. If financial ratios shows percentage good (or) percentage best as per norms in critical value it will be regarded as score 1. If the financial ratios show between percentage of bad condition and good condition, the formula given below is used as inputs for calculating score.

$$\text{Estimated score} = 5 - [(\text{FSIs}\% - \text{Bad } \%) / (\text{Good}\% - \text{Bad } \%) / 4 ]$$

Where, FSIs =Financial Soundness Indicators

#### **4.3.1 Capital Adequacy Analysis**

Capital is an important indicator of a bank and it shows the financial soundness of that bank. To protect unexpected losses of a bank, which the bank needs to keep the appropriate amount of capital. The banks should maintain the certain amount of capital for three reasons. The first reason is that the bank's capital can prevent that bank whenever the bank faces any failure. Secondly, the capital amount

of a bank can impact the profit amount of that bank. Third reason is that the banks are required to maintain the minimum capital ratio set by the central bank or regulatory authority.

The bank's capital represents the buffer which is available to protect depositors' money against losses. The requirement for minimum capital ratio is determined by the Central Bank and as a result, the depositors can have some degree of guarantee for their deposits. Normally, the banks use part of their capital to buy fixed assets and the remaining capital (free capital) can be used for their investment. The CBM calculated the free capital that is an amount which is capital minus fixed assets. Therefore, capital is one of the bank's specific factors that influence the level of bank profitability and it is also the amount of owners' funds available to support the bank's business and act as a buffer in case of adverse situations. Moreover, bank capital supports for liquidity of the bank and capital adequacy ratio is directly proportional to the resilience of the bank to crisis situations.

Capital adequacy ratios are a measurement of ratios that present the capital strength and the risk weighted assets of the banks. The three ratios below are used to analyze the capital adequacy of the banks by the CBM.

- (a) Capital Adequacy Ratio
- (b) Core Capital to Total Deposits
- (c) Core Capital to Risk Weighted Assets

**(a) Capital Adequacy Ratio**

Capital Adequacy Ratio is a regulatory ratio determined by the Central Banks. In Myanmar, the banks need to maintain this ratio at least 10 percent. However, to review the capital strength of the banks, the good ratio and bad ratio specified by the CBM are 25% and 11 % respectively. The score for banks which have the ratio above 25 % set by the CBM will not be calculated using formula and these banks are automatically given score 1. Like this, the score for banks which have the ratio under 11 % set by the CBM will not be calculated using formula and these banks are automatically given score 5. Scores for the banks which have the ratio of above 11 % to 25 % will be calculated by using the following formula.

$$\text{Estimated score} = 5 - [(\text{FSIs}\% - \text{Bad } \%) / (\text{Good}\% - \text{Bad } \%) / 4 ]$$

Where, FSI = Capital Adequacy Ratio

**Table (4.3): Capital Adequacy Ratio of Selected Private Banks**

Sr.	Name of Bank	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Average Ratio (%)	Score	Rank
1	Kanbawza Bank	12.92	12.89	10.83	11.12	10.91	11.73	4.79	7
2	Ayeyarwaddy Bank	30.37	16.42	11.15	10.16	8.58	15.34	3.76	5
3	Cooperative Bank	16.79	16.44	15.16	11.65	9.5	13.91	4.17	6
4	Myawaddy Bank	43.07	42.51	43.12	42.54	43.95	43.04	1	2
5	Global Treasure Bank	32.61	35.69	34.3	35.89	34.11	34.52	1	3
6	Myanmar Oriental Bank	23.63	25.5	29.44	25.76	23	25.47	1	4
7	Small and Medium Industrial Development Bank	66.28	68.76	53.16	55.07	65.76	61.81	1	1

Source: Financial Institutions Supervision Department

Note: This study analyzes the data of capital adequacy on the period of (31-3-2013) to (31-3-2017) by using previous regulation and new regulation on capital adequacy ratio which was explained in Chapter 3 was issued with effect from July 7, 2017.

Table (4.3) shows Capital Adequacy Ratio of selected private banks from 2012/2013 FY to 2016/2017 FY. These ratios are calculated by the FISD of CBM and this study takes these ratios for the analysis. The study found that capital adequacy ratio of SMIDB was 61.81% and scored 1.0, ranking first. It is noted that capital adequacy ratio of SMIDB bank is quite adequate for the bank as it is higher than good condition 25% specified by the Central Bank of Myanmar criteria. Therefore, SMIDB bank's capital adequacy ratio is in the best condition. Additionally, the other banks

including MWD, GTB and MOB Bank have scored 1, ranking second, third and fourth respectively while KBZ scored 4.79, ranking seven. CB, AYA and KBZ Bank received average capital adequacy ratio of above 11% and it can be interpreted that they meet the requirement for capital ratio determined by the Central Bank of Myanmar. However, the Capital Adequacy Ratio is a regulatory ratio and the banks need to maintain this ratio at least 10 %. Therefore, CB, AYA and KBZ Bank should take an action plan to increase this ratio. This ratio is a ratio of Tier 1 Capital plus Tier 2 Capital to Risk Weighted Assets. The way to increase this ratio is either to increase Tier 1 Capital plus Tier 2 Capital or to decrease Risk Weighted Assets value. Normally, the Risk Weighted Assets include loans, fixed assets and time deposit (more than one year) and these components are calculated into risk weighted assets with respective risk weight and the risk weight for NPLs are larger than other risk weight. Therefore, collecting the NPLs can decline the Risk Weighted Assets value and the capital adequacy ratio can increase. Moreover, injecting the bank's capital can be able to increase the capital adequacy ratio.

**(b) Core Capital to Total Deposits**

Core Capital to Total Deposit ratio is not a regulatory ratio specified by CBM. This ratio is also to measure the capital strength of the banks. In this case, the good ratio and bad ratio specified by CBM are 23% and 7 % respectively. The score for banks which had the ratio above 23 % set by CBM will not be calculated using formula and these banks are automatically given score 1. Like this, the score for banks which had the ratio under 7 % set by CBM will not be calculated using formula and these banks are automatically given score 5. Scores for the banks which have the ratio of above 7 % to 23 % will be calculated by using the following formula.

$$\text{Estimated score} = 5 - [(\text{FSI}\% - \text{Bad } \%) / (\text{Good}\% - \text{Bad } \%) / 4 ]$$

Where, FSI = Core Capital to Total Deposits

The following Table (4.4) depicts core capital to total deposit ratios of selected private banks for the period from 2012/2013 FY to 2016/2017 FY. These ratios were calculated by FISD of the CBM and this study uses these ratios for capital analysis of the banks. According to this table, SMIDB Bank scored 1 and ranking 1 with the average percentage of 29.03% followed by GTB which scored 2.1, ranking 2. MWD

and MOB Bank respectively had scored 2.4 and 4.2, while AYA, CB and KBZ Bank had scored 5, ranking five, six and seven respectively.

**Table (4.4): Core Capital to Total Deposit Ratio of Selected Private Banks**

Sr.	Name of Bank	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Average Ratio (%)	Score	Rank
1	Kanbawza Bank	6.01	4.94	4.94	4.71	4.13	4.94	5	7
2	Ayeyarwaddy Bank	12.94	6.30	3.71	3.60	3.26	5.96	5	5
3	Cooperative Bank	7.10	7.20	6.21	4.97	4.19	5.93	5	6
4	Myawaddy Bank	16.13	16.93	16.95	18.05	18.29	17.27	2.43	3
5	Global Treasure Bank	14.35	16.87	18.20	24.06	19.55	18.61	2.10	2
6	Myanmar Oriental Bank	9.76	10.17	11.26	9.98	9.58	10.15	4.21	4
7	Small and Medium Industrial Development Bank	18.43	30.13	27.35	31.24	38.01	29.03	1	1

Source: Financial Institutions Supervision Department

Therefore, AYA, CB and KBZ Bank may need to take an action plan to increase Core Capital to Total Deposit Ratio. To implement this action plan, there is only one way to increase bank capital because the way to decrease the deposit amount is not possible for the banks. However, some banks decrease their deposits amount by reducing the interest rates for bank deposits.

**(c) Core Capital to Risk Weighted Assets**

Core Capital to Risk Weighted Assets ratio is not a regulatory ratio specified by the CBM. This ratio shows the capital strength and asset quality of the bank. In this purpose, the good ratio and bad ratio specified by the CBM are 22% and 7.5 %

respectively. The score for banks which had the ratio above 22 % set by the CBM will not be calculated using formula and these banks are automatically given score 1. Similarly, the score for banks which had the ratio under 7.5 % set by the CBM will not be calculated using formula and these banks are automatically given score 5. Scores for the banks which have the ratio of above 7.5 % to 22 % will be calculated by using the following formula.

$$\text{Estimated score} = 5 - [(\text{FSI}\% - \text{Bad } \%) / (\text{Good}\% - \text{Bad } \%) / 4 ]$$

Where, FSI = Core Capital to Risk Weighted Assets Ratio

**Table (4.5): Core Capital to Risk Weighted Assets Ratio of Selected Private Banks**

Sr.	Name of Bank	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Average Ratio (%)	Score	Rank
1	Kanbawza Bank	9.68	8.75	7.53	7.59	7.36	8.18	4.8	7
2	Ayeyarwaddy Bank	29.27	15.33	9.60	8.92	7.37	14.10	3.2	5
3	Cooperative Bank	12.55	12.61	13.00	7.49	5.91	10.31	4.2	6
4	Myawaddy Bank	29.41	29.12	29.69	29.72	31.08	29.80	1	2
5	Global Treasure Bank	24.43	26.82	25.31	25.21	22.35	24.82	1	3
6	Myanmar Oriental Bank	17.46	18.74	17.76	19.40	17.29	18.13	2.1	4
7	Small and Medium Industrial Development Bank	63.23	65.92	42.76	39.67	46.55	51.63	1	1

Source: Financial Institutions Supervision Department

Table (4.5) provides core capital to risk weighted assets ratio of selected private bank for 2012/2013 FY to 2016/2017 FY. These ratios were calculated by FISD of the CBM and the study takes these ratios for analysis. This table reveals that

SMIDB, MWD and GTB bank are in good shape while all other banks need to improve their ratio by increasing the capital. KBZ Bank is at the bottom with its lowest ratio of core capital to risk weighted assets. However, its ratio is still within the range of acceptable condition. Actually, the Core Capital amount of KBZ Bank is larger than other banks in this case but the Risk Weighted Assets value is huge large compare with Core Capital amount. Therefore this ratio is smaller than other banks.

The Core Capital to Risk Weighted Assets Ratio is a ratio between the core capital or Tier 1 capital and Risk Weighted Assets value. Therefore, this ratio is always smaller than the Capital Adequacy Ratio in nature, because the Capital Adequacy Ratio is a ratio between Tier 1 capital plus Tier 2 capital and Risk Weighted Assets value.

### **The Capital Adequacy Component Score**

The Capital Adequacy Component Score is a summary of the capital adequacy and it is the average score of Capital Adequacy, Core Capital to Total Deposits and Core Capital to Risk Weighted Assets. The following equation is to calculate for Capital Adequacy Component Ratio.

$$C^* = \text{Average} (C_1, C_2, C_3)$$

Where,  $C^*$  = Capital Adequacy Component Score

$C_1$  = Score for Capital Adequacy Ratio

$C_2$  = Score for Core Capital to Total Deposits Ratio

$C_3$  = Score for Core Capital to Risk Weighted Assets Ratio

The Capital Adequacy Component Score is a score which explains the overall capital strength of a bank. The range of this score is from 1 to 5 and scores 1 means that this bank outperforms the average bank in all respects in capital side and by easily measurable differences. Score 2 means that bank is measurably better than the average bank, but not quite outstanding in capital strength. Score 3 means that bank operates in well-run situation, good bank that just meets all of the standards concerning capital requirement. Score 4 represents that bank demonstrates a major weakness in capital strength that if not corrected, could lead to a very severe or unsatisfactory condition that will threaten its existence. Score 5 means that the bank's



financial health is substandard, with asset quality impairing over half of the bank's primary capital. If it is not corrected, the further deterioration will lead to regulatory control and a high probability of failure. Therefore, if the score approaches to 1, this bank's capital strength is good and if the score approaches to 5, this bank's capital strength will be bad.

The Capital Adequacy Component Score shows the financial soundness of a bank and some banking activities are linked with the capital amount of that bank. For example, the maximum lending amount of a bank depends on the core capital amount of that bank. According to the Financial Institutions Law, a bank is not allowed to lend more than 20% of its core capital to a single individual, an enterprise of an economic group.

**Table (4.6): Capital Adequacy Component Score of Selected Private Banks (2012/2013 -2016/2017)**

Name of Bank	C1		C2		C3		Capital Adequacy Component Ratio	
	Average Ratio	Score	Average Ratio	Score	Average Ratio	Score	Average Score	Rank of Average Score
Kanbawza Bank	11.73	4.8	4.94	5	8.18	4.8	4.87	7
Ayeyarwaddy Bank	15.34	3.8	5.96	5	14.10	3.2	4	5
Cooperative Bank	13.91	4.2	5.93	5	10.31	4.2	4.47	6
Myawaddy Bank	43.04	1	17.27	2.43	29.80	1	1.48	3
Global Treasure Bank	34.52	1	18.61	2.10	24.82	1	1.37	2
Myanmar Oriental Bank	25.47	1	10.15	4.21	18.13	2.1	2.44	4
Small and Medium Industrial Development Bank	61.81	1	29.03	1	51.63	1	1	1

Source: Researcher's own calculation

Notes: C1 = Score for Capital Adequacy ratio

C2 = Score for Core Capital to Total Deposits ratio

C3 = Score for Core Capital to Risk Weighted Assets ratio

Table (4.6) shows the Capital Adequacy Component Score of selected private banks. These ratios were calculated by using the ratios from Tables (4.3), (4.4) and (4.5). Analysis of the component rank column reveals that SMIDB bank was rank 1 and GTB bank, rank 2 and Myawaddy bank and Myanmar Oriental Bank were rank 3 and rank 4 respectively. The analysis concludes that SMIDB Bank has score 1 and this bank is in the best position concerning capital adequacy which indicates that this bank outperforms the average bank in all respects in the capital side and by easily measurable differences. MWD and GTB Bank scored 1.48 and 1.37; it means that they are measurably better than the average bank, but not quite outstanding in capital strength. MOB Bank has a score of 2.44 which means that this bank operates in a situation that just meets all of the standards concerning capital requirement. KBZ, AYA and CB Bank scored 4.87, 4.0 and 4.47 respectively which indicates that these banks demonstrate a major weakness in capital adequacy and that if it is not corrected, could lead to a very severe or unsatisfactory condition that will threaten its existence. In the analysis of this study, it indicates that KBZ, CB and AYA Bank are weak in Capital Component and these banks need to take an action plan to improve the Capital Component by increasing paid up capital or managing their assets quality. MOB Bank is at a moderate level in Capital Component and SMIDB, MWD and GTB Banks record score 1 in Capital Component.

#### **4.3.2 Asset Quality**

Asset quality of a bank explains how much that bank has the financial soundness and profitability. Normally, bank assets include others current assets, loans and overdraft, fixed assets and other investments. The asset of loans and overdraft is the major asset of the bank and major income of a bank is the incomes from interest from loans and advances.

The commercial banks specify the criteria and principles for loans division and loans managers and staff are required to follow those lending principles and criteria. The character of the loan customer, the purpose of borrowing, the plan of repayment schedule, and the security offered are four main factors to consider before making decision for issuing the loans and advances. The two main functions of the commercial banks are to accept the customer's deposits and to extend the loans and advances to the businesses. As the banks have responsibility to withdraw the deposits

when bank customers want to withdraw their deposits, the banks need to assess the loans and advances applications carefully to be quality loans. Mostly, loans and overdrafts are two main methods of lending. The loan department of bank scrutinizes the loans applications and decides the loan or overdraft amount and term.

The banks can face the credit risks because of the external factors and internal factors. The changes in the economy, natural disasters, and regulations imposed by government are external factors and management errors, illegal manipulation, and ineffective lending policies are internal factors. To protect the credit risks, central banks or regulation authorities ask the bank to maintain general provision account for loans and overdrafts. In Myanmar, the banks are required to maintain the provision account to have at least two percent of total outstanding loans/advances at the end of FY and they are also required to maintain specific provisions for doubtful and/or bad loans on a case by case basis.

Loans and overdrafts can be classified as performing loans and non-performing loan. If the loans customers pay interest and principal for their loans regularly, these loans can be classified as performing loans. However, if the customers are absent to pay interest and principal for their loans, these loans can be classified as non-performing loans. NPLs include substandard, doubtful and bad debts and loans for which interest and principal amounts are not paid back in six months from the maturity date, are classified as sub-standard, those for which interests and principal amounts are not paid back for one year are classified as doubtful debts, and those for which interest and principal amounts are not paid back in two years and above are classified as bad debts. To assess the asset quality of the banks, the CBM uses the following ratios.

(a)  $\text{NPLs/Total Loans}$

(b)  $\text{Provision/NPLs}$

(c)  $\text{NPLs/Total Assets}$

**(a) Non- performing Loans (NPLs) to Total Loans**

The Non-performing Loans to Total Loans ratio shows the asset quality of a bank. Although the CBM does not use this ratio as a regulatory ratio, it uses it to check the asset quality of banks. In this purpose, the good ratio and bad ratio specified

by the CBM are 0% and 5 % respectively. The score for banks which have the ratio of 0 % set by the CBM will not be calculated using formula and these banks are automatically given score 1 and the score for banks which have the ratio above 5 % set by the CBM will not be calculated and these banks are automatically given score 5. Scores for the banks which have the ratio of above 0 % to 5 % will be calculated by using the following formula.

$$\text{Estimated score} = 5 - [(\text{FSI}\% - \text{Bad } \%) / (\text{Good}\% - \text{Bad } \%) / 4 ]$$

Where, FSI = NPLs to Total Loans Ratio

**Table (4.7): NPLs to Total Loans Ratio of Private Banks**

Sr.	Name of Bank	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Average Ratio (%)	Score	Rank
1	Kanbawza Bank	0.17	0.11	0.09	1.70	4.51	1.31	2.05	1
2	Ayeyarwaddy Bank	0.70	1.84	2.15	2.29	1.78	1.75	2.4	4
3	Cooperative Bank	1.45	1.34	3.09	2.68	2.37	2.19	2.75	5
4	Myawaddy Bank	7.07	5.78	5.41	5.57	4.29	5.62	5	6
5	Global Treasure Bank	1.80	1.88	14.14	6.24	8.90	6.59	5	7
6	Myanmar Oriental Bank	0.23	0.31	1.07	1.97	4.16	1.55	2.24	3
7	Small and Medium Industrial Development Bank	0.21	0.20	0.28	1.63	4.92	1.45	2.16	2

Source: Financial Institutions Supervision Department

Table (4.7) shows the selected private bank's NPLs to total loans condition from 2012/2013 FY to 2016/2017 FY. These ratios were calculated by FISD of the CBM and the study takes these ratios for analysis. Based on the analysis, KBZ Bank

is at the top followed by SMIDB, MOB and AYA Bank with average NPLs to Total Loans ratio with 1.45%, 1.55% and 1.75% respectively. The GTB and MWD have an average percentage of 6.59% and 5.62% respectively with scores of 5.0 for each. Therefore, these two banks can be interpreted as the weakest condition relating to NPLs ratio.

According to the CBM instruction, the private banks keep the provision (reserve) to total loans ratio of at least 2%. Therefore, the NPLs to Total Loans Ratio of KBZ Bank, 1.31 % is less than the provision of total loans ratio of 2% and the provision amount covers to the NPLs amount of KBZ Bank. Moreover, the NPLs to Total Loans Ratio of SMIDB, MOB and AYA Bank are under 2% and their banks' provision amount also covers their NPLs amount. However, the NPLs to Total Loans Ratio of CB, MWD and GTB Banks are 2.19%, 5.62% and 6.59% respectively and the provision amounts (provision to total loan, 2%) do not cover their NPLs amount. Therefore, CB, MWD and GTB Banks may need to take an action plan to decrease the NPLs to Total Loans Ratio.

Table (4.7) also shows the NPLs to Total Loans Ratio trend during the period from 2012/2013 FY to 2016/2017 FY. KBZ Bank's ratio increased from 1.7 percent to 4.51 percent in 2016/2017 FY, MOB Bank's ratio increased from 1.97 percent to 4.16 percent in 2016/2017 FY and the GTB Bank's ratio sharply increased from 1.88 percent to 14.14 percent in 2014/2015. The main reason is that most of the banks extended the loans to business with collaterals and most of collaterals are real estate. Normally, the private banks lend the loan amount which is one third of collateral value to borrowers and unless the borrower pays the interest and principal, the banks can easily take their loan amount by selling collaterals. In this situation, the borrowers regularly pay the interest and principal for their loans. However, after 2014/2015 FY, the price of real estate started to decline and some businesses did not pay interest and principal for their bank loans. Therefore, non-performing loans to total loans ratios of private banks have increased with effect from 2014/2015 FY in Myanmar.

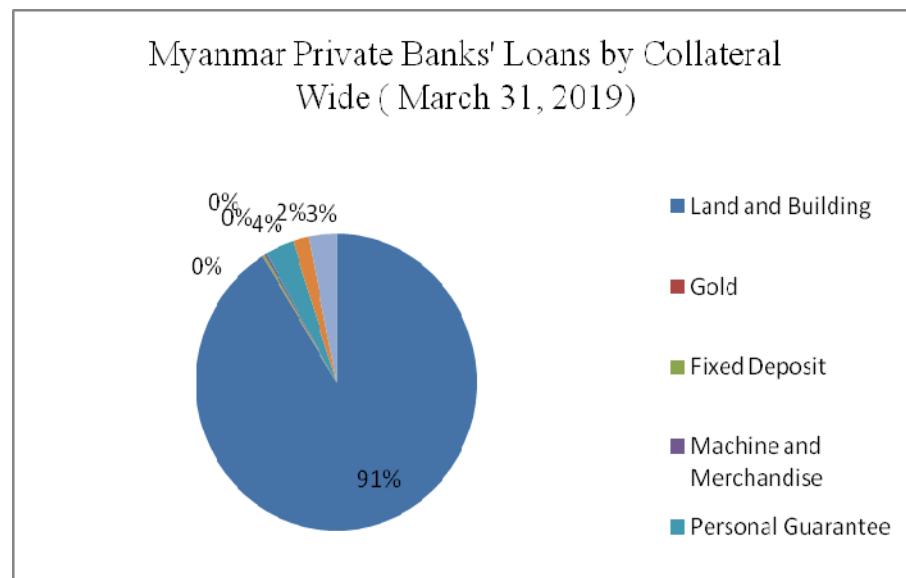
**Table (4.8): Myanmar Private Banks' Loans by Collateral Wide (31-3-2017)**

Sr.	Type of Collateral	Amount (Kyat in Millions)	Percent (%)
1	Land and Building	14677743	91.19
2	Gold	2920	0.02
3	Fixed Deposit	40817	0.25
4	Machine and Merchandise	40154	0.25
5	Personal Guarantee	527284	3.28
6	Hire Purchase	298332	1.85
7	Other	509325	3.16
	Total Loan	16096575	100.00

Source: Central Bank of Myanmar, Quarterly Financial Statistics Bulletin (2018 Volume III)

Table (4.8) explains the total loans amount of Myanmar private banks on March 31, 2017 by collateral wide. In explanation of the table, the major collateral type is land and building with 91.19% and second largest collateral type is personal guarantee with 3.28%. The other collateral types of Gold, Fixed Deposit, Machine and Merchandise and Hire Purchase have a small portion as 0.02%, 0.25%, 0.25% and 1.85% respectively. This data analyzes that Myanmar private banks mostly extended the loans to businesses with collateral, land and building.

**Figure (4.3): Private Banks' Loans by Collateral Wide (%) (March 31, 2019)**



Source: Central Bank of Myanmar, Quarterly Financial Statistics Bulletin (2018 Volume III)

Normally, the businesses paid their interest and principle for loans while the prices of real estate were high. However, they failed to pay their interest and principle when the price of real estate declined. Figure (4.3) shows the collateral types of landing and building, gold, fixed deposits, machine and merchandise and personal guarantee percentage in total loans of private banks on March 31, 2017.

**(b) Provision to Non-performing Loans (NPLs)**

Provision to total loans ratio is not a regulatory ratio by the CBM. However, the banks need to maintain the provision to total loans ratio of at least 2 percent according to the CBM's instruction. According to the CBM's instruction, the banks need to check whether the provision or reserve money cover to 2% of total loans amount or not, when they close the statement on income and expenditure for FY. If the provision amount does not cover to 2% of total loans amount, it is needed for the bank to fulfill the required amount to Provision Account of the bank.

**Table (4.9): Provision to NPLs Ratio of Private Banks**

Sr.	Name of Bank	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Average Ratio (%)	Score	Rank
1	Kanbawza Bank	857.11	1548.09	1476.78	74.73	29.20	797.18	1	1
2	Ayeyarwaddy Bank	24.75	17.94	34.21	15.03	22.63	22.91	5	7
3	Cooperative Bank	156.21	127.65	4.51	103.32	119.49	102.24	1	4
4	Myawaddy Bank	48.71	58.08	60.22	58.10	74.82	59.98	3.67	6
5	Global Treasure Bank	142.27	136.51	16.96	70.26	48.50	82.90	2.14	5
6	Myanmar Oriental Bank	874.45	665.39	728.30	101.34	48.50	483.59	1	2
7	Small and Medium Industrial Development Bank	142.30	39.17	572.68	406.97	164.40	265.10	1	3

Source: Financial Institutions Supervision Department



The Provision to NPLs ratio is used to assess the asset quality of the banks. For this purpose, the good ratio and bad ratio specified by the CBM are 100 % and 40 % respectively. The score for banks which have the ratio above 100 % set by the CBM will not be calculated using formula and these banks are automatically given score 1 and the score for banks which have the ratio under 40 % set by the CBM will not be calculated and are automatically given score 5. Scores for the banks which have the ratio of above 40 % to 100 % will be calculated by using the following formula.

$$\text{Estimated score} = 5 - [(\text{FSI}\% - \text{Bad}\%) / (\text{Good}\% - \text{Bad}\%) / 4]$$

Where, FSI = Provision to NPLs Ratio

Table (4.9) shows the selected private bank's provision to non-performing loans condition from 2012/2013 FY to 2016/2017 FY. These ratios were calculated by FISD of the CBM and the study takes these ratios for analysis. Based on the calculation of provision to non-performing loans ratio of selected private banks, KBZ bank has an average of 797.18 % and it makes KBZ bank at rank 1 with score 1. MOB bank records at rank 2 and score 1 with an average of 483.59 % and SMIDB is rank 3 and score 1 with an average of 265.10 %. CB bank is rank 4 with score 1 with an average of 102.24 %. However, AYA bank recorded the lowest average ratio of 22.91 % with a score of 5.0 and last rank. According to this analysis, most of Myanmar private banks can maintain the provision to NPL ratio within the range specified by the CBM.

**(c) Non-performing Loans (NPLs) to Total Assets**

Non-performing Loans (NPLs) to Total Assets ratio is not a regulatory ratio specified by the CBM and it is an important ratio which shows the assets quality of the banks. In this case, the ratios for good ratio and bad ratio as specified by CBM are 2% and 20% respectively. The score for banks which have the ratio under 2 % set by the CBM will not be calculated using formula and these banks are automatically given score 1. Like this, the score for banks which have the ratio above 20 % set by the CBM will not be calculated using formula and these banks are automatically given score 5. The banks which have the ratio between 2% and 20% will be calculated the score by using the following formula. KBZ bank, AYA bank, CB bank, MOB bank

and SMIDB bank have the ratio under 2% and are given score 1. Scores for the banks which have the ratio of above 2 % to 20 % will be calculated by using the following formula.

$$\text{Estimated score} = 5 - [(\text{FSI}\% - \text{Bad } \%) / (\text{Good}\% - \text{Bad } \%) / 4 ]$$

Where, FSI = NPLs to Total Assets Ratio

**Table (4.10): NPLs to Total Assets Ratio of Private Banks**

Sr.	Name of Bank	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Average Ratio (%)	Score	Rank
1	Kanbawza Bank	0.11	0.07	0.05	1.17	2.90	0.86	1	1
2	Ayeyarwaddy Bank	0.39	0.99	0.63	1.31	1.00	0.86	1	1
3	Cooperative Bank	0.62	0.62	1.57	1.46	1.42	1.14	1	1
4	Myawaddy Bank	4.22	3.60	3.36	3.55	2.45	3.44	1.32	6
5	Global Treasure Bank	1.10	1.13	8.23	3.46	4.83	3.75	1.39	7
6	Myanmar Oriental Bank	0.14	0.19	0.59	1.15	2.43	0.90	1	1
7	Small and Medium Industrial Development Bank	0.08	0.27	0.16	0.90	2.92	0.87	1	1

Source: Financial Institutions Supervision Department

Table (4.10) shows the selected private bank's NPLs to total assets condition from 2012/2013 FY to 2016/2017 FY. These ratios were calculated by FISC of the CBM and the study takes these ratios for analysis. Based on the calculation of NPLs to Total Assets ratio of selected private banks, KBZ Bank and AYA Bank recorded the lowest average ratio of 0.86 with a score of 1.0 and ranked first while GTB Bank average ratio is only 3.75% with score of 1.39 and ranked last. Therefore, KBZ Bank and AYA Bank can be analyzed as the best condition in NPL ratio. Analysis of the table points out that KBZ, AYA, CB and MOB Banks are in the top ranking which indicates that these banks are much financially secured.

### **Assets Quality Component Score**

Assets Quality Component Score is an average score of Non- performing Loans (NPLs)/Total Loans score, Provision/NPLs score, Non- performing Loans (NPLs)/Total Assets score and the following equation is to calculate this score.

$$A^* = \text{Average } (A_1, A_2, A_3)$$

Where,  $A^*$  = Assets Quality Component Score

$A_1$  = Score for NPLs to Total Loans Ratio

$A_2$  = Score for Provision to NPLs Ratio

$A_3$  = Score for NPLs to Total Assets Ratio

The Assets Quality Component Score is a score which explains the overall assets quality of that bank. The range of this score is from 1 to 5 and scores 1 means that this bank outperforms the average bank in all respects in assets quality and by easily measurable differences. Score 2 means that bank is measurably better than the average bank, but not quite outstanding in assets quality. Score 3 means that bank operates in a good situation that just meets all of the standards concerning assets quality. Score 4 represents that bank demonstrates a major weakness in assets quality that if it is not corrected, could lead to a very severe or unsatisfactory condition that will threaten its existence. Score 5 means that the bank's financial health is substandard, with asset quality impairing over half of the bank's primary capital. If it is not corrected, the further deterioration will lead to regulatory control and a high probability of failure. Therefore, if the score approaches to 1, this bank's assets quality can be concluded as in good condition and if the score approaches to 5, this bank's assets quality can be concluded as in bad condition.

**Table (4.11): Assets Quality Component Score of Selected Private Banks (2012/2013 - 2016/2017)**

Name of Bank	A1		A2		A3		Assets Quality Component Ratio	
	Average Ratio	Score	Average Ratio	Score	Average Ratio	Score	Average Score	Rank of Average Score
Kanbawza Bank	1.31	2.05	797.18	1	0.86	1	1.35	1
Ayeyarwaddy Bank	1.75	2.4	22.91	5	0.86	1	2.80	2
Cooperative Bank	2.19	2.75	102.24	1	1.14	1	1.58	5
Myawaddy Bank	5.62	5	5.62	5	3.44	1.32	3.77	6
Global Treasure Bank	6.59	5	82.90	2.14	3.75	1.39	2.84	7
Myanmar Oriental Bank	1.55	2.24	483.59	1	0.90	1	1.41	3
Small and Medium Industrial Development Bank	1.45	2.2	265.10	1	0.87	1	1.39	4

Source: Researcher's own calculation

Notes: A1 = Score for NPLs to Total Loans Ratio

A2 = Score for Provision to NPLs Ratio

A3 = Score for NPLs to Total Assets

Table (4.11) is a summary of the asset quality component score for selected private banks. These score were calculated by using the score from Tables (4.8), (4.9) and (4.10). Analysis of the component rank column reveals that KBZ Bank and SMIDB Bank are in the best position with the component score of 1.35 and 1.39 respectively while Myawaddy Bank records with component score 3.77 in the last position. The other banks, MOB Bank, CB Bank, AYA Bank and GTB Bank have component scores of 1.41, 1.58, 2.80 and 2.84 respectively. In analysis of asset quality side, the banks which have scored 1 are good in assets quality and the banks which are near to score 5 are bad in asset quality. Most of the selected private banks achieve the assets quality component score 1 and score 2, only one bank achieves this score above 3. Therefore, the overall assets quality of private banks can be concluded as in good condition.

### **4.3.3 Management Quality Analysis**

Management of a bank is very important for successful operation of that bank. The banks are required to determine the responsibilities of the management team and the decisions of the management team drive the stability and profitability of the banks. As the banks need to balance the liquidity, capital adequacy ratio and profitability, the decision of bank management team is very critical for banks to be successful.

Mostly, the banks form board of directors and the board delegates the day to day operations to officers and employees. Moreover the board appoints the Chief Executive Officer (CEO) to lead the day to day operations of the bank. The bank regulations determine the fit and proper of the CEO and board members and the banks need to follow those regulations. The loan policies, deposit interest rates and operation procedures of the bank are set by board of the bank.

The responsibilities of board are very broad and the board should be strong and independent for bank's affairs. The board needs to watch the market situations and business activity and also need to handle the liquidity position and profitability. If the board emphasizes for profitability too much, the bank can face the liquidity shortage problem. In the other side, if the board emphasize for liquidity position more, the bank can face the profitability problem. Moreover, the board needs to understand the economy's situation, market trends, and international economic affairs and need to balance the bank's liquidity position, loan to deposit ratio, capital position and profitability.

The management quality component ratio is a score which explains the management quality of a bank. The range of this score is from 1 to 5 and scores 1 means that this bank outperforms the average bank in all respects in management quality and by easily measurable differences. Score 2 means that bank is measurably better than the average bank, but not quite outstanding in management quality. Score 3 means that bank operates in well-run situation, good bank that just meets all of the standards concerning management. Score 4 represents that bank demonstrates a major weakness in quality that if not corrected, could lead to a very severe or unsatisfactory condition that will threaten its existence. Score 5 means that the bank's financial health is substandard, with management quality. If it is not corrected, the further deterioration will lead to regulatory control and a high probability of failure. Therefore, the score approaches to 1, this bank's management quality is good and if the score approaches to 5, this bank's management quality will be bad. The following ratios can be used to assess the management quality of the banks.

- (a) Total assets growth rate
- (b) Loans growth rate
- (c) Total income growth rate

Although the FIRD of CBM analyzes the total assets growth rate, loans growth rate and total income growth rate for management quality component, the average ratio of 4 component ratios, Capital Adequacy, Asset Quality, Earning and Liquidity is used to mention the management quality of the banks.

**Table (4.12): Management Quality Component Score of Selected Private Banks (2012/2013 - 2016/2017)**

Name of Bank	Average growth rate of M1	Average growth rate of M2	Average growth rate of M3	Management Quality Component Score	
				Component score	Rank of component score
Kanbawza Bank	42.02	42.99	37.37	2.89	5
Ayeyarwaddy Bank	72.09	89.27	81.95	3.25	7
Cooperative Bank	34.89	47.14	28.96	3.08	6
Myawaddy Bank	17.74	16.277	12.91	2.74	4
Global Treasure Bank	7.84	4.8	8.31	2.18	2
Myanmar Oriental Bank	22.75	21.48	31.78	2.41	3
Small & Medium Industrial Development Bank	-65.18	12.54	9.41	2.11	1

Source: Researcher's own calculation

Note: Component Score\* = the average of other 4 components' score such as Capital Adequacy, Asset Quality, Earning and Liquidity

M1 = Total assets growth rate

M2 = Loans growth rate for

M3 = Total income growth Ratio

Table (4.12) explains the summary of the management control component ratio of the selected private banks. In this table, although the ranking for total assets growth rate, loans growth rate and total income growth rate of selected private banks are mentioned, the management quality component ratio is calculated as the average of other 4 components such as Capital Adequacy, Asset Quality, Earning and Liquidity. The Management Quality Component Ratio is a score which explains the overall management quality of that bank. The range of this score is from 1 to 5 and scores 1 means that this bank outperforms the average bank in all respects in management quality and by easily measurable differences. Score 2 means that bank is measurably better than the average bank, but not quite outstanding in management quality. Score 3 means that bank operates in a good situation that just meets all of the standards concerning management quality. Score 4 represents that bank demonstrates a major weakness in management quality that if it is not corrected, could lead to a very severe or unsatisfactory condition that will threaten its existence. Score 5 means that the bank's financial health is substandard, with asset quality impairing over half of the bank's primary capital. If it is not corrected, the further deterioration will lead to regulatory control and a high probability of failure. Therefore, if the score approaches to 1, this bank's management quality can be concluded as in good condition and if the score approaches to 5, this bank's management quality can be concluded as in bad condition.

Analysis of the management quality component score column prescribes that SMIDB bank has the best score of 2.11 and ranked 1 while AYA bank gets the last score 3.08 and ranked 7. The other banks, GTB bank, Myawaddy bank and MOB bank have scores, 2.18, 2.74 and 2.41 respectively. Therefore, the overall management quality of selected private banks can be concluded as in a moderate condition.

#### **4.3.4 Earning Ability**

Earning ability explains the profitability of a bank with the ratios. The banks are profit oriented organizations and they cannot survive without profit. Normally, the banks calculate the profit ratios at the end of the fiscal year and they mention these ratios in their bank's annual report. The following ratios explain earning ability and they can be used to evaluate earning quality of the banks.



- (a) Return on Equity (ROE)
- (b) Return on Assets (ROA)
- (c) Operating Expenses/ Total Income

**(a) Return on Equity (ROE)**

Return on Equity (ROE) ratio is very useful to measure the profitability of the banks. Most of the banks mention ROE in their annual reports. This ratio is a traditional way to study the profitability of the banks. The good ratio and bad ratio specified by CBM are 40% and 10 % respectively. The score for banks which have the ratio above 40 % set by the CBM will not be calculated using formula and these banks are automatically given score 1 and the scores for banks which have the ratio under 10 % set by the CBM will not be calculated and these banks are automatically given score 5. Scores for the banks which have the ratio of above 10 % to 40 % will be calculated by using the following formula.

$$\text{Estimated score} = 5 - [(\text{FSI}\% - \text{Bad } \%) / (\text{Good}\% - \text{Bad } \%) / 4 ]$$

Where, FSI = ROE ratio

**Table (4.13): ROE of selected Private Banks in Myanmar**

Sr.	Name of Bank	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Average (%)	Score	Rank
1	Kanbawza Bank	37.49	33.92	28.98	23.22	20.49	28.82	2.49	1
2	Ayeyarwaddy Bank	11.40	15.94	14.07	7.94	11.50	12.17	4.71	7
3	Cooperative Bank	20.53	16.04	6.81	7.65	12.65	12.74	4.64	5
4	Myawaddy Bank	32.08	19.88	15.91	14.27	14.07	19.24	3.77	2
5	Global Treasure Bank	25.35	22.32	19.04	13.25	11.64	18.32	3.89	4
6	Myanmar Oriental Bank	24.29	22.69	15.60	11.05	21.07	18.94	3.81	3
7	Small &Medium Industrial Development Bank	16.02	16.43	16.38	6.77	6.12	12.34	4.69	6

Source: Financial Institutions Supervision Department

Table (4.13) shows as the Selected Private Bank's return on equity (ROE) condition from 2012/2013 FY to 2016/2017 FY. These ratios were calculated by FISD of the CBM and the study takes these ratios for analysis. Analysis of the rating and ranking return on equity ratios show that among all banks, KBZ Bank has the highest average ratio of 28.82 % and scored 2.94 and ranked first while AYA Bank recorded the lowest average ratio of 12.17 % with the last rank. Myawaddy Bank, MOB Bank and GTB Bank have high ratios of 19.24 %, 18.94 % and 18.32 % respectively.

Generally, if the score approaches to 1, this bank's ROE can be concluded as in good condition and if the score approaches to 5, this bank's ROE can be concluded as in bad condition. Therefore, according to the study, the ROE of selected private banks could be concluded as the condition between bad condition and moderate condition and the banks need to take an action plan. To implement this purpose, the banks need to review their overall expenditures structure and to find new income sources and to be careful in the assessment of issuing loans procedure to avoid the NPLs.

**(b) Return on Assets (ROA)**

Return on Assets (ROA) is not a regulatory ratio specified by CBM. This ratio is also a ratio to measure the profitability for the banks. For this purpose, the good ratio and bad ratio specified by CBM are 4% and 1 % respectively. The score for banks which have the ratio about 4 % set by the CBM will not be calculated using formula and these banks are automatically given score 1. Like this, the score for banks which have the ratio under 1 % set by the CBM will not be calculated using formula and these banks are automatically given score 5. Scores for the banks which have the ratio of above 1 % to 4 % will be calculated by using the following formula.

Generally, if the score approaches to 1, this bank's ROA can be concluded as in good condition and if the score approaches to 5, this bank's ROA can be concluded as in bad condition. After calculating this ratio, the banks can review their return on assets condition and whether they should take an action plan or not to recover the banks' profitability.

$$\text{Estimated score} = 5 - [(\text{FSI}\% - \text{Bad } \%) / (\text{Good}\% - \text{Bad } \%) / 4 ]$$

Where, FSI = ROA ratio

**Table (4.14): ROA of Myanmar Selected Private Banks**

Sr.	Name of Bank	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Average (%)	Score	Rank
1	Kanbawza Bank	2.03	1.48	1.26	0.99	0.79	1.31	4.59	5
2	Ayeyarwaddy Bank	1.22	0.92	0.49	0.27	0.25	0.63	5	7
3	Cooperative Bank	1.24	0.94	0.35	0.31	0.49	0.67	5	6
4	Myawaddy Bank	4.28	2.77	2.23	2.11	1.93	2.66	2.78	2
5	Global Treasure Bank	2.72	2.70	2.26	1.77	1.49	2.19	3.42	3
6	Myanmar Oriental Bank	1.91	1.93	1.43	0.93	1.69	1.58	4.23	4
7	Small & Medium Industrial Development Bank	2.34	8.72	2.86	1.27	1.41	3.32	1.91	1

Source: Financial Institutions Supervision Department

Table (4.14) shows the selected private bank's return on assets condition from 2012/2013 FY to 2016/2017 FY. These ratios were calculated by FISD of the CBM and the study takes these ratios for analysis. Comparison shows that the rating and ranking in return on assets ratios among all banks, SMIDB Bank got the highest average ratio of 3.32% and scored 1.91 and ranked first. And Myawaddy Bank has second highest average ratio of 2.66 % and scored 2.78 and ranked second. GTB Bank and MOB Bank got the average ratios of 2.19 % and 1.58% respectively. AYA Bank got the lowest average ratio of 0.63 and scored 5 with rank 7, followed by CB Bank with the second lowest average ratio of 0.67 % and scored 5 with rank 6.

According to the study, the ROA of selected private banks could be concluded as the condition between bad condition and moderate condition because AYA Bank and CB Bank achieve bad score 5 and, KBZ Bank and MOB Bank have above score 4 and the other banks, MWD, GTB Bank were above score 2. Therefore, the banks

need to take an action plan and to implement this purpose, the banks also need to review their overall expenditures structure and to find new income sources and to be careful in the assessment of assets quality.

**(c) Operating Expenses to Total Income of Selected Private Banks**

Operating Expenses to Total Income ratio is not a regulatory ratio specified by CBM. This ratio is a ratio to measure the earning ability of the banks. In this case, the good ratio and bad ratio specified by CBM are 5% and 80 % respectively. The score for banks which have the ratio under 5 % set by the CBM will not be calculated using formula and these banks are automatically given score 1. Similarly, the score for banks which have the ratio above 80 % set by the CBM will not be calculated using formula and these banks are automatically given score 5. Scores for the banks which have the ratio of above 5 % to 80 % will be calculated by using the following formula.

$$\text{Estimated score} = 5 - [(\text{FSIs}\% - \text{Bad } \%) / (\text{Good}\% - \text{Bad } \%) / 4 ]$$

Where, FSI = Operating Expenses to Total Income Ratio

**Table (4.15): Operating Expenses to Total Income Ratio**

Sr.	Name of Bank	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Average (%)	Score	Rank
1	Kanbawza Bank	18.28	21.60	21.93	21.44	23.70	21.39	1.87	4
2	Ayeyarwaddy Bank	25.38	22.27	22.08	22.64	20.88	22.65	1.94	5
3	Cooperative Bank	22.83	31.72	31.78	27.15	26.00	27.90	2.22	6
4	Myawaddy Bank	7.71	11.10	11.28	11.86	10.84	10.56	1.30	1
5	Global Treasure Bank	18.17	18.92	18.38	22.83	24.64	20.59	1.83	3
6	Myanmar Oriental Bank	21.40	26.19	29.93	40.45	33.35	30.26	2.35	7
7	Small & Medium Industrial Development Bank	2.97	3.40	10.33	52.00	19.82	17.70	1.68	2

Source: Financial Institutions Supervision Department

Table (4.15) shows the selected private bank's operating expenses to total income condition from 2012/2013 FY to 2016/2017 FY. These ratios were calculated by FIRD of the CBM and the study takes these ratios for analysis. Analysis of the ratios on operating expenses to total income shows that the Myawaddy Bank have score 1.3 with the average percentage of 10.56 % and ranked 1, followed by SMIDB Bank with average percentage of 17.70% and score 1.68 was ranked 2. All other banks can maintain the total operating expenses below 80% of the total income even MOB with rank 7 achieves this ratio at 30.26 %. Therefore, this study concludes that all selected private banks can maintain this ratio within the CBM's specification.

### **Earning Ability Component Score**

Earning Ability Component Score is an important ratio to review the earning ability of the banks. The following equation is to calculate this score.

$$E^* = \text{Average } (E_1, E_2, E_3)$$

Where,  $E^*$  = Earning Ability Component Score

$E_1$  = Score for Return on Assets (ROA) Ratio

$E_2$  = Score for Return on Equity (ROE) Ratio

$E_3$  = Score for Operating Expenses/Total Income Ratio

The Earning Ability Component Score is a score which explains the overall earning ability of that bank. The range of this score is from score 1 to score 5 and scores 1 means that this bank outperforms the average bank in all respects in earning ability and by easily measurable differences. Score 2 means that bank is measurably better than the average bank, but not quite outstanding in earning ability. Score 3 means that bank operates in well-run situation, good bank that just meets all of the standards concerning earning ability. Score 4 represents that bank demonstrates a major weakness in earning ability that if it is not corrected, could lead to a very severe or unsatisfactory condition that will threaten its existence. Score 5 means that the bank's financial health is substandard, with asset quality impairing over half of the bank's primary capital. If it is not corrected, the further deterioration will lead to regulatory control and a high probability of failure. Therefore, if the score approaches to 1, this bank's earning ability can be concluded as in well condition and if the score approaches to 5, this bank's earning ability can be concluded as in bad condition.

**Table (4.16): Earning Ability Component Score of Selected Private Banks (2012/2013 -2016/2017)**

Name of Bank	E1		E2		E3		Earning Ability Component Score	
	Average Ratio	Score	Average Ratio	Score	Average Ratio	Score	Average Score	Rank of Average Score
Kanbawza Bank	1.31	4.59	28.82	2.5	21.38	1.87	2.99	3
Ayeyarwaddy Bank	0.63	5.00	12.17	4.7	22.65	1.94	3.88	7
Cooperative Bank	0.67	5.00	12.74	4.6	27.89	2.22	3.94	6
Myawaddy Bank	2.66	2.78	19.24	3.8	10.56	1.30	2.62	1
Global Treasure Bank	2.19	3.42	18.32	3.9	20.59	1.83	3.05	2
Myanmar Oriental Bank	1.58	4.23	18.94	3.8	30.26	2.35	3.46	5
Small & Medium Industrial Development Bank	3.32	1.91	12.34	4.7	17.70	1.68	2.76	4

Source: Researcher's own calculation

Notes: E1 = Score for Return on Assets (ROA) Ratio

E2 = Score for Return on Equity (ROE) Ratio

E3 = Score for Operating Expenses/Total Income Ratio

Table (4.16) mentions a summary of the earning ability component score of the selected private banks, covering ROE score, ROA score and operating expenses to total income score. The average score from the three components is computed to give the group score. From this group score, the result shows that MWD Bank has the best liquidity condition with score 2.62 while CB Bank is in the lowest condition. According to the analysis, the overall earning ability of selected private banks could be concluded as in a moderate level.

#### **4.3.5 Liquidity Quality**

To have adequate liquidity is very important for every business especially for the banks. As explained in the previous chapter, the banks accept public deposits and extend credit to the businesses. In this case, although the banks have responsibility to pay depositors' money when the depositors want to withdraw their deposits, the banks cannot collect the loans from the business. Therefore, the banks are facing the maturity mismatch and to maintain adequate liquidity is more important for the banks. The following ratios can be used to assess the liquidity condition of the banks.

- (a) Liquidity Ratio
- (b) Total Loans/Total Deposits
- (c) Total Deposits/Total Assets

##### **(a) Liquidity Ratio**

Liquidity ratio is a regulatory ratio specified by CBM and the banks need to maintain this ratio at least 20 %. To assess the liquidity condition of the banks, CBM specifies that the good condition for liquidity ratio of 45 % while the bad ratio is 20%. The score for banks which have the ratio above 45 % set by the CBM will not be calculated using formula and these banks are automatically given score 1 and the score for banks which have the ratio under 20 % set by the CBM will not be calculated and these banks are automatically given score 5. Scores for the banks which have the ratio of above 20 % to 45 % will be calculated by using the following formula.

$$\text{Estimated score} = 5 - [(\text{FSI}\% - \text{Bad}\%) / (\text{Good}\% - \text{Bad}\%) / 4]$$

Where, FSI = Liquidity Ratio

Although the liquidity ratios above 45% are specified as good ratio condition by Central Banks, the extremely high ratios are not good for the banks because the banks could not earn the profit by holding liquidity assets. For example, the liquidity assets such as cash in hand, account with central banks and current accounts with other banks could not earn the profit. The non-liquidity assets such as loans and advances, investments, fixed deposits with other banks could earn profits. Therefore, the banks need to balance between the liquidity assets and non-liquidity assets for their profitability and liquidity. If the banks do not have appropriate profit, they cannot survive and if the banks do not maintain the appropriate liquidity, they can face the liquidity crisis and tends to face bank- run problem.

**Table (4.17): Liquidity Ratio of Selected Private Banks**

Sr.	Name of Bank	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Average (%)	Score	Rank
1	Kanbawza Bank	24.05	23.32	27.50	20.01	24.54	23.88	4.38	7
2	Ayeyarwaddy Bank	20.00	29.70	21.85	24.68	24.48	24.14	4.34	6
3	Cooperative Bank	20.02	23.71	27.46	30.30	23.01	24.90	4.22	5
4	Myawaddy Bank	20.01	33.96	32.11	34.13	35.14	31.07	3.23	2
5	Global Treasure Bank	20.07	28.60	25.03	34.02	32.33	28.01	3.72	4
6	Myanmar Oriental Bank	20.04	25.04	30.85	34.18	34.23	28.87	3.58	3
7	Small & Medium Industrial Development Bank	55.48	37.25	25.39	24.94	30.76	34.76	2.64	1

Source: Financial Institutions Supervision Department

Table (4.17) shows as selected private bank's liquidity ratio from 2012/2013 FY to 2016/2017 FY. These ratios were calculated by FISD of the CBM and the study takes these ratios for analysis. Among all private banks, SMIDB Bank has the highest average ratio of 34.76 % with score 2.64 and ranked first followed by MWD which have second largest average ratio 31.07 % and scored 3.23 with rank 2 while KBZ received ranked 7. The analysis reveals that KBZ, AYA and CB Bank have the scores above 4 and these scores seem to be in bad condition. Moreover, MWD, GTB and MOB Bank have scores above 3 and these scores indicate moderate conditions. Only SMIDB Bank has the best rate for liquidity.



**(b) Total Loans to Total Deposits**

Loan to Deposit ratio is not a regulatory ratio specified by CBM and this ratio explains the liquidity position of the banks. Actually, this ratio explains not only the liquidity condition but also the profitability condition. High Loan to Deposit ratio extends to high profitability but can also lead to liquidity problems. But if the Loan to Deposit ratio is at a low level, it will extend to high liquidity but it will extend to low profitability. Therefore, the banks need to balance this ratio. The specifications by the CBM are 75 percent and 95 percent for good ratio and bad ratio. The score for banks which have the ratio under 75 % set by the CBM will not be calculated using formula and are automatically given score 1. Likewise, the score for banks which have the ratio above 95 % set by the CBM will not be calculated using formula and automatically given score 5. Scores for the banks which have the ratio of above 75 % to 95 % will be calculated by using the following formula.

$$\text{Estimated score} = 5 - [(\text{FSIs}\% - \text{Bad } \%) / (\text{Good}\% - \text{Bad } \%) / 4 ]$$

Where, FSI = Total Loans to Total Deposits Ratio

**Table (4.18): Total Loans to Total Deposits of Selected Private Banks**

Sr.	Name of Bank	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Average (%)	Score	Rank
1	Kanbawza Bank	68.94	67.73	71.42	75.99	68.69	70.55	1	3
2	Ayeyarwaddy Bank	66.86	59.08	62.68	60.74	58.47	61.57	1	2
3	Cooperative Bank	49.81	56.35	60.74	67.51	64.42	59.76	1	1
4	Myawaddy Bank	72.10	75.71	75.18	77.92	75.86	75.35	1.07	5
5	Global Treasure Bank	93.09	83.68	89.13	99.57	70.24	87.14	3.43	7
6	Myanmar Oriental Bank	75.60	73.70	67.93	69.33	69.95	71.30	1	4
7	Small & Medium Industrial Development Bank	50.14	76.83	88.81	92.35	97.89	81.20	2.24	6

Source: Financial Institutions Supervision Department

Table (4.18) presents total loans to total deposits condition of selected private banks from 2012/2013 FY to 2016/2017 FY. These ratios were calculated by FIRD of the CBM and the study takes these ratios for analysis. According to the analysis of Table (4.18), CB is at the top with an average ratio of 59.76% which means the bank could lend out 59.76% of the bank's deposits while GTB bank is at the last rank seven with an average ratio of 87.14%. From the point of view of CBM, CB bank is more secured and is in good condition while GTB bank which had lend out most of the deposits, is less secured and thus in bad condition.

**(c) Total Deposits to Total Assets**

Total Deposits to Total Assets ratio is not a regulatory ratio specified by CBM and this ratio is also a ratio to measure the liquidity condition of the banks. Regarding total deposits to total assets, the Central Bank of Myanmar specified that the good condition is 60 % while the bad ratio is 80%. The score for banks which have the ratio under 60 % set by the CBM will not be calculated using formula and these banks are automatically given score 1. Similarly, the score for banks which have the ratio above 80 % set by the CBM will not be calculated using formula and these banks are automatically given score 5. Scores for the banks which have the ratio of above 60 % to 80 % will be calculated by using the following formula.

$$\text{Estimated score} = 5 - \left[ \frac{(\text{FSIs}\% - \text{Bad } \%)}{(\text{Good}\% - \text{Bad } \%)} \right] / 4$$

Where, FSI = Deposits to Assets ratio of Private Banks

**Table (4.19): Deposits to Assets ratio of Private Banks**

Sr.	Nameof Bank	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Average (%)	Score	Rank
1	Kanbawza Bank	90.48	88.37	88.31	90.52	93.76	90.29	5	6
2	Ayeyarwaddy Bank	82.75	91.08	93.15	94.46	94.68	91.22	5	7
3	Cooperative Bank	85.33	81.34	83.50	80.64	93.30	84.82	5	4
4	Myawaddy Bank	82.76	82.31	82.63	81.79	75.09	80.92	5	2
5	Global Treasure Bank	65.51	71.74	65.27	55.68	77.28	67.10	2.42	1
6	Myanmar Oriental Bank	80.74	83.43	81.61	84.12	83.60	82.70	5	3
7	Small & Medium Industrial Development Bank	79.41	176.11	63.79	59.90	60.69	87.98	5	5

Source: Financial Institutions Supervision Department

Table (4.19) provides the total deposits to total assets condition of selected private banks from 2012/2013 FY to 2016/2017 FY. These ratios were calculated by FISD of the CBM and the study takes these ratios for analysis. The analysis presents that GTB bank has the lowest average ratio of 67.10 % and scored 2.42 and ranked first whereas KBZ, AYA, CB, MWD, MOB and SMIDB Banks recorded above 80% of the average ratio and scored 5. This study analyzes that most of selected private banks have a high ratio of total deposits to total assets ratio. Actually, the bank's liability mainly includes bank deposits and capital and the high total deposits to total assets ratio explains that the portion of deposits is larger in the bank's liability side. Therefore, high ratio of this ratio explains that the bank's deposit size is larger than bank's capital size. According to this study, Myanmar private banks need to increase their capital size.

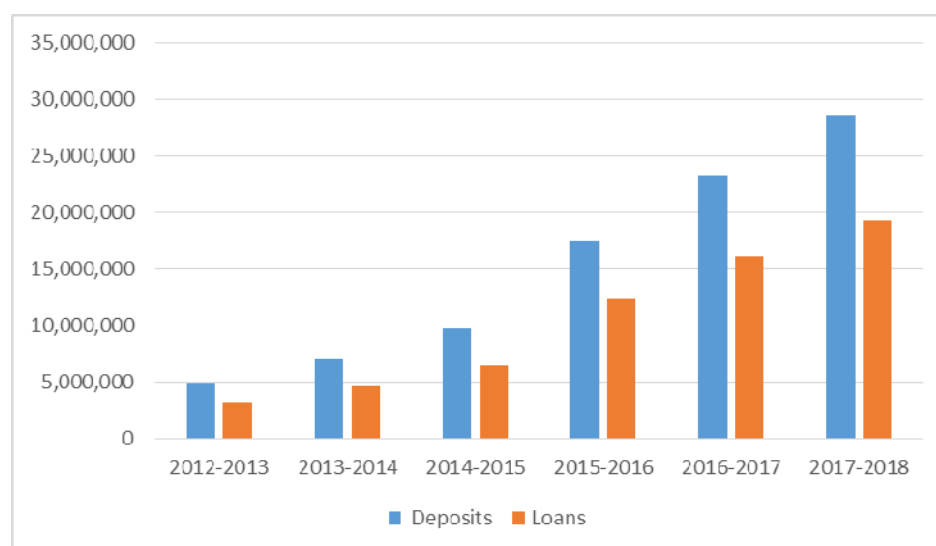
**Table (4.20): Loans to Deposits of Private Banks (Kyat in Millions)**

Sr.	Fiscal Year	Deposits	Loans	Loans to Deposit Ratio (%)
1	2012/2013	4,980,973	3,260,334	65
2	2013/2014	7,112,691	4,680,329	66
3	2014/2015	9,782,435	6,536,356	67
4	2015/2016	17,508,892	12,382,760	71
5	2016/2017	23,324,386	16,155,223	69
6	2017/2018	28,598,835	19,346,797	68

Source: Central Bank of Myanmar, Quarterly Financial Statistics Bulletin  
(2018 Volume III)

Table (4.20) explains the loans to deposits ratio of Myanmar private banks during the period from 2012/2013 FY to 2017/2018 FY and the ratios are within the range specified by the CBM.

**Figure (4.4): Loans to Deposits of Private Banks (Kyat in Millions)**



Source: Central Bank of Myanmar, Quarterly Financial Statistics Bulletin  
(2018 Volume III)

Figure (4.4) shows the situation that the loans and deposits of Myanmar private banks are increasing year by year during the study period. The loans are major assets of a bank and deposits are also a major liability of a bank. Therefore, the banks need to balance the loan to deposit ratio to avoid the maturity mismatch for the bank.

### **Liquidity Quality Component Score**

Liquidity Quality Component Score is an average score of Liquidity Score, Total Loans to Total Deposit Score and Total Deposits to Total Assets Score. Normally, the banks accept deposits which are major liability of bank and that bank is responsible to pay the deposit money to customers anytime. On the other side, banks extend the loans which are major assets of banks however it needs some time to collect the money back. Therefore, the banks face maturity mismatch problem and to maintain the liquidity position is also important. The formula for Liquidity Quality Component Score is as following.

$$L^* = \text{Average } (L_1, L_2, L_3)$$

Where,  $L^*$  = Liquidity Quality Component Ratios

$L_1$  = Score for Liquidity Ratio

$L_2$  = Score for Total Loans to Total Deposit Ratio

$L_3$  = Score for Total Deposits to Total Assets Ratio

**Table (4.21): Liquidity Quality Component Score of Selected Private Banks (2012/2013-2016/2017)**

Name of Bank	L1		L2		L3		Liquidity Quality Component Ratios	
	Average Ratio	Score	Average Ratio	Score	Average Ratio	Score	Average Score	Rank of Average Score
Kanbawza Bank	23.88	4.38	70.55	1	90.29	5	3.46	7
Ayeyarwaddy Bank	24.14	4.34	61.57	1	91.22	5	3.45	6
Cooperative Bank	24.90	4.22	59.76	1	84.82	5	3.41	2
Myawaddy Bank	31.07	3.23	75.35	1.07	80.92	5	3.10	1
Global Treasure Bank	28.01	3.72	87.14	3.43	67.10	2.42	3.19	4
Myanmar Oriental Bank	28.87	3.58	71.30	1	82.70	5	3.19	2
Small & Medium Industrial Development Bank Ltd	34.76	2.64	81.20	2.24	87.98	5	3.29	5

Source: Researcher's own calculation

Notes: L\* = Liquidity Quality Component Score

L1 = Score for Liquidity Ratio

L2 = Score for Total Loans to Total Deposit Ratio

L3 = Score for Total Deposits to Total Assets Ratio

The Liquidity Component Score is a score which explains the overall liquidity of that bank. The range of this score is from 1 to 5 and scores 1 means that this bank outperforms the average bank in all respects in liquidity and by easily measurable differences. Score 2 means that bank is measurably better than the average bank, but not quite outstanding in liquidity. Score 3 means that bank operates in a good situation that just meets all of the standards concerning liquidity. Score 4 represents that bank demonstrates a major weakness in liquidity that if it is not corrected, could lead to a very severe or unsatisfactory condition that will threaten its existence. Score 5 means that the bank's financial health is substandard, with asset quality impairing over half of the bank's primary capital. If it is not corrected, the further deterioration will lead to regulatory control and a high probability of failure. Therefore, if the score approaches to 1, this bank's liquidity can be concluded as in good condition and if the score approaches to 5, this bank's liquidity can be concluded as in bad condition.

Table (4.21) is a summary of the liquidity quality component score of the selected private banks, covering liquidity ratio, total loans to total deposits ratio and total deposits to total assets ratio. MWD Bank got the component score of 3.1 with rank 1 while MOB Bank's component score is 3.19 and is ranked 2. The AYA, CB, GTB and SMIDB Banks have scores of 3.45, 3.41, 3.19 and 3.29 respectively. KBZ Bank's score is 3.46 and it is ranked 7. According to this analysis, all selected private banks have liquidity component scores between 3 and 4. Score 3 means that these banks operate in a good situation that just meets all of the standards concerning liquidity and score 4 means that these banks demonstrate a major weakness in liquidity that if it is not corrected, could lead to a very severe or unsatisfactory condition that will threaten its existence. However, the scores of all selected banks are under 3.5 and the overall liquidity of selected private banks could be concluded as in a moderate level.

#### **4.3.6 Overall Performance Ranking and Composite Rating**

In order to assess the overall performance of the selected private banks, the study calculated the composite rating score using the components of the CAMEL framework. The composite rating score is an average score of capital adequacy, Asset Quality, Management, Earning and Liquidity components. The range of this score is from 1 to 5 and scores 1 means that this bank outperforms the average bank in all respects and by easily measurable differences. Score 2 means that bank is measurably better than the average bank, but not quite

outstanding in all respects. Score 3 means that bank operates in good situation that just meets all of the standards. Score 4 represents that bank demonstrates a major weakness that if it is not corrected, could lead to a very severe or unsatisfactory condition that will threaten its existence. Score 5 means that the bank's financial health is substandard, with asset quality impairing over half of the bank's primary capital. If it is not corrected, the further deterioration will lead to regulatory control and a high probability of failure. Therefore, if the score approaches to 1, this bank's financial performance could be concluded as in good condition and if the score approaches to 5, this bank's financial performance could be concluded as in bad condition.



**Table (4.22): Overall Financial Performance Ranking of Selected Private Banks (2012/2013 - 2016/2017)**

Sr.	Name of Bank	Component Score					Composite Rating Score	Composite Rating
		Capital Adequacy	Asset Quality	Management	Earning Ability	Liquidity		
1	Kanbawza	4.87	1.35	2.89	2.99	2.33	2.89	3
2	Ayawady	4.00	2.80	3.25	3.88	2.33	3.25	3
3	Cooperative Bank	4.47	1.58	3.08	3.94	2.33	3.08	3
4	Myawady Bank	1.48	3.77	2.74	2.62	3.08	2.74	3
5	Global Treasure Bank	1.37	2.84	2.18	3.05	1.47	2.18	2
6	Myanmar Oriental Bank	2.44	1.41	2.41	3.46	2.33	2.41	2
7	SMIDB	1.00	1.39	2.11	2.76	3.29	2.11	2

Source: Financial Institutions Supervision Department

Table (4.22) explains the CAMEL composite rating of selected private banks during the period from 2012/2013 FY to 2016/2017 FY. It can be interpreted that overall performance score of the banks is ranging from 2 to 3. Among the selected private banks, SMIDB, GTB and MOB Bank have the composite rating score as 2.11, 2.18 and 2.41 with rating 2. It means that these banks are measurably better than the average bank, but not quite outstanding in all respects. MWD, KBZ, CB and AYA Banks have the composite rating score of 2.74, 2.89, 3.08 and 3.25 with rating 3. It means that these banks operate in good situation that just meets all of the standards. In the analysis of the study, SMIDB, GTB and MOB Banks have an overall financial performance rating 2 and MWD, KBZ, CB and AYA Banks have the overall financial performance rating 3. Therefore, all selected banks are within the range of satisfactory performance according to financial performance by using CAMEL framework.

#### **4.4 Non-financial Performance of Selected Private Banks in Myanmar**

To measure the non-financial performance of selected private banks, the customer satisfaction and employee satisfaction are used by many researchers and these criteria are related between them. Some researchers assume that employee satisfaction is more important than customer satisfaction because bank services are served by bank employees, unless bank employee are satisfied on their jobs, they cannot give good services to their customers. The equity theory is used to construct the survey question to measure the employee satisfaction of selected private banks. The main elements of the survey question are Job Content, Relationship with Supervisor, Salaries and Incentives, Promotions, Relationship with Co-workers, Training and Development and Career Development.

Customer Satisfaction component can be assessed whether the customers like their banks or not. According to SERVQUAL model, the survey questions were constructed and there are five components, Reliability of Bank Services, Assurance, Tangible, Empathy, and Responsiveness to measure Customer Satisfaction. The Cronbach's Alpha test was used to check the reliability of questions or items.

**Table (4.23): Reliability Test for Cronbach's Alpha**

Sr.	Name of Bank	Employee Satisfaction	Customer Satisfaction
1	AYA Bank	0.826	0.896
2	CB Bank	0.925	0.962
3	GTB Bank	0.926	0.926
4	KBZ Bank	0.898	0.881
5	MOB Bank	0.824	0.930
6	MWD Bank	0.927	0.962
7	SMIDB Bank	0.833	0.939

Source: Calculation by Author using SPSS

Table (4.23) shows Reliability Test for Cronbach's Alpha and that all values of Cronbach's Alpha are over 0.8 which indicates that the reliability of data is good and the survey data on employee satisfaction and customer satisfaction can be used for the study.

#### **4.4.1 Employee Satisfaction of Selected Private Banks**

The analysis on employee satisfaction of the bank is important to measure the performance of the bank from human aspects. To measure employee satisfaction of the banks, the researchers analysis on job content, relationship with supervisor, salaries and incentives, promotion, relationship with co-worker, training and development, career development items. The Job Content component overviews whether employee likes the kind of work he does or not, employee assumes whether his job makes good use of his skills and abilities or not, employee feels whether his job gives him a feeling of personal accomplishment or not, employee thinks whether his job is enjoyable or not. Table (4.24) shows the employee satisfaction of selected private banks. According to the survey result on Job Content, SMIDB Bank got the highest score with 3.85 followed by CB Bank and GTB Bank with 3.68 while MWD Bank got the lowest score with 3.35.

**Table (4.24): Average Score of Employee Satisfaction of Selected Private Banks by Dimension**

Items	AYA Bank	CB Bank	GTB Bank	KBZ Bank	MOB Bank	MWD Bank	SMIDB Bank
Job Content	3.67	3.68	3.68	3.36	3.45	3.35	3.85
Relationship with Supervision	3.76	3.73	3.56	3.20	3.33	3.43	3.89
Salaries and Incentives	2.58	3.32	3.47	2.84	3.26	3.11	3.36
Promotion	3.03	3.39	3.40	2.57	3.30	3.17	3.39
Relationship with Co-worker	4.00	3.92	3.74	3.34	3.42	3.71	4.12
Training and Development	3.50	3.47	3.40	3.02	3.29	3.09	3.21
Career Development	3.20	3.67	3.46	3.12	3.37	3.37	3.00
Overall Employee 's Satisfaction	3.39	3.60	3.53	3.06	3.35	3.32	3.55

Source: Survey data (2018)

Relationship with Supervisor component examines whether employee assumes his supervisor gives empowerment towards employees or not, employee hopes his supervisor is aware of the difficulties in his job or not, employee thinks his supervisor encourages an open and participative work environment or not, and his supervisor encourages him to suggest new ways of doing things or not, employee thinks his supervisor looks out for the personal welfare of group members or not, employee assumes his supervisor is living example of his company's goals and he can trust his supervisor or not. As a survey results of Relationship with Supervisor component, SMIDB Bank got the highest score with 3.89 followed by AYA Bank with 3.76 while KBZ Bank got the lowest score with 3.20.

Salaries and Incentives component explains whether employee assumes his pay is depending on the effort that he contributes for his bank or not, employee thinks his company's benefits program is flexible enough to meet his particular needs or not,

employee hopes the benefits he receive are as good as most other organizations offer or not, employee thinks his salary is enough for him or not. According to the survey result, GTB Bank got the highest score with 3.47 followed by SMIDB Bank with 3.36 while AYA Bank got the lowest score with 2.58.

Promotion component shows whether employee assumes where he work, promotions go to the people who really deserve or not, employee thinks that his bank's promotion policy is fair or not, employee thinks that his bank's promotion policy is clear and transparent or not and employee is satisfied with his current position in his bank or not. As the survey results of Promotion component show, GTB Bank got the highest score with 3.40 followed by CB Bank and SMIDB Bank with 3.39 each while AYA Bank got the lowest score with 3.03.

Relationship with Co-worker components explains whether employee thinks his co-workers cooperate to get the job done or not, employee likes the people he works together with or not, employee has good relations with his co-workers or not. According to the survey result, SMIDB Bank got the highest score with 4.12 followed by AYA Bank with 4.00 while KBZ Bank got the lowest score with 3.34.

Training and Development component shows whether employee thinks he regularly receive technical training or not, employee assumes he regularly receive non-technical training or not, employee has adequate training he need to do his job or not. According to the survey results, AYA Bank got the highest score with 3.50 followed by CB Bank with 3.47 while KBZ Bank got the lowest score with 3.02.

Career Development component demonstrates whether employee thinks the bank assists in career planning or not, employee believes the bank cares about its employees' well-being or not, employee hopes his job gives opportunities for professional development or not. As the survey results of Career Development component show, CB Bank got the highest score with 3.67 followed by GTB Bank with 3.46 while SMIDB Bank got the lowest score with 3.00.

Overall Employee's Satisfaction is important to estimate the non financial performance of the banks with the survey result. It is calculated by finding the average value of seven components explained above. The survey result shows that CB Bank got the highest score with 3.60 followed by SMIDB Bank with 3.55 while KBZ Bank got the lowest score with 3.06.

#### **4.4.2 Customer Satisfaction of Selected Private Banks**

The analysis on customer satisfaction of the banks is important to measure the performance of the bank from human aspects. To measure customer satisfaction of the banks, the researchers analyze on reliability of bank services, assurance / trust, tangible / bank appearance, empathy / attention to customers and responsiveness items.

Reliability of Bank Services component overviews whether bank always meets customer expectations or not, whether the bank does the right thing when customer decides to use his bank to purchase banking service or not, whether Banks fulfill its promises at the time indicated or not, whether bank accurate records of transactions and requests or not, whether bank takes the reasonable charges for its banking service or not. According to the survey result, CB Bank got the highest score with 4.15 followed by MWD Bank with 3.98 while MOB Bank got the lowest score with 3.47.

Assurance component explains whether the bank's staffs tell customers exactly the time the service will be performed or not, whether the bank's staff understands customer specific needs or not, whether the bank's staffs gave the banking services as they explained to customers or not. The survey result shows that CB Bank got the highest score with 4.18 followed by MWD Bank with 4.07 while KBZ Bank got the lowest score with 3.47.

Tangible component demonstrates whether the bank has modern equipment and tools or not, whether the bank's facility is exactly what is needed for the banking service or not, whether the bank has sufficient customer representatives or not, whether the bank's staffs are neat in appearance and the bank's staffs have the knowledge to answer all customer questions or not. According to the survey result, CB Bank got the highest score with 4.07 followed by MWD Bank with 3.94 while KBZ Bank got the lowest score with 3.46.

Empathy component explains whether the bank's physical facilities are virtually nice or not, whether the bank's staffs remember customer when they come to the bank or not, the bank's staffs know what kind of service customers would like to take at the bank or not. The survey result shows that CB Bank got the highest score with 4.18 followed by MWD Bank with 4.07 while MOB Bank got the lowest score with 3.46.

Responsiveness component shows whether the bank's staffs give prompt services and the bank's has customer interest at heart or not, whether the bank's shows a keen interest in solving customer problems or not, the bank's staff behavior instills confidence in customer or not, whether the bank's employee always has the time to provide service

or not, whether the bank’s staff are always willing to assist customers or not, whether the bank’s staffs are not too busy to respond to customers requisition or not. According to the survey result, CB Bank got the highest score with 4.05 followed by MWD Bank with 4.04 while KBZ Bank got the lowest score with 3.27.

**Table (4.25): Average Score of Customer Satisfaction of Selected Private Banks by Dimension**

Items	AYA Bank	CB Bank	GTB Bank	KBZ Bank	MOB Bank	MWD Bank	SMIDB Bank
Reliability of Bank Services	3.72	4.15	3.82	3.46	3.47	3.98	3.71
Assurance / Trust	3.82	4.18	3.84	3.33	3.48	4.07	3.83
Tangible / Bank Appearance	3.77	4.11	3.75	3.27	3.47	3.94	3.56
Empathy / Attention to customer	3.72	4.19	3.81	3.51	3.47	4.07	3.65
Responsiveness	3.78	4.09	3.76	3.44	3.40	4.04	3.57
Overall Customer 's Satisfaction	3.76	4.14	3.80	3.40	3.46	4.02	3.66

Source: Survey data (2018)

Table (4.25) shows the survey result of Customer Satisfaction for selected private banks. Overall Customer’s Satisfaction is very critical to overview the non financial performance of the banks with survey results. It is calculated by finding the average value of five components explained above. The survey result shows that CB Bank got the highest score with 4.11 followed by MWD Bank with 4.02 while KBZ Bank and MOB Bank got the lowest score with 3.40, 3.46 respectively. According to the survey result on customer satisfaction, CB and MWD Bank can be concluded as these banks are above average bank and AYA, GTB, KBZ, MOB and SMIDB Banks can be concluded as an average bank in customer satisfaction.

#### **4.4.3 The Correlation between Financial Performance and Customer Satisfaction and Employee Satisfaction of Selected Private Banks**

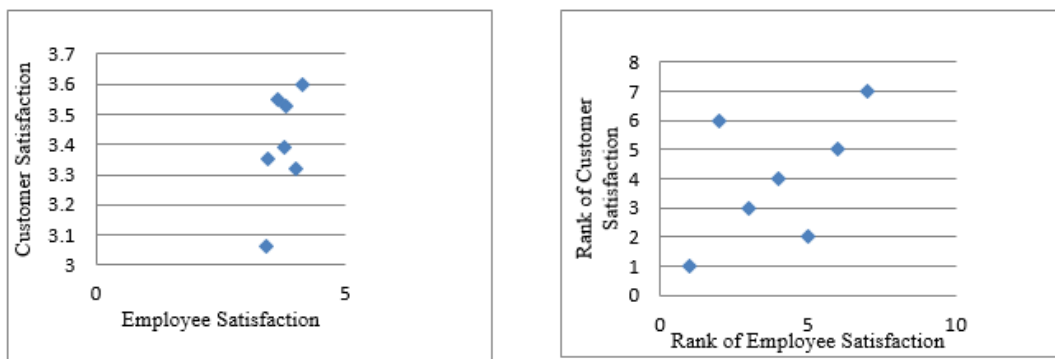
The banks are profit- oriented organizations and customer satisfaction is of crucial importance for the banks. A bank cannot survive without having profit and that bank

cannot earn for profit without having customer satisfaction. Therefore, customer satisfaction is related with financial performance of the bank. On the other hand, customer satisfaction is related with employee satisfaction. The employees who satisfy with their bank can serve their customers to have customer satisfaction.

For the analysis of relationship between variables - financial performance, customer satisfaction and employee satisfaction - Spearman's rank correlation is considered to apply for the study. However, it is important to identify the monotonicity between the variables since Spearman's rank correlation determines the strength and direction of the monotonic relationship between two variables.

**Figure (4.5): Scatter Diagram of Customer Satisfaction and Employee**

**Satisfaction**



(a) For Untransformed Data

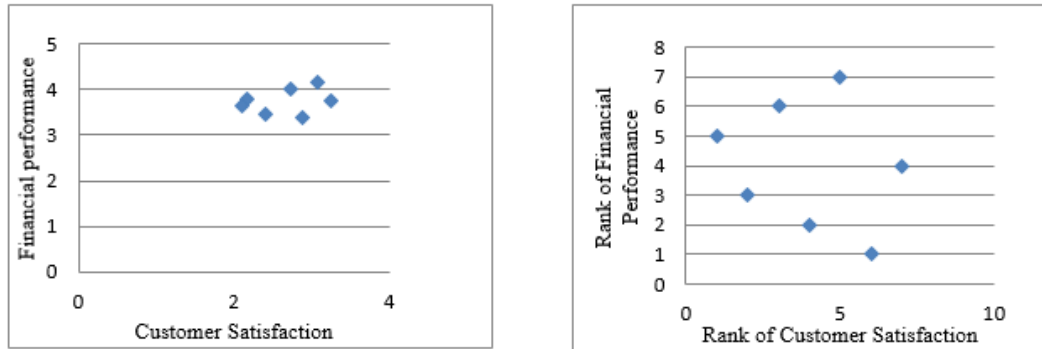
(b) For Transformed Data

Source: Researcher's Own Construct

Figure (4.5) describes the scatterplots of customer satisfaction and employee satisfaction of seven private banks. There is non-monotonic relationship between customer satisfaction and employee satisfaction, according to the patterns of the scatterplots for both untransformed data, i.e., scores and transformed data, i.e., rank. Therefore, it is not suitable to use the Spearman's correlation for testing the correlation between these two variables.



**Figure (4.6): Scatter Diagram of Financial Performance and Customer Satisfaction**



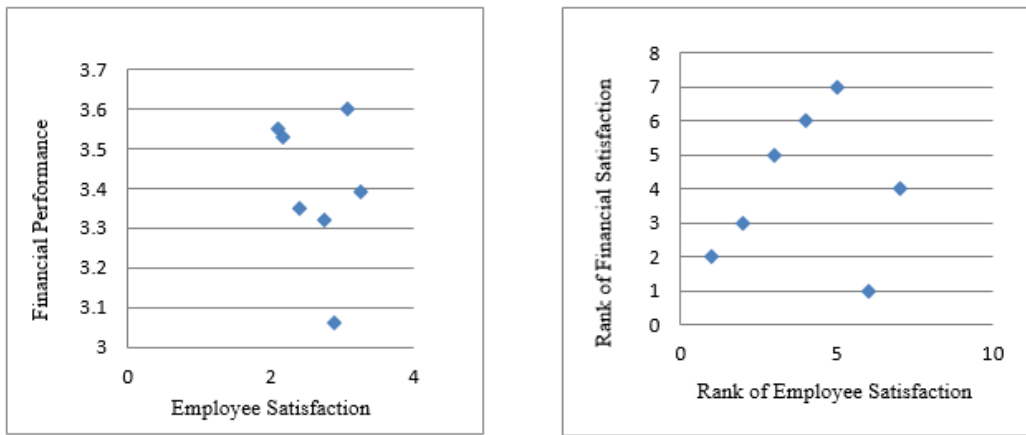
(a) For Untransformed Data

(b) For Transformed Data

Source: Researcher's Own Construct

Figure (4.6) depicts the scatterplots of the financial performance and customer satisfaction of seven private banks. It is found that financial performance and customer satisfaction are not monotonically related according to the patterns of scatterplots for both untransformed data, i.e., scores and transformed data, i.e., rank. Therefore, Spearman's correlation is not appropriate for testing the association between these two variables.

**Figure (4.7): Scatter Diagram of Financial Performance and Employee Satisfaction**



(a) For Untransformed Data

(b) For Transformed Data

Source: Researcher's Own Construct

Figure (4.7) shows the scatterplots of financial performance and employee satisfaction of seven private banks. It is clearly observed that financial performance and employee satisfaction are not monotonically related according to the patterns of scatterplots for both untransformed data, i.e., scores and transformed data, i.e., rank. Therefore, Spearman's correlation is not appropriate for examining the association between these two variables.

The non-monotonic relationships between variables coincide with the insignificant coefficients of Spearman's rank correlation<sup>1</sup> as shown in Table (4.26).

<sup>1</sup> Scores of customer satisfaction, scores of employee satisfaction and scores of financial performance of bank are converted into ranks, and Spearman's rank correlation coefficients are calculated by using IBM SPSS Statistic 23.

**Table (4.26): Results of Spearman's rank correlation**

Sr.	Particular	Correlation Coefficient	Significance (P-value)
1	Rank of Employee Satisfaction and Rank of Customer Satisfaction	0.536	0.215
2	Rank of Financial Performance and Rank of Employee Satisfaction	(-) 0.143	0.760
3	Rank of Financial Performance and Rank of Customer Satisfaction	0.214	0.645

Source: Researcher's Own Calculation

Note: The calculation results of SPSS are shown in Appendix (7)

According to the Spearman's rank correlation results, all correlation coefficients are not significant as P-values are 0.215 for correlation between Rank of Employee Satisfaction and Rank of Customer Satisfaction, 0.76 for correlation between Rank of Financial Performance and Rank of Employee Satisfaction and 0.645 for correlation between Rank of Financial Performance and Rank of Customer Satisfaction. Therefore, the insignificant correlation coefficients could not support, to a small extent, to the study. However, it is important to note that if the study extends the number of observations, it will fulfill the requirement of monotonicity for running the Spearman's correlation and will strongly support for the study.

#### **4.5 Overall Performance of Selected Private Banks**

The role of private banks is very important in Myanmar banking sector. Myanmar private banks could extend their branches and offer innovative banking products such as ATM, POS, mobile banking, internet banking and others. Therefore, the bank performance becomes more important to protect customers' interest and to avoid the risk of bank. This study approaches to measure the overall performance of Myanmar private banks and seven private banks are selected by sample random method for the study. Measuring on overall performance of the banks includes two components in this study. Those components are "bank performance from financial aspects" and "bank performance from human aspects". The bank performance from human aspects includes Customer Satisfaction and Employee Satisfaction. Customer Satisfaction is more important in

measuring the bank performance from human aspects because the bank cannot survive without profit and the bank cannot have profit without customer satisfaction. Therefore, Customer Satisfaction component is given more weight in the calculation

In this study, the nature of customer satisfaction and employee satisfaction scores show score 5 is the highest score and score 1 is the lowest score because since the survey answers represent that score 5 shows strongly agree, score 4 shows agree, score 3 shows neutral, score 2 shows disagree and score 1 shows strongly disagree. On the other hand, the composite rating scores for financial performance represents that rating 1 is the highest rating and rating 5 is the lowest rating. Therefore, before calculating the overall performance of the banks, the bank performance from human aspects are reversed order as formal score 5 is reversed as score 1, formal score 4 is reversed as score 2, formal score 3 is reversed as score 3, formal score 4 is reversed as score 2 and formal score 5 is reversed as score 1.

**Table (4.27): The Overall Performance of Selected Private Banks**

Name of Bank	Customer Satisfaction	Employee Satisfaction	Bank Performance from Human Aspects ( $2/3*b+1/3*c$ )	Performance of Human Aspects (Reverse Order)	Bank Performance from Financial Aspects	Overall Performance Rating ( $2/3*f+1/3*e$ )	The Rank of Overall Performance
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
AYA	3.76	3.39	3.64	3.36	3.25	3.29	7
CB	4.14	3.60	3.96	3.04	3.08	3.07	5
GTB	3.80	3.53	3.71	3.29	2.18	2.55	2
KBZ	3.40	3.06	3.29	3.71	2.89	3.16	6
MOB	3.46	3.35	3.42	3.58	2.41	2.80	3
MWD	4.02	3.32	3.79	3.21	2.74	2.90	4
SMIDB	3.66	3.55	3.62	3.38	2.11	2.53	1

Source: Researcher's Own Calculation

Table (4.27) explains the overall performance of selected private banks and the overall performance rating ranges from rating 1 to rating 5. These overall ratings are calculated based on financial composite rating and rating of bank performance from human aspects. The range of these ratings are also from rating 1 to rating 5 and the explanations of Financial Composite Ratings are appropriate to use for overall performance rating. Rating 1 explains that the banks which achieve rating 1 perform well in all respects by easily measurable differences. The rating 2 means the banks which achieve rating 2 are measurably better than the average bank, but not quite outstanding in

all respects. The rating 3 represents that the banks are good banks that just meet all of the major standards. The rating 4 means that the banks which achieve rating 4 demonstrate a major weakness that if not corrected, could lead to a very severe or unsatisfactory condition that will threaten its existence. The banks which achieve rating 5 are facing high risk of failure in the near term. According to analysis, there are no private banks which achieve the highest rating 1 and lowest rating 5. SMIDB, GTB, MOB and MWD Banks have the overall rating 2 and these banks are measurably better than the average bank, but not quite outstanding in all respects. CB, KBZ and AYA Banks have an overall rating 3 and these banks are good banks that just meet all of the major standards. Therefore, the overall performance of selected Myanmar private banks is at moderate level and private banks need to enhance their capital strength, management skill, assets quality and profitability.

#### **4.6 Concluding Remarks**

The study analyzes the overall performance of selected private banks with the study period from 2012/2013 FY to 2016/2017 FY. In measuring from financial aspect, Global Treasure Bank, Myanmar Oriental Bank and Small & Median Industrial Development Bank recorded financial composite rating 2 and it can be conclude that these bank are financially sound with modest weakness and outperform their average rivals, whereas Kanbawza Bank, Ayeyarwaddy Bank, Co-operative Bank and Myawaddy Bank achieved financial composite rating score 3 and it can be conclude that these banks just meet the major regulatory standards and should be under cautious supervisory stance.

In measuring from non-financial perspective, performance of all selected private banks is moderately good in terms of employee satisfaction and customer satisfaction. As overall performance measured through composite rating analysis which taking both financial and non-financial aspects into consideration, Global Treasure Bank and Small & Median Industrial Development Bank are in the group of better than average banks whereas Ayeyarwaddy Bank, Co-operative Bank, Kanbawza Bank, Myanmar Oriental Bank and Myawaddy Bank fall into the category of average banks.

According to the analysis of overall performance of the banks, SMIDB, GTB, MOB and MWD Bank have the overall rating 2 and these banks are measurably better than the average bank, but not quite outstanding in all respects. CB, KBZ and AYA Bank

have an overall rating 3 and these banks are good banks that just meet all of the major standards. Therefore, the overall performance of selected Myanmar private banks is at moderate level and private banks need to enhance their financial strength, management skill, assets quality and profitability of the bank.

The capital sizes of private banks are less than the capital size of foreign banks and the foreign banks' average paid-up capital size is 2.5 times of private banks. Therefore, the private banks need to transform their ownership type to public company type to increase their capital size by selling the shares of banks. Otherwise, the private banks can decide to merge and it can enhance more capital size and markets shares of the Myanmar private banks.

To assess the capital strength of the banks, calculation of free capital is also important for the bank and the banks need to balance between the capital and fixed assets amount to have good free capital ratio (fixed assets to capital ratio). According to the analysis of March 2018 data, State-owned Banks uses only 4 % of its capital amount to buy fixed assets and it left much capital for the bank. Like this Foreign Bank Branches uses only 1 % of its capital amount to buy fixed assets and it left much capital for the bank. However, Private Banks uses 80 % of its capital amount to buy fixed assets and it left small capital for the bank. Therefore, the private banks should review their fixed assets to capital ratio.

Most of the loans managers from private banks misunderstand the purpose of Central Bank regulation. Actually, this regulation is for benefits of the banks, however some bank managers do not follow this regulation and they hide some NPLs from the list. Therefore, the private banks should be educated to understand and follow the regulations.

The fact that how private banks extend their loan to various sector is very important for the banks' asset quality. According to the sector wide of loans of private banks in March 2018, the private banks extend 35 % of their loans to trade sector, 18 % to construction sector and only 10 % to production sector. Normally, production sector is more stable than other sectors, therefore, the private banks should extend their loans to production sector more.

## **Chapter 5**

### **Conclusion**

Myanmar has been implementing reforms to develop financial sector of the country by amending the legal framework and allowing the participation of financial institutions such as private banks, foreign bank branches, finance companies, microfinance institutions, private insurance companies, security companies since 1988. However, the banking sector is still dominant in Myanmar financial sector and the role of private banks become more important in banking sector. The private banks extend the branches whole the country and innovate the new banking products and the total deposit, bank loans and banking services are also increasing year by year. In the other side, Myanmar allowed foreign bank branches to establish and do foreign banking in 2015. The foreign bank branches have adequate capital, experiences, human resources and other necessary requirements. According to their banking license, they can establish only one branch in Myanmar and they can deal with only foreign corporate. Therefore, their banking operations are restricted and they could not extend their business. However, Central Bank of Myanmar allowed to foreign bank branches to deal with local corporate in November, 2018 and they shall have the equal chance in banking business with local banks. Therefore, Myanmar private banks should try to maintain the market share of banking sector and need to increase their capital, knowledge and banking performance.

This study focuses the performance of private banks from financial aspects and from human aspects. In measuring the performance of private banks from human aspects, the survey on bank employees and bank customer was made for selected private banks. In measuring the performance of private banks from financial aspects, CAMEL framework is used and the results show the financial soundness, liquidity and profitability of the banks. Furthermore, the study emphasizes on the theoretical considerations and calculations to measure the performance of selected private banks.

#### **5.1 Findings**

The study analyzes the overall performance of selected private banks over the period from 2012/2013 FY to 2016/2017 FY. In measuring the performance of the banks from financial aspects, the analysis of capital adequacy component score is one of the important indicators and it includes capital adequacy ratio, core capital to total deposit

ratio and core capital to risk weighted asset ratio. The banks declined in capital adequacy ratios except for MWD and GTB Bank. In measuring the Core Capital to Total Deposit Ratio, 4 private banks, namely MWD Bank, GTB Bank, MOB Bank and SMIDB Bank increased and AYA, KBZ and CB Bank sharply decreased in that ratio. For Core Capital to Risk Weighted Assets Ratio, KBZ, AYA, CB and SMIDB Bank declined that ratio and MWD, GTB and MOB Bank increased in that ratio. As an analysis of capital adequacy component ratio, only SMIDB Bank and GTB Bank achieved score 1 and MWD Bank and MOB Bank recorded score 2. Other three banks, KBZ, AYA and CB Bank achieved score 4 and score 5 in capital adequacy component ratio. Therefore KBZ, AYA and CB Bank need to try to enhance the capital adequacy component ratio and those banks can increase the paid-up capital or reduce the NPLs outstanding amount or extend the good quality loans.

The study also analyzes the assets quality of selected private banks. It is found that the NPL to total loans ratio of the banks increased during the period except for MWD Bank. In this case, KBZ, AYA, MOB and SMIDB achieved score 2 and CB Bank recorded score 3. The rest banks, MWD and GTB Banks achieved score 5. The other important indicator, provision to total NPLs ratio of the banks also declined during the period except for MWD Bank and SMIDB Bank. However, in this analysis, KBZ, CB, MOB and SMIDB achieved score 1 and GTB Bank achieved score 2. MWD Bank achieved score 4 and AYA Bank achieved score 5. Therefore, most of the banks are in good condition at provision to NPLs ratio. Another ratio to review is the NPLs to total asset ratio. In this analysis, all private banks achieved score 1 during the period under the study and it can be concluded that all banks are in good position from the point of view of NPLs to total asset ratio. As an analysis of asset quality component ratio, KBZ, MOB and SMIDB Bank recorded component score 1 and CB Bank achieved component score 2. AYA and GTB Bank achieved component score 3 and MWD Bank achieved component score 4. In this matter, the banks which achieved component score 3 and score 4 need to review their loans policy, the monitoring procedure on loan customers, current economic situation of the country.

The study analyzes the earning ability of selected private banks and the ROE ratios of the banks were declining during the period except for AYA Bank. The other important indicator, ROA ratio of all banks also declined during the period. Another ratio to review is the Operating Expenses to Total Income ratio. According to the analysis,



MWD Bank recorded score 1 and other banks achieved score 2. Therefore, it can be concluded that the selected private banks are good situation in operating expenses to total income ratio. As an analysis of earning ability component ratio, AYA and CB Bank achieved component score 4 and other banks achieved component score 3. In this analysis, it can be concluded that most of the banks stand at average level in earning ability. However, the two banks achieved component score 4 and it indicates that these two banks' earning ability is immoderate weakness unless properly address could impair future viability of the bank. Therefore, the two banks which achieved component score 4 need to review the composition of expenditure of the bank and the investment policy of the banks.

The study analyzed the Liquidity Ratio of seven private banks during the period from 2012/2013 FY to 2016/2017 FY and the liquidity ratios of the banks were increasing in the study period except for SMIDB Bank. The Loan to Total Deposit Ratio is an indicator for the liquidity condition of the banks. During the study period, that ratio of 4 private banks, namely KBZ Bank, CB Bank, MWD Bank and SMIDB Bank increased and other 3 private banks decreased in that ratio. The Total Deposit to Total Assets Ratio is indicating the balances between major liability and total assets of the banks. During the period, all private banks increased that ratio except for MWD Bank and CB Bank. As an analysis of liquidity quality component ratio, all banks recorded component score 3 and it can be concluded that the private banks are at average level in liquidity component.

The above findings show the financial performance of private banks by separate components. The Composite Rating by CAMEL can assess the overall financial performance of the selected private banks. The Result of Composite Rating reveals the overall performance of the banks along with individual's score of capital adequacy, Asset Quality, Management, Earning and Liquidity. It is found that overall performance score of the banks is ranging from rating 2 to rating 3. According to the composite rating score of financial performance, SMIDB, MOB and GTB Bank achieve the rating 2 and KBZ, AYA, CB and MWD Bank achieve the rating 3. Therefore, it can be concluded that all selected private banks are moderate level in overall financial performance in terms of financial soundness indicators through CAMEL framework.

This study took the survey to measure the customer satisfaction and employee satisfaction of selected private banks. The customer satisfaction includes reliability of bank services, assurance, tangible, empathy and responsiveness. If customer satisfaction

of a bank approaches to average score 5, it can be concluded that customer satisfaction of that bank is good and if customer satisfaction of a bank approaches to average score 1, it can be concluded that customer satisfaction of that bank is bad. According to survey result of customer satisfaction, CB Bank achieved average score 4.14 and MWD Bank achieved average score 4.02 and these two banks are at good position in customer satisfaction. The average scores of customer satisfaction for other banks are score 3.76 for AYA Bank, score 3.80 for GTB Bank, score 3.40 for KBZ Bank, score 3.46 for MOB Bank and score 3.66 for SMIDB Bank and it can be concluded that the customer satisfaction of those banks is average level.

The study on employee satisfaction includes the several components such as Job Content, Relationship with Supervisor, Salaries and Incentives, Promotions, Relationship with Co-workers, Training & Development and Career Development. If employee satisfaction of a bank approaches to average score 5, it can be concluded that customer satisfaction of that bank is good and if customer satisfaction of a bank approaches to average score 1, it can be concluded that customer satisfaction of that bank is bad. According to survey result of employee satisfaction, all selected private banks achieve average score above 3 and the employee satisfaction level of private banks is at just moderate level.

This study analyzed the overall performance of the banks from financial aspects and human aspects. According to the analysis, SMIDB, GTB, MOB and MWD Bank have the overall rating 2 and these banks are measurably better than the average bank, but not quite outstanding in all respects. CB, KBZ and AYA Bank have an overall rating 3 and these banks are good banks that just meet all of the major standards. Therefore, the overall performance of selected Myanmar private banks is at moderate level and private banks need to enhance their financial strength, management skill, assets quality and profitability of the bank.

## **5.2 Recommendation**

Based on the calculation of CAMEL Composite rating score, there is no bank which achieves rating score 1. Among the selected private banks of this study, three banks achieve rating score 2 and four banks achieve rating score 3. Therefore, it found that the banks need to increase the paid-up capital, to balance the loan to deposit ratio, to increase the asset quality by reducing the NPLs and issuing the quality loans.

Since employee satisfaction and customer satisfaction of the selected private banks are still at the moderate level, it is important for these private banks to improve their performance from this human aspect in order to maintain their major markets share in a more competitive business environment of banking sector in the near future. Therefore, the banks need to emphasize on the business practice which will improve the employee satisfaction and customer satisfaction.

Although the paid-up capital size of private banks meet the specification of Financial Institutions Law (2016), the capital size of private banks are less than the capital size of foreign banks. The average paid-up capital size of private banks is kyat 49.2 billion and the average paid-up capital size of foreign banks is Kyat 126.6 billion in March, 2018. The foreign banks' average paid-up capital size is 2.5 times of private banks. Therefore, the one possible way for a private bank to raise capital is to transform their ownership type into a public company type by issuing the shares of the bank. In raising capital, the other possible option for a small private bank is to merge with the others and it can enhance capital size.

To assess the capital strength of the banks, free capital view is also important for the bank as the explanation from chapter 3. The banks need to balance between the capital and fixed assets amount to have appropriate free capital ratio (fixed assets to capital ratio). According to the analysis of March 2018 data, State-owned Banks uses only 4 % of its capital amount to buy fixed assets and it left much capital for the bank. Like this Foreign Bank Branches uses only 1 % of its capital amount to buy fixed assets and it left much capital for the bank. However, Private Banks uses 80 % of its capital amount to buy fixed assets and it left small capital for the bank. Therefore, the private banks should review their fixed assets to capital ratio.

Most of the loans managers from private banks misunderstand the purpose of Central Bank regulation and they hide some NPLs from NPLs list. According to regulation, the interests for performing loans are booked into Income Account and the interests for NPLs are booked into Sundry Account because the banks are not sure to get the interest for NPLs. Actually, this regulation is for benefits of the banks, however some bank managers do not follow this regulation and they hide some NPLs from the list. Therefore, the CBM needs to educate the awareness of bank supervision to the banks.

Regarding the large exposure limit (maximum amount for each loan) of bank loans regulation, the loans amount for an individual or one economic group must not

exceed 20 percent of bank's capital. The CBM on-site supervision teams often see the loan cases which the loan amount exceed 20 percent of bank's capital. Actually, this regulation is also for the risk protection for the bank. However, the loan division managers extend this kind of loans and they collect those loans when the CBM's supervisor finds this violation and object to this loan. Therefore, the private banks should be educated to understand and enforced the regulations.

Analyzing credit channels through which bank loans flow into various sector is also important. According to the sector wide of loans of private banks in March 2018, the private banks extend 35 % of their loans to trade sector, 18 % to construction sector and only 10 % to production sector. Normally, since production sector is more stable than other sectors, the private banks should extend their loans to production sector more.

To sum up, the analysis shows that the overall performance of Myanmar private banks is moderately good and these banks need to improve their level on the performance of both financial and human aspects.

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## Appendix (1)

## List of Private Banks in Myanmar

No	Name of the Bank	Head Office	Date of Licence Issued	Branches on 31.3.2017
1	Myanmar Citizens Bank Ltd	Nay Pyi Taw	25.5.1992	23
2	First Private Bank Ltd	∥	25.5.1992	33
3	Co-operative Bank Ltd	Yangon	3.8.1992	183
4	Yadanabon Bank Ltd	Mandalay	27.8.1992	3
5	Myawaddy Bank Ltd	Nay Pyi Taw	1.1.1993	49
6	Yangon City Bank Ltd	Yangon	19.3.1993	4
7	Yoma Bank Ltd	∥	26.7.1993	69
8	Myanmar Oriental Bank Ltd	∥	26.7.1993	41
9	Asia Yangon Bank Ltd	∥	17.3.1994	13
10	Tun Commercial Bank Ltd	Nay Pyi Taw	8.6.1994	22
11	Kanbawza Bank Ltd	∥	8.6.1994	430
12	Small & Medium Industrial Development Bank Ltd	∥	12.1.1996	19
13	Global Treasure Bank Ltd	∥	9.2.1996	130
14	Rural Development Bank Ltd	∥	26.6.1996	2
15	Innwa Bank Ltd	Yangon	15.5.1997	40
16	Asia Green Development Bank Ltd	Nay Pyi Taw	2.7.2010	56
17	Ayeyarwaddy Bank Ltd	∥	2.7.2010	206
18	United Amara Bank Ltd	∥	2.7.2010	74
19	Myanma Apex Bank Ltd	∥	2.7.2010	86
20	Naypyitaw Sabin Bank Limited	Nay Pyi Taw	28.2.2013	6
21	Myanmar Microfinance Bank Limited	Yangon	2.7.2013	9
22	Construction and Housing Development Bank Limited	Yangon	12.7.2013	9
23	Shwe Rural and Urban Development Bank Limited	Yangon	28-7-2014	3
24	Ayeyarwaddy Farmers Development Bank Limited (A Bank)	Pathein	17-11-2015	3
	<b>Total</b>	<b>24</b>		<b>1513</b>

Source: Financial Stability Report (2017), Central Bank of Myanmar



## List of Foreign Banks Branches in Myanmar

<b>Sr. No.</b>	<b>Bank Name</b>	<b>License Date</b>	<b>Date of Business Commencement</b>
1	The Bank of Tokyo-Mitsubishi UFJ, Ltd	2-4-2015	22-4-2015
2	Oversea-Chinese Banking Corporation Ltd	2-4-2015	23-4-2015
3	Sumitomo Mitsui Banking Corporation	2-4-2015	23-4-2015
4	United Overseas Bank Limited	30-4-2015	4-5-2015
5	Bangkok Bank Public Company Limited	26-5-2015	2-6-2015
6	Industrial and Commercial Bank of China	26-5-2015	1-7-2015
7	Malayan Banking Berhad (Maybank)	27-7-2015	3-8-2015
8	Mizuho Bank Limited	27-7-2015	3-8-2015
9	Australia and New Zealand Banking Group Limited	29-9-2015	2-10-2015
10	The Joint Stock Commercial Bank for Investment and Development of Vietnam (BIDV)	30-6-2016	1-7-2016
11	Shinhan Bank	15-9-2016	20-9-2016
12	E.Sun Commercial Bank Limited	27-9-2016	3-10-2016
13	State Bank of India	27-9-2016	3-10-2016

Source: Financial Stability Report (2017), Central Bank of Myanmar

## Representative Offices of Foreign Banks

Sr.	Name of Bank	Date of Registration Certificate Issued	Date of Commencement
1.	DBS Bank Limited	10.11.93	29.3.94
2.	National Bank Limited	6.7.95	16.7.96
3.	First Overseas Bank Limited	30.4.96	15.5.96
4.	CIMB Bank Berhad (New Licence for Name of Change)	19.2.2008	19.2.2008
5.	Arab Bangladesh (AB)Bank Limited	10.12.2010	6.6.2012
6.	Siam Commercial Bank Public Company Limited	23.4.2012	23.12.2012
7.	Krung Thai Bank Public Company Limited	14.6.2012	20.12.2012
8.	United Bank of India	19.6.2012	5.12.2012
9.	Kasikornbank Public Company Limited	18.7.2012	9.1.2013
10.	Woori Bank	25.10.2012	15.11.2012
11.	Vietin Bank	12.12.2012	1.3.2013
12.	Korea Development Bank	27.12.2012	12.6.2013
13.	Standard Chartered Bank	27.12.2012	5.2.2013
14.	Industrial Bank of Korea	14.3.2013	23.4.2013
15.	First Commercial Bank (New Licence for Change of Management Office)	18.3.2013	30.4.2013
16.	Kookmin Bank	4.6.2013	19.12.2013
17.	Export-Import Bank of India	14.6.2013	9.9.2013
18.	The Export-Import Bank of Korea	16.12.2013	20.1.2014

19.	Eastern Bank Limited	26.3.2014	-
20.	Bank of Ayudhya Public Company Limited	26.3.2014	-
21.	RHB Bank Berhad	26.3.2014	-
22.	Commercial Bank of Ceylon PLC	12.11.2014	-
23.	Cathay United Bank	11.4.2014	-
24.	BRED Banque Populaire	11.6.2014	-
25.	Busan Bank Co., Ltd	23-6-2015	-
26.	AEON Credit Service Company	20.7.2012	21.9.2012
27.	PT. Bank Negara Indonesia (Persero) Tbk	23.6.2015	-
28.	Bank of Taiwan	23.6.2015	-
29.	Taishin International Bank Co., Ltd	23.6.2015	-
30.	Taiwan Shin Kong Commercial Bank Co., Ltd	23.6.2015	-
31.	CTBC Bank Co., Ltd	23.6.2015	-
32.	Yuanta Commercial Bank Co., Ltd	23.6.2015	-
33.	Taiwan Cooperative Bank Limited	23.6.2015	-
34.	Taiwan Business Bank Limited	23.6.2015	-
35.	Mega International Commercial Bank Co., Ltd	23.6.2015	-
36.	Ho Chiminh City Development Joint Stock Commercial Bank	23.6.2015	-
37.	Qatar National Bank	26.7.2015	-
38.	Sampath Bank PLC	26.7.2015	-
39.	Bank of China	12.8.2015	-
40.	KEB Hana Bank (New Licence for Change of Name)	18.12.2015	18.12.2015

41.	BOT Lease(Thailand) Co., Ltd.	7.4.2016	-
42.	ACLEDA Bank Plc.	7.4.2016	-
43.	SATHAPANA Bank PLC.(New Registration Certificate for Change of Name)	7.5.2012	28.7.2012
44.	Chang Hwa Commercial Bank Limited	21.11.2016	-
45.	Hua Nan Commercial Bank Limited	21.11.2016	-
46.	Export-Import Bank of Thailand	6.3.2017	-
47.	KB Kookmin Card Company Limited	14.9.2017	13.10.2017
48.	Mitsubishi UFJ Lease and Finance Co., Ltd.	27.12.2017	-
49.	Shinhan Card Co., Ltd.	6.9.2018	-

Source: Central Bank of Myanmar Website on March 4, 2019

Questionnaires

Part One – Profile of the Bank

1. Name of bank \_\_\_\_\_

2. Location \_\_\_\_\_

3. Established year and years of operations \_\_\_\_\_

4. Type of Ownership    Private owned            Semi-government owned  
 State Owned     FDI                     Others                    Public Bank

5. What is the size of your bank in terms of level of profitability?

Small

Medium

Large

6. How many branches are there in your bank? (Total)

\_\_\_\_\_

Of Which: Number of branches in Yangon-----

7. How many employees in your banks? (totally)

\_\_\_\_\_

8. How many customers in your bank. (totally)

9. How many ATM Cards in your bank. (totally)

10. What is the range of services that the bank offers?

-----  
-----  
-----  
-----  
-----

## Part Two- Personal Factors of Responsible Person

**Section A: Background Information** (Please fill the blanks and tick appropriate box that best describes your situation)

1. Your Job Title -----

Division ----- Contact Phone No -----

2. Gender

Male       Female

3. What is the range of your age?

< 20     20-29     30 - 39     40 - 49     50 - 59     60 & above

4. Highest Education attained

Diploma     Bachelor     Master     PhD

Others (Please specify) -----

5. Years of experience in related field \_\_\_\_\_

6. Number of years you worked for current bank ----- year (s)

7. Your previous job title \_\_\_\_\_

Position \_\_\_\_\_

Organization \_\_\_\_\_

8. Currently, which department do you work for?

Planning     Finance     Human Resource     Operations

Others (Please specify) -----

9. Which job category do you belong to in your current organization?

Senior management     Middle level management     First-line Manager

Supervisor     Others (Please specify) -----

**Bank's Staff Questionnaire**

**Section A: Background Information** (Please fill the blanks and tick appropriate box that best describes your situation)

Your Job Title -----

Division -----

1. What is the range of your age?

- Under 20     20-29     30 - 39     40 - 49     50 - 59     60& above

2. Gender

- Male     Female

3. Education

- Below High School     High School     Bachelor     Master  
 PhD     Diploma     Others (Please specify) -----

4. Monthly income (Kyats)

- Not more than 100,000     100,001 to 200,000     200,001 to 300,000  
 300,001 to 400,000     400,001to 500,000     above 500,000

5. Number of years you worked for current bank ----- year (s)

6. What kind of incentives (or) benefits do you get from your bank?

- Bonus     Increase compensation     Promotion  
 Increasing salary     Arranging plans for recreation     Housing  
 Social security     Health insurance     Life insurance  
 Supporting children's education     Supporting family's requirement  
 Arranging picnic     Arranging excursion     Others

7. By adding more facilities and equipments, do you think your bank can attract more customers? (Please tell your opinion)-----  
-----  
-----

**Section B: Employee Satisfaction**

This section relates to your satisfaction with your job. Please indicate your agreement with the following statement by ticking the number which most closely corresponds to your personal experience in the boxes using a tick (√). Assessment scales are as follows:

1. Strongly Disagree    2. Disagree    3. Neutral    4. Agree    5. Strongly Agree

No	Item	1	2	3	4	5
<b>Job Content</b>						
1	Your job makes good use of your skills and abilities.					
2	Your job gives you a feeling of personal accomplishment.					
3	You like the kind of work you do.					
4	Your job is enjoyable.					
5	Your job makes well reorganization for job done.					
6	You have change to give your opinion for bank's improvement.					
<b>Relationship with supervisor</b>						
7	Your supervisor gives empowerment towards employees.					
8	Your supervisor is aware of the difficulties in your job.					
9	Your supervisor encourages an open and participative work environment.					
10	Your supervisor encourages you to suggest new ways of doing things.					
11	You can trust your supervisor.					



12	Your supervisor looks out for the personal welfare of group members.					
13	Your supervisor is living example of your company's goals.					
14	Your supervisor provides you with actionable suggestions on what I can do to improve.					
<b>Salaries and incentives</b>						
15	Your pay is depended on the effort that you contribute for your bank.					
16	This company's benefits program is flexible enough to meet your particular needs.					
17	The benefits you receive are as good as most other organizations offer.					
18	The people you work with encourage one another to give their best effort.					
<b>Promotions</b>						
19	Where you work, promotions go to the people who really deserve them.					
20	You think that your bank's promotion policy is fare.					

21	You think that your bank's promotion policy is clear and transparent.					
22	You are satisfied with your current position in your bank.					
<b>Relationship with co-workers</b>						
23	Your co-workers cooperate to get the job done.					
24	You like the people you work together with.					
25	You have good relations with your co-workers.					
<b>Training and Development</b>						
26	You regularly receive technical training.					
27	You regularly receive non-technical training.					
28	You have adequate training you need to do your job.					
29	You and co-workers can meet for brain storming for your bank.					
<b>Career Development</b>						
30	The bank assists in career planning.					
31	The bank cares about its employees' well-being.					

32	Your job gives opportunities for professional growth.					
<b>Employees satisfaction and Overall performance of bank</b>						
33	The bank cares about workers' overall satisfaction at work.					
34	Overall, how satisfied are you working for The Company?					

**Bank's Customers Questionnaire**

Section A: Background Information (Please fill the blanks and tick appropriate box that best describes your situation)

1. What is the range of your age?

- Under 20     20-29     30 - 39     40 - 49     50 - 59  
 60&above

2. Gender

- Male     Female

3. Education

- Below High School     High School     Bachelor     Master  
 PhD     Others (Please specify) -----

4. Occupation

- Entrepreneur     Government servant     Company staff     Professional  
 Housewife     Retired     Others (Please specify) -----

5. Monthly income (Kyats)

- Not more than 100,000     100,001 to 200,000  
 200,001 to 300,000     300,001 to 400,000  
 400,001 to 500,000     above 500,000

6. Main Private bank

- KBZ     Myanmar Oriental Bank     Small & Medium Industrial     Global  
Treasure Bank    Development Bank  
 Myawaddy Bank     Cooperative Bank     AYA Bank

7. How long have you been banking with your main private bank?

1. Less than a year        2. 1 -2 years      
3. 2 - 3 years        4. Over 4 years

8. Which service areas have you used in this bank?

- |                     |                          |                         |                          |
|---------------------|--------------------------|-------------------------|--------------------------|
| 1. Foreign Exchange | <input type="checkbox"/> | 2. Current account      | <input type="checkbox"/> |
| 3. Deposit accounts | <input type="checkbox"/> | 4. Savings accounts     | <input type="checkbox"/> |
| 5. Overdraft loan   | <input type="checkbox"/> | 6. Credit/ Charge cards | <input type="checkbox"/> |
| 7. Demand loan      | <input type="checkbox"/> | 8. Remittances          | <input type="checkbox"/> |
9. Hire - purchase       10. Other (Please specify) -----

9. What are the most important factor / thing that attract you to deal with this/these banks?

- |                             |                          |                         |                          |
|-----------------------------|--------------------------|-------------------------|--------------------------|
| 1. Good interest rate       | <input type="checkbox"/> | 2. Near to your home    | <input type="checkbox"/> |
| 3. Staff's friendliness     | <input type="checkbox"/> | 4. Convinced by someone | <input type="checkbox"/> |
| 5. Large number of branches | <input type="checkbox"/> | 6. Cheaper Charge       | <input type="checkbox"/> |
| 7. Speed & efficiency       | <input type="checkbox"/> | 8. Any other            | <input type="checkbox"/> |

10. How often do you visit your main private bank?

- |                  |                          |
|------------------|--------------------------|
| 1. Daily         | <input type="checkbox"/> |
| 2. Once a week   | <input type="checkbox"/> |
| 3. Twice a week  | <input type="checkbox"/> |
| 4. Once a month  | <input type="checkbox"/> |
| 5. Twice a month | <input type="checkbox"/> |
| 6. Others        | <input type="checkbox"/> |

11. Comments or additional information

Please use the space below for any comment or additional information.

-----  
 -----

**Section: B      Customer Satisfaction**

This section relates to your satisfaction with the service of your main bank. Please indicate your agreement with the following statement by ticking the number which most closely corresponds to your personal experience. Assessment scales are as follows:

1. Strongly Disagree    2. Disagree    3. Neutral    4. Agree    5. Strongly Agree

No.	Items	1	2	3	4	5
<b>Reliability of Bank Services</b>						
1	Your bank always meets your expectations.					
2	Your bank did the right thing when you decide to use your bank to purchase this banking service. / Your bank provides the right services at the first time.					
3	Banks fulfills its promises at the time indicated.					
4	You think that your bank accurate records of transactions and requests.					
5	You think that your bank takes the reasonable charges for its banking service					
<b>Assurance</b>						
6	Bank's staffs tell you exactly the time the service will be performed.					
7	Bank's staff understands your specific needs.					
8	Bank's staffs are courteous with you.					
9	Bank's staffs gave the banking services as they explained you.					
<b>Tangibles- Bank Appearance, Staff Appearance</b>						
10	Bank has modern equipment and tools.					
11	Your bank's facility is exactly what is needed for the banking service.					
12	Your bank has sufficient customer representatives.					
13	Bank's staffs are neat in appearance.					

14	Bank's staffs have the knowledge to answer all my questions.					
15	Bank's personnel have the required skills and knowledge.					
<b>Empathy</b>						
14	Bank operating hours convenient to me.					
15	Bank's physical facilities virtually nice.					
16	I feel safe in my transactions with the bank.					
17	Bank's staffs remember you when you come to the bank.					
18	Bank's staffs know what kind of service you would like to take at the bank.					
<b>Responsiveness</b>						
19	Bank's staffs give prompt services.					
20	Bank has your interest at heart.					
21	Banks gives you individual attention.					
22	Bank shows a keen interest in solving your problems.					
23	Bank's staff behavior instills confidence in you.					
24	Bank employee always has the time to provide service.					
25	Bank's staff always willing to assist you.					
26	Bank staffs are not too busy to respond to my requisition.					
<b>Overall satisfaction with your bank</b>						
27	Overall, how satisfied are you working for the bank?					

Thank you for taking your time to respond to this research questionnaire.

Appendix (7)

The Calculation Results by SPSS

			Rank of Employee	Rank of Customer
Spearman's rho	Rank of Employee	Correlation Coefficient	1.000	.536
		Sig. (2-tailed)	.	.215
		N	7	7
	Rank of Customer	Correlation Coefficient	.536	1.000
		Sig. (2-tailed)	.215	.
		N	7	7

			Rank of Financial	Rank of Customer
Spearman's rho	Rank of Financial	Correlation Coefficient	1.000	.214
		Sig. (2-tailed)	.	.645
		N	7	7
	Rank of Customer	Correlation Coefficient	.214	1.000
		Sig. (2-tailed)	.645	.
		N	7	7

			Rank of Financial	Rank of Employee
Spearman's rho	Rank of Financial	Correlation Coefficient	1.000	-.143
		Sig. (2-tailed)	.	.760
		N	7	7
	Rank of Employee	Correlation Coefficient	-.143	1.000
		Sig. (2-tailed)	.760	.
		N	7	7