Lending Risk Analysis of the Nationalised Commercial Banks of Bangladesh

PhD Dissertation

Fellow

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Submitted to the Department of Banking and Insurance, University of Dhaka in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

Department of Banking and Insurance
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Dhaka, Bangladesh

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Dedicated

To

the sweet and loving memories of my dearest persons whose sacrifices, affections, and inspirations illuminated and shaped my life

Late Abjuban Nahar Begum
My Mother

Late Md. Wazed Ali
My Father

Late Hosne Ara Begum
My Elder Sister

Declaration

I hereby declare that the thesis entitled **Lending Risk Analysis of the Nationalised Commercial Banks of Bangladesh** submitted to the Department of Banking and Insurance, University of Dhaka is exclusively my own and original work. No part of it, in any form, has been submitted to any other institute or university for any degree or diploma, or any other similar purposes.

Dhaka
22 June, 2014

Md. Kismatul Ahsan
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BANGLADESH

Certificate of Supervisor

I have the pleasure to certify that the thesis entitled **"Lending Risk Analysis of the Nationalised Commercial Banks of Bangladesh"** submitted by **Md. Kismatul Ahsan,** Professor, Department of Finance, University of Dhaka is an original work carried out under my guidance and supervision. The thesis being submitted for the degree of Ph.D. is the product of his creative efforts and to the best of my knowledge, neither this thesis nor any part of it has been submitted to any university or institution for any degree or diploma, or any other similar purposes.

I also certify that I have gone through the draft and final versions of the dissertation and found it satisfactory for submission to the University of Dhaka, Bangladesh for the degree of Doctor of Philosophy in Banking and Insurance.

Date: 22 June, 2014

Professor Dr. Azizur Rahman Khan
Department of Banking and Insurance
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ABSTRACT

Over the last few years, the banking world has been undergoing a lot of changes due to deregulation, technological innovations, globalization and different reforms. These changes in the banking system also brought revolutionary changes in a country's economy. The banking sectors of Bangladesh have been reformed several times. Due to recent bank failures, high occurrences of loan defaults, bank insolvency have lighted the importance of good governance. Therefore, regulators in developing countries like Bangladesh have become more concerned about the financial health and governance of banking industry. Initiatives to reform the financial sector in Bangladesh may be traced back to the beginning of the 1980s when the denationalization of the Uttara Bank and Pubali Bank took place and a number of new Private Commercial Banks (PCBs) were given licenses. Financial sector reforms started in an intensive way in the beginning of the 1990s under the Financial Sector Adjustment Credit (FSAC) which Bangladesh contracted with the World Bank. In order to make the banking system competitive, effective, and international standard, the policy making institutions of Bangladesh adopted different measures and initiatives especially from the beginning of 1990s that include deregulation of interest rates, loan classification and provisioning requirement, adoption of indirect and market oriented monetary policy instruments, strengthening the operations of banking system by improving legal environment, making taka convertible and computerization of bank branches. All the reforms brought mixed forms of changes in the banking sectors in Bangladesh.

The major objectives of the study would be i) to evaluate the nature and characteristics of lending risk analysis followed by the State Owned Commercial Banks (SCBs) in Bangladesh and ii) to judge the effectiveness of their practices on the performances of these banks in terms of profitability, liquidity, productivity, trends of recovery of loans, size and nature of non-performing loans and iii) The study also aims to diagnose the root causes of the loan defaults and focus on some suggestive measures to improve the eroding situation in healthy management of credit of the SCBs as well as of the banking sector as a whole. The study is based mainly on secondary data, generally from the published reports of Bangladesh Bank, commercial banks of all categories, other relevant organizations pertinent for the study during 1993 to 2012. In measuring the performance, comparative analysis among different categories of Banks like SCBs, PCBs, FCBs, DFIs, have also been done. The research has been analyzed based on the qualitative and quantitative phenomenon. The statistical

techniques those have been used are: Central Tendency, Standard Deviation (SD), Coefficient of Variation (CV), Growth Rate, Log Linear Model for growth rate, Correlation, Regression Analysis, 'T' test, 'F' test, ANOVA etc. and the hypotheses have been tested through the aforesaid tools and techniques. In case of financial tools, Ratio analysis, Funds flow analysis and Trend analysis have been done.

From the analysis it has been found that among the three types of banks, SCBs earned lowest income compared to other categories during the study period. On the other side FCBs were in the top position in terms of income position. The growth rate of income of FCBs and PCBs were much more than that of SCBs. FCBs have minimum manpower compared to SCBs and PCBs. SCBs are in top position in case of manpower position from 1994 but the growth rate became decreased from the year 2003. FCBs maintained a good amount of capital compared to its risk weighted assets than the PCBs. SCBs were third in that race followed by the DFIs. Amount of NPLs of the SCBs decreased from Taka 117.3 billion in 2000 to Taka 107.6 billion in 2010 and again it rose to tk. 132.7 billion in 2102. The PCBs recorded a total increase of Taka 18.1 billion in their NPL accounts, which stood at Taka 64.3 billion in 2010 as against Taka 46.2 billion in 2000.

In case of quantitative evaluation of the selected State Owned Banks (SCBs), we experienced a mixed nature of picture in different parameters of performance among these four banks. There was no stable pattern in any area of the activities of these banks. We found that Sonali bank had the maximum volume of outstanding, classified, substandard, doubtful, and bad/loss loans among the others during the study period. This is not only in terms of magnitude but also in terms of average and growth rate. Others picture was also not satisfactory except in some few areas in isolated ways. In some cases, Janata Bank and Rupali Bank represented better scenario than those of Sonali Bank and Agrani Bank. For example, interest income of all the SCBs showed a positive trend during the period.

Both from the view point of objective and subjective analyses, it was found that the State Owned Commercial Banks (SCBs) of Bangladesh are especially in challenge with many problems including crisis in efficient risk management, high default rate leading to increasing non-performing loans and deteriorating customer service standards. An alarmingly high rate of default, especially of willful default, has put undue pressure on banks' capability to increase investment and/or reduce lending rate despite high profile demand for such promotional intervention of the banks to boost up the economy. Efficient Credit Risk

Analysis and selection of investment proposals on the basis of sound financial merits are the preconditions of good recovery of credit funds as well as the sustainability of the lending banks. But the real situations depict a poor analysis of lending risks inherent in loan projects, flawed credit delivery system, high debt equity ratio, delayed credit disbursement, and inappropriate loan repayment installment due to poor supervision, are the common scenario of the banking sector, particularly the SCBs are the worst affected ones.

The major findings of the study through testing the hypothesis is that there is a strong relationship among net profit (np), total income (ti), total expense (te), capital adequacy ratio (car), non performing loan (npl) and return on equity (roe) of SCBs and it shows a significant correlation between net profit as dependent variable and all others variables above as independent ones. The test result suggests that net profit of the SCBs as a whole can be well explained by those factors i.e. if Total income, Return on equity, Capital adequacy ratio increase then obviously, these will have positive impact on the Net profit of any bank and vice versa. On the other hand if Total expenses, Non performing loan size increase then these will have adverse impact on the profitability of any bank. Moreover, it has been found through test that efficiency in lending risk varies within different units of SCBs. Using the Log –lin model for predicting the future growth of Net Profit After Tax (NAPT) of the SCBs, it has been found that in aggregate, all the SCBs are expected to have negative NPAT in future. In the same way, through time series analysis we also get a very dark picture about these banks when we find that their predicted classified loan amount also show a positive growth over the coming years individually in large bulks. These are all very alarming for the sustainability of such banks.

It has been observed that efficient credit risk analysis and selection of investment proposals on the basis of sound financial merits are the preconditions of good recovery of credit funds as well as the sustainability of the lending banks. Due to ignorance and insincere commitment on the part of the bank officials, the loan proposals are not properly investigated. So, weaknesses remain in the appraisal and selection process of loan projects which ultimately end as sick ones. Moreover, political and undue interference in loan sanctioning and repayments, Diversion of credit fund in non productive sectors, and poor follow up and monitoring in post loan sanctioning stage are other reasons behind the distressed conditions of SCBs.

As policy prescriptions, the SCBs can be cured from the grip of bad/loss loan situations, if banks can strengthen the credit risk management area by equipping their manpower with sophisticated training, or can resort to the service from expert and independent professional firms for scientific and authentic appraisal of loan proposals. Nevertheless, passing of Financial Reporting Act is an essential requirement in this regard to get transparent information from the borrowers' end. The SCBs' loan recovery units also should be reorganized with target oriented motivational package. SCBs have to be freed from the curse of double supervision of Ministry of Finance and Bangladesh Bank. They should be under the direct control of the central bank for effective supervision. All the above devices can protect the SCBs from poor lending performances and can also contribute towards sustained profitability of those banks.

Contents

Page No.

List of Tables

List of Figures

List of Abbreviations

ANOVA	Analysis of Variance
BL	Bad & Loss
BB	Bangladesh Bank
BCBS	Basel Committee on Banking Supervision
BKB	Bangladesh Krishi Bank
BOE	Bill of Exchange
CAR	Capital Adequacy Ratio
CCF	Credit Conversion Factor
CIB	Credit Information Bureau
CL	Classified Loans
CRG	Credit Risk Grading
CRGM	Credit Risk Grading Manual
CRM	Credit Risk Management
CRR	Cash Reserve Requirement
CV	Coefficient of Variation
DD	Demand Draft
DF	Doubtful
DFIs	Development Financial Institutions
DP Note	Demand Promissory Note
ECAI	External Credit Assessment Institution
EXP	Export Form
FC	Foreign Currency
FSRP	Financial Sector Reform Program
ICD	Industrial Credit Division
KYC	Know Your Customer
L/C	Letter of Credit
LLP	Loan Loss Provision
LRA	Lending Risk Analysis

NP	Net Profit
NPAT	Net Profit After Tax
NPL	Non performing loan
PCBs	Private Commercial Banks
RBCA	Risk Based Capital Adequacy
RWA	Risk Weighted Asset
RM	Relationship Manager
ROA	Return on Assets
ROE	Return on Equity
RU	Recovery Unit
SB	Specialized Banks
SCBs	State Owned Banks
SD	Standard Deviation
SMA	Special Mention Account
SPSS	Statistical Package for Social Science
SRP	Supervisory Review Process
SS	Sub Standard
SWOT	Strength, Weakness, Opportunity, and Threat
TCL	Total Classified Loans
UC	Unclassified

Chapter one
Introduction

1.1 Background

Banking system of a country as a whole plays a key role in the macro economy irrespective of its stage of development. Bangladesh, one of the poorest countries in the world, is no exception to this. It inherited a poor banking system from Pakistan in terms of liquidity, personnel, deposits, advances, discipline and banking net work at the time of liberation in 1971. Soon after independence, in pursuance of the government policy to control the banking sector, the local as well as Pakistani banks were nationalized and reorganized into distinct banks incorporated in Bangladesh in light of the Bangladesh Bank (Nationalization) order, 1972, which was promulgated on March 26, 1972. A few foreign banks were allowed to operate with only a limited number of urban branches.

Banking system plays an important role in the economic development of a country. Bangladesh, as a developing country, is no exception to this. In Bangladesh, the banking sector dominates the financial sector and the macroeconomic performance largely depends on the efficiency of the banking sector. The country's banking sector comprises of Bangladesh Bank, State Owned Commercial Banks, Private Commercial Banks, Foreign Commercial Banks and other Specialized Financial Institutions. The financial sector in various economies including Bangladesh is undergoing a mammoth restructuring process in the past few years due to massive crisis in the financial sector across the globe. The recent global recession has highlighted the need for banks to incorporate the concept of risk management into their regular agenda. Various aspects of increasing deregulation, introducing innovative products, and financial instruments as well as innovation in delivery channels have highlighted the need for banks' risk management.

Governance of banks has become a serious issue ever since the breakdown of many banks during and after the recent global financial crisis. Due to this global financial crisis, a good number of banks and financial institutions have gone in to liquidations throughout the world. Recent bank failures, high occurrences of loan defaults, bank insolvency have lighted the importance of good governance. Therefore, regulators in developing countries like Bangladesh have become more concerned about the financial health and governance of banking industry. A large number of empirical studies on corporate governance have

emerged during the last decade which focused mainly on the relation between corporate governance and firm performance. The issues of bank governance and bank performance have received inadequate attention, particularly in developing countries like Bangladesh. The nature of bank business is different than that of non-bank business. Banks receive deposits of depositors and provide loans by creating riskier assets. Depositors bear the risk of losing money as they do not know how banks invested their money. Good governance in the banking industry is required to maintain public trust and confidence in the banking industry; to run an efficient financial system without excessive risk exposures; to establish an efficient and reliable depository and financing system to propel the wheels of the economy. Most of the existing literature focused mainly on non-bank firm governance and have narrowly focused on the bank governance issues. In order to promote good governance in the banking sector, regulatory response is being provided by the Bangladesh bank and other regulatory organizations.

Generally, the financial performance of banks and other financial institutions have been measured using a combination of financial ratio analysis, benchmarking, measuring performance against budget or a mix of these methodologies. Much of the current banking performance literature described the relationship between risk and return and focused too much on asset and liability management. There is a generally accepted relationship between risk and return, that is, the higher is the risk, the higher is the expected return; hence, it is most essential to maintain parity between risk and return. But, risk management in the banking sector of Bangladesh is a relatively newer practice. In recent years, the Basel Committee is guiding the world's banking sector regarding risks issue. Like the central banks of other countries, Bangladesh is following various Basel pacts and different core risk guidelines implemented by the Bangladesh Bank. Following subsequent implementation of core risk management guidelines by the Bangladesh Bank, all banks have already established separate division namely Risk Management Division headed by Chief Risk Officer. In spite of various risk management measures and tools, some financial scams have taken place in some banks in the last few years. The government has to raise the non-developmental capital expenditure each year due to increase in allocation on account of recapitalization of the scam-hit State Owned Commercial Banks (SCBs) and acquisition of shares and equities. Evidently, question has arisen regarding the efficacy of the lending risk analysis process for selection of loan proposals as well as the overall management of credit by the banking sector of Bangladesh.

The credit policy of any bank is a combination of certain accepted, time tested standards and other innovative devices as the demand of time. The accepted standards are related to safety, liquidity, and ultimately, profitability of the investment proceeds, whereas, the innovations are related to exploration of newer forms of risk factors emerging in the credit arena, managing those factors through innovative tools, and extensive monitoring and supervision of credit for timely and optimal level recovery of loans and advances with a view to maintain the goal of making profit which is the precondition for the survival of the financial institutions.

1.2 Statement of the Problem

One of the most talked about issues concerning Bangladesh economy now-a-days is the meager state of affairs of the banking sector with special reference to the Nationalized Commercial Banks (NCBs), now a day termed as State Owned Commercial Banks (SCBs). The SCBs are in challenge with many problems including crisis in efficient management, high default rate leading to increasing non-performing loans and deteriorating customer service standards. An alarmingly high rate of default, especially of willful default, has put undue pressure on banks' capability to increase investment and/or reduce lending rate despite high profile demand for such promotional intervention of the banks to boost up the economy. Time is more than matured for us to make a dent into the situation to arrest the rising trend of default, inject fresh funds in productive sectors in one hand and the other to save the banking sector as well as the economy as a whole. Banks and lending agencies in the country have become hostages in the hands of only a few rich families who borrowed heavily from them but never paid back. Flawed credit delivery system, high debt equity ratio, delayed credit disbursement, and inappropriate loan repayment installment, are the main reasons for it.

Credit risk management is important for bank managers because it determines several features of a loan: interest rate, maturity, collateral and other covenants. Riskier projects require more analysis before loans are approved. If credit risk analysis is inadequate, default rates would be higher and push a bank into insolvency, especially, if the markets are competitive and the margins are low. Credit risk management has become more complicated over time because of the increase in off-Balance Sheet activities that create implicit contracts and obligations between prospective lenders and borrowers. Credit risks of some off-balance-sheet products such as loan commitments, options, and interest rate swaps, are difficult to assess because the contingent payoffs are not deterministic, making the pricing of these products complicated.

In 2005, Bangladesh Bank undertook a project to review the global best practices in the banking sector and examined the possibility of introducing these in the banking industry of Bangladesh. Four 'Focus Groups' were formed with participation from State Owned Commercial Banks (SCBs), Private Commercial Banks (PCBs) & Foreign Commercial Banks (FCBs) with representatives from the Bangladesh Bank as team coordinators to look into the practices of the best performing banks both at home and abroad. These focus groups identified and selected five core risk areas and produced a document that would be a basic risk management model for each of the five 'core' risk areas of banking.

The five core risk areas are as follows:

a) Credit Risks;

b) Asset and Liability/Balance Sheet Risks;

c) Foreign Exchange Risks;

d) Internal Control and Compliance Risks; and

e) Money Laundering Risks.

Bangladesh Bank in one of its circular (BRPD Circular no.17) advised the commercial banks of Bangladesh to put in place an effective risk management system by December, 2003 based on the guidelines sent to them. In this study, I will try to make a comparative analysis of existing credit risk management policies, procedures and practices among State Owned Commercial Banks (SCBs) in Bangladesh in light of Bangladesh Bank's suggested best practices guidelines for managing credit risks and their impact on the loan recovery scenario as well as the level of nonperforming loans on the overall the banking sector.

1.3 Objectives of the Study

The objectives of the study are:

- To focus the major characteristics and practices of lending risk analysis made by State Owned Commercial Banks (SCBs) in Bangladesh.
- To make an overview of the performance of SCBs in Bangladesh that will reflect their operating efficiency as well as the effectiveness of credit risk analysis and management aspect.
- To know the volume and trend of Non Performing Loans (NPL) of the SCBs.
- To identify the causes for the rapid default culture and possible ways for mitigating them.
- To provide suggestions for productive uses of funds through planned approach in risk management of credit and overall development of SCBs in Bangladesh.

1.4 Rationale of the Study

Risk is inherent in all aspects of commercial operations. However, for banks and financial institutions, credit risk is an essential factor that needs to be managed. Credit risk is the possibility that a borrower or counter party may fail to meet its obligations in accordance with agreed terms. Credit risk, therefore, arises from a bank's dealings with or lending to corporate, individuals, and other banks or financial institutions.

Credit risk management needs to be a robust process that enables banks to proactively manage loan portfolios in order to minimize losses and earn an acceptable level of return for shareholders. Central to this is a comprehensive IT system, which should have the ability to capture all key customer data, risk management and transaction information including trade & foreign exchange. Given the fast changing, dynamic global economy and the increasing pressure of globalization, liberalization, consolidation and disintermediation, it is essential that banks have vigorous credit risk management policies and procedures that are sensitive and responsive to these changes.

Management of fund in any commercial bank is very important for its growth and stability. The unusual difference between cost of fund and return on working fund is very harmful for the financial base of any commercial bank. All the SCBs have severe financial difficulties and due to alarming situation, our government has appointed foreign consultants to review their financial performances. World Bank suggested that over staffing in SCBs should be reduced and even SCBs should be denationalized. There is a strong debate about this idea. It is the expectation of Bangladesh Bank that these guidelines will be adopted, particularly for those institutions that have a high rate of non-performing loans and weak credit risk management procedures. Moreover, SCBs have different social obligations, which are not mandatory bindings on the Private Commercial Banks (PCBs).The study will help to understand the needs of management of Credit Risks in the banking sector. It's an endeavor to know the intricacies of Credit Risks Management (CRM) of SCBs particularly, the problems and remedies in this regard. The research has the potential for connecting to efficient system of management of credit risks and measuring the long term effects thereof to improve the asset quality of the banks. This study will also put emphasis on the reform measures of the banking system of Bangladesh along with economic outcomes of the reform measures. The banking system followed arms-length model since the 1990s by undertaking a broad based reform program in the name of FSRP. Afterwards, it undertook BRC/CBRP programs, liberalized interest rate policy, and adopted risk based capital adequacy norms to foster competiveness and efficiency in the banking system. That's why this research will try

to examine the efficacy of financial reforms measures on the banking sector particularly, in respect to their contribution towards credit risk management of SCBs. Because, accurate and proper risk management device may improve financial stability in the banking system as a whole which is very essential for a sustained economy of Bangladesh.

1.5 Hypotheses of the Study

To conduct the study, the following hypotheses have been developed:

1. Net profit cannot be explained by total income, total expenditure, capital adequacy ratio, nonperforming loan and return on equity.
2. There is no positive correlation between effective lending risk analysis and productive uses of fund.
3. Efficiency in lending risk analysis varies within the SCBs.

1.6 Methodology of the Study

In conducting the present study "Lending Risk Analysis of the Nationalised Commercial Banks in Bangladesh," the research methodology has been designed in such a way that helped accomplishing the research objectives by minimizing the constraints of time and other limitations. According to the title of study and its objectives, the study has been based primarily on secondary data.

1.6.1 Sample of the Study:

The proposed study has selected four State Owned Commercial Banks (SCBs) earlier termed as Nationalized Commercial Banks (NCBs) in Bangladesh. The selected Banks are:

01. Sonali Bank Ltd.
02. Janata Bank Ltd.
03. Agrani Bank Ltd.
04. Rupali Bank Ltd.

1.6.2 Sources of Data:

The proposed study is intended to conduct based on secondary sources of data, both printed and electronic in nature. The secondary sources of data include Annual Reports of the concerned banks (SCBs), different annual and semi-annual publications of Bangladesh Bank, Ministry of Finance, Bangladesh Institute for Bank Management (BIBM), Bangladesh Bureau of Statistics, Bangladesh Economic Survey, Governmental and Non-Governmental Publications, Publications of International agencies like IMF, World Bank, Asian Development Bank, journals and periodicals on economics and business.

1.6.3 Period of the Study

This study covers the period from 1993 to 2012 on the basis of availability of data. To draw the real picture of banking sector performance in Bangladesh, last five years' data have been used and these data were published in the annual reports, Economic Trends, Credit and Information Bureau of Bangladesh Bank.

1.6.4 Analysis of the Research: The research has been analyzed based on the qualitative and quantitative phenomenon.

A. Qualitative Analysis: In order to review the reform measures undertaken so far in the banking system of Bangladesh, the study divides the reform measures into four phases. These are:

(1) Ownership Reform (1982-89),
(2) Financial Sector Reform Project (FSRP) [1990-95],
(3) BRC/CBRP (Commercial Bank Reforms Program) (1996-2002)
(4) Current reforms programs (BASEL-2) (2003-onwards).

Structural issues with respect to consultants, manpower, costs, timing and implementation of each reform measures have been examined on the basis of reviewing documents related to agreements.

B. Quantitative analysis: Some statistical and financial tools have been used to carry out quantitative analysis. The analytical methods are stated below:

Statistical Techniques:

In order to analyze and interpret data obtained from various sources different statistical tools and techniques have been used in this study. The Major statistical tools/tests like Central Tendency, Standard Deviation (SD), Coefficient of Variation (CV), Growth Rate, Log Linear Model for growth rate, Correlation, Regression Analysis, 'T' test, 'F' test, ANOVA etc. have been followed to analyze data and test the hypotheses. Computer software Excel and SPSS have been used to represent various necessary models. The statistical tools employed are:

Mean

The most popular and widely used measure for representing the entire data by one value is, what most laymen call an 'average' and what the statisticians call the arithmetic mean. Its value is obtained by adding together all the observations and by dividing this total by the number of observations.

The arithmetic mean, often simply referred to as mean, is the total of the values of a set of observations divided by their total number of observations. It is calculated by applying the formula.

$$\bar{X} = \frac{\sum X}{N}$$

Where, $\bar{X}$ = Arithmetic Mean

$\sum X$ = Value of observations

N = Number of observations

Standard Deviation

It is by far the most important and widely used measure for the study of dispersion. It satisfies most of the properties of a good measure of dispersion. Standard deviation is also known as the root-mean square deviation. The square of the standard deviation is called the variance. It is conventionally symbolized by σ (sigma). The formulas for standard deviation for ungrouped and grouped data by direct and short-cut methods are given below:

$$\sigma = \sqrt{\frac{\sum (x - A)^2}{n} - \left\{\frac{\sum (x - A)}{n}\right\}^2}$$

Where,

σ = Standard deviation.

A = Mid-value of class interval.

X = The individual value.

n = Number of observations.

For frequency distribution with unequal size class internal the formula by short-cut method is given below:

$$\sigma = \sqrt{\frac{\sum f(x - A)^2}{n} - \left\{\frac{\sum f(x - A)}{n}\right\}^2}$$

where,

A = Assumed mean

f = Class frequency

x = Mid – value

n = Total frequency.

Co-efficient of Variation

It is one of the important relative measures of dispersion.

$$C.V = \frac{\sigma}{x} \times 100$$

where, C.V = Co-efficient of variations

σ = Standard deviation

$\overline{X}$ = Mean value

Standard Error of Estimate

The standard error of estimate, measures the variability or scatter, of the observed values around the regression line the equation of standard error is given below:

$$S_e = \sqrt{\frac{(Y - \hat{Y})^2}{n - 2}}$$

where,

Y = Values of dependent variable

$\hat{Y}$ = Estimated values from the estimating equation that correspond to each Y values.

n = Number of data points used to fit the regression line.

Analysis of Variance (ANOVA)

ANOVA is a test for the significance of the differences among more than two sample means. It is able to make inferences about whether the samples are drawn from populations having the same mean. Analysis of variance (ANOVA) has always been playing a vital role in the field of empirical research where the ability to examine the effects of many different variables.

$$F = \frac{\text{The variance among the sample means}}{\text{The variances within the samples}} = \frac{S^1{}_2}{S^2{}_2}$$

t- test

It is the technique to test the hypotheses about the mean of a normal population whose standard deviation is unknown.

$$t = \frac{\overline{X} - \mu}{S_e}$$

Where,

$\bar{X}$ = Population mean

μ = Sample mean

S_e = Standard error of the mean

Correlation

To evaluate the inter-relationship between various financial variables under study in determining the capital structure Correlation coefficient is used. The formula used to calculate the Correlation coefficient of any two variables is:

$R = Cov_{(x,y)} / N\sigma_X \sigma_y$

Where,

R = Correlation co-efficient,

$Cov_{(x,y)}$= Co-variance of x, y,

σ_X = Standard deviation of x,

N = Number of Pairs of Observations

Simple Regression

Simple regression is used to find out linear growth rate of various financial variables under study over the given period time (in our study for 15 years period). The equation applied to find out the linear growth rate is as follows:

$$\mathbf{Y = a + bX}$$

Where,

Y = Financial variable used in the study,

X = Time,

a = Constant, and

b = Growth Rate

Multiple Regression Equation

In order to estimate the degree and extent of linear – relationship between a dependent variable and the number of independent variables, multiple linear regression equation is used. In our study, multiple regression equation is used as determinants of capital structure and also used to find out degree and extent of relationship of each financial variable with respect to its financial ratios.

The following is the multiple regression equation, which is used to determine the capital structure:

$$Y_i = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_n X_n + \mu$$

Where,

Y_i = Debt Ratios

Where I = 1….3 indicating the three debt ratios such as Total Debt ratio, Long-term debt ratio & Short-term-debt ratio.

Xi….Xn = Various financial ratios used as independent variables.

α = Constant (Intercept).

$\beta_1 \ldots \beta_n$= Coefficient of respective financial ratio variables.

The multiple regression equation used to find out the degree and extent of relationship of financial variable with respect to its ratios is as follows:

$$Y = a + b_1 X_1 + b_2 X_2 + e$$

Where,

Y = Financial ratio calculated using the variables $X_1$and X_2

$X_1 \ldots X_2$ = Financial variable used to calculate Y

a = Constant

b_1, b_2 = Beta values (degree of relationship).

The overall variance and regression coefficients calculated using the above equation are tested with student 't' values and the goodness of fit of the estimated equation is worked out with the help of R^2 and Adjusted – R^2 and its significant level is tested with 'F' ratios.

Log-Lin Model of Growth Rate

We know the compound interest formula uses in the money, banking and finance is:

$$Y_t = Y_o (1 + r)^t$$

Where r is the compound rate of growth of Y, taking the natural logarithm, we can write,

$$\text{In } Y_t = \text{In } Y_o + t \text{ In } (1 + r)^t$$

Now Letting

$$\beta_1 = \text{In } Y_o$$

$$\beta_2 = \text{In } (1 + r)$$

It can be written as, $\text{In } Y_t = \beta_1 + \beta_2 t$

Adding the disturbance term, we obtain

$\ln Y_t = \beta_1 + \beta_2 t + u_t$

This model is like any other linear regression model in that the parameters β_1 and β_1 are linear. The only difference is that the regressand is the logarithm of Y and the regressor is "time," which will take values of 1, 2, 3, etc. This model is called **Semilog Model** because only one variable appears in the logarithmic form. For descriptive purposes a model in which the regress and logarithmic are there will be called a **Log-lin Model**.

Financial Tools:

The following Financial tools have been used for getting financial picture of different banks.

Ratio Analysis: To show the effect of the financial reforms on the performance of the banks, some ratios have been used in the study such as profitability ratio, nonperforming loan ratio, capital adequacy ratio, liquidity ratio, capital to risk weighted asset ratio, expenditure to income ratio, return on asset ratio and return on equity ratio etc. The details of the ratios are given below:

1) Return on asset ratio = Net Income/Total assets.
2) Return on equity ratio = Net income/Shareholder's equity.
3) Income to expenditure ratio = Total income/Total expenditure.
4) Return on asset ratio = EBIT/Total asset.
5) Return on equity ratio = EBIT/ Shareholder's equity.
6) Nonperforming loan ratio = Nonperforming loan/Total loan outstanding.
7) Capital to risk weighted asset ratio = Equity capital/ Risk weighted asset.
8) Nonperforming loan to total loan ratio = Nonperforming loan / Total loan
9) Net nonperforming loan to total loan ratio = Net nonperforming loan / Total loan

Trend analysis: Trend analysis of different variables of State Owned Commercial Banks (SCBs), and individual bank have been used to measure the impact of banking sector reforms on the financial performance and growth of the banks in Bangladesh. The research will include the following:

1) Trends of net profit after tax of SCBs.
2) Trends of classified loan amount of Sonali Bank Ltd.
3) Trends of classified loan amount of Janata Bank Ltd.
4) Trends of classified loan amount of Agrani Bank Ltd.
5) Trends of classified loan amount of Rupali Bank Ltd.

1.6.5 SWOT Analysis

In this section, the strength, weakness, opportunity and threats of the State Owned Commercial Banks (SCBs) have been analyzed based on findings from the qualitative and quantitative data thereof considering the other competitors in the industry like Private Commercial Banks (PCBs), Foreign Commercial Bank (FCBs), and Development Financial Institutions (DFIs).

1.7 Organization of the Thesis

The thesis consists of nine chapters. Chapter one covers the introduction, statement of the problems, purpose and objectives of the study, Hypotheses of the study, Rationale of the study, and organization of the thesis. The second chapter deals with the Review of Literature and their limitations. The third chapter covers the Theoretical Framework, Terms, and Concepts used in the Study. Chapter four includes the Banking System in Bangladesh. Chapter five covers Credit Risks Grading Techniques & Guidelines of Bangladesh Bank. Chapter six deals with the Financial Performance of Banking sector in Bangladesh. Chapter seven presents Lending Risk Analysis and its impact on the Selected Banks. In Chapter eight, attempts have been made to identify the problems and to recommend some policy guidelines. Finally, Chapter nine contains the conclusion of the thesis.

Chapter Two

Review of Related Literature

Prelude

Among the several reform measures that Financial Sector Reforms Program (FSRP) recommended, Lending Risk Analysis (LRA) constitutes an important technique which was prescribed for minimizing and averting risk in the lending activities. But the LRA practices in lending activities in banks have been suffering due to non-compliance of risk-adjusted loan pricing methodology, follow-up and monitoring mechanism based on completed LRA, data insufficiency, inadequate auditing practices to identify documentation and security irregularities, etc.

In this chapter an attempt has been made to highlight the major research works done related to the field of lending risk analysis. For the sake of this research, the following articles and writings of different authors related to this topic have been reviewed.

Kumbirai and Webb (**2010)** studied the performance of five South African commercial banks for the period 2005 – 2009. They aimed at identifying and explaining the differences in the profitability, liquidity, and credit quality of commercial banks between pre-GFC (2005-2006) and post-GFC (2008-2009) periods. The researchers employed financial ratio analysis (FRA) to evaluate the performances of the select five big banks. The measures that had been used to analyze the profitability performance were Return on Assets (ROA), Return on Equity (ROE), and Cost to Income ratio (C/I). Liquid Assets to Deposit Borrowing ratio (LADST), Net Loans to Total Assets ratio (NLTA), and Net Loans to Deposit and Borrowing (NLDST) ratio had been used to show comparison liquidity performance. Loan loss reserve to gross loans (LRGL) was used to understand asset credit quality (credit performance). The results showed that the banks were in better conditions in pre GFC era in terms of profitability, liquidity, and credit quality.

Another study conducted by **Abbas, Tahir, and Rahman (2012**), examined the financial performance of five commercial banks of Pakistan during the five year period from 2007 to 2011. The main idea of this study is to observe that whether the banks are using their assets and equity according to their investment or not. The findings of this study shows that the ranking of top five Pakistani commercial banks based on their total average assets, total operating fixed assets, total average equity and return on the respective variable. These

results are according to the present situation of the market and matched with the situation in industry. This study is an crucial contribution. They used Return on Operating Fixed Assets (ROFA) to understand how it impacts the profitability of commercial banks, in addition to other dependent variables like Return on Asset (ROA), Return on Equity (ROE), and Growth and Average of the Assets and Equity.

Almazari (2012) attempts in his study to measure the financial performance of the Jordanian Arab commercial bank for the period 2000-2009 by using the DuPont system of financial analysis which is based on analysis of return on equity model, which is further disaggregated into three components: net profit margin, total asset turnover, and the equity multiplier. The DuPont system of financial analysis shows the performance of The Arab Bank over the years from 2000-2009 and the impact of the world financial crisis that hit the region in the recent years of that country. Though there was a negative impact of the recent financial crisis on most banks of the world but this impact hit slow the performance of Arab Bank of Jordan.

A study carried out by **Sufian and Kamruddin (2012),** identifies bank specific characteristics and macroeconomic determinants of profitability in the Bangladesh's banking sector over the years 2000 to 2010. The study uses related data from a sample of 31 commercial banks in Bangladesh. The results bring out five bank specific factors that are vital in influencing profitability: capitalization, non-traditional activities, liquidity, management quality, and size of the bank. Besides, three macroeconomic determinants crucially influence profitability including growth in GDP, inflation and concentration.

The empirical study by **Ongore and Kusa (2013**) shows that capital adequacy, asset quality and management efficiency significantly affected the performance of commercial banks in Kenya. The findings also perceived that poor asset quality or high non-performing loans to total asset led to poor bank performance. In other words, banks with high asset quality and low non-performing loan are more profitable than the others bank.

Mehta (2012) studied all banks listed on Abu Dhabi Stock Exchange covering a period of 2005 to 2010, which had been classified into before crisis, during crisis and after crisis periods. The performances of the banks had been measured by leverage, liquidity and profitability ratios. The results of the study concluded that the recent global crisis had impacted the UAE bank's financial performance especially the profitability measured by Return on Assets and Return on Equity. Liquidity of banks had also decreased during the crisis period especially in terms of cash and portfolio investments to deposits, while the leverage ratios of UAE's baking sector have increased during the crisis period.

In his recent research work **Okpara (2011**) examines the effectiveness of banking reforms on the performance of the sector. The variables were selected of commercial banks' liquidity ratio, cash reserve ratio, commercial banks loan to deposit ratio; nonperforming loans to total loans (NPLTLoan), yield on earning assets (YieldEamAst), return on equity (ROE), return on asset (ROA) financial deepening's engendered by the banking system namely credit to private sector/GDP, net domestic credits over GDP (NDC/GDP) and also M1 over M2 (M1/M2) since banking system played very important role in the money supply process. The study found the remarks that of all reforms adopted so far since 1959, only the financial liberalization (of 1987-1993) impacted much on most of the banking sector variables and the financial deepening. The reform era 1999-2003 which saw the return to liberalization of financial sector accompanied with the adoption of distress resolution process and universal banking impacted significantly on few variables like cash reserve ratio and loan to deposit ratio.

Ahmed (2012) examines the degree of concentration and performance of the Bangladesh banking industry for the period 1999-2011 by using the random effects (RE) estimator. It applies two competing hypotheses of the traditional industrial organization theory e.g. the structure conduct performance (SCP) paradigm and efficient structure hypothesis (ESH) to analyze the relationship between the concentration and competition in the banking sector. The results of the main sample (1999-2011) do not find any relation for either of the hypotheses. However, a sub-sample (2002-2011) of the study supported the SCP hypothesis that the profitability of Bangladesh banking market is determined by concentration and not by the market share of banks. It implied that concentration lowers the cost of collusion between banks and results in higher than normal profits for all market participants. Bank performance was positively associated with capitalization, liquidity and assets size of the banks. The ownership variable suggested that government-owned banks are less profitable than other commercial banks in the market.

Turkmen & Yigit (2012) examines the effect of sectoral and geographical diversification on the performance of Turkish banks and try to find out how the diversification affects banks' performance. The study asks whether diversification via sectoral and geographical credits helps banks. To examine the relationship between the credit diversification and performance of 50 Turkish banks between the time period of 2007 and 2011, data sources of Banking Regulation and Supervision Agency (BRSA), The Banks Association of Turkey (BAT) and Istanbul Stock Exchange (ISE) is used. Because of the mergers and acquisitions and being

closed, it is failed to reach some of bank data in 2007-2011. On the hand the study is analyzed on 40 banks' data. In the present study, ROA (Return on Assets) and ROE (Return on Equity) are used as measure of performance and Herfindahl Index (HI) have been used as a measure of diversification of banks. The number of credits and the amount of credits that banks let borrowers' use are employed as control variables. According to the result of the analysis it is concluded that dependent variables ROA and ROE are explained by diversification.

Yudistira (2004) addresses the efficiency of Islamic bank the overall efficiency through empirical studies results suggest that inefficiency across 18 Islamic banks is small at just over 10 percent, which is quite low in comparison to many conventional counterparts. Islamic banks in the sample affected from the global crisis in 1998-1999 but performed very well after the crisis periods. The findings show that there are diseconomies of scale for small-to-medium Islamic banks which concludes that mergers should be encouraged.

Berger, Clarke, Cull, klapper & Udell jointly analyze that it is important to include indicators of all the governance effects in the same model. "No robustness" checks (which purposely exclude some indicators) support this argument. Using data from Argentina in the 1990s, our strongest and most robust results concern state ownership. State-owned banks have showed poor long-term performance (static effect), those undergoing privatization had particularly weaker performance beforehand (selection effect), and these banks dramatically improved following privatization (dynamic effect). Besides, much of the measured improvement is likely due to placing nonperforming into residual entities, leaving "good" privatized banks.

Das & Ghosh (2004) examine the Indian banks during the post reform period the efficiency of Indian banks using nonparametric Data Envelopment Analysis (DEA) approach over the period 1992 to 2002. DEA is a methodology for estimating the relative efficiency and managerial performance of productive units, having the same set of inputs and outputs. Besides, it enables to compare of the relative efficiency of banks by determining the efficient banks, which span the frontier. In effect, the paper examines five important issues relating to the efficiency of Indian banks. At first, what do data find regarding the convergence of performance, efficiency of banks during the post reform period, efficiency varies across ownership patterns, correlation of with bank size, banks' capital position correlation with efficiency, and relation of quality of banks' assets with their efficiency levels. The paper also examines how efficiency differs among the peer groups' In addition, the paper find out the proximate sources of (in) efficiency under both univariate and multivariate framework and relates the findings to the ongoing reforms undertaken in India.

Raza, Farhan & Akram (2011) research that Investment banks are the major contributors in economic development of a country's. They have vast impact on capital and credit markets of a country's economy. This study presents comparison of financial performance for the period 2006–2009 by using financial ratios and analyze of investment banks working in Pakistan. Financial ratios were divided into three main categories and measures including two indicators. Seven investment banks out of nine are selected for analysis to compare for analytical purpose. This work concludes that the performance of investment banks on the basis of efficiency ratio was different than on the basis of liquidity ratio, capital or leverage ratio and financial measures. Because of the unavailability of data of other two banks, the results were compiled from the data of seven banks. The findings were consistent with the analysis reported by the central bank of Pakistan (State Bank of Pakistan, SBP) in its report for financial sector analysis 2006-09. This study also equipped the managers with critical information about different activities of banks which have a high impact on the financial performance of investment banks.

Kalluci (2011) examines that banking industry is the most important element of the Albanian financial system and therefore it requires more attention when it comes to financial analysis. This paper analyzed theoretically and analytically some indicators of risk and performance, and for the first time ever, it presents a methodology for calculating a risk index for the Albanian banking system. Its aim is not simply to show some financial indicators or measures of risk and return, but, more importantly, to suggest some factors and a risk index that may be helpful to supervisors during their work.

Nimalat Hasan (2008) research highlights the comparison of financial performance of banks. The sample for this studies all branches of the banks in Bangladesh. Secondary data were used for the present study. The annual data for all banks during the financial years of 1999-2006 are used for rating performance of the banks. In addition another source of data was through references to the library and the review of different articles, papers, and relevant previous studies. The analysis on the bank performance was based on CAMELS rating techniques for performance evaluation of a bank. CAMELS rating system shows that 3 banks was strong 01, 31 banks were rated 02, satisfactory, rating of 7 banks was 03 fair, 5 banks were rated 04 or Marginal and 02 banks got 05 or unsatisfactory rating and other 3 NCBs had marginal ratings.

Anwar and Deepty's research paper investigated the efficacy of bank governance in improving asset performance and capital adequacy standard for private commercial banks of Bangladesh. The broad objective of this paper is to ascertain the governance effectiveness in handling corporate performance of PCBs. Of the 30 PCBs, 15 commercial banks were taken for the purpose of assessing their compliance to regulations based on capital and asset. The asset performance was assessed in the backdrop of nonperforming loan ratio and the capital adequacy standard of banks were assessed in dynamics of capital adequacy ratio over the period of 1999-2008. Governance variables were considered as independent variables. 15 banks had been taken as dependent variables. The finding of the report is that the directors are heading the audit committees in each and every PCB. Growth in director's remuneration has been evident in the study to be grossly devoid of any role towards improvement of compliance. On the other hand findings of this report suggest that governance may have a direct and important bearing upon implementing policies and procedures towards improving their credit discipline.

Hossain, Kumar, Hasan, Islam (2012) analyzed the financial performance of Janata Bank Limited. The specific objectives were to get an overall idea about Janata Bank Limited and to measure the profitability of Janata Bank Limited. The main sources of data has been used in the study were secondary data such as annual reports, annual accounts, and official records of Janata Bank Limited. Moreover published literatures and journals, Bangladesh Bank booklets, websites of different banks websites of banks and books are used. The data collected for the purpose have been researched and examined critically on the light of various statistical techniques and selected ratio.

Fogelberg and Griffth research examined the relationship between management ownership and firm performance for a sample of commercial bank holding companies. The sample consists of 100 bank holding companies obtained from the Stern Stewart & Co. 1997 database for year ending 1996. The authors implemented standardized measures of EVA. It is an economic measure of performance and tells us how much management increased shareholder's wealth. The report found that there is no relationship between when the CEO is also Chairman of the Board and bank performance. This result are somewhat contrary to those of Pi and Timme (1993), who find that cost efficiency and return on assets are negatively related to CEO-Chairmanship.

Islam & Salim (2012) researches show the comparison of the performances of Banks in Bangladesh. The methodology of this study has used the comparative performance that are

most commonly used measures such as general business measures, profitability measures, management soundness measures and social profitability measures. The study examines that in spite of a few exception in general Islamic banks overall performance was better than the conventional banks.

Manole & Gardner (2002) research examine the indicators of financial efficiency by using Data envelopment analysis, a new method of performance analysis. The seventeen transition countries bank is implemented as a sample data from 1995-1998. The research is conducted on data set complied by Bank Scope. It concludes the difference in efficiency among the transition countries banks.

Roodposhti, Lotfi & Ghashemi (2010) research show an analytical model for performance evaluation of banks. The objective of this report is to show an analytical model for performance evaluation of banks .This report aim to this article is comprising DEA (Data Envelopment Analysis) and BSC (Balanced Scorecards) Methods to achieve most meaningful evaluation of organization without any personal opinion and also, Performance Evaluation implementation through a comprising method which brings the entire path on to the main target in Phasing algorithm model.

In **Makkar and Singh (2013)** study CAMELS rating methodology are used in the study to measure the performance of the considered banks. The results of the 't' - test disclosed that there is a significant difference in the Capital Adequacy, Asset Quality and Earning Capacity of public and private sector banks in India, while there is no significant difference in the Management, Liquidity Position and Sensitivity to market risk of the two different banks groups. The study concluded that on an average, there is no statistically significant difference in the financial performance of the public and private sector banks in India, but still, there is a need for overall improvement in the public sector banks to make their position strong in the competitive market.

Sangmi and Nazir (2010) used CAMEL parameters (the latest model of financial analysis) in order to measure whether the position of the banks is sound and satisfactory so far as their capital adequacy, asset quality, management capability and liquidity is concerned.

Matkar (2012) uses CAMEL model - a recognized statistical tool for measuring the financial performance of a MSC Bank in retail banking products. Ratio analysis, one of the most important statistical techniques of financial statement analysis is generally used to find out the financial performance in CAMEL model. With the help of ratio analysis technique, an attempt has been made under this study to observe the improvements in performance or development in retail banking products of MSC Bank.

Murthy (2007) uses the break even analysis and factors separation analysis give fair idea of the past performance of the bank. In the light thereof the bank has to diagnose the past, look into the future, anticipate the course of events and prepare strategies for improving the productivity and operational efficiency of the bank. As part of the profit planning, the bank should devise strategies for reduction of costs, maximization of revenues and optimal utilization of all its resources including the human resources.

Selvam, Radjaramane (2012) focused on the performance of the nationalized banks in the context of the Indian economy. The performance is being carried out with the help of certain crucial operational variables of the banks including total business, expenditure, deposits, advances, profits etc. To identify the relative performance of the operational variables the linear and compound growth rates have been calculated. The positive or negative signs of the growth rates worked out are interpreted as the acceleration or deceleration of the variables for the study period. The significance of the growth is being tested with the help of the't' statistics worked out for both linear and compound growth rates. The growth rates worked out indicated that on the average in the case of a majority of the operational variables, the performance of the nationalized banks followed by private sector banks is found to be higher when compared to SBI and its associates and foreign banks.

Singh & Tandon (2012) Ratio Analysis is applied to analyze and compare the trends in banking business and financial performance. Mean and Compound Growth Rate (CGR) have also been deployed to analyze the trends in banking business profitability.

Azhagaiah and Gejalakshmi (2012) The regression analysis used in the study to estimate the impact of predictor variables on the responding variable shows that the financial performance of the banks, specifically the public sector banks is strongly and positively influenced by the operational efficiency, asset management, and the interest income size. This was supported with the correlation analysis, which shows the existence of positive relationship between the ROA, ASSTUTZ and OPEFF. The overall banking industry in India is strongly influenced by asset utilization (ASSTUTZ), Operational Efficiency (OPEFF), log of asset size (log of ASSTSIZ), return on assets (ROA) and interest income (INTINC). The private sector banks are positively influenced by asset utilization (ASSTUTZ), operational efficiency (OPEFF) on interest income (INTINC) while the public sector banks are strongly and positively influenced by operational efficiency (OPEFF), asset management (ASSTMGT), return on assets (ROA) and interest income (INTINC).

Alkhatib (2012): Financial performance has been measured by using three indicators; Internal–based performance measured by Return on Assets, Market-based performance measured by Tobin's Q model (Price / Book value of Equity) and Economic–based

performance measured by Economic Value add. The study employed the correlation and multiple regression analysis of annual time series data from 2005-2010 to capture the impact of bank size, credit risk, operational efficiency and asset management on financial performance measured by the three indicators, and to create a good-fit regression model to predict the future financial performance of these banks. The study rejected the hypothesis claiming that "there exist statistically insignificant impact of bank size, credit risk, operational efficiency and asset management on financial performance of Palestinian commercial banks".

Shah & Nisar (2012): Bank size and financial ratio are taken as variables such as efficiency /profitability ratio, capital /leverage ratio, liquidity ratio and asset quality ratios. Study concludes that ranking of banks differ as the financial ratio changes. Eighteen financial ratios were estimated to measure these performances in term of profitability, liquidity, risk and solvency, capital adequacy, deployment and operational efficiency. Independent sample t-test and ANOVA was used to determine the significance of mean differences of these ratios between and among banks. The study concluded that Islamic banks proved to be more liquid, less risky and operationally efficient than conventional banks.

Ansari & Khalil Rehman (2011): Explanatory variables are Total Loans/Total Assets, Deposits/Total Assets, Total Expenses/Total Assets, Non-Interest Expenses/Total Expenses and Total Equity/Total Assets. Multiple regression Model is used to compare this financial performance. Descriptive Statistics, Correlation Matrix and F-Statistics are used to analyze the impact of explanatory variables.

Kouser & Saba (2011): The Study is based on the quantitative research design. Business combinations' effects are investigated on firm's performance measures. This section of thesis report presents the information about the variables of the study, sample of Study, hypotheses formulated, quantitative methods used and analysis tools. As research study is based on the comparative analysis, so that's why it mainly focuses on independent variables. Dependent variable here is the acquisition of firm, and independent variables are six performance measures:

Gross Profit Margin, Operating Profit Margin, Net Profit Margin, Return on Capital Employed, Return on Net worth & Debt Equity Ratio .These variables are analyzed to measure the financial performance of companies, whether there was a momentous improvement of the monetary condition of the company after acquisition.

Zakir, Afjal, Masrick & Islam (2012) Researchers used different ratios and statistical tools to measure the financial position of the bank. Maximum results (profitability ratio, productivity ratio, spread ratio etc) of the study are positive. Very few ratios (burden ratio-noninterest expenditure as percentage of working fund) in some years are not satisfactory, but except these few results overall calculated results show good sign for the bank. If the bank tries to recover some of its limitations it will enhance its performance in future.

Guisse (2012) showed that profitability of commercial banks can be influenced by several factors, such as liquidity, credit, capital, operating expenses, and the size of the banks. Measuring the profitability in term of Return on Asset (ROA) and Return on Equity (ROE) for a panel of local and foreign banks can give a general idea about the effects of these factors to banking system. For this analysis, a panel regression methodology is applied to investigate the performance of these commercial banks within Malaysian's banking system empirically. In addition, a comparative study is carried out to show possible difference between the two categories of bank ownership from the perspective of performance and profitability.

Chowdhury & Ahmed (2009) this article analyzes five years data of selected private commercial banks of Bangladesh. For evaluating the performance of selected private commercial banks of Bangladesh data has been analyzed through the various statistical measures like growth percentage, trend equation, square of correlation coefficient, correlation matrix etc. Seven trend equations have been tested for different activities of the private commercial banks. Among them the trend value of branches, employees, deposits and net income are positive incase of all the selected banks. Square of correlation coefficient (r^2) has also been tested for all trend equations. The r^2 of branches deposits and net income is more than 0.5. It indicates the prospect of private commercial banks in Bangladesh is very bright.

Rayhan & Ahmed (2011) examined that among the various straight-line trend method of time series analysis, the method of least square is most popular and widely used in practice. The method of least square can be used either to a fit a straight trend or a parabolic trend. The straight-line trend is represented by the equation Ye = a + bx where, Ye denotes the trend values to distinguish them from the actual Y values. "a" is the Y intercept or the value of the Y variable when x= 0. "b" represent the slope of the line of the amount of change in Y variable that if associated with a change of one unit in x variable. X variable in the time series analysis represent time. The square of correlation coefficient (r^2) is called the multiple determinants or squared multiple correlation coefficients. The coefficient of correlation is denoted by r. The value of r lies between 0 and 1. The higher r^2 the greater the percentage of the variation of Y explained by the regression model, that is, the better the "goodness of fit" of the regression model to the sample observation r^2 closer to zero, the worse the fit. Entire data analysis was performed through SPSS.

Haneef (2012) attempts to measure the financial performance, here used return of assets, return on equity and dividend payout ratios. The study has used the secondary data, obtained from Stock market and annual financial reports of Pakistan. By applying the panel data, they have found significant relationships of domestic banks with the financial performance of the banks. Results show domestic banks performed better as compared to foreign banks in Pakistan. For this study there is one dependent variable that is financial performance. Measurement of financial performance is done with the help of ROA, ROE and Dividend payout. This research study has been conducted on the basis of pre-developed phenomena that domestic banks have better performance than foreign. Quantitative research methods have been used to collect and analyze the data because quantitative research approach is being widely used to test theory deductively from existing knowledge, by developing hypothesized relationships and anticipated results.

Saud (2011) uses the performance indicators ROA, ROE, and NSC were taken as the dependent variables to test the hypothesis. The variables in the regression analysis reacted differently to profitability indicators for entire Saudi banks. First, total assets, which measure the size of bank, impact negatively on Saudi banks, which mean that bigger banks are less profitable. Second, operating expenses, have a negative influence on bank's ROE and ROA, yet positive impact on NSC. Third, operating income has positive impact on bank's performance, which means increasing the activities of banks causes increase in banks performance.

Jiang's (2008) study is considered as the first study that comprehensively investigates bank performance using multiple methodologies of financial ratio analysis and stochastic frontier analysis for the period of 1995-2005. The effects of a variety of governance changes have also been differentiated in order to providing policy recommendations for the on-going banking reform. This study has addressed a number of methodological issues and has developed a more comprehensive stochastic distance function model by combining advantages of existing models, approaches, methods and procedures. Estimation methods are grouped into nonparametric and parametric methods. Both are well established with no consensus regarding which is superior to another and each fits different research issues.

Saha, Sujit, M. Saidur Rahman and M. Mosaddake-Ul-Alam (2001) wrote an article on "An Evaluation of LRA Practices in Banks in Bangladesh." In the late eighties, the Financial

Sector Reforms Project (FSRP) was instituted in Bangladesh with a view to bringing about financial discipline through undertaking some reforms measure in the financial sector of Bangladesh. Among the several reform measures that FSRP recommended, Lending Risk Analysis (LRA) constitutes an important technique which was prescribed for minimizing and averting risk in the lending activities. But the LRA practices in lending activities in banks have been suffering due to non-compliance of risk-adjusted loan pricing methodology, follow-up and monitoring mechanism based on completed LRA, data insufficiency, inadequate auditing practices to identify documentation and security irregularities, etc.. Under the present study the authors not only tried to investigate the problems that remain in LRA practices in banks but also made some recommendations to overcome such problems for improving the quality of lending.

Alam, M. Jahangir and Md. Hamid Uddin (2003) prepared a paper on "Impact of Socio Economic and Political Factors of Loan Repayment in Nationalized Commercial Banks of Bangladesh." In this paper various empirical studies on loan repayment performance of commercial banks have indicated that there are a number of factors affect loan repayment performance. Among others, socio economic and political factors such as economic conditions, political situations, social conditions and policies changes by the government are found to be significant factors that influence the loan defaulting by the borrowers. A linear regression model is employed to test the effects of above factors on the loan repayment performance. Results show that GDP growth rate, profit margin and sales growth in the undustry help decrease in the loan default rate, but crimes and hortals help increase in the rate. The empirical model estimated in this paper would help predicting the loan defaults in the nationalized commercial banks, which will be useful for redesigning loan recovery procedure in the light of expected changes in the socio economic and political environment of the country.

Taleb, M. Abu (2003) in an article on "Lending Risk Analysis and Its Application in Lending Decision: An Evaluation" has observed that Lending risk analysis as a technique, has currently been used in all the bank's of our country excepting Bangladesh Krishi Bank (BKB), Rajshahi Krishi Unnayan Bank (RAKUB), and Bangladesh Shilpa Bank (BSB) of evaluation of loan proposal of borrowers those requires a bank loan of exceeding Tk. 1 (one) crore. It was introduced in the banking sector of Bangladesh in 1993 as a part of reformation program undertaken by the Financial Sector Reform Project (FSRP) of Bangladesh Bank in

order to eliminate the ever-increasing amount of bad debt loan in this sector. With this aim in mind this paper has been prepared to give an idea about the operational aspects of this new technique and highlights the problems that are a lending officer most frequently face in implementing this technique. To make this technique more effective, some recommendations like modification of LRA form with some additions, introduction of Data Bank for getting available information, and opening of an investigation department within a bank to examine reliability of the information provided by a borrower has given for its sound operation.

Jahan, Rounak, Helen O'Neill (2003) in the study on "Banking and Industrial Development: A Case Study of Bangladesh" examined the difficulties hampering efficient functioning of the banking system in promoting economic and industrial development in Bangladesh. The paper has been written on the basis of information collected from two nationalized commercial bank, two private banks and two industrial development bank of Bangladesh by using a structured and open-ended questionnaire. The study found that legal environment in which banks function is relatively poor. Despite financial sector reform program of the government there is lack of credit discipline. Loan sanctioning is dictated by political decisions. Loan taking entrepreneurs are not genuinely serious in utilizing the loan for the purposes for which these are granted and a chasm exists between banks and entrepreneurs. Banking system in Bangladesh is not properly equipped with trained manpower to perform its job.

Roni, Naheed Nawazesh and Muhammad Mujibul Kabir (1999) contributed an article on "Lending Behaviour of a Commercial Bank in the Semi-Liberalized Regime: A Case Study of Eastern Bank Limited." Financial sector reform program has brought about significant changes in the environment in which the commercial banks and other financial instructions operate. The new, largely liberalized environment thus created provides the opportunity to the banks to act on the prudence and business judgment of the bankers for profit maximization. This article examines the new environment and, using a simple model, the probable lending behavior of banks if they actually operate as a profit maximizer. The empirical result, based on a case study, shows that the bank we have studied does act as a profit maximizer. More specifically, the bank under study discriminates in lending to different sectors since such discrimination contributes to profit maximization. The empirical result confirms the behavior of the bank predicted by the model.

Islam, Muinul et al. (1999) published an article on "Bank Loan Default Problem in Bangladesh: A Dialogue between Borrowers and Lenders." The process of economic

development of Bangladesh has been seriously constrained by the continuing crisis of accumulation of defaulted bank loans. This paper attempts to discuss this vital issue and is designed to provide theoretical and empirical insights to this problem. Based on randomly selected 125 big bank loan default firms with Taka 10 million or more as defaulted loans, the study reveals that the key-persons (the persons behind the loan / business unit) have significant dominance in the composition of the board of directors. One of the striking finding of the study is that the majority of the key-persons have affiliation with political parties and most of them have frequently changed their political affiliation. Moreover, political connections have played a key-role in sanctioning a loan. Finally, some recommendations are made in the paper to overcome this problem. These include-appropriate legal reforms and enforcement of laws, recruitment of the ombudsman for the financial sector, de-politicization of governance of banks, etc.

Choudhury, Toufic A. et al. (1998) prepared a report on "An Evaluation of the Impact of Reforms in the Financial Sector." The report examined the pre-reform situation if the banking and financial sector of Bangladesh. It is also examined the reform objectives and measures so far undertaken in the financial sector of Bangladesh. The study evaluate the impact of the reform measures as well as to see whether the reform measures so far taken are sufficient to overcome the existing problems of our banking and financial system. The study has been undertaken mainly on the basis of secondary sources of data / information which include different publications of Bangladesh Bank, Financial Sector Reform Project, World Bank and Asian Development Bank. In addition, a number of top executives of the banking sector have been interviewed by the study team.

Azad, M. A. Kalam (2000) had a study on "Lending Strategy, Policy and procedure in Financing Small Scale Industry: A Case Study of Bank of Small Industries and Commerce Bangladesh Limited". The main objective of the study was to evaluate the lending operations of BASIC Bank. The study examines the main objectives and functions of BASIC Bank and lending operations of the bank. It also evaluated the lending performances. The study identified the flows in lending operation, if any, and suggests remedial measures thereof.
The study was limited to BASIC Bank only. It evaluated lending operations of the bank for a period of five years ranging from 1993 to 1997. The study was based mainly on secondary data. Secondary data relevant to growth, development, organization & management of bank; lending operations and recovery of loan etc. were collected on perusal of Annual Reports of the Bank, Resume of Financial Institutions & office records of the bank. However, primary data were also collected through free interview method. The author visited head office of

BASIC Bank in Dhaka and two branches of the bank in Dhaka and another in Chittagong and talked to the officials of the bank as to problems of lending, flows in loan operation, difficulties in recovery of the loan and suggested some remedies thereof.

Both descriptive and analytical methods were used to present the findings. Descriptive method was based on as to growth and development of bank, organization and management system, lending operations, problems and remedies. Analytical approach was based to evaluate lending performance. In this case a number of variables were taken into consideration such as quantum and trend of loan, composition of loan portfolio, credit deposit ratio and elasticity thereof, loan to total asset and loans to working capital fund and other related variables. Some simple statistical techniques like average, standard deviation, co-efficient of variation etc. were used to interpret lending performance.

Development of small-scale industry is considered important in Bangladesh especially in the context of the vast population and capital scarcity. A number of agencies are working in this regard. Bank of Small Industries and Commerce Bangladesh Limited is a financial institution set up to help the entrepreneurs and relevant Small Scale Industries who are working in Bangladesh for the development of the country. However, the lending operations seemed to suffer from a number of flows, which need to be addressed in proper perspective.

It was observed that appraisal process of the proposed project for which loan is sought is lengthy, cumbersome and complex. This should be simplified as far as possible.

The lending system is predominantly security oriented. Although there are provisions for supervision, yet it is reportedly inadequate. Provision for more and effective supervision may produce better performance and better utilization of resources. The loan deposit and loan asset ratio was found low. It is urgently required that the ratio be increased for the benefit of both the Bank as to earning and the customer as to the availability of more fund. Concerned authority may be given attention to this regard.

Saha, Sujit and M.S. Karim Chowdhury (2000) authored an article entitled "Role of Commercial Banks in Development Financing in Bangladesh". They regarded commercial banks as the most important functionary of the financial system, play a dynamic role in the economic development of a nation through mobilization of savings and allocation of credit to productive sectors. However, directed and inefficient credit allocation by the commercial banks of Bangladesh in various economic sectors without adequate credit appraisal and monitoring, inter alia, ultimately led to the widespread loan delinquency, and deteriorating health of the entire financial system. An attempt has been made in this paper to examine and

evaluate the nature and extent of involvement of commercial banks in development financing in Bangladesh using different performance indicators like branch expansion, mobilization of savings, sectoral and regional distribution of advances, etc. in their noble effort of development financing, commercial banks are facing various problems such as mismatch of sources and uses of funds, extreme dependence on traditional collateral securities, politicization of credit delivery system, absence of sound legal system for recovery of loans, lack of government's extension facilities in the form of data base, investment counseling, appropriate technology, infrastructure, marketing of products and services etc. However, they should increasingly involve themselves in development financing in order to gain long-term viability benefiting themselves as well as the economy, but that should not occur at the cost of viability of the total financial intermediation process.

Huda, M. Nazrul wrote an article on "Bangladesh's Financial Sector: An Overview". According to his opinion the financial sector in Bangladesh is smaller and less developed than that in most countries in South and East Asia. Despite recent modest gain in financial depth, the system remains shallow. While major policy reforms have been undertaken during the last few years including deregulation of interest rates, strengthening standards of loan classification and provisioning, elimination of Bangladesh Bank's control over most financial transactions and adoption of risk-based capital adequacy requirements, the financial sector continues to be severely underdeveloped and inefficient. The poor quality of intermediation of Bangladesh Bank and the underdeveloped debt and equity markets are acting as a drag on economic growth. Indeed, the widespread insolvencies in the banking sector lead to a continual risk of financial crisis in the country. To avoid a painful crisis, a comprehensive and wide-ranging reform is indispensable. Implementation of reforms involves pain and costs. But experiences elsewhere in the world suggests that the longer the delay the greater the pain, sacrifice and costs.

Shah, A.K. Fazlul H. and Md. S.H. Khan (2000) in their study on "Efficiency of Some Selected Commercial Banks in Bangladesh" investigated the efficiency of certain commercial banks operating in the country. It considered twenty commercial banks selected from three groups: nationalized, private (domestic) and foreign banks. The Principal Component Analysis, a special case of Factor Analysis, was adopted to measure the efficiency of these banks based on seven productivity indicators. The analysis revealed that out of 20 banks, only 7 of them were efficient. Of these 7 efficient ones, 6 were foreign banks and only one was a domestic private bank. None of the nationalized commercial banks was found to be efficient. Thus the study supports the general notion that foreign banks are efficient while nationalized ones are not.

Alam, M. Nurul and S. B. Jahan (1999) prepared an article on "Default Culture in Banking Sector of Bangladesh". The loan default in Bangladesh has mainly emanated from non-professional handling of assets both by the NCBs and the private sector banks. Public sector banks' credit was directed by the Government mostly for loss financing of the public sector enterprises and on political consideration. On the other hand, private sector banks' lending was directed to satisfy sponsor directors' interests. Proper professional exercises were not in place in respect of disbursement, monitoring and supervision of credit. Bangladesh Bank's efforts to set the things on right track have met with limited success. The international standard of bank supervision as suggested by FSRP needs to be introduced in phases by allowing adequate time to adjust. All concerned should visualize that financial health of the banks should be kept intact through proper classification and provisioning.

Ahmed, S. and M. H. Uddin Nizami (1998) in their study on "Comparative Performance on Nationalized and Private Commercial Banks in Bangladesh: A Study on Important Aspects" found that the PCBs in Bangladesh show better performance in the spheres of increased growth rate in profitability, deposit and mobilization and credit disbursement. However, measured from the angle of stability, the deposit lending performance of NCBs found better than PCBs. On the other hand, the NCBs performance is well in branch expansion. Some factors that influence the profit and employee performance include manpower expenses, deposit mix, ratio of advance to deposit along with optional credit mix. These explanatory variables seem to be favorable for the PCBs than NCBs. The governing situation of the NCBs and PCBs is different. The NCBs give greater emphasis on social obligation. Expansion of branches in rural and remote areas, advance to priority sector at low interest rate, etc, is some of the examples in this regard. Such roles of the NCBs contribute significantly toward social profitability. But the fact remains that there may be scope for enhanced profitability and better performance for the NCBs. On the other hand, the PCBs are mostly urban based. Their credit portfolio in loans and advances are made mainly in trade financing. These are the devices for the safe and rapid turnover of the fund deployed contributing to increased profit. Further, wide inter-bank performance variation, both among the NCBs and the PCBs has also been observed. This may be attributed to size, operational policies, leadership dimensions of the management and the like.

Against this backdrop, the following are the important policy implications of the present study:

- Increased deposit mobilization and their deploying for development contribute significantly towards economic development of the country at a reasonable cost. Thus deposit base must be broadened. For NCBs and PCBs this should be done from two different angles. For NCBs overall motivational factor should be ensured specially for rural areas so that its objective of more deposit mobilization in rural areas in one hand and attracting business deposit on the other can be achieved. On the contrary for PCBs mobilization of small savings and expansion of branches in rural area should be ensured through policy measures.
- The PCBs should modify their urban biasness and consider increased involvement in priority and rural development financing to widen the base of credit so as to serve the economy of the country in line with government policy for the development of the neglected sectors though not exactly at par with NCBs but to a significant extent. The PCBs cannot neglect their social responsibility in this respect altogether.
- The study does not attempt to evaluate the factors that have adversely affected the performance rather it points out that the performance level of both the NCBs and PCBs. However, for efficient use of scarce resources of our country, there is need to identify and evaluate the obstructing factors so that corrective measures may be taken as and where necessary in the deficient areas of the NCBs and PCBs.

Adedin, M. Z. (1992) conducted a study on "Recent Trends of Profitability and Productivity of Commercial Banks of Bangladesh". The main objectives of the study were to measure the extent and level of profitability and productivity of commercial banks of Bangladesh. The study showed the recent trends of profitability and productivity of commercial banks. It identified the causes of the changes in the trends of profitability and productivity of the banks. Also suggest some remedial measures for increasing the profitability and productivity of the banks.

Standard statistical techniques including indexing, rates, ratios, percentages and tabular forms were used in this study for analyzing the data and drawing conclusions from those. Indexing technique is used to see the trends of profitability and productivity of the banks. The ratios include net profit to total asset, net profit to capital (capital includes paid up capital and reserves), ratios of net profit to total employees as well as to total branches. The growth rates of and the components of income and expenditure of the banks were expressed in terms of percentages.

The sources of data were secondary. But, since those had to be collected and compiled from the annual reports of different years of different banks, they may equally be called primary sources. Besides, the data of foreign banks were not easily available. Bangladesh Bank's Bulletin, Economic Trends and Scheduled Banks Statistics were also used as source materials.

From the study it is clear that the overall productivity levels of the banks are not only low but also constantly declining. The continuations of this trend may lead to some sort of banking crisis in the near future. So, sincere efforts should be made to increase the profitability and productivity of the banks in Bangladesh. With this end in view, the following recommendations are offered to the respective authorities for their possible considerations:

- Under the programs of financial sector reforms, the banks are allowed to determine the rates of interests (except a few priority sectors) on deposits and advances. If the banks can rationally utilize this opportunity, they may be able to increase their profitability and productivity.
- Before every financial year begins, each bank should prepare its performance budget including its income and expenditure. Strict cost control measures are to be applied so that actual expenditure keeps pace with planned expenditure. In no way, the growth rate of expenditure should be allowed to exceed the growth rate of income. The banks, which are making losses, must drastically curtail their expenditure heads on the one hand, and make best use of their manpower and resources for earning and raising incomes on other hand.

Choudhuri, A.H.M. Nurul Islam and T. A. Choudhuri wrote an article on "Performance of Private Commercial Banks Vis-à-vis Banking Sector". The authors analyzed the performances of private commercial banks vis-à-vis banking sector as a whole. The results of denationalization and privatization in the banking sector of Bangladesh so far do not indicate clear-cut improvement in the efficiency of the banking system. The efficiency of the three denationalized banks deteriorated in all respects during last 10 years. The performance of PCBs though at present better only in operational aspects compared to NCBs but lagging in allocation aspects in terms of putting less emphasis in the socially more desirable sectors. The privatization and denationalization process is also inducing NCBs to gradually withdraw from socially desirable sectors in order to improve their profitability.

Azad, A.K. (2000) in his paper on "Banking Structure in Bangladesh: Regulatory Framework and the Reforms" made a review of the historical evaluation, strength and competitive performance of the banking structure in Bangladesh. It analysed the impact of post-reform regulatory framework and the efficiency of the restructured banking sector in terms of institutional deepening and financial intermediation, deposit mobilization and advance deployment, productivity and profitability, and the growth rate of the financial system. It also made some policy recommendations in light of the findings of the review and analysis.

Khan, Tanvir Ahmed (2005) wrote an article on "Management of Non-performing Loans: An Analysis in the Context of Bangladesh." Non-performing Loans (NPLs) became a burden for the banking sector in Bangladesh. With the implementation of Financial Sector Reforms Program and also with effective implementation of some prudential regulatory guidelines of Bangladesh Bank, non-performing loans gradually came down. But the gross non-performing loans of Bangladesh to total loans remained at a higher level compared to other countries of Asian region. An attempt has been made in the paper to discuss the present status of non-performing loans, the causes for the emergence of NPLs and their remedies, and regulatory guidelines of Bangladesh Bank to improve the overall situation of non-performing loans. Banks in Bangladesh have demonstrated significant improvements over the period through reduction in their existing Non-performing Loans. Private Banks and specialized banks have demonstrated continuous decline in their levels of NPLs while nationalized banks could not improve their position. Recent prudential guidelines provided by Bangladesh Bank in the form of Capital Adequacy Ratio, Provisioning, CAMEL rating, write-off policy, etc. had salutary impact on the reduction of the overall level of NPLs in Bangladesh. Legal measures had also immense impact on the recovery performance of banks. It is not possible to eliminate totally the existing level of non-performing loans in the banking business but can be minimized. Banking industry in Bangladesh continues to face the problem of NPLs. It is now recognized by all that a sizeable portion of NPLs have rendered some banks ineligible to recycle their loanable funds, shacked and the confidence of the general public. Banks also hesitate to go for fresh loans whole-heartedly and their cost of credit has increased because of non-recognition of income in accounts declared non-performing. In this backdrop, reduction of NPLs is the urgent need for the banking industry in Bangladesh.

Generally, the financial performance of banks and other financial institutions has been measured using a combination of financial ratios analysis, benchmarking, measuring

performance against budget or a mix of these methodologies (Avkiran, 1995). The financial statements of corporations in Bangladesh that published commonly contain a variety of financial ratios designed to give an indication of the corporation's performance.

As it known in accounting literature, there are limitations associated with use of some financial ratios. In this research, however, ROA ratio with interest income size is used to measure the performance of the two banks. Asset management, the bank size, and operational efficiency are used together to investigate the relationships among them and the financial performance.

Simply stated, much of the current bank performance literature describes the objective of financial organizations as that of earning acceptable returns and minimizing the risks taken to earn this return (Hempel G. Coleman, 1986). There is a generally accepted relationship between risk and return, that is, the higher the risk the higher the expected return. Therefore, traditional measures of bank performance have measured both risks and returns. The increasing competition in the national and international banking markets, the change over towards monetary unions and the new technological innovations herald major changes in banking environment, and challenge all banks to make timely preparations in order to enter into new competitive financial environment. (Spathis, and Doumpos, 2002) investigated the effectiveness of Greek banks based on their assets size. They used in their study a multi criteria methodology to classify Greek banks according to the return and operation factors, and to show the differences of the banks' profitability and efficiency between small and large banks.

Chien Ho, and Song Zhu, (2004) showed in their study that most previous studies concerning company performance evaluation focus merely on operational efficiency and operational effectiveness which might directly influence the survival of a company. By using an innovative two-stage data envelopment analysis model in their study, the empirical result of this study was that a company with better efficiency does not always mean that it has better effectiveness.

Elizabeth Duncan, and Elliott (2004) showed that all financial performance parameters as interest margin, return on assets, and capital adequacy are positively correlated with customer service quality scores.

Generally, the concept of efficiency can be regarded as the relationship between outputs of a system and the corresponding inputs used in their production. Within the financial efficiency literature, efficiency is treated as a relative measure which reflects the deviations from

maximum attainable output for a given level of input **English M. and Warng (1992)**. However, there have been numerous studies analyzed the efficiency of financial institutions. Among these, Rangan N. and Grabowski (1988) use data envelopment analysis to analyze technical efficiency in US banking into pure technical and scale efficiency. Aly H., and Rangan (1990) extend this analysis to contain analysis of allocative efficiency, and Field (1990), Dark (1992), Chu-Meiliu (2001), Tser- Yieth Chen, and Tasi Yeh (1998), and Leigh D., and Howcroft, B. (2002) have conducted some studies into banking efficiency.

Many researchers have made too much focus on asset and liability management in the banking sector, some of these studies are: Richard, B., and Moloney, J., (2003), (Ruth, F., (2001), and Ian Canddy (2000). However, the literature concerning the asset and liability management for banks strongly suggests that risk management issues and its implications must be concentrated by the banking industry. Jon R. Presely (1992) concluded from his study that there is a need for greater risk management in relation to more effective portfolio management, and this requires a greater emphasis upon the nature of risk and return in bank asset structure, and greater diversification of assets in order to spread and reduce the bank's risks.

Arzu Tektas, and Gunay (2005) discussed the asset and liability management in financial crisis. They argued that an efficient asset-liability management requires maximizing bank's profit as well as controlling and lowering various risks, and their study showed how shifts in market perceptions can create trouble during crisis.

In a study conducted by Kuwait **Edris (1997)** to determine the importance of selection factors used by Kuwait business consumers in choosing domestic and foreign banks. Findings of this study showed that the highest – ranking determinant factors of selection a bank in Kuwait by business firms were size of bank assets, personnel efficiency, banking experience, friendliness of staff, reputation, and availability of branches abroad.

Commercial banks are the most dominant financial institutions in any country. Therefore, local financial institutions and foreign ones have greater opportunity in economic development of the country. The local and foreign banks in these countries have performed well over the past several years. Moreover, banks in these economies are well capitalized and the banking sector is well developed with intense competition among the banks.

The main contribution of this study is to make financial comparison based on return on assets, return on equity, return on deposits, and other financial banking activities as credits and deposits to determine the performance.

According to **Ahamed (2012),** banking system in Bangladesh has experienced unprecedented changes over the last few years. Our country moved away from state control to a relatively market based open economy by converting to a major stabilization, liberalization and deregulation program under the influence of the World Bank and the IMF against the backdrop of serious macroeconomic imbalances in the early 1980s. After the introduction of Financial Sector Reforms Program (FSRP) in 1990, the banking sector was faced to greater and immense competition because of the entry of new private banks and more easy entrance of foreign banks in line with the recommendations of this program. Also, quick developments of IT sector of Bangladesh, where increased adoption of the internet as a medium of delivery contributes to a gradual reduction in overhead expenses (Marketing, IT and Staff) of the banks by providing a high level of quality services through ATM, POS (Point of Sale), Online, Internet, Tele-banking, SWIFT, internet banking, any branch banking and Reuter. These have changed the market structure of Bangladesh banking industry significantly. As a result, in recent years, the state-owned public banks have lost market share to the private commercial banks. Also, state owned banks are loosing customers and facing huge competition. The methodology of his research was based on traditional industrial organization theory, there are two competing approaches: the Structure Conduct Performance (SCP) hypothesis and the Efficient Structure hypothesis (ESH). These competing hypotheses are used to investigate the relationship between the concentration and competition in banking sector. The SCP states that the higher the concentration in a market, the lower the competition and the higher profits that the firms receive. On the other hand whereas ESH takes the efficiency factor into account and states that the firms with superior efficiency improve their market shares and become more profitable. According to the writer, the banking sector has witnessed a positive development in most of the key indicators of the industry. Banking sector of Bangladesh was heavily burdened with higher levels of nonperforming loans (NPLs). It was accumulated over many years due to weak management of the SCBs, corruptions, nepotism etc. The ratio of NPLs of various types of banks has decreased considerably over the last ten years. It has declined to 7.3 per cent at the end of 2010 from 41.1 per cent at the end of 1999. Also, it is remarkable that the introduction of bank capital regulations by Basel has solved the problem of undercapitalization of banks by raising capital adequacy from 8 per cent to 10.5 per cent of risk-weighted assets, and the minimum capital requirement of 400 corer.

Parimal & **Gosh** (2011) stated that various banks had various mixtures of deposits, credits, assets, and shareholders' equity which led these banks to maintain different positions in ranking each and every attributes. The study of Parimal and Gosh was based on different financial and statistical tools. The study revealed that Prime Bank and Southeast Bank contains first and second position in respect of all aspects like total assets, deposits, credits, and shareholders' equity in comparison with National bank, Dhaka bank, One bank, Trust bank, NCC, AB bank, Standard bank . They also examined the relationship between financial performance of a bank and its operational efficiency and asset utilization. The analysis of their variance (ANOVA) indicated that financial performance of a bank is strongly and positively influenced by the operational efficiency and asset utilization. Their findings were important in the sense that a bank's financial performance depends more on its effective management rather than on its size (total assets, total deposits etc).

Hasan and Saimoon (2011) stated in their study that most of the commercial banks are interested to offer stock dividend rather than offering cash dividend. The rate of stock dividends is attractive for all kinds of investors. But most of the time, the market price of the shares became lower after the declaration of the stock dividend, which fail to meet the expectation of the small investors. The main reasons behind this, is to raise the paid up capital. But if the commercial banks regularly follow the policy of offering stock dividend, their can be arisen of negative impact such as decrease in share price, loss of goodwill, dissatisfaction of shareholders, sales of share at discount and increase in internal fund in the future. The study also showed that only Islami Bank Bangladesh Ltd. issues corporate bond to raise its capital. None of the commercial banks listed in DSE has preferred stock, they have only Common Stocks. So, the authors suggested that every commercial bank listed in DSE can issue corporate bond and convertible preferred stocks. They recommended that these will strengthen their financial ability and attract the small and large investors to purchase the common stock from the market.

Hossain & Hossain (2012) explained that at present banking sector of Bangladesh both the Nationalized Commercial Banks (NCBs) and the Private Commercial Banks (PCBs) were in front of a difficult conversion period in terms of their assets quality and overall performance. This situation was prevailing because of inconsistent and unbalanced efficiency and productivity due to some environmental constraints, political instability, corruption, nepotism and socio economic instability. They were also facing problems to adjust with reasonable investment in commercial and agricultural activities. In general, the financial performance of

banks and other financial institutions were measured using a combination of financial ratios analysis, benchmarking, measuring performance against budget or a mix of these methodologies. The authors suggested that company performance evaluation focus simply on operational efficiency and operational effectiveness, which might directly influence the survival of a company, growth of a company, adoption of competition of a company and profitability of a company.

Mostak (2012) stated that from 2002, the supremacy of the banking system by the state-owned commercial banks (SCBs) had been dilapidated while private commercial banks (PCBs) and foreign commercial banks (FCBs) were ahead in market share and gaining more customers in both deposits and bank loans and advances shimmering an increased competition in the banking industry. The analysis was based on different statistical and financial tools and data were mostly secondary. They revealed that the market share of the SCBs declined noticeably to 28.75 per cent of the total industry assets in 2011 as against 54.4 per cent in 1990, on the other hand, they also mentioned that PCBs' share increased to 65.24 per cent in 2011 as against 22.6 per cent in 1990. In the same way, FCBs have also shown a trend of slender increase holding total industry assets over the last ten years. The study also showed that FCBs hold 6.0 per cent of the industry assets as of 2011. To create an efficient environment in the banking sector, the respective authorities have undertaken extensive initiatives in the legal, institutional and policy reforms areas since the 1990s. According to the authors the main measures adopted by the Financial Sector Reforms Program (FSRP) were to progress loan classification and provisioning, capital adequacy positions, the legal system and the amplification of central bank's administration and regulation. Given that 1994, to quantify the performance of the banking sector, CAMEL (Capital Adequacy, Asset Quality, Management, Earnings and Liquidity) rating system has been introduced for scheduled banks. They also stated that currently Bangladesh bank has employed Early Warning Systems (EWS) of administration to deal with the difficulties faced by banks. Any bank facing complicatedness in areas of operation in terms of CAMELS framework is brought under EWS category and monitored strongly to facilitate advance its performance. The banking sector has witnessed a constructive development in most of the key indicators of the industry. The sector was profoundly burdened with high levels of nonperforming loans (NPLs).

Anwar and Shekh (2009) said that authoritarian oversight into financial sector practices and procedures are predominantly designed to meet their accountability, transparency and monitoring roles that they play for the economy-wide stakeholders. The authors mentioned that a failure of such a governance apparatus becomes clear and prevalent in cases of pervasive and extensive frauds, misconducts, moral hazards, corruption, nepotism, contagions and crashes that occur primarily out of negative investor psychology that accumulate in a particular time periods, which are usually short-lived. The article contains the information that the reported ratio of net NPLs to total loans declined to 18% at the end of 2004 from 41% at the end of 1999. This diminution was achieved by provisioning and write-off and by a jagged reduction in new bad debt. The authors also stated that the reduction is also due to stronger regulations, enhanced legal powers of the banks to collect problem loans, and better screening of new loans (facilitated by the Credit Information Bureau), strong supervision and some excellent steps taken by Bangladesh Bank. Bangladesh Bank prearranged regulations and that are presently in use for assessing the capital adequacy under the Basel II standards of the Bank for International Settlements. The study also revealed that non performing loan in the banking sector of Bangladesh totaled to about Tk 229.74 billion as of June, 30, 2009, up by Tk 4.93 billion or 2.19 per cent over a period of six months starting from January, 2009, according to Bangladesh Bank statistics. An ADB (2008) note that the high NPLs adversely affect profitability and capital adequacy ratios, of NPLs constrains the supply of credit for economic enlargement and expansion.

Raihan (2012) stated that financial sector reform has been initiated in so many countries in order to bring the financial discipline and development. The author also stated that important issue is now whether there prevail any association between the development and reform and whether financial reforms in developing countries motivate growth. The authors also stated that though several academic literature and pragmatic studies show that financial reform develops financial system by improving banking industry's competitiveness, enlistment of savings, and allocation of efficiency whereby achieving economic growth. According to the author the banking sector reform or restructuring of banks as the package of macro-economic, micro-economic, institutional and regulatory measures taken to restore banking systems to financial solvency and discipline in order to ensure a stable and prosperous growth of the economy.

Adhikari (2010) used several financial ratios and statistical tools to conduct the research with various secondary data. The study revealed that ratio of NPLs to total loans in the banking system in Bangladesh had shown a descending downtrend since the year 2000. After increasing steadily from 26.09% in 1990 to a climax of 41.11% in 1999, the ratio of NPLs to total loans cut down to 31.49% in the year 2000, 22.1% in 2003 and 13.55% in 2005. In distinction, the sub-standard loan as a percentage of total NPLs increased by 1.4% in 2005 as compared to 2004, marking the end of a downward trend since 1997, with the exception of the year 2003. Moreover, in the case of doubtful loans, a longer downward trend had pragmatic since the espousal of prudential norms in 1990, except in the years 2003 and 2005. The study also revealed that in 2005, doubtful loans increased by 0.36% as opposed to 6.6% in 2004. A more frightening picture was observed in the case of bad/loss loans, which account for more than 80% of NPLs since the year 1997. Unfortunately, this trend had not shown any improvement over the period 1990 to 2005. Writer also mentioned that mentioned that with regard to the comparison of NPLs with neighbor countries, Bangladesh exhibits a higher level on NPLs than either India or Sri Lanka. In his study, it was observed that among the different clusters of banks in Bangladesh, NCBs and DFIs continued to have an alarming amount of NPLs (21.35% and 34.87% respectively in 2005) since the adoption of prudential norms in 1990. Although it was not clear in the study that which sectors contain major NPLs, available data indicates that the highest ratio of NPLs are in the category of micro and agricultural loans of both NCBs and DFIs (47.09% and 39.20% respectively), followed by term loans having a maturity of more than 5 years in the case of DFIs . The author also stated that the NPL ratio of term loans given by NCBs was also observed to be very high. Another important observation was the gradual decline of capital in NCBs due to continuance of poor loan loss provisions against default loans. These aspects clearly call for conclusion the operation of NCBs and DFIs. However, writer also mentioned that the stock markets of Bangladesh are not efficient enough to channel funds for industrial growth, and thus NCBs as well as DFIs play a vital role in meeting the overall industrial credit needs of the country which is really necessary to achieve economic growth of our country.

Ikbal (2012) carried out an analysis to evaluate the performance of selected banks based on CAMELs ratio. CAMELS ratios mainly indicate the adequacy of the risk based capital, non-performing loan position, liquidity gap analysis, liquidity ratio, inter-bank dependency, return on assets (ROA), return on equity (ROE), net interest margin (NIM), credit growth, credit concentration, single borrower exposure, foreign exchange exposure, market risk and

management questionnaire, etc. His study compared the 4 types of bank's time series performance on the basis of selected CAMELS ratios. Secondary time series data was used in his study to analyze the trend of performance by banking sector in Bangladesh. A statistical technique 'Correlation' was used to find out the impact of different ratios on GDP contribution by financial mediators. Sources of data were Bangladesh bank, Bangladesh Bureau of Statistics, Central Bank of Different countries, World Bank etc. He had compared ROA, ROE, Interest income, excess liquidity of state owned commercial banks, DFIs, foreign banks and nationalized banks. He had also carried out cross country comparison of ROA, ROE, net interest income, excess liquidity. CRAR will increase if capital increase at a rate higher than that of risk weighted assets increase. In his study it is seen that industry CRAR increased gradually and reach a satisfactory level of 11.6% in 2009 which was contributed by all type of banks except DFIs. Interest income also increased over the period. The correlation between CRAR and interest income shows a positive result which indicates that increased capital base leads to the interest income growth. The study also revealed that The correlation between CRAR and interest income was highest in PCBs and lowest in DFIs over the period from 2002 to 2009.

Kabir and Dey (2012) examined a performance analysis of selected private commercial banks based on CAMEL rating. Ratios used in their study were Capital Adequacy: a) Capital Adequacy Ratio b) Leverage Ratio c) Return on Equity d) Net-worth Protection. Asset Quality: a) Percentage of Classified Loan. **Management Capacity:** a) Income per Employee b) Expenses per Employee. **Earnings Ability:** a) Net Investment Margin b) Net Profit Margin c) Diversification Ratio d) Earnings per share. **Liquidity:** a) Loan to Deposit Ratio b) Liquid Assets to Total Deposit Ratio c) Earning Assets to Deposit. Their study revealed that both IFIC and EXIM bank achieved a better result than the standard in relation to capital adequacy ratio although IFIC bank had demonstrated a slightly better performance. As per as leverage ratio was concerned, both the banks outmoded the standard score. More so, like capital adequacy ratio, for leverage ratio, IFIC bank had achieved a better position. With regard to return on equity, IFIC bank had shown a poor result which was for behind the standard (score30.0) whereas EXIM bank had shown a admirable performance (score 25.05). As to net worth fortification, IFIC Bank had shown a remarkable growth in the performance in the later years although the average performance is a bit low-grade (score 81.34) to the standard (score100). The study also revealed that with respect to net worth protection, EXIM bank had shown a far better performance (average score 533.03) than the IFIC.

Islam and Salim (2011) carried out an analysis named as operational efficiency of commercial banks where the study was based on the secondary data of five years (2004-2008). Data were being collected from the financial statements of the 7 bank representation the full fledged Islamic banking services in Bangladesh. The regression equations, the financial ratios and trend analysis, Statistical tools of SPSS and Microsoft Excel were used in order to show up the objectives of performance appraisal of the operational efficiency of the Islamic banking institutions of Bangladesh. In addition, table and graphs were presented to present the data and interpret the findings of the study. They used ROA, ROE, EPS, trends of deposit, investment trend position, investment to deposit ratio, net profit after tax etc of IBBL, EXIM, Al Arafah, FSIB, SJIB, ICB Islamic bank to evaluate operational efficiency.

Mamun, Shohag and **Akhter (2013)** have focused on the profit attractive role of CSR expenditure while completely ignoring the determinants of CSR in a particular corporation. Moreover they argued that earlier studies have used several obsolete methodologies. Most of these methodologies have serious drawback in their ability to conclude about time series or cross sectional data. Therefore, their study used panel data from Bangladeshi banking industry to viaduct the research gap i.e. identify the long-run and short-run financial determinants of CSR expenditure. A total of 30 local private commercial banks were chosen as the sample for the study. The sample excluded public commercial banks, foreign banks and investment banks. This was due to their different nature of ownership, operating guidelines and other regulatory differences. Most of the data had been collected from the banks' annual report and in some case missing data have been retrieved from IPO prospectus of these respective banks and from DSE (Dhaka Stock Exchange) library. Thus the data included 30 banks over 10 years of observation, made it a entirely evenhanded panel data. Size differences in the value of the clarification across cross section and over time period has been normalized with logarithmic conversion. As per the variables were alarmed, the study employed a horde of financial variables from banking industries in Bangladesh based on earlier experimental studies on the financial determinants of CSR in different industries together with financial service industries from transversely the world.

Hosain and **Zaman (2012)** stated that performance of a bank largely depends on the performance of human resource management department. Human resources are the most important assets of an organization because without them the business functions such as managing cash flow, making business transactions, communicating through all forms of media, and dealing with customers could not be accomplished. They have suggested about

the practice of HRM i.e. employee selection based on fit with the company's culture, prominence on behavior, thoughts, and necessary technical skills required by the job, compensation deputation on performance, and employee empowerment to forward team work, among others have the potential to improve and prolong organizational performance. A growing body of research, including both industry-specific studies and cross- industry studies, investigates the impact of human resource management (HRM) on firm performance. Their research work was based on qualitative research method where analysis was done based on data collected from DBL and SCB. For their study both primary and secondary sources were used. Primary source includes face to face discussion, telephone discussion and oral interview that were taken since May to October, 2012 to the HR personnel of these two banks.

Webb and **Kumbirai (2010)** asserted that the whole idea of measuring bank performance is to separate banks that are performing well from those which are doing poorly. They further indicated that, evaluating the performance of financial institution can inform government policy by assessing the effects of deregulation, mergers and market structure on efficiency. They stated that bank regulators screen banks by evaluating banks' liquidity, solvency and overall performance to enable them to intrude when there is need and to estimate the potential for tribulations. They also argued that on a micro-level, bank performance measurement can also help progress managerial performance by identifying best and worst practices coupled with high and low measured efficiency. They investigated the performance of seven locally incorporated commercial banks during the period 1994-2001. Financial ratios were used to evaluate the credit quality, profitability, and liquidity performances. The performance of the seven commercial banks was compared with the banking industry in Bahrain which was considered a benchmark. The article applied a Student's *t*-test to measure the statistical significance for the measures of performance. The results revealed that commercial banks in Bahrain were relatively less profitable, less liquid and were exposed to higher credit risk than the banking industry, in which wholesale banks are the main component.

Yunus and Mujari (2009) used a bank profit maximization model based on empirical industrial organization approach to explain the interest rate spread (IRS) in the banking sector of Bangladesh using panel data of 48 banks covering the period of 2004 to 2008. The analysis shows that the higher the non-interest income as a ratio of total assets of a bank, the lower its spread. Similarly, market share of deposits of a bank, statutory reserve requirements, and NSD certificate interest rates affect the IRS. The analysis in terms of bank groups shows that

IRS is extensively predisposed by operating costs and classified loans for state owned commercial banks (SCBs) and specialized banks (SBs); while inflation, operating costs, market share of deposits, statutory reserve requirements, and taxes are important for the private commercial banks (PCBs). On the other hand, non-interest income, inflation, market share, and taxes matter for the foreign commercial banks (FCBs). The analysis brings out several systemic actions and measures at the bank level to advance earnings and profitability of the banks which are sustainable tools of reducing the IRS. According to the writers, the desired IRS can be calculated using the formula: (LR-DR) = {k/(1-k)} DR, where LR is the lending rate, DR is the deposit rate, and k is the required reserve ratio. Using the methodology, the desired IRS came to an average of 1.03 for the 1970s, 1.92 for the 1980s, 1.76 for the 1990s, and 1.53 over the period 2000-2007. As against this, the actual IRS was 7.03, 6.13, 6.95, and 6.06 respectively during the four periods. This showed that the difference between the actual IRS and the desired IRS has somewhat narrowed down in recent years (an average of 4.53 during 2000-2007 relative to 5.19 in the 1990s). In their study they argued that, IRS has showed a somewhat declining trend. The study also revealed that the spread between weighted average lending and deposit rates of all banks declined by 1.91 percentage points between June 2001 and March 2009, while the average deposit rate increased by 0.49 percentage points and the lending rate declined by 1.42 percentage points over the same period.

Comments on Reviews of literature: Though several studies have been done earlier related to this issue, but those works didn't diagnose and identify the proper intricacies into the selected topic like the present one and the findings of earlier researches are suffering from the limitations of up datedness, objectivity, and relevance. No such study has been done yet on this focus area and therefore this area lacks in-depth analysis and assessment. This empirical study would help identifying the recent pragmatic causes and trend of loan defaults in the SCBs, which will be useful for identifying the effectiveness of ongoing mechanism of credit risk analysis, redesigning loan recovery procedure and reducing the level of default trend in the light of expected changes in the socio economic and political environment of the country. This study may stand as a bench mark for further detailed research on credit risk management in the banking sector.

Chapter Three

Theoretical Framework

3.1 Introduction

In an economy, commercial banks play the role of an intermediary that channel resources from the surplus group to the deficit group. So, obviously, one of the core functions of commercial banks is to sanction credit facility to their customers as per requirements. Banks' mission is to actively participate in the growth and expansion of our national economy by providing credit to various customers in most efficient way of delivery and at a competitive price.

Risk is inherent in all aspects of a commercial operation; however for banks and financial institutions, credit risk is an essential factor that needs to be managed. Credit risk is the possibility that a borrower or counter party may fail to meet its obligations in accordance with agreed terms. Credit risk, therefore, arises in varying degrees from the banks' dealings with or lending to individuals, corporate bodies, government, semi-government organizations, and other banks or financial institutions.

In general, a banking system accumulates a high number of low value deposits to fund enterprises with a smaller number of high value loans. This intermediation through a well functioning banking system helps to achieve immense economic benefits for the depositors, the borrowers and above all -- the macro economy. The Bank must allocate loans effectively for achieving these broad objectives of the economy. While identifying profitable enterprises, the bank, in fact, identifies risks of the borrower and business in order to allow loan in the context of its risk–return profile. In other words, Banks are in the business of risk taking; as such risk management is viewed as a core function of banking.

3.2 Concepts of Some Management Terms

Spread: Spread is the difference between interest paid and interest earned during particular period of time (Amandeep 2003). S = R – K.

Where,

S = Spread

K = Interest Paid

R = Interest earned

Burden: According to Amandeep (1993)**,** burden is the difference between non-interest income and non-interest expenses i.e. Noninterest income – (Manpower expenses + other expenses) = Burden.

Working Funds: Working funds are the total assets of the organization excluding contra item. It shows the total operating assets during particular period of time (Shakoor 1986).

Profitability:

Profit and profitability are two separate concepts. The former indicates absolute measurement while the latter indicates relative measurement that is profit in relation to some other variables. In financial institutions, the profit is defined as the difference between total income and total expenditure. Income & expenditure sources of the financial institutions may be grouped under two heads: i) interest & ii) non-interest sources. Alternatively, profit is also defined as the difference between spread and burden. Absolute profit of the financial institution has been reflected by gross & net profit where the latter is gross profit minus tax. Generally, absolute level of profit increases or decreases as the operations of a financial institution increases or decreases. For measuring the profitability, that is, for dividing the absolute profit by suitable denomination, one can use various denominators such as total deposits, total credit, operating expenses, operating income, total net worth etc. But, whatever denominator is taken, one must be careful that it is truly reflective of total operations (Shookur 1986).

Productivity

It is the rate of the incremental income and incremental expenditure that measures the productivity of a bank. Bank's productivity is defined as percentage change in its earnings in relation to percentage change in its costs. To put it differently, the output responsiveness as measured by proportionate change in income in relation to proportionate change in expenditure, measures the productivity of a commercial bank.

Symbolically;

$$P = \{(\Delta I / I) / (\Delta E / E\}$$

Where, P = Productivity or output responsiveness to change in inputs

Δ = Delta (Change)

I = Total Income

E = Total Expenditure

In absence of specific indicators of output and input of a bank, the above measurement of productivity is widely used. Productivity of a bank is inversely related to cost responsiveness,

i.e. higher cost responsiveness leads to lower productivity and vice-versa. The productivity (P) is greater than (1) one, is a sign of good health of the banks and vice-versa (Rahman 2002).

Cost of Fund

In the analysis of the cost of operation first, calculated the interest cost from the income statement through dividing the per year interest by per year total deposit and borrowing. Second, sort out the non-interest expenses and divide them by the total loans and advances to find out the administrative costs for per taka loans and advances. Then weighted average cost of fund has been calculated on the basis of cost of interest and cost of administration. Hossain (1988) had implemented the following formula to find out the cost of fund of Grameen Bank in his famous empirical study.

$$\text{Cost of Fund} = \left[\frac{\text{Total Interest Paid}}{\text{Total Borrowing} + \text{Total Deposit}} + \frac{\text{Total Administrative Costs}}{\text{Total Loans and Advances}} \right]$$

3.3 Financial Statements Analysis

Financial Statements may tell a vivid story of the financial status of an enterprise if they are analyzed properly. Financial Statements Analysis is the judgmental process which aims to evaluate the current and past financial positions and the results of operations of an enterprise, with the primary objective of determining the best possible estimates and predictions about future conditions and performance. Analysis is generally directed towards reaching answers to some broad questions concerning a business like its liquidity, profitability, activity, solvency and stability.

Analytical Tools

Financial Ratios Analysis and Funds Flow Analysis are the most commonly used analytical tools to the lending banks for analyzing the financial conditions and performance of a borrower. Besides these, the Financial Sector Reforms Project (FSRP) which emerged in the early nineties in our country also introduced a comprehensive analytical tool in a manual form named “Financial Spread Sheet and Credit Scoring” in this area for using by the credit providing decision- makers.

3.3.1 Financial Ratio Analysis

In assessing the financial position and performance of a borrower, financial ratio analysis is one of the principal tools to the lending banks. Ratio analysis provides guides and evidences especially in spotting trends towards better or poor performance, and in finding out

significant deviation from any average or relatively applicable standard. On the basis of items, which are used for the ratios, financial ratios can be divided into certain categories viz., Liquidity Ratios, Activity Ratios, Financial Leverage Ratios and Profitability Ratios. Liquidity ratios are concerned to show the liquidity position and ability to pay the short term obligations of a firm. Activity ratios and Profitability ratios represent the operating performance of the firm and Financial leverage ratios show the long term solvency and capital structure position of a firm. But this study is concerned to find out whether these ratios can predict the financial position and performance properly of a borrower, and if so, to what extent such prediction is reliable.

Current Ratio: A concern's current assets divided by its current liabilities is known as the current ratio. A current ratio of 2:1 is said to be satisfactory. A higher current ratio will indicate the better ability of concern to meet its current obligations. This statement is not always true. It depends on the composition of the current assets involved with it. Excessive amount of inventory stock and prepaid expenses may hamper the debt paying ability of a concern. The larger the amount of inventory stock indicates the higher degree of liquidity risk because of their limited marketability, chance of obsolescence, stockpiling of unsold stock etc. on the other hand prepaid expenses cannot be used to meet the another obligations of the concern.

Acid Test or Quick Ratio: This ratio is obtained by dividing the quick assets (excluding inventory stock and prepaid expenses from the total current assets) by current liabilities. Its satisfactory standard norm is 1:1. Too much reliance on 1:1 quick ratio may not be wise in all cases. Because the terms of bills receivable and credit sales policy can influence the ability to pay of the borrower. Moreover, due to the lack of financial solvency and commitments of the drawers, bills receivable do not always ensure the cash that may be required to meet the immediate purpose.

Debt Service Coverage Ratio: This ratio is computed by dividing the net profit after tax but including interest and depreciation by the yearly interest charges and loan installment which is payable within one year. It is a measure of the borrowers' ability to pay the interest charges on its total outstanding debt and principal repayments.

Receivable Collection Period (Days): Receivable collection period shows the average number of days required to collect an account receivable during a year. Receivable collection period should be compared with the firm's credit terms to judge the efficiency of receivable management. Shorter the receivable collection period than the credit terms may mean the efficiency of credit management or excessive conservatism in credit granting that may result in the loss of some desirable sales. In computation of the collection period, it is remarkable that when sales are highly seasonal or when sales growth is high, the year end receivable figure is somewhat inappropriate. In such case the average of the beginning and ending receivable may be used. However, most of the published financial statements do not provide the figure of credit sales separately. So the lending banker can use the average sales per day and it is simply the sales for the year divided by 365 days.

Tangible Assets Turnover Ratio: This ratio is found by dividing the net sales for the period by the tangible assets. This ratio is supposed to measure the efficiency with which tangible assets are employed and a high ratio indicates a high degree of efficiency in assets utilization. But in interpreting this ratio, analyst should be aware about the composition of tangible assets. When the fixed assets of the firm are old and substantially depreciated, the ratio tends to be high because the denominator of the ratio is very low.

Debt to Net worth Ratio: The numerator of this ratio consists of all liabilities, short-term as well as long-term, and the denominator consists of tangible net worth. Although the lower the debt-equity ratio indicates the lower degree of financial risk to the creditors but in interpreting this ratio, banks should be careful regarding the existing forms of loans which are protected by specific collateral and hence enjoy superior protection. However, the possibility of undisclosed contingent liabilities can easily impair the net worth of the owners. So it is important to consider not only the net worth of the firm itself but also of the owners' assets, liabilities and net worth outside the business.

Profitability Ratio: Conventionally, profitability is measured as the ratio of profit before tax to the book value of tangible assets or alternatively as the ratio of net profit to net worth. However these ratios do not adequately measure profitability particularly in an inflationary situation, for the reasons; (a) the numerator is a flow variable for one particular year while the denominator is a stock variable and represents the sum of different points of time, (b) investment allowance, subsidies and other invectives may affect the taxation of profit and

hence the rate of return, (c) the depreciation on physical assets is not an economic depreciation and thus the net profit does not reflect the real return, and (d) risk factors are not taken into account. RAO is internally inconsistent because the numerator measures the return to shareholders and the denominator represents the contribution of shareholders as well as creditors. But profitability ratio in relation to sales, more or less, provides the accurate picture here.

3.3.2 Funds Flow Analysis

The term 'Funds' is very ambiguous and different concepts are put forth by different authors. But according to most widely used concept, funds mean working capital. The International Accounting Standard No. 7 under the title Statement of Changes in Financial Position also recognized this concept. The Statement of Changes in Financial Position indicates both the sources and application of working capital. That is, it reveals the sources from which funds have been received during the year and how these funds were used within the enterprise. Thus, funds flow statement portrays the movement of funds and also shows the causes of net changes that occur in working capital between two balance sheet dates.

3.4 Credit Risk Grading (CRG)

Credit risk grading is an important tool for credit risk management as it helps the banks & financial institutions to understand various dimensions of risks involved in different credit transactions. The aggregation of such grading across the borrowers, activities and the lines of business can provide better assessment of the quality of credit portfolio of a bank or a branch. The credit risk grading system is vital to take decisions both at the pre-sanction stage as well as post-sanction stage.

At the pre-sanction stage, credit grading helps the sanctioning authority to decide whether to lend or not to lend, what should be the loan price, what should be the extent of exposure, what should be the appropriate credit facility, what are the various facilities, what are the various risks mitigation tools to put a cap on the risks level.

At the post-sanction stage, the bank can decide about the depth of the review or renewal, frequency of review, periodicity of the grading, and other precautions to be taken.

Having considered the significance of credit risk grading, it becomes imperative for the banking system to carefully develop a credit risk grading model which meets the objective outlined above.

The Lending Risk Analysis (LRA) manual introduced in 1993 by the Bangladesh Bank has been in practice for mandatory use by the Banks & Financial institutions for loan size of BDT 1.00 crore and above. However, the LRA manual suffers from a lot of subjectivity, sometimes creating confusion to the lending bankers in terms of selection of credit proposals on the basis of risk exposure. Meanwhile, in 2003 end Bangladesh Bank provided guidelines for credit risk management of Banks wherein it recommended the introduction of Risk Grade Score Card for risks assessment of credit proposals.

Since the two credit risks models are presently in vogue, the Governing Board of Bangladesh Institute of Bank Management (BIBM) under the chairmanship of the Governor, Bangladesh Bank decided that an integrated Credit Risk Grading Model be developed incorporating the significant features of the above mentioned models with a view to render a need based simplified and user friendly model for application by the banks and financial institutions in processing credit decisions and evaluating the magnitude of risks involved therein.

Bangladesh Bank expects all commercial banks to have a well defined credit risk management system which delivers accurate and timely risk grading. This manual describes the elements of an effective internal process for grading credit risk. It also provides a comprehensive, but generic discussion of the objectives and general characteristics of effective credit risk grading system. In practice, a bank's credit risk grading system should reflect the complexity of its lending activities and the overall level of risks involved.

Credit risk management needs to be a robust process that enables banks to proactively manage loan portfolios in order to minimize losses and earn an acceptable level of return for shareholders. Central to this is a comprehensive IT system, which should have the ability to capture all key customer data, risk management and transaction information of trade & foreign exchange. Given the fast changing, dynamic global economy and the increasing pressure of globalization, liberalization, consolidation and disintermediation, it is essential that banks have robust credit risk management policies and procedures that are sensitive and responsive to these changes. The purpose of this model is to provide directional guidelines to the banking sector that will improve the risks management culture, establish minimum standards for segregation of duties and responsibilities, and assist in the ongoing improvement of the banking sector in Bangladesh. Credit risk management is of utmost importance to banks, and as such, policies and procedures should be endorsed and strictly enforced by the top management of the Bank.

Lending Risk Analysis

Lending Risk Analysis (LRA) is a significant package of activities, prescribed for minimizing and avoiding risks in fund management of the commercial banks in Bangladesh. It is one of the vital financial sector reforms measures. Experts in bankers opine that the main reasons for stuck-up advance of the commercial banks are the high risk in disbursing loan. To face the challenging situation of stuck-up advances, more attention is to be given on careful appraisal of the projects, proper utilization of loan. Once status of loan or investment is appraised through using the techniques under LRA (Lending Risk Analysis) package, it would be easier on the part of banks to monitor the proper uses of funds, control the over dues; enhance the recovery volume and raise the return on working and through planned investment and avoiding risky investment.

As a financial institution, bank has a vital role to lend money to the businessman for overall economic development of our country. But they have to face different kinds of risks on lending of their own fund to the business houses. Banks profitability mainly depends on the good quality of its assets. So it is obligatory for a banker to lend money in such a way that repayment of the borrowing money to be ensured. In the early years of 1990s, FSRP was formed by the decision of Government of Bangladesh with the assistance of World Bank with a view to reform the financial sector in our country. Lending Risk Analysis is a significant package of activities prescribed by FSRP for treating risks in fund management of the commercial banks of our country.

Characteristics of Lending Risk Analysis

Lending Risk Analysis is one of the new management and operational tools for measuring of credit risks. It was initiated by FSRP in 1993. Bangladesh Bank made it mandatory for commercial banks of Bangladesh to follow it for granting loans for projects of Taka one crore and above. It focuses on determination of the degree of risks of non-repayment by a particular borrower and thus has been helping the bank management in taking loan decisions on the basis of the risk scores. This improved methodology for analyzing lending risk is undoubtedly a unique technique for the bank of this country in the present day context.

Lending effectively is important to the economic success of any country. Defect in the lending process of banks in a country hinders economic development and costs a lot of money to the people of Bangladesh. Lending risk broadly addresses two types of risks i.e. Business Risk and Security Risk of a loan proposal.

3.4.1 Division & Subdivision of Lending Risks

Business Risk:

Business Risk (BR) is the risk business fails to generate sufficient cash to repay the loan. It is most important risk because of that is the security cannot be realized, and then the bank is exposed to business risk. So, all types of risks, business risk is the vital to banks. BR can be further subdivided on two sectors like Industry Risk (IR) and Company Risk (CR).

Supplies Risk: Supplies risk is the risk of failure due to disruption in the supply of inputs.

Sales Risk: Sales risk is the risk of failure due to disruption to sales. These types of risk are the part of industry risk.

Company Risk:

Company risk is the risk when the company fails to repay the loan due to internal reasons is called company risk. It comprises of two risks, such as company position risk and management risk.

Company Position Risk: A company position risk is the risk when a company fails to repay the loan due to weakness of the company position. Company position is the major factor to disburse the loan in banking sector.

Performance Risk: when a company fails to perform enough to repay the loan due to weakness of external condition of company is called performance risk.

Resilience Risk: It is the risk of failure due to lack of resilience to unexpected external conditions is called resilience risk.

Management Risk: When the company's management fails to exploit effectively the company's position is called management risk. It is divided into parts such as man management competence risk and management integrity risk.

Management Competence Risk: When company management fails due to incompetence of management is called management competence risk.

Management Integrity Risk: It is the risk of failure due to lack of management integrity is called management integrity risk.

Security Risk:

Security risk is the risk that the realized value of the security does not cover the exposure. It is divided into two parts i.e. Security control risk and security cover risk.

Security Control Risk: When the bank fails to realize the security is called security control risk. This type of risk creates by the lack of legal rights, documentation inadequate i.e. (lack

of notary, meaning signature, incorrect references, incomplete documentation, lack of stamp duty, fraud, insurance does not cover exposure, customer able to influence judgment etc.).

Security Cover Risk: It is the risk that the release security value does not cover risk. The customers may create it. This risk is to measures under two way i.e. speed of realization and liquidation value. Expected releasable value may be less than the exposure due to acquiring title to security takes longer than expected. Liquidation value may be less then expected on amount on under causes such as follows:

Security losses value if it is released for poor quality, perishable, subject to rapid depreciation technology liable to become obsolete, product has been customized for customer etc. Market price changes are the one of them causes of security cover risk. **Supplies Risk:** What is the risk of failure due to disruption in the supply of inputs?

Measures	Example of Risks	Analysis
Price	Increase to cost of supplies reduces margins.	Obtain cost Breakdown, and for each item on breakdown, assess risk that supplies of risk tat supplies of these items are disrupted.
Quantity	Scarcity of supplies or Unreliability of deliveries causes production loss.	
Quality	Difficulty in obtaining right quality of supplies result in inferior product.	

Sales Risk: What is risk of failure due to disruption of sales?

Examples	Analysis
Total market drop	Obtain industry to data at least 3 years.
ncreased competition	♦ Financial data for at least 2 major competitors. ♦ Determine how company differentiates itself from its competitors: Better quality/Lower Price/More responsible/better distribution etc. ♦ Determine how company's Production technology compares with that of competitor. ♦ Analyze barriers to entry.

Changes in Regulation	♦ Review regulations, which govern industry. ♦ Review recent changes and determine likelihood & nature of future changes (Discuss with industry experts in the bank & industry participants) ♦ Evaluate impact on industry of recent and potential future changes.
Co. losses a single large customer	♦ Identify company's 5 largest customers (in terms of sales). ♦ For any customers representing more than 10% of sales, assess the risk that these customers switch to a competitor.

Performance Risk: What is the risk that the company's position is so weak that it cannot perform well enough to repay the loan, given expected external conditions?

Examples	**Analysis**
Company borrows more than it can repay, based on unrealistic performance Expectations.	♦ Analyze recent performance history (use FSS, look for trends, find explanations for any significant trends). ♦ Analyze competitive position (rank in industry, comparison of financial data with competitors, Company strength & weaknesses. ♦ Assess company's strategy (does it exists? is it appropriate? how risky is it? ♦ Analyze cash flow forecast.

Resilience Risk: What is the risk of failure due to lack of resilience to unexpected external conditions?

Measures	**Example of Risks**	**Analysis**
Leverage	Company has insufficient equity to avoid bankruptcy	♦ Debt/Eq. Ratio ♦ Obtain CIB report ♦ Assess Sh. Holders' support.
Liquidity	Company has insufficient cash flow to meet repayments.	♦ Analysis Financial Ratios ♦ (CR, QR, RTO, ITO, A/P TO, DSCR etc) ♦ Analyze flexibility of production.
Connections	Company Position weekend by	♦ Determine political & private

	inappropriate connections.	affiliations of owner(s) key managers.

Management Competence Risk: What is the risk of failure due to lack of management competence?

Measures	Example of Risks	Analysis
Ability	♦ Managers don't have the necessary abilities or experience.	♦ Obtain key managers' bio-data and determine education, experience, and relevant skill. ♦ Interview individuals familiar with MGT (Br./Region manager, Govt. officers, Managers themselves).
Level of Teamwork	♦ Managers don't work well together due to poor Org. structure, poor decision making etc.	♦ Review Org. chart. ♦ Review performance ♦ & Compare with competitors (Profit, growth etc). ♦ Determine reasons for any recent changes in Mgt.

Management Integrity Risk: What is the risk of failure due to lack of management integrity?

Measures	Example of Risks	Analysis
Honesty	♦ Bank is unable to assess risk Properly due to unreliable or inadequate data.	♦ Review credit files. ♦ Interview Mgt. ♦ Interview individuals ♦ Familiar with Mgt. ♦ Quality. ♦ Look for characteristics
Dependability	♦ Bank has difficulty in recovering loan due to failure of Mgt. to meet commitments.	♦ Review intra-group accounts. ♦ Look for characteristics of managers that may cause problems in recovering the loans.

Security Control Risk: What is the risk that the bank fail to realize the security?

Measures	Example of Risks	Analysis
Ease of Obtaining a favorable judgment	♦ Faulty legal rights. ♦ Documentation inadequate. ♦ Fraud. ♦ Insurance does not cover exposure. ♦ Customer able to influence judgment.	♦ Verify documentation. ♦ Assess customer's lobbing power with legal authorities.
Ease of taking possession of security	♦ Security missing/transferred. ♦ Security immobile. ♦ Difficulty in evicting squatters.	♦ Conduct site visit(s) to verify security existence.

Security Cover Risk: What is the risk that the realized security value is less than the exposure?

Measures	Example of Risks	Analysis
Speed of realization	Acquiring title to security takes longer than expected. Selling security takes longer than expected.	♦ Review recent cases to estimate speed of realization. ♦ Assess power of borrower to prolong legal process. ♦ Analyze market demand for security.
Liquidation Value	Security loses value before its is realized (poor quality, perishable, Dep, obsolete technology) Market price changes before security is realized (small number of buyers)	♦ Use assessr to value security (quality, quantity, market demand) ♦ Review recent cases for difference between assessed value & realized at sale. ♦ Review economic conditions.

3.5 CAMELS Rating

In the USA, the Uniform Financial Rating System is an internal supervisory tool currently used by the Federal Agencies. In addition to this, State Banking departments as well as the Farm Administration use the CAMELS rating system to evaluate the soundness of financial institutions as follows.

The abbreviations are as follows:

C = Capital Adequacy

A = Asset Quality

M = Management Evaluation

E = Earning Potential

L = Liquidity and

S = Sensitivity to market risk.

Factors are described as under:

CAPITAL ADEQUACY

Capital provides the necessary cushion to withstand credit risk and other risks related to banking operation. While assigning a rating, we consider its capital base and its sustainability from medium to long term. This assessment is significantly influenced by the perception of relative profitability, the entity's risk profile and asset quality. The analysis encompasses the following factors:

Size of Capital

The absolute size of capital imparts flexibility to a bank or financial institution to withstand shocks. Therefore, an entity with a high absolute capital is viewed favorably. In addition, a few other factors are also evaluated, like, whether the capital level is above the regulatory requirement, internal capital generation trend is in line with business growth, to what extent existing capital base can support Pillar II capital requirement and others.

Quality of Capital Components (Tier I & Tier II)

The proportion of Tier I capital or core capital is the primary indicator of the quality of the banks' or financial institutions' capital. Although presence of Tier II capital does provide some cushion over the short to medium term, such capital needs to be periodically relinquished.

We also analyze other issues like presence of hidden reserves (unutilized gains on investment portfolio), and the percentage of the investment portfolio that is marked to market. These issues help streamline accounting policy differentials across entities, and have a bearing on the capital quality.

Sustainability of Capital Ratios

An entity can enhance is internal capital either through internal accruals or by raising fresh equity capital or by issuing hybrid capital. We therefore evaluate the rated entity's access to capital market to increase Tier I capital needs or to service the increased capital base. Internal capital generation is considered as the prime factor in assessing the sustainability of its capital adequacy. An entity that is able to maintain its assets growth through internal generation without impairing the capital adequacy is viewed favorably.

Capital vs. Business Growth Plans

We also factor the growth plan of the banks & financial institutions in analyzing the capital adequacy. Its capital adequacy may be regarded as unsustainable (although presently it is high) if the entity pursues a high growth strategy. Additional focus is also provided how capital plan is formulated to absorb unexpected loss.

ASSET QUALITY

Quality of the asset portfolio is considered as the most important factor of any bank or financial institution. Because, it reflects the strength of any bank or financial institution about its loan portfolio, expected cash flow and also the expected return. In studying the bank's credit portfolio, we also examine its credit appraisal mechanisms, portfolio monitoring procedures and problem asset resolution strategies. We analyze the asset quality on the following parameters:

Geographical Diversity and Sectoral Diversity

Geographical diversity of asset base and diversity across industries, along with single risk concentration limits are important inputs in determining the asset quality of bank/ financial institution. Foreign banks with limited operations and branch network have lesser flexibility to diversify their advance portfolio domestic banks having larger networks and are thus susceptible to adverse economic conditions.

The industry exposure and single risk concentrations are monitored by central bank through exposure guideline. However, some banks and financial institutions show a high degree of

exposures to certain industries, leaving themselves vulnerable to downturns in those industries. To ascertain the credit concentrations in the credit portfolio, we review the rated bank's largest exposures.

Profile of the Large Exposures

The credit quality of a bank's credit portfolio (funded as well as non-funded) is an important input in the analysis of asset quality. We analyze the top 50 or 100 corporate exposures in the asset portfolio of a bank to make a judgment on portfolio quality. The ability to attract clients with a better quality is an important indicator of its own future credit quality. The single part exposure limit is also a good factor for any bank/financial institution to attract big clients that is considered favorably in rating exercise. Also a bank/ financial institution's ability to attract or retain good clients by providing value added services would enhance asset quality in future.

Quality of Non Industrial/Specialized Lending

Banks in Bangladesh are obliged to lend a proportion of their funds to the priority sector that primarily encompasses agriculture and small scale industries. Especially, State Owned Banks (SCBs) have good exposures in this area. To this extent financial institutions are in better place than banks due to their non-obligation to lending in such sectors. We analyze the credit quality of this non-industrial portfolio in judging the overall asset quality of a bank. The credit quality of the asset portfolio by the segment wise non –performing asset (NPA) level of the portfolio is also done.

In recent times, banks and financial institutions are focusing significantly on retail segment primarily for vehicle and house building loan. We look at the retail credit growth, quality of credit portfolio and the underlying recovery mechanism to arrive at the asset quality implications of the retail segment.

NPA/Weak asset Levels

The asset quality of a bank depends not only on the credit quality of its clients but also on its ability to manage its assets portfolio. The weak asset (calculated based on rating distribution approach for corporate loans and on a lagged delinquency approach for retail loans) level helps benchmark the bank/FIs ability to manage its asset portfolio on a relative scale. Weak asset levels are indicators of the inherent quality of the entity's asset portfolio and thus, of its credit appraisal capabilities. Weak asset levels net of provisioning are considered as indicators in judging the balance sheet strength of the bank, the proportion of earning asset held by it and the potential credit loss. The proportion of earning assets and the potential credit loss would have a bearing on the bank's future earnings capability.

Movement of Provisions and Write-offs

Some banks/FIs follow a practice of writing off a large portion of their bad loans in order to clean up their balance sheets. The present weak asset numbers are thus not a true indicator of the inherent credit quality of a bank's asset portfolio. Therefore, weak asset levels alone cannot be a criterion to assess a bank's future asset quality. Average provisioning, including write-offs, over five-years timeframe is an indicator of the level of clearing up done by a bank over a period of time. This average provisioning level and its movement is an indicator of the portfolio's credit risk and the expected write-offs and provisioning, which would further affect the bank's earnings capability.

Growth in Advances

High growth rates in the financial sector bring the risks associated with the establishment of collection systems, tracking of asset quality and lack of seasoning of lending portfolio. WE closely analyses the pattern and nature of such growth, studying entities with higher growth rates more carefully to look at the nature of the growth, the reasons for it and its implication for the asset quality. An entity that has grown by attracting good quality clients would be viewed more favorably than one that has grown just by increasing its geographical presence or diluting credit criteria.

MANAGEMENT EVALUATION

We believe that the quality of management is an important differentiating factor in the future performance of a bank/FI. The management is evaluated on the following parameters:

Goals and Strategies

A bank's future goals strategies are evaluated to form a view on its management's vision. The bank's ability to adapt to the changing environment and manage credit and market risks, especially in a scenario of increasing deregulation of the financial markets, assumes critical importance.

Systems and Monitoring

We study credit appraisal systems and the systems for managing and controlling credit and market risks at a portfolio level. Significant emphasis is laid on the analysis of risk monitoring systems and the periodicity and quality of monitoring. Most banks face the challenges of enhancing the coverage and quality of their information systems and reporting.

The degree of acceptance of new systems and procedures in the bank, data monitoring systems and the extent of computerization and interconnectivity between branches within a bank is given significant importance. The level of computerization is gauged on the basis of the extent of business covered by computerization, computerization in branches and of the money market and foreign exchange desks.

We attach significance to the operating systems for data capturing and MIS reporting in a bank. A bank's balance sheet that has a large volume of transactions pending reconciliation reflects its lack of operating systems and is viewed negatively. WE also analyses expenses made on technology during the recent period and the bank's strategy of using technology effectively as a delivery platform to reduce costs and improve service levels.

Risk Craving

We also analyze the management's attitude towards risk and growth. An analysis of the strength of systems and processes put in place by the management to strengthen the structures within financial institution/banks are also undertaking to assess the management risk appetite. A high-risk propensity typically reflects in higher volatility in earnings in both the fund-based and the fee businesses. A management with a higher propensity to take on risks is viewed cautiously.

Competence and Integrity

Assessment of the competence and integrity levels of management is a key analytical driver of the management evaluation. This delves into the past track record of the management to identify positive and negative attributes of both these areas.

EARNINGS POTENTIAL

We analyze a bank/FI's earnings on the basis of the level, diversity and stability of earnings.

Level of Earnings

The level of earnings as measured by the net profitability margin (NPM) or Net Interest Margin (NIM) provides the bank/FI with a cushion for its debt servicing and also increases its ability to cover its asset risk. NPM is a function of interest spreads, expense levels, and fee based income earned by the bank. Purely from the viewpoint of size, the absolute profit levels registered by a bank are also germane to the earnings profile of a bank.

Earnings of banks/FIs can be significantly affected due to volatility in interest rates. Thus, the trend in profitability at gross profit levels over the past years is examined to form a view on the sustainability of earnings. The various elements leading to profitability, such as interest spreads, fee levels, expense levels and provisioning levels are also analyzed to form a view on profitability trends and the sustainability of profits.

Diversity of Income Sources

Diversity of income sources is an important input in analyzing the stability of earnings. Diversity in fund-based income is achieved by focusing on different borrower segments such as industries, trade and retail. Bank also diversity their income streams through non-interest or fee income such as guarantees, cash management facility, service charges from retail customers and trading income. Fee income provides a cushion to profitability, especially in times of pressure on interest spreads.

We also view the composition of interest revenue streams while analyzing the earnings position of a bank/FI. Banks relying on short term, non-repetitive income sources such as bill financing and trading income are viewed less favorably than banks with long-term credit relationships with companies through cash credit or term loan exposures. WE also analyses the composition of non-interest income while evaluating a bank/FI's earnings; this includes income from trading activities, which tend to be volatile. A closer analysis of the composition of revenue streams helps to form an opinion on the sustainability of earnings.

Operating Efficiency

We look at the level and trend of operating expenses and degree of automation in the bank/FI. We look at salary expenses and total non-interest expenses as a proportion of average assets to benchmark bank/FIs on efficiency parameters.

LIQUIDITY/ ASSET LIABILITY MANAGEMENT

We assess the asset liability maturity profile of the rated entity to form an opinion on the liquidity and interest rate risks. The entity's policy on asset and liability management is discussed. The following issues are considered in evaluating liquidity;

Liquidity Risk

The liquidity risk is the factor of bank's resource strength and the liquidity support available to it in the form of access to call/repo borrowings and the extent of refinance available from

BB. Banks are considered as the primary channel of retail savings into the economy. Most public sector banks with a widespread branch network act as conduits for mobilizing retail savings. We view most of the public sector banks favorably on this parameter due to the stable accretion to deposits and the attendant liquidity support available to them due to this large deposit base.

A Financial Institution's(FIs) liquidity position is a function of its management's policy of maintaining treasury portfolios to meet asset and liability side liquidity demands. However, on account of their significance to the domestic sector, FIs enjoy a high degree of financial flexibility that reduces liquidity risks to fairly low levels.

The specific liquidity parameters analyzed are:

Liquid Asset/Total Asset

To arrive at this ratio, we look at the percentage of sovereign investments, liquid funds and other short term fixed income instruments in an entity's books to its total assets. This can also be derived from credit-deposit ratio.

Proportion of Small Deposits

We look at the proportion of deposits below Tk. 1.0 million in the bank's total deposit base. These small sized retail deposits tend to be inherently more stable.

Interest Rate Risk

The rating factors in the volatility of the bank/FI's earnings to interest rate changes. We analyze the entity's asset liability maturity profile to judge the level of interest rate risk carried by it. In the banking system the interest rate maturity profiles of the assets and liabilities have an inherent mismatch. The floating rate advances portfolio (linked to prime lending rates) and the relatively long duration investment portfolio are funded through short to medium tenure liabilities, which exposes the bank to an element of interest rate risk.

FIs score over banks in this regard due to the wholesale nature of their operations and policies that link the nature of borrowing (fixed/Floating) with correspondingly matched lending.

Incentive Program:

Banks may wish to introduce incentive programs to encourage Recovery Unit Account Managers to bring down the Non Performing Loans (NPLs). The table below shows an indicative incentive plan for Recovery Unit Account Managers:

Recovery as a % of Principal plus Interest	Recommended Incentive as % of net recovery amount	
	If CG 7-8	**If written off**
76% to 100%	1.00%	2.00%
51% to 75%	0.50%	1.00%
20% to 50%	0.25%	0.50%

Loan Classification For a long period after liberation, the banking system of Bangladesh operated in an environment of directed lending, particularly to priority sectors determined by the government, at administered rates of interest. The system of classifying non-performing loans was extremely lax in absence of a standardized loan classification procedure and specific time limits for loans to be classified. Generally, a long time was required for a loan to be identified as classified, and as such the provisioning requirement was less important. This resulted in huge non-performing loans and banks had to operate with inadequate capital bases. Gradually, the country's banking system reached a chronic state of insolvency and became virtually non-viable.

The National Commission on Money, Banking, and Credit conducted a study with the help of the World Bank and on the basis of its report, the government introduced a comprehensive financial sector reform program in the country. As part of this program, a new system of loan classification and provisioning against potential loan losses for advances as of 31 December 1989 was introduced in November 1989. The initial classification and provision calculations were completed by 31 August 1990. A new phase of classification and provision calculation began on 1 December 1990 and was conducted on advances as of 31 December 1991. The calculation of provisions and interest suspense was based on the balance outstanding on 31 December 1990 and the calculation was completed on 31 March 1991. Subsequently, the classification, provision estimates, and treatment of unrealized interest were carried out on advances as of 31 December each year and completed within three months.

The loans were usually classified by the lending bank whenever the bank had reasons to believe that the borrower would not be able to repay the loan. This judgment was made regardless of whether the loan was overdue or not. Banks by themselves formulated specific conditions for classification on a qualitative basis. Loans extended by a bank were classified into the following three categories: substandard-if an advance or any portion of an advance or interest thereon remained overdue for one year or more but less than three years; doubtful-if the advance or any portion of the advance or interest thereon remained overdue for three

years or more but less than five years, or if legal action for recovery of the loan had been initiated; and bad-if the advance or any portion of an advance or interest thereon remained overdue for five years or more, or if legal action had been initiated and no court decision had been obtained within five years of initiation of action. The base for provisions on substandard loans was the balance outstanding in the loan ledger for the loan, less any interest taken in an interest suspense account. The base for provisions for doubtful and bad loans was the balance outstanding, less any interest included in the balance outstanding but offset in an interest suspense account. A 1% provision was taken for all non-classified outstanding loans while the rates of provision for loans classified as substandard was 10%, for those classified as doubtful 50%, and for bad loans 100%.

In December 1994, an amended and revised loan classification and provisioning procedure was introduced by the Bangladesh bank to bring it in line with the international standards. This was implemented in five phases, the last of which ended in December 1998. In the revised policy, the duration for loans to be classified under various categories was drastically reduced, while the frequency of classifications was increased. In December 1998, to simplify the classification procedure, guidelines were issued to banks to categories loans into four groups' viz., continuous credit, demand loan, fixed-term loan, and short-term agricultural loans and microcredit. For classification and provisioning under the revised procedure, banks were instructed to classify loans overdue for more than 3 months but less than 6 months as substandard; those overdue for more than 6 months but less than 1 year as doubtful; and those overdue for more than 1 year as bad. The revised rate of provisioning for substandard loans was 20%, for doubtful loans 50%, and for bad loans 100%. Banks were instructed to classify loans annually in the first phase, half-yearly in the second and third phases, and quarterly from the fourth phase. The loan sanctioned, renewed, or rescheduled from first January 1995 are to be treated as new loans for classification and provisioning from the 4th phase of the revised procedure.

The new loan classification procedure has unmasked the extent and gravity of the loan default problem. It exposed the extremely weak quality of loan portfolios and forced banks, particularly, nationalized commercial ones to embark upon remedial action. It also forbade banks to pay interest on non-performing loans to show artificial profits. The net effect of new loan classification and provisioning is that it rescued the country's banking sector from the verge of collapse and enables it to stand on a new footing and to grow as a vibrant sector for facing the challenges of the new millennium.

The causes of Non-Performing Loans (NPLs) vary from country to country. As mentioned by Bloem and Gorter (2001) the non-performing loans are caused by an inevitable number of wrong economic decisions by individuals and plain bad luck e.g., inclement weather, unexpected price changes for certain products. To wit, when the cost of fuel, prices of key export products, foreign exchange rates, or interest rates change abruptly the amounts of NPL may increase considerably, or, if there is a sudden failure of a major company, the cascading effects can aggravate the situation. Moreover, inefficient bank management, poor supervision, overoptimistic assessments of credit worthiness during high growth, and moral hazard that result from generous government guarantees or the expectation of assured bailouts can cause non-performing loans in a country. Deliberate act of fraud is another possibility. There are at least three effects of high NPL as pointed out by Bloem and Gorter (2001): (i) a fall in the price of loan collaterals (often real estate) may cause more loans to become classified as doubtful (ii) large bad loan portfolios will affect the ability of banks to provide credit, and the resulting liquidity crunch may suffocate otherwise good creditors. And (iii) Depositors and foreign investor may start a run on the banks, pushing them into further liquidity problems. Recently a study by Roe and Peachey (2005) pointed out that the above cited factors, especially the state control of lending (both volume and price) and the absence of appropriate risk management practices were the major reasons behind the high-classified loan ratio in Bangladesh.

Banks in Bangladesh accumulated huge non-performing loans after the independence in 1971. Prior to financial sector reforms of the early 1990s, credit disbursement was mostly directed by the bank management which was often politically motivated rather than based on any commercial grounds. Besides, SOEs many of which never made any profit, borrowed a large amount of money from nationalized banks, which in turn led to bad loans due to large scale corruption, inefficient management, and low technical skills of the SOEs. As of March, 2006, the outstanding loans to the public sector corporations and SOEs by NCBs are over BDT 130 billion, among which BDT 13.38 billion is classified loans, which has created a negative impact on the NCBs overall financial condition and their liquidity situation. The interventionist policies in the past did not affect all the scheduled banks the same way. It affected first and second generation banks badly than new and third generation banks. Of the 30 PCBs now operating in Bangladesh, nineteen have entered the market since 1995. The banking industry is highly segmented at least for three reasons and would appear noncompetitive. First, there are some older private banks (10 out of 30) which made mistakes in the past, accumulated a large amount of classified loans, and are currently constrained by the need to maintain capital adequacy levels in accordance with the tighter Bangladesh Bank

rules. They are trying to make up for the past losses partly through their current level of loan charges. Second, almost all the FCBs and several new PCBs have no history of past lending mistakes, and are operating in an environment that appear to be one of tacit collusion. Thirdly, even though the state-owned NCBs and SBs have serious capital adequacy problems, they still do operate in the market. Therefore, in order to be competitive NCBs (and SBs) would have to charge the same as that by their competitors in the market; otherwise they would lose market share and eventually go out of business. It can be noted here that the classified loans of NCBs and SBs are 21 percent and 34 percent respectively where PCBs and FCBs have 5.62 percent and 1.26 percent of classified loans as a share of total outstanding loans respectively as on December 31, 2005.

Loan Classification and Provisioning In 1989, the Bangladesh Bank announced its first ever policy towards loan classification and provision in order to protect depositor's money, owner's equity and to improve the performance of the banking sector. According to the BCD Circular No. 34, 1991 all loans should be termed as classified and unclassified loans except for agricultural short-loans. In addition, classified loans would further to be divided as sub-standard, doubtful and bad/losses. In 1994, a revised policy on loan classification and provisioning system was introduced by the central bank in order to meet the international standards by 1998. The loan provisioning and classification system was modified further in 2001. Table 5.1 shows the current loan classification and provisioning system in Bangladesh.

Current Loan Classification and Provisioning System

Types of Loan	Length of Overdue	Status of Classification	Rate of Provision (Percent)
Continuous loan Overdue period will be accounted from the day following the date of expiry of such loan	-Less than 6 months - 6 months or more but less than 9 months - 9 months or more but less than 12 months - More than 12 months	Unclassified Sub-Standard Doubtful Bad / loss	1 20 50 100
Demand Loan Overdue period will be accounted from the day	-Less than 6 months - 6 months or more but less than 9 months - 9 months or more but less than 12	Unclassified Sub-Standard Doubtful	1 20 50

following the date of expiry of such loan	months - More than 12 months	Bad / loss	100
Term loan payable within 5 years Overdue period will be accounted from the day following the date of expiry of the due date of payment of installment of such loan	- if default amount of installment is equal to installment payable in 6 months. - if default amount of installment is equal to installment payable in 12 months. - if default amount of installment is equal to installment payable in 18 months.	Sub-Standard Doubtful Bad / loss	20 50 100
Term loan payable within 5 years Overdue period will be accounted from 6 months following the expiry of the due date of payment of installment of such loan.	- if default amount of installment is equal to installment payable in 12 months. - if default amount of installment is equal to installment payable in 18 months. - if default amount of installment is equal to installment payable in 24 months.	Sub-Standard Doubtful Bad / loss	20 50 100
STAG / Micro Credit Overdue period will be accounted from 6 months following the expiry of the due date of payment of installment of such loan.	Less than 12 months 12 months or more but less than 36 months 36 months or more but less than 60 months more than 60 months	Unclassified Sub-Standard Doubtful Bad / loss	1 20 50 100

From the above Table it is clear that Bangladesh did not follow the international standard in loan classification, but in case of provisioning and frequency of classification the Bangladesh practice is consistent with the international standards.

Divestiture of the Nationalized Commercial Banks

In Bangladesh, improving the performance of 4 problem-ridden NCBs (i.e., Sonali, Rupali, Agrani, and Janata) by privatization would require strict regulatory vigilance and tight credit discipline. Therefore, the immediate goal of privatization policy would be to shore up the governance with strong boards appointed to run these (i.e., 4 NCBs) autonomously with full authority of branch rationalization and downsizing. Running on a commercial basis will entail denial of credit to loss making SOEs except against government guarantee readily cashable in the event of an overdue loan. Financing SOEs with government guarantees on any extended scale would however be undesirable on account of bringing in further laxity in SOE management, and is no substitute for a comprehensive government strategy for SOEs.

In recent years, the financial conditions of the NCBs have improved gradually, and these banks also undertook efforts to reduce excess staff and close unviable branches, which helped curtail operating losses. However, significant steps in restructuring these banks have thus far been slower than expected. In particular, the privatization of Rupali Bank was interrupted by a court order, and the implementation of fundamental restructuring in other NCBs has been slower than expected. Moreover, responses to major recommendations of the consulting teams regarding human resource management, procurement, and lending to SOEs have been subject to considerable delays or not implemented at all. A crucial problem that has impeded the successful restructuring of the NCBs is the lack of autonomy that bank managements and boards have over major operational decisions.

Therefore, up to date measures have been taken to re-invigorate the privatization process and more determined efforts will be needed in the near future to make the bank restructuring program successful. In particular, continued close monitoring of all NCBs' performance under MOUs will be important to restrain new lending and improve credit risk management. To expedite the restructuring of Agrani Bank, the government has already revised the TOR of the consulting team to provide it with increased authority to implement operational restructuring and to serve as the financial advisor for the eventual privatization of the bank. To strengthen oversight of NCB managements, the board of directors of Sonali Bank includes two members with banking and financial expertise, and the government also reconstituted the boards of Agrani and Janata Banks lately. Furthermore, to enable the banks to function as

independent corporate entities and place them under BB regulatory purview, the authorities have already initiated the corporatization of Agrani, Janata, and Sonali Banks. The Working Group on NCB reform, which is now being supported by an international banking expert, will work closely with the NCBs to ensure that the recommendations of the consulting teams are considered in a timely fashion. Bank managements and boards will be held accountable against performance benchmarks that are being designed in consultation with the World Bank. With respect to NCB reform, management support teams are now in place in Agrani, Janata, and Sonali banks. Given the unfortunate delays already experienced, the government has intensified efforts to ensure the successful divestment of Rupali Bank. All outstanding legal challenges to Rupali bank's divestment have been resolved. The government has already worked out the details for recapitalizing Rupali. In addition, at the point of transaction, the government will remove from Rupali's books and assume full responsibility for the liabilities of existing pensioners and for the accrued rights of current employees, with cash payments made from the government's budget as these payments become due. The eventual majority shareholder will have management control over all aspects of the bank's operations, including on human resource policies and pay scales. With respect to the other three NCBs, the government is committed to bringing Agrani to the point of divestment in the near term. Finally, NCB restructuring and divestment will be facilitated by granting bank managements and their support teams greater autonomy over day to day operations and strategic reforms, and by strengthening the role of the NCB Working Group. BB will regularly monitor the implementation of the reforms measures in the NCBs and will be consulted in an advisory capacity in the matters of privatization of banks. This will focus on: (i) revising the TOR for the consulting teams to give them authority to implement recommendations in collaboration with the management of the banks; (ii) reviewing the practices of management and the boards of directors, and advising as necessary, to ensure that they are cognizant of their authority to take decisions on operational policies without prior consent from the Ministry of Finance (as defined in the Bangladesh Banks (Nationalization Order); (iii) holding NCB boards and management accountable against annual performance targets; and (iv) corporatizing Janata, Sonali and Agrani Banks.

Chapter Four
Banking System in Bangladesh

4.1 Evolution of the Banking Sector in Bangladesh:

The banking system that our country inherited at independence consisted of two branch offices of the former State Bank of Pakistan as the Central Bank of Pakistan and seventeen large commercial banks, two of which were controlled by Bangladeshi interests and three by foreigners other than West Pakistanis. Bangladesh Bank, the central bank of the country, was set up on 16 December 1971 by the Bangladesh Bank Order 1972. The government accepted the assets and liabilities of the Deputy Governor's office of the State Bank of Pakistan in Dhaka and renamed it the Bangladesh Bank as a fully effective and permanent central bank of the country. The bank was responsible for regulating currency, controlling credit and monetary policy, and administering exchange control and the official foreign exchange reserves. The Bangladesh government initially nationalized the entire domestic banking system and proceeded to reorganize and rename the various banks. Foreign-owned banks were permitted to continue doing business in Bangladesh. The insurance business was also nationalized and became a source of potential investment funds. Cooperative credit systems and postal savings offices handled service to small individual and rural accounts.

At the time of independence the value of the taka, Bangladesh's unit of currency, was set between 7.5 and 8.0 to US$1. With the exception of FY 1978, the taka's value relative to the dollar declined every year from 1971 through the end of 1987. To help offset this phenomenon, Bangladesh first used the compensatory financing facility of the International Monetary Fund (IMF) in FY 1974. Despite the increasing need for assistance, the Mujib government was initially unwilling to meet the IMF's conditions on monetary and fiscal policies. By FY1975, however, the government revised its stance; declaring a devaluation of the Taka by 56 percent and agreeing to the establishment by the World Bank of the Bangladesh Aid Group. Between 1980 and 1983, the Taka sustained a decline of some 50 percent because of deterioration in Bangladesh's balance of payments position. Between 1985 and 1987, the Taka was adjusted in frequent incremental steps, stabilizing again around 12 percent lower in real terms against the United States dollar, but at the same time narrowing the difference between the official rate and the preferential secondary rate from 15 percent to 7.5 percent. Accompanying this structural adjustment was an expansion in the amount of

trade conducted at the secondary rate, to 53 percent of total exports and 28 percent of total imports. In mid- 1987, the official rate was relatively stable, approaching Tk. 31 to US$1.

To conduct banking in Bangladesh, all banks have to have licenses from the Bangladesh Bank under the Bank Companies Act 1991. To be able to get a license, all intending banks have to be registered with the Registrar of Joint Stock Companies under the Companies Act 1994, and collect Certificate of Incorporation. Moreover, to collect capital through public offerings of shares, intending banks have to obtain permission from the country's Securities and Exchange Commission. All such banks operating in Bangladesh with different paid-up capital and reserves having a minimum of an aggregate value of Tk. 50 lacs and conducting their affairs to the satisfaction of the Bangladesh Bank have been declared as scheduled banks in terms of section 37(2) of Bangladesh Bank Order 1972. In terms of section 13 of Bank Company Act, 1991, the minimum aggregate value was Tk. 20 crore. From 30th March 2003 it was 100 Crore. From October 2007, it has been raised to minimum size of Tk.200 crore. After 2011, it is now Tk. 400 crore.

Banking institutions in Bangladesh can be classified under different groups. Most banks fall under the category of branch banking i.e., the banks operate through branches at home and abroad under the control of their head offices. Foreign branches of Bangladeshi banks have to abide by home country regulations. Under the ownership-based classification, banks in Bangladesh are classified as government/nationalized, private, foreign, and joint ownership banks. After liberation, the banks operating in Bangladesh (except those incorporated abroad) were nationalized. These banks were merged and grouped into six commercial banks. Of the total six commercial banks, Pubali Bank Ltd. and Uttara Bank Ltd. were subsequently transferred to the private sector with effect from January 1985. The rest four State Owned Banks (SCBs) are operating as public limited company from October, 2007. The two Govt owned specialized banks were renamed as Bangladesh Krishi Bank and Bangladesh Shilpa Bank. Managed by the Bangladesh Krishi Bank, a specialized agricultural banking institution, lending to farmers and fishermen dramatically expanded. The number of rural bank branches doubled between 1977 and 1985, to more than 3,330. Denationalization and private industrial growth led the Bangladesh Bank and the World Bank to focus their lending on the emerging private manufacturing sector. Scheduled bank advances to private agriculture, as a percentage of sectoral GDP, rose from 2 percent in FY 1979 to 11 percent in FY 1987, while advances to private manufacturing rose from 13 percent to 53 percent.

In March 1987, Bangladesh Krishi Bank was bifurcated and another specialized bank for the development of the Agriculture sector was emerged as Rajshahi Krishi Unnayan Bank

(RAKUB) for Rajshahi Division. Bank of Small Industries & Commerce Ltd. (BASIC) started its operation as a private bank from September 1988. Later on BASIC was brought under direct control of the Government and was reckoned to as a specialized bank with effect from June 1993. From July 1995 again the BASIC was categorized as a private bank. In 1997, Government decided to treat this bank as a specialized bank again. So in this booklet, the BASIC has been treated as a specialized bank. BSB & BSRS were merged and renamed as BDBL from January-March 2010. Two foreign banks operating in Bangladesh - Standard Chartered and Grindlays Bank were merged to start operations in the name of Standard Chartered Bank in 2003. American Express Bank was also sold to Standard Chartered Bank in 2005.The Oriental Bank Ltd., an Islamic private bank was sold to foreign investors and was renamed as ICB Islamic Bank Ltd. in 2008.

The transformation of finance priorities has brought with it problems in administration. No sound project-appraisal system was in place to identify viable borrowers and projects. Lending institutions did not have adequate autonomy to choose borrowers and projects and were often instructed by the political authorities. In addition, the incentive system for the banks stressed disbursements rather than recoveries, and the accounting and debt collection systems were inadequate to deal with the problems of loan recovery. It became more common for borrowers to default on loans than to repay them; the lending system was simply disbursing grant assistance to private individuals who qualified for loans more for political than for economic reasons. The rate of recovery on agricultural loans was only 27 percent in FY 1986, and the rate on industrial loans was even worse. As a result of this poor showing, major donors applied pressure to induce the government and banks to take firmer action to strengthen internal bank management and credit discipline. As a consequence, recovery rates began to improve in 1987. The National Commission on Money, Credit, and Banking recommended broad structural changes in Bangladesh's system of financial intermediation early in 1987, many of which were built into a three-year compensatory financing facility signed by Bangladesh with the IMF in February 1987. One major exception to the management problems of Bangladeshi banks was the Grameen Bank, begun as a government project in 1976 and established in 1983 as an independent bank. In the late 1980s, the bank continued to provide financial resources to the poor on reasonable terms and to generate productive self-employment without external assistance. Its customers were landless persons who took small loans for all types of economic activities, including housing. About 70 percent of the borrowers were women, who were otherwise not much represented in institutional finance.

The new banking system succeeded in establishing reasonably efficient procedures for managing credit and foreign exchange. The primary function of the credit system throughout the 1970s was to finance trade and the public sector, which together absorbed 75 percent of total advances. The government's encouragement during the late 1970s and early 1980s of agricultural development and private industry brought changes in lending strategies.

4.2 Current Banking Scenario in Bangladesh

After the independence, banking industry in Bangladesh started its journey with 6 nationalized commercialized banks, 2 State owned specialized banks, 3 foreign Banks and Bangladesh Bank as the central bank. In the 1980's banking industry achieved significant expansion with the entrance of private banks. Now, banks in Bangladesh are primarily of two types:

- Scheduled Banks: The banks which get license to operate under Bank Company Act, 1991 (Amended in 2003) are termed as Scheduled Banks.
- Non-Scheduled Banks: The banks which are established for special and definite objective and operate under the acts that are enacted for meeting up those objectives, are termed as Non-Scheduled Banks. These banks cannot perform all functions of scheduled banks.

There are 56 **scheduled banks** in Bangladesh who operate under full control and supervision of Bangladesh Bank which is empowered to do so through Bangladesh Bank Order, 1972 and Bank Company Act, 1991. Scheduled Banks are classified into following types:

- State Owned Commercial Banks (SCBs): There are 4 **SCBs** which are fully or in majority owned by the Government of Bangladesh.
- Specialized Banks (SBs): 6 **specialized banks** are now operating which were established for specific objectives like agricultural or industrial development. These banks shares are fully or majority owned by the Government of Bangladesh.
- Private Commercial Banks (PCBs): There are 39 **private commercial banks** which are generally owned by the private entities. PCBs can be categorized into two groups:
- Conventional PCBs: 31 **conventional PCBs** are now operating in the industry. They perform the banking functions in conventional fashion i.e interest based operations.
- Islami Shariah based PCBs: There are 8 **Islami Shariah based PCBs** in Bangladesh and they execute banking activities according to Islami Shariah based principles i.e. Profit-Loss Sharing (PLS) mode.

- Foreign Commercial Banks (FCBs): 9 **FCBs** are operating in Bangladesh as the branches of the banks which are incorporated in abroad.

4.2.1 Bangladesh Bank as the central bank:

Bangladesh Bank (BB), as the central bank, has legal authority to supervise and regulate all banks and non-bank financial institutions. It performs the traditional central banking roles of note issuance and of being the banker to the government and banks. Given some broad policy goals and objectives, it formulates and implements monetary policy, manages foreign exchange reserves and sets regulations and conduct monitoring thereof as they apply to the entire banking system. Its statutory regulations include, among others: minimum capital requirements, limits on loan concentration and insider borrowing and guidelines for asset classification and income recognition. The Bangladesh Bank has the power to impose penalties for non-compliance and also to intervene in the management of a bank if serious problem arise. It also has the delegated authority of issuing policy directives regarding the foreign exchange regime. Some of the major policies taken by Bangladesh Bank have been given below:

Policies and Strategies of Bangladesh Bank:

a) Monetary Policy

Monetary policy is a set of rules that aims at regulating the supply of money in accordance with predetermined goals or objectives. Monetary policy plays a very dominant role in altering the economic activity and the price level in a country. So, it should be very carefully formulated and implemented in achieving the goals and objectives as outlined in the Bangladesh Bank Order, 1972 below:

- Price stability both internal & external
- Sustainable growth & development
- High employment
- Economic and efficient use of resources
- Stability of financial & payment system

b) Strategy for Reserve Management

Bangladesh Bank (BB) is empowered by section 7A of Bangladesh Bank Order, 1972 (President's Order No. 127 of 1972) to hold and manage the official foreign exchange reserve of Bangladesh. It maintains its foreign exchange reserve in different currencies to minimize the risk emerging from widespread fluctuation in exchange rate of major currencies and very irregular movement in interest rates in the global money market.

BB has established Nitro account arrangements with different Central Banks. Funds accumulated in these accounts are invested in Treasury bills, repost and other government papers in the respective currencies. It also makes investment in the form of short term deposits with different high rated and reputed commercial banks and purchase of high rated sovereign/supranational/corporate bonds.

Fore Reserve & Treasury Management Department of BB performs the operational functions regarding investment which is guided by investment policy set by the Bib's Investment Committee headed by a Deputy Governor. The underlying principle of the investment policy is to ensure the optimum return on investment with minimum market risk.

c) Exchange Rate Policy

Towards liberalization of foreign exchange transactions, a number of measures were adopted since 1990s. Bangladeshi currency, the taka, was declared convertible on current account transactions (as on 24 March 1994), in terms of Article VIII of IMF Article of Agreement (1994).

As Taka is not convertible in capital account, resident owned capital is not freely transferable abroad. Bangladesh adopted Floating Exchange Rate regime since 31 May 2003. Under the regime, BB does not interfere in the determination of exchange rate, but operates the monetary policy prudently for minimizing extreme swings in exchange rate to avoid adverse repercussion on the domestic economy. In the forex market banks are free to buy and sale foreign currency in the spot and also in the forward markets.

d) Interest Rate Policy

Under the Financial sector reform program, banks are free to charge/fix their deposit (Bank /Financial Institutes) and Lending (Bank /Financial Institutes) rates other than Export Credit. At present, Loans at reduced rates (7%) are provided for all sorts of export credit since January 2004.

With a view to controlling the price hike and ensuring adequate supply of essential commodities, the rate of interest on loan for import financing of rice, wheat, sugar, edible oil (crude and refined), chickpeas, beans, lentils, onions, spices , dates and powder milk has been temporarily fixed to a maximum of 12%. Now, banks can differentiate interest rate up to 3% considering comparative risk elements involved among borrowers in same lending category.

With progressive deregulation of interest rates, banks have been advised to announce the mid-rate of the limit (if any) for different sectors and the banks may change interest 1.5% more or less than the announced mid-rate on the basis of the comparative credit risk. Recently Banks have been advised to upload their deposit and lending interest rate in their respective website.

e) Policy related to Capital Adequacy Requirement of the Banks

With a view to strengthening the capital base of banks and making them prepare for the implementation of Basel-II Accord, banks are required to maintain Capital to Risk-Weighted Assets ratio 10% at the minimum with core capital not less than 5% effective from December 31, 2007. However, minimum capital requirement (paid up capital and statutory reserve) for all banks will be Tk.200 corer as per Bank Company (Amendment) Ordinance, 2007. Banks having capital shortfall will have to meet at least 50% of the shortfall by June, 2008 and the rest by June, 2009.

Revaluation reserves of held to maturity (HTM) securities (up to 50% of the revaluation reserves) has been added to the components of supplementary capital. Besides, 'Hedging the price risk of commodity transactions' has been included in Short-term self liquidating trade related contingencies.

f) Loan Classification and Provisioning Policy

In order to strengthen credit discipline and bring classification and provisioning regulation in line with international standard, Bangladesh Bank issued a master circular on loan classification and provisioning through BRPD circular no 5 dated June 5, 2006. The revised policy covers an independent assessment of each loan on the basis of objective criteria and qualitative factors which is appended below:

Any Continuous Loan/Demand Loan if not repaid/renewed within the fixed expiry date for repayment will be treated as past due/overdue from the following day of the expiry date. A Continuous Loan/Demand loan/Term Loan which will remain overdue for a period of 90 days or more will be put into the "Special Mention Account (SMA)". Interest accrued on "Special Mention Account (SMA)" will be credited to Interest Suspense Account, instead of crediting the same to Income Account. A Continuous Loan/Demand loan is classified as 'Sub-standard' if it is past due/over due for 6 months or beyond but less than 9 months, classified as Doubtful' if it is past due/over due for 9 months or beyond but less than 12 months and classified as `Bad/Loss' if it is past due/over due for 12 months or beyond.

If any installment or part of installment of a Fixed Term Loan is not repaid within the due date, the amount of unpaid installment will be termed as `defaulted installment'. In case of Fixed Term Loans, which are repayable within maximum five years of time- If the amount of 'defaulted installment' is equal to or more than the amount of installment due within 6 months, the entire loan will be classified as "Sub-standard"

if the amount is equal to or more than the amount of installment due within 12 (twelve) months, the entire loan will be classified as" Doubtful" and if the amount is equal to or more than the amount of installment due within 18 (eighteen) months, the entire loan will be classified as "Bad/Loss". In case of Fixed Term Loans, which are repayable in more than five years of time and if the amount of 'defaulted installment' is equal to or more than the amount of installment due within 12 (twelve) months, the entire loan will be classified as "Sub-standard". If the amount is due within 18 (eighteen) months, the entire loan will be classified as "Doubtful" and if the amount is due within 24 (twenty four) months, the entire loan will be classified as "Bad/Loss".

The Short-term Agricultural and Micro-Credit will be considered irregular if not repaid within the due date as stipulated in the loan agreement. If the said irregular status continues, the credit will be classified as 'Substandard ' after a period of 12 months, as 'Doubtful' after a period of 36 months and as 'Bad/Loss' after a period of 60 months from the stipulated due date as per loan agreement. Besides, if any situational changes occur in the stipulations in terms of which the loan was extended or if the capital of the borrower is impaired due to adverse conditions or if the value of the securities decreases or if the recovery of the loan becomes uncertain due to any other unfavorable situation, the loan will have to be classified on the basis of qualitative judgment.

If the said irregular status continues, the credit will be classified as 'Substandard ' after a period of 12 months, as 'Doubtful' after a period of 36 months and as 'Bad/Loss' after a period of 60 months from the stipulated due date as per loan agreement.

As regards the provision, banks are required to maintain General Provision against all categories of loans along with off-balance sheet items in the following manner:

Particulars		**Short Term Agri. Credit and micro credit**	**Consumer Financing**			**Small Enterprise Financing**	**All other Credit**
			Other than Housing Finance & Loans for Professionals to set up business	Housing Finance	Loans for Professionals to set up business		
UC	Standard	5%	5%	2%	2%	1%	1%
	SMA	-	5%	5%	5%	5%	5%
Classified	SS	5%	20%	20%	20%	20%	20%
	DF	5%	50%	50%	50%	50%	50%
	B/L	100%	100%	100%	100%	100%	100%

Besides, banks are required to maintain general provision against Off-balance sheet exposures in the following manner:

g) Foreign Exchange Regulations

On March 24, 1994 Bangladesh Taka (domestic currency) was declared convertible for current transactions in terms of Article VIII of the IMF Articles of Agreement. Consequent to this, current external settlements for trade in goods and services and for amortization payments on foreign borrowings can be made through banks authorized to deal in foreign exchange, without prior central bank authorization.

However, because resident owned capital is not freely transferable abroad Taka is not yet convertible on capital account; some current settlements beyond certain indicative limits are subject to bonfires checks. Direct investments of non-residents in the industrial sector and portfolio investments of non-residents through stock exchanges are reparable abroad, as also are capital gains and profits/dividends thereon. Investment abroad of resident-owned capital is subject to prior Bangladesh Bank approval, which is allowed only sparingly.

Depending upon the relationship with and the degree of control of the Bangladesh Bank, banks in Bangladesh are divided into scheduled and non-scheduled banks. Scheduled banks are enlisted by the Bangladesh Bank under the provisions of section 37 of the Bangladesh Bank Order 1972. They are promise bound to obey the central bank's instructions, rules and

regulations especially, those relating to required capital and provisions, statutory liquidity reserves, audited returns etc. Through scheduling, banks gain special status and enjoy some special facilities from the central bank such as re-discounting, participation in the money market, membership of the clearing house and deposit insurance scheme. Non-scheduled banks do not enjoy such privileges.

4.3 Banking Sector Reforms in Bangladesh: Measures and Economic Outcomes

The general features of capital market of the developing economies are that they lack transparency and accountability in operations which reduce the trust and confidence of the general investors in undertaking financial transactions in this market. Additionally "information asymmetry" problem is seen fierce in developing economies and this information asymmetry problem reduces the depth of the capital market. Developing economies also suffer from a shortage of supporting institutions such as venture capitalists, security houses, rating companies, and asset management bodies which are in fact preconditions of a sound financial system. In developing economies, the banking system mainly mobilizes and allocates financial resources at a lower financial intermediation cost, and thereby enhances economic growth. However, the reduction of financial intermediation costs requires continuous reforms in the banking system in tune with the technological advancements, prudential laws and regulations, accounting standards, supervisory capability of the banking regulators, and efficiency of the bank officials in applying latest tools and techniques to manage the operational, credit, and market risks of a transaction. Besides, for independence of the banking system in fixation of interest rates, allocation of credits without government intervention, and increasing of competition and efficiency in financial intermediation, reforms are indeed essential. In other words, effective reform measures ensure robustness of the banking system which helps increase the economic growth rate of a country by directing investments to those sectors that offer the highest risk-adjusted rates of return. However, unplanned financial liberalization is likely to aggravate financial malaise instead of improving the efficacy of the system as is observed in the latest Asian financial debacle in 1997. This implies that the banking sector reform is a continuous process and multipronged in nature. It aims at developing the banking system competitive, prudent, resilient, and efficient in mobilizing and allocating financial resources at a least financial intermediation cost. It also covers integration strategies of the banking system with the global banking arena. Looking at Bangladesh, the banking system captures the lion's share of the financial market, although in recent years the number of non-banking financial institutions

(leasing and merchant banks) is seen to increasingly catering the financing and technological needs of the entrepreneurs.

In the banking system, the private commercial banks (PCBs) hold more than 61% of the total deposits and 59% of industry assets followed by the four State Owned Commercial Banks (SCBs) that hold 27.5% of the total deposits and 28.8% of industry assets (Annual Report, Bangladesh Bank 2010-11), and thus, they influence the efficacy of the banking system to a great extent. On the other hand, the equity financing from capital markets through issuing new shares is found to be lenient, and the debt financing through issuing corporate bonds is almost nonexistent. Bank financing was around 94% of total financing while equity financing accounted for the remaining 6% in 2007.This represents that the financial system of Bangladesh is predominately bank centered and the country's economic growth primarily rests on the development of its credible and stable banking system. Notably, in order to make the banking system competitive, effective, and international standard, the policy making institutions of Bangladesh adopted different measures and initiatives especially in the beginning of 1990s that include deregulation of interest rates, loan classification and provisioning requirement, adoption of indirect and market oriented monetary policy instruments, strengthening the operations of banking system by improving legal environment, making taka convertible and computerization of bank branches. However, the banking system of Bangladesh still holds large percentage of non-performing loans (NPLs) stands at 9.2% as of December 2009 which is in fact highest in comparison to the NPL ratios of neighbouring countries such as India (1.5%), Sri Lanka (5.6%), and Pakistan (7.7%). There is also absence of technological alliance among different banks and financial institutions to judge the credit risk of the borrower's effectively. Keeping this background in mind, several reform measures have been undertaken in Bangladesh so far in order to increase the efficiency of the banking sector.

In order to bring stability, discipline, and healthy growth in the banking sector several reform measures were undertaken by the central bank of Bangladesh in different phases since1980s. The study segregates the reform measures into four phases. These are: (a) Ownership Reform Program (1982-89), b) Financial Sector Reform Project (1990-95), (3) Banking Reform Committee (BRC)/Commercial Bank Restructuring Project (CBRP) (1996-2002), and (4) Current reforms programs (2003-onwards). The impact of reforms in the banking sector has been measured primarily in terms of profitability, productivity and efficiency, and social justice parameters.

(a) Ownership Reform Program (1982-1989):

The ownership reform program was initiated in 1982 to encourage the private sector and to strengthen overall banking sector. As a part of ownership reform program, the government denationalized two out of six nationalized commercial banks (SCBs) and allowed the operations of local private banks. The main reason for allowing local private banks was the desire on the part of the government to demonstrate its commitments to encourage the private sector and to create competition in the banking sector.

However, it is argued that during the period of 1983 to 1985, the operational efficiency of the banking sector further declined due to improper allocation of credits which created huge Non Performing Loans (NPLs) in the name of "sick industry syndrome". Thus, the government appointed a "National Commission on Money, Banking and Credit" in 1986 to diagnose the malaise and identify ways and means for banking recovery. The Commission undertook a detailed examination of various problems of the banking sector, such as the bank rate and refinancing policy of the Bangladesh Bank, overdue loans of SCBs and the Development Financial Institutions (DFIs), supply of adequate loan to rural and agriculture sector, supervisory problems of the Bangladesh Bank and individual bank management, and frauds and forgeries in the banking sector. Based on the recommendations of the Commission,

Government undertook a number of steps to improve the efficiency of the banking system that

included fixation of recovery targets for the SCBs and DFIs, prohibiting defaulters from getting new loans, self classification of loans by banks based on their quality of loans, and increase of monitoring capabilities of the central bank. Nevertheless, the deterioration in banking efficiency could not be arrested although there was an increase in total number of bank branches, volume of deposits and credits. For instance, the number of branches for SCBs increased from 3270 in 1983 to 3560 in 1989, but in relative terms they shared 64.12% of the total branches in 1989, a reduction of 6.92% in comparison to the year 1983. Similarly, the volume of deposits and credits for SCBs increased by more than 100% in 1989 as compared to the year 1983, but their relative share in total banking industry decreased by almost 22% and 25% respectively during the same period. Likewise, the volume of deposits and credits for DFIs are found to have a declined trend when a relative measurement is applied. On the other hand, the share of bank branches, deposits, and credits for PCBs and FCBs are found to have an increasing trend during the period of 1983-89.

Nevertheless, the operational efficiency of the banking system declined to 0.11% in 1989 from 0.32% in 1983, where SCBs shown to have a very poor performance. This indicates that the Ownership Reform Program (1983-89) helped increase in financial intermediation in the economy but the overall banking efficiency declined due to the presence of collusive behavior among banks followed by directed credits of the government. There was also improper accounting system for recording accrued interest income, lack of supervision on the part of Bangladesh Bank, inadequate support for debt recovery, and absence of prudential rules and regulations that can correct financial failures. All these phenomena ultimately reflected in declining profitability of the banking system. This situation demanded further reform for the banking sector.

(b) Financial Sector Reform Program (1990-1995):

The Financial Sector Reform Program (FSRP) was launched under Financial Sector Adjustment Credit (FSAC) of the World Bank in 1990 with the following objectives:

- Gradual deregulations of the interest rate structure with a view to improving the allocative efficiency;
- Providing market oriented incentives for priority sector lending;
- Making subsidies in the priority sectors more transparent;
- Adoption of appropriate monetary policy;
- Improvement in debt recovery environment; and
- Strengthening of the capital markets.

Accordingly, the FSRP brought about a number of developments in the banking system of Bangladesh. This development focused on four broad ares such as: (i) screening, (ii) monitoring, (iii) transparency, and (iv) lender's recourse regulations. For instance, in case of screening, a 'Lending Risk Analysis Manual' was put into operation, directed lending and subsidy to the priority sectors were reduced, interest rates were liberalized, insiders' loan was controlled and banks were asked to follow the Credit Information Bureau (CIB) report formulated by Bangladesh Bank. In the case of monitoring, the performance-planning system, large loan reporting system and the supervisory role of the central bank was given emphasis. While, to ensure stability and transparency in financial intermediations, minimum capital requirement (Tk. 100 crore), capital adequacy ratio (8% of the risk weighted assets), CAMEL rating and the International Accounting Standard (IAS) were introduced for the preparation of bank accounts. Banks were also asked to classify their loans, make provision thereof as well as instructed to disregard accrued interest on classified loans as their income so as to protect

them from vulnerability. Alongside these measures, the Money Loan Court Act and Bankruptcy Act were enacted to improve the loan recovery performance.

However, a review of the outcomes of the FSAC indicates that from the viewpoint of implementation, the reform measures were implemented satisfactorily, but from the viewpoint of desired outcome, the results were not very encouraging. For instance, the share of SCBs and PCBs in total deposits remained constant nearly within 62% and 27% respectively during the FSRP period (1991-95), but the share of deposits for DFIs increased to 6.34% in 1995 from 4.88% in 1991. On the other hand, the share of FCBs in total deposits declined from 6.91% in 1991 to 4.54% in 1995 with a volatile trend. Similarly, the SCBs' share of advances during the stated period was volatile. Somehow, SCBs' share increased from 52.66% in 1991 to 53.13% in 1995. PCBs' share in advance increased from 22% in 1991 to 27.59% in 1995 but the share of FCBs and DFIs declined from 6.01% to 5.14% and 19.33% to 14.14% respectively during the stated period. However, the amount of net profit of the SCBs increased from Tk. (-) 38.78 in 1991 crore to Tk.112.37 crore in 1995. Similar trend has been observed in the case of PCBs and FCBs, but the DFIs shown to have a declined trend in their net profit that reduced Tk. (-) 250.88 crore in 1995 from Tk.9.81crore in 1991.

Another important area that the FSRP brought under attention is the failure to curb NPLs of the banking system of Bangladesh. For instance, in 1990, 26.09% of the total loans were classified as NPLs, which increased to 32.04% in 1995. As per different categories of banks, NPLs for SCBs increased to 31% in 1995 from 27.95% in 1990, and NPLs for PCBs increased to 39.43% from 23.73% during the same period (source: Banking Regulation & Policy Department, Bangladesh Bank, 1995). NPLs for FCBs, however, reduced to 5.40% in 1995 from 20.65% in 1990. In addition, the percentage of rural deposits and advances remained more or less stable i.e. 21.9% to 22.1% and 19.8% to 19.8% respectively during the FSRP period (Schedule Bank Statistics, various issues, Bangladesh Bank).

This implies that the FSAC failed to address the issue of efficient resource allocation in terms of access to credit by productive sectors. Interest rate deregulation could not encourage competition in the sector rather the banking sector remained somewhat fragmented and oligopolistic. Besides, management efficiency in the SCBs could not be perceptibly improved despite implementation of new operational and management/loan quality assessment tools such as the capital adequacy and the loan classification and provisioning system. This implies that the FSAC placed more emphasis on economic deregulations rather than on broadening of the prudential regulation and supervision for the sector. It is argued that it would have been more appropriate, in the context of Bangladesh, to introduce measures to deal with the "debt

default syndrome" and the management of the SCBs, prior to more general interest rate liberalization in order to improve the financial health of the banking sector of Bangladesh.

The impact evaluation of FSRP (1995) itself recognized that though many of the operational building blocks needed to permit SCBs to function soundly had been provided successfully by FSRP, yet effective incorporation of new operating procedures required leadership and vision on the part of senior management, which was not ever present in the SCBs. Almost same conclusion was drawn by Cookson and Alamgir (1993), when they said, "the expected improvement of the management of SCBs has not been forthcoming after the Financial Sector Reform measures are taken in Bangladesh." All these scenarios, in fact, demanded a third stage reform program for the banking system of Bangladesh.

(c) Banking Reform Committee (BRC)/Commercial Bank Restructuring Project (CBRP) (1996-2002):

In order to fix the problem unveiled by FSRP, the government formed a Banking Reform Committee (BRC) in October 1996. The broad objectives of BRC were to place recommendations in regard to:

(i) Improving debt recovery environment of banks;

(ii) Increasing income, reducing expenditure and upgrading service standard of banks;

(iii) Improving the personnel quality of the banks;

(iv) Strengthening supervisory capacity of Bangladesh Bank; and

(v) Any other related important issues, considered by the committee.

In May 1997, the government also undertook a Commercial Bank Restructuring Project (CBRP) funded by the World Bank. The CBRP mainly focused on improving the supervisory and regulatory framework of the commercial banks, enforcement of the power of Bangladesh Bank in loan monitoring, and restructuring the legal framework related to finance and banking.

The report of the Bank Reform Committee (BRC) gave highest priority on restructuring of the supervisory and regulatory set up for ensuring strong system of enforceable oversight of banks. At the same time, the CBRP also asked for strengthening of legal framework and effective restructuring of the SCBs. For reducing the political interference, BRC proposed not to interfere with the affairs of the Bangladesh Bank Board and to set a clear-cut guideline for deficit financing of the government. The BRC also suggested that the Directors of the NCBs' boards cannot be Member of Parliament or an office bearer of a political party or a loan defaulter. The BRC also opined that the 'regulatory forbearance' on the part of the Bangladesh Bank has been responsible for the continuing problems with the "problems banks". The government also removed the floor rates of deposits in 1997. Finally, in August 1999, the

government eliminated interest band on agriculture and small and medium enterprises (SMEs) loans.

Though one should not expect that within the BRC/CBRP period (1996-2002), all predetermined objectives would be achieved, yet the movement of key financial variables during 1996-2002 should be looked into to see the direction of movement of the banking variables. For instance, the share of SCBs in total deposits declined from 61.33% in 1996 to 50.32% in 2002. But the share of PCBs increased from 27.83% to 36.84% during the above period (1996-2002). On the other hand, the share of FCBs increased from 5.30% in 1996 to 6.81% in 2002. Similarly, the share of DFIs' also increased from 5.54% to 5.82% during the period 1996-2002.

In regard to advances, SCBs' share in advances declined from 52.88% to 45.56%, PCBs' share sharply increased from 26.73% to 36.16%, the share of FCBs also increased from 5.40% to 6.81%; but the share of DFIs sharply declined from 14.99% to 11.47% during the FSRP period 1996-2002. The amount of net profit of the SCBs during the same period declined from Tk. 28.11 crore to Tk.19.88 crore, whereas PCBs' net profit increased from Tk.137.87 crore to Tk.458.79 crore. FCBs also remarkably earned Tk.224.08 crore in 2002 from Tk.98.72 crore in 1996. Importantly, the net loss of DFIs declined from Tk.292.07 crore to Tk. 114.64 crore during the period of 1996-2002.

This indicates that the BRC/CBRP initiatives improved the financial health of the banking system to a great extent, however, it failed to curb the NPLs of the banking industry. For instance, the NPL ratio of the banking system reached to the highest level (41.11%) in 1999, although it reduced to 28.01% in 2002. There was also unsatisfactory performance with respect to the settlement of cases in Money Loan Court and under the PDR Act. In addition, poor recovery, withdrawal of refinance and interest rate band aggravated the negative flow in the rural banking after the BRC/CBRP program instead of improving it.

As previously mentioned, the government liberalized interest rate fully in 1999 to make the banking system market driven and competitive. In such a market-driven system, one of the important indicators of competitiveness in the financial markets is the interest rate spread (the difference between lending and deposits rate of interest). The higher the level of competitiveness, the lower the interest rate spread. However, in the wake of the deregulation of interest rates it has been observed that the spread has increased over the years in Bangladesh — the spread in the banking sector increased from 5.88% in 1990-91 to 7.30% in 1995-96. In 2002-03, the spread was declined to 6.49%, but in terms of competitiveness, this remained very high for the banking system. In other words, the high nominal spread indicates

that previous reforms are yet to bring about the expected degree of competitiveness in the banking system, rather, market distortions have increased. Arguably, the presence of higher NPLs is one of the factors responsible for those market distortions, but government-led distortions (for example, high interest rates on government savings certificates) and misconceived price strategies of the bank management are also responsible for these unusually high spreads. Fortunately, the real interest spread is found negative in most of the years during the period of 1990-91 to 2002-03, indicating that the financial liberalization policies provided incentives for banks to expand their bank branches as well as financial intermediations.

(d) Current Reform Programs (2003-onwards)

After the expiry of BRC/CBRP program, the government of Bangladesh continued undertaking different measures and initiatives to make the banking system robust and competitive. A summary of these measures is presented below:

Selected Current Reforms in the Banking Sector:

- Formation of Audit Committee by individual banks to assist the Board in fulfilling its oversight responsibilities.
- Provision for appointing two independent directors representing the depositors' interest.
- Measures to strengthen risk management through recognition of different components of risk, assignment of risk-weights to various asset classes.
- Several provisions of the three important Acts relating to Banking, viz. the Bangladesh Bank Order, 1972, the Bank Company Act, 1991 and the Banks Nationalization Order, 1972 have been amended during the period 2003 with a view to further strengthening the activities of the banking sector, bringing dynamism and extending greater autonomy to the central bank.
- Enactment of the Artha Rin Adalat Ain 2003 to provide mainly for speedy procedures for obtaining decrees and execution. Provision was also made for Alternative Dispute Resolution to ensure early settlement of disputes through settlement conference and negotiations.
- Development of a basic risk management model for selected areas of banking operation.
- Promulgation of "Money Laundering Prevention Act, 2012 repealing Money Laundering Prevention Act, 2009 and Anti Terrorism (Amendment) Act, 2012".

- High priority is accorded to ensure Corporate Governance in Banks.
- Introduction to uniform account opening and KYC profile form for all banks. Besides, the National Payment System Council (NPSC) was reorganized to support the development of sound and efficient payment, clearing and settlement systems, and to serve as a forum for cooperation in domestic and international payment matters.
- Mapping of External Credit Assessment Institutions (ECAIs) rating with the Bangladesh Bank Rating Grade.
- Introduction of New Capital Accord (Basel II) and Risk Based Capital Adequacy (RBCA) for Banks to introduce Basel III".
- Prudential Guidelines for Consumer Financing and Small enterprise Financing have been issued.
- Marking to Market Based Revaluation of Treasury Bills & Bonds Held by the Banks.
- Introduction of CAMELS supervisory rating system, move towards risk-based supervision, consolidated supervision of financial conglomerates, strengthening of off-site surveillance through control returns.
- Corporatization of nationalized commercial banks (NCBs)
- Stress Testing became mandatory for the Schedule Banks.
- Introduction to Corporate Social Responsibility
- Safeguard Policy for the banks on capital market activities.
- Financial inclusion.
- Green Banking- a new dimension.
- On-line CIB services.

Source: Banking Regulation & Policy Department, Department of Off-Site Supervision, Bangladesh Bank.

4.3 Introduction of Digital System in banking by Bangladesh Bank

Bangladesh Bank (BB) has adopted advanced Information and Communication Technology (ICT) to digitize all spheres of its functions including monetary policy, banking supervision and internal management. BB has already introduced e-commerce, e-banking, automated clearing house etc.; a historic move towards achieving higher productivity across all economic sectors including agriculture and SME through use of ICTs. Engineers could be pioneers innovating new applications of ICT, and reaching them to the doorstep of the common people.

The universal role of ICT is vital for socio-economic development of a developing country like Bangladesh. Availability of information helps increase productivity, ensures fair and competitive market and empowers marginal people. Digital technology makes doing things easily from any place -- using mobile phone as a medium of money transfer and payment of utility bills, for example.

Digital society means knowledge based society. Therefore, the government has placed the vision of 2021- the year of Golden Jubilee of our independence. The vision envisages a digital Bangladesh with excellence in information and communication technology and high-performing economic growth. If Bangladesh goes digital it will be an e-state combined with e-governance, e-banking, e-commerce, e-learning, e-agriculture, e-health and so on. However, the vision encompasses much more. There is a strong correlation between economic and social development of a country and its proficiency in science and technology, so we need a knowledge-based society, efficient management and skilled human resources as well. We need to extend ICT facility to every village in Bangladesh, so that even farmers can get access to internet connectivity; acquire related information regarding his/her crop or product development, pricing etc. In this connection, the government has already taken initiatives to connect Bangladesh with the second Submarine Cable Network to have secured connectivity with the information superhighway. Realizing the potential of ICT for national development, the government has approved the National ICT Policy, 2009 on priority basis.

It is expected that by 2021, Bangladesh will have a countrywide ICT network and high-speed information flow between centre and periphery. Instructions will be transmitted

- Electronically, which will accelerate the national decision-making process and monitor the performance of all agencies?

High level of internet penetration is a must for the development of ICT. The latest statistics (ITU 2007) revealed that internet penetration is only 0.3% in Bangladesh, whereas the rate is 7.3 and 5.3% respectively in India and Pakistan. However, we too are getting ready to experience higher level of internet penetration, particularly with high density of wireless infrastructure. BB, which is indeed the nerve centre of the financial world, cannot remain behind in this race of digitization.

BB has achieved a historic milestone in the trade and business arena, departing from conventional banking with the introduction of e-commerce recently; a giant stride towards digital Bangladesh. Banks have been allowed to make online money transactions, payment of utility bills through internet, transfer of funds (account to account), payments for trading goods and services, and facilitate online credit card payments in local currency.

Indeed, electronic payments will be considered as cash transactions, which will be regulated under the Anti-Money laundering Act as well as other relevant rules and regulations. It is expected that a national payment gateway, connecting all banks for inter-bank transactions (e-banking), will be established soon. Electronic fund transfer will also be possible in near future. Necessary preparations have already been taken in this direction. Installation of Bangladesh Automated Clearing House (BACH) is another remarkable event in the history of the financial sector in Bangladesh. It will simplify the remittance channel and payment system and, therefore, bring dynamism in business activities.

The system was started in early November 2009 on experimental basis, participated by some well-prepared banks, and will be inaugurated formally soon. Applying sophisticated methods, the system needs only images and corresponding information of the submitted cheque leaves instead of a physical one, and will send them to the Bangladesh Automated Cheque Processing System (BACPS) using a secured communication link.

New cheques/clearing instruments (standardized) will contain Magnetic Ink Character Recognition (MICR) line that encompasses information regarding the amount, transaction code, clients account details, routing number (numeric code assigned to bank branches for easy identification of origin and destination of the instrument), cheque leaf's serial number and so on. The system will support both intra-regional and inter-regional clearings based on a centralized processing centre in Dhaka and designated clearing regions, and will conform to the international best practices and cost-effective solutions for cheque processing.

Mobile banking, using cell phone as a tool, extends banking services to the doors of the people. An account holder can check account history/statement, status on cheques, and payment order, or stop payment, and so forth.

However, initially, three commercial banks have been allowed mobile banking to accelerate inward remittance transfer with the help of the outlets of mobile companies. Recently, BB has strengthened its monitoring and supervision activities on agricultural and SME loans with the help of the existing countrywide mobile network, keeping records of cell phone numbers of farmers and small entrepreneurs.

Online Credit Information Bureau (CIB) report, a pivotal component of risk management measures, has been launched in 2010. Banks and financial institutions will be able to access the CIB data base online, and get the credit report of the concerned borrower. The database will consist of detailed information of individual borrowers, owners and guarantors.

Meantime, a project, On-line Credit Bureau has been started using advanced technology to establish online connectivity between CIB of BB and head offices of all banks and financial

institutions. It is crucial to upgrade the capacity of CIB to the policy priority accorded to financial inclusion, expand SME and agricultural lending, and increase overall growth of trade and business.

Online CIB will minimize the extent of default loan by facilitating the banks and financial institutions with credit reports of the loan applicants very quickly, and therefore, lending institutions would not encounter any credit risk while extending lending or rescheduling facility.

A central bank reform program initiated ICT packages include networking, banking application, enterprise resources planning solution, enterprise data warehouse etc., with a view to ensuring efficient management of assets including human resources.

Enterprise Resources Planning (ERP) solution covers digitization of procurement (e-procurement), cash management, access control etc. Meanwhile, recruitment process under BB has been digitized (online application, sorting, validation etc.).

Banking application includes automation of all the accounts with BB (banks, financial institutions and government), foreign exchange management, currency management, treasury and securities systems/module, public debt management module, and also establishment of a central depository system (CDS) to build a platform for secondary trading of treasury bills and bonds.

Enterprise Data Warehouse (EDW) creates an electronic data bank, which will provide all information and statistics of monetary, trade and fiscal areas of the national economy, where all the concerned people of BB will have access to use it for further policy analyses. BB is going to commence web based e-tendering system, which covers announcement of tender, distribution of schedules, bidding etc., to ensure simplicity and transparency of tendering process.

These are only a few examples of how fast the BB is progressing in the process of digitization of its activities. In addition, it is also taking other banks and government agencies on board to ensure speedy, credible, user-friendly financial services to all.

Moreover, BB has been encouraging green engineering by installing solar panels on its own premise and providing re-financing windows to support speedy development of solar energy, biogas and effluent treatment plants all around the country. And in all these activities the role of green engineers will be vital.

The banks play an important role in the economy of the country. Bangladesh Bank has been collecting, compiling and publishing statistics on scheduled banks for the use of researchers,

planners and policy makers. Laws that directly regulate the banking system of Bangladesh are: Bangladesh Bank Order 1972; Bank Company Act, 1991; Bangladesh Bank (Nationalization) Order 1972; Companies Act 1913 and 1994; Deposit Insurance Order 1984; Bankruptcy Act 1997; Insolvency Act 1920; Financial Court Act 1990; Foreign Exchange (Regulation) Act 1986; Financial Institutions Act 1993; Financial Institutions Rules 1994; and Co-operative Societies Ordinance 1984.

4.4 A comparative positions of all banks in Bangladesh

Banks' Deposits:

Total deposit liabilities (excluding interbank items) of the scheduled banks increased by Tk.19944.34 crore or 5.72% to Tk. 368919.98 crore during the quarter October-December 2010 as compared to increases of Tk. 11056.14 crore or 3.27% and Tk. 16402.31 crore or 5.70% in the previous quarter (July-September, 2010) and the corresponding quarter (October-December, 2009) of the last year respectively. The increase in deposits during the quarter was due to increases in urban deposits by Tk. 16847.96 crore or 5.55% to Tk. 320287.19 crore and in rural deposits by Tk. 3096.38 crore or 6.80% to Tk. 48632.79 crore. The share of urban deposits to total deposits at the end of the quarter October- December, 2010 was 86.82% as compared to 86.95% at the end of the preceding quarter (July-September, 2010) and 86.79% at the end of the corresponding quarter (October-December, 2009) of the last year. Bank deposits registered an increase of Tk. 64643.20 crore or 21.24% from end December 2009 to end December 2010 as compared to an increase of Tk. 51520.68 crore or 20.38% from end December 2008 to end December 2009.

Banks' Advances:

Bank's Advance Increased by Tk. 25414.59 crore or 9.40% to Tk. 295881.18 crore during the quarter October- December 2010 as compared to increases of Tk. 13023.14 crore or 5.06% and Tk. 17034.98 crore or 7.87% respectively during the preceding quarter (July-September2010) and the corresponding quarter (October-December2009) of the last year. Bank advances in urban areas increased by Tk. 23703.35 crore or 9.52% to Tk. 272673.96 crore and in rural areas increased by Tk. 1711.24 crore or 7.96% to Tk 23207.22 crore during the quarter under review. Bank advances exhibited an increase by Tk. 62401.68 crore or 26.73% from end December 2009 to end December 2010 as compared to an increase of Tk. 37094.01 crore or 18.89% from end December 2008 to end December 2009.

Banks' Credit:

Total credit of the scheduled banks increased by Tk 25517.81 crore or 8.69% to Tk. 319319.59 crore during the quarter under review as compared to increases of Tk. 18196.69 crore or 6.60% and Tk. 17993.41 crore or 7.79% respectively during the preceding quarter (July- September 2010) and the corresponding quarter (October-December 2009) of the last year.

Deposits by Category of Banks:

The increase of Tk. 19944.34 crore or 5.72% in total deposit liabilities during the quarter October-December, 2010 over the preceding quarter (July - September, 2010) was shared by increases in private banks by Tk. 13889.94 crore or 6.60%, in state owned banks by Tk. 5429.99 crore or 5.58% and in specialized banks by Tk. 1589.93 crore or 9.23%, where as in foreign banks decrease by Tk. 965.52 crore or 4.01%. The net accretion in deposits during the quarter under review over the same quarter (October- December, 2009) of the last year amounting to Tk. 64643.20 crore or 21.24% was due to increase in deposits of state owned banks by Tk. 16826.42 crore or 19.60%, in private banks by 43885.89 crore or 24.32%, in specialized banks by Tk. 2745.97 crore or 17.08% and in foreign banks by Tk. 1184.92 crore or 5.41%. Of the total deposits of Tk. 368919.98 crore at the end of the quarter under review, the shares of state owned banks, specialized banks, foreign banks and private banks were Tk.102657.04 crore (27.83%), Tk. 18820.54 crore (5.10%), Tk. 23099.85 crore (6.26%) and Tk. 224342.55 crore (60.81%) respectively. The position in respect of deposit liabilities by category of banks is shown in Following

Chapter Five

Credit Risks Grading Techniques & Guidelines of Bangladesh Bank

A) Credit Risk Grading (CRG) Techniques:

5.1 Background:

In 1993, Bangladesh Bank as suggested by Financial Sector Reform Project (FSRP) made the first regulatory move to introduce best practices in credit risk management area and directed to use Credit Risk Grading (CRG) system in the Banking Sector of Bangladesh under the caption "**Lending Risk Analysis (LRA)**" for all lending exposures undertaken by a bank in excess of Tk.10 Million. The Banking sector since then has changed a lot as credit culture has been shifting towards a more professional and standardized Credit Risk Management approach. However, the LRA manual suffers from a lot of subjectivity, sometimes creating confusion to the lending bankers in terms of selection of credit proposals on the basis of risk exposure. The LRA forced banks to take a systemic approach towards risk analysis. LRA however made no attempt to introduce a Risk Grading System (RGS) for unclassified accounts.

Credit Risk Grading system is a dynamic process and various models are followed in different countries & different organizations for measuring credit risk. The risk grading system changes in line with business complexities. A more effective credit risk grading process needs to be introduced in the Banking Sector of Bangladesh to make the credit risk grading mechanism easier to implement. With the world moving towards Basle II, the need to introduce a Risk Grading System (RGS) for the industry is essential. Meanwhile, keeping the above objective in mind, the Lending Risk Analysis Manual (under FSRP) of Bangladesh Bank has been amended, developed and re-produced in the name of **"Credit Risk Grading Manual"** that was made mandatory in 2003. Bangladesh Bank provided guidelines for credit risk management of Banks wherein it recommended the introduction of Risk Grade Score Card for risk assessment of credit proposals. Since the two credit risk models were in vogue, the Governing Board of Bangladesh Institute of Bank Management (BIBM) under the chairmanship of the Governor, Bangladesh Bank decided that an integrated Credit Risk Grading Model be developed incorporating the significant features of the above mentioned models with a view to render a need based simplified and user friendly model for application by the banks and financial institutions in processing credit decisions and evaluating the

magnitude of risk involved therein. The Credit Risk Grading Manual has taken into consideration the necessary changes required in order to correctly assess the credit risk environment in the Banking industry. This manual has also been able to address the limitations prevailed in the LRA Manual. The Credit Risk Management module in CRGM, for the first time, introduced the requirement of grading unclassified accounts. The CRGM however, was not detailed enough for banks to fully implement a RGS. Therefore in January 2004, BIBM was instructed by Governor Bangladesh Bank to produce a Credit Risk Grading Manual (CRGM) based on the Core Risks Management Guidelines. BIBM constituted a Focus Group for this purpose. The CRGM was completed and submitted to BB in Sept '04.

CRGM was reviewed by an Industry Review Group (IRG) consisting of members from NCBs, PCBs and FCBs involved specifically in the credit approval and corporate banking functions. The IRG met a number of times in August and September 2005 and gave their recommendations. These were discussed and suitable amendments were made in the Guidelines.

All Banks should adopt a credit risk grading system outlined in this manual. Risk grading is a key measurement of a Bank's asset quality, and as such, it is essential that grading is a robust process. The CRGM is a mandatory replacement of the LRA and is applicable for all exposures (irrespective of amount) other than those covered under Consumer and Small Enterprises Financing Prudential Guidelines and also under The Short-Term Agricultural and Micro – Credit.

Definition of Credit Risk Grading:

- The Credit Risk Grading (CRG) is a collective definition based on the pre-specified scale and reflects the underlying credit-risk for a given exposure.
- A Credit Risk Grading deploys a number/ alphabet/ symbol as a primary summary indicator of risks associated with a credit exposure.
- Credit Risk Grading is the basic module for developing a Credit Risk Management system.

Functions of Credit Risk Grading:

Well-managed credit risk grading systems promote bank safety and soundness by facilitating informed decision-making. Grading systems measure credit risk and differentiate individual credits and groups of credits by the risk they pose. This allows bank management and examiners to monitor changes and trends in risk levels. The process also allows bank management to manage risk to optimize returns.

Use of Credit Risk Grading:

`The Credit Risk Grading matrix allows application of uniform standards to credits to ensure a common standardized approach to assess the quality of individual borrower, credit portfolio of a unit, line of business, the branch or the bank as a whole.

- As evident, the CRG outputs would be relevant for individual credit selection, wherein either a borrower or a particular exposure/facility is rated. The other decisions would be related to *pricing* (credit-spread) and specific features of the credit facility. These would largely constitute borrower level analysis.
- Risk grading would also be relevant for surveillance and monitoring, internal MIS and assessing the aggregate risk profile of a bank. It is also relevant for portfolio level analysis.

Number and Short Name of Grades used in CRG:

- The CRG scale consists of 08(eight) categories with short names and numbers are provided below :

Grading	Short Name	Number
Superior	SUP	1
Good	GD	2
Acceptable	ACCPT	3
Marginal/ Watch List	MG/ WL	4
Special Mention	SM	5
Sub Standard	SS	6
Doubtful	DF	7
Bad & Loss	BL	8

Credit Risk Grading Definition:

A clear definition of the different categories of Credit Risk Grading is given as follows:

- **Superior (SUP) – 1 :**

- Credit facilities, which are fully secured i.e. fully cash covered.
- Credit facilities fully covered by government guarantee.
- Credit facilities fully covered by the guarantee of a top tier international Bank.

- **Good (GD) – 2 :**

- Strong repayment capacity of the borrower.
- The borrower has excellent liquidity and low leverage.
- The company demonstrates consistently strong earnings and cash flow.
- Borrower has well established, strong market share.

- Very good management skill & expertise.
- All security documentation should be in place.
- Credit facilities fully covered by the guarantee of a top tier local Bank.
- Aggregate Score of 85 or greater based on the Risk Grade Score Sheet.

❖ **Acceptable (ACCPT) – 3 :**

- These borrowers are not as strong as GOOD Grade borrowers, but still demonstrate consistent earnings, cash flow and have a good track record.
- Borrowers have adequate liquidity, cash flow and earnings.
- Credit in this grade would normally be secured by acceptable collateral (1st charge over inventory / receivables / equipment / property).
- Acceptable management.
- Acceptable parent/sister company guarantee.
- Aggregate Score of 75-84 based on the Risk Grade Score Sheet.

❖ **Marginal/ Watch List (MG/ WL) – 4 :**

- This grade warrants greater attention due to conditions affecting the borrower, the industry or the economic environment.
- These borrowers have an above average risk due to strained liquidity, higher than normal leverage, thin cash flow and/or inconsistent earnings.
- Weaker business credit & early warning signals of emerging business credit detected.
- The borrower incurs a loss.
- Loan repayments routinely fall past due.
- Account conduct is poor, or other untoward factors are present.
- Credit requires attention.
- Aggregate Score of 65-74 based on the Risk Grade Score Sheet.

❖ **Special Mention (SM) – 5 :**

- This grade has potential weaknesses that deserve management's close attention. If left uncorrected, these weaknesses may result in a deterioration of the repayment prospects of the borrower.
- Severe management problems exist.
- Facilities should be downgraded to this grade if sustained deterioration in financial condition is noted (consecutive losses, negative net worth, excessive leverage).
- An Aggregate Score of 55-64 based on the Risk Grade Score Sheet.

❖ **Sub Standard (SS) – 6 :**

- Financial condition is weak and capacity or inclination to repay is in doubt.
- These weaknesses jeopardize the full settlement of loans.
- Bangladesh Bank criteria for sub-standard credit shall apply.
- An Aggregate Score of 45-54 based on the Risk Grade Score Sheet.

❖ **Doubtful (DF) – 7 :**

- Full repayment of principal and interest is unlikely and the possibility of loss is extremely high.
- However, due to specifically identifiable pending factors, such as litigation, liquidation procedures or capital injection, the asset is not yet classified as Bad & Loss.
- Bangladesh Bank criteria for doubtful credit shall apply.
- An Aggregate Score of 35-44 based on the Risk Grade Score Sheet.

❖ **Bad & Loss (BL) – 8:**

- Credit of this grade has long outstanding with no progress in obtaining repayment or on the verge of wind up/liquidation.
- Prospect of recovery is poor and legal options have been pursued.
- Proceeds expected from the liquidation or realization of security may be awaited. The continuance of the loan as a bankable asset is not warranted, and the anticipated loss should have been provided for.
- This classification reflects that it is not practical or desirable to defer writing off this basically valueless asset even though partial recovery may be affected in the future. Bangladesh Bank guidelines for timely write off of bad loans must be adhered to. Legal procedures/suit initiated.
- Bangladesh Bank criteria for bad & loss credit shall apply.
- An Aggregate Score of less than 35 based on the Risk Grade Score Sheet.

5.1.1 Regulatory Credit Grading of the Banks

Irrespective of credit score obtained by a particular bank and irrespective of credit risk rating assigned to a particular Bank in line with this Manual, grading of any bank by the Bangladesh Bank is mandatory and all banks should adjust its credit rating in line with Bangladesh Bank rating (if any). This means that if a credit rating by Bangladesh Bank is inferior then the

credit rating as arrived as per this Manual then the Bangladesh Bank credit rating for the banks shall prevail and the lender bank has to adjust its credit rating accordingly. The principal risk components; i) Quantitative and ii) Qualitative factors of any loan proposal have to be identified along with the key parameters corresponding to the principal risk components.

i) Key Parameters for Quantitative factors:

Key parameters corresponding to the Principal Risk Components of Quantitative Factors are given below. Each of the key parameters mentioned below shall be evaluated, analyzed and reviewed in order to conclude on the credit risk grading of a commercial bank.

Key Parameters for Capital Adequacy

- Bank's plan to raise equity to support its growth (Internal Capital Generation)
- Minimum Capital Adequacy Requirement (CAR) set by Bangladesh Bank
- Leverage ratio of the bank is satisfactory
- Dividend policy of the Bank

Key Parameters for Asset Quality

- Risk Management includes exhaustive pre-approval and post - approval activities
- Portfolio Management System
- Level of nonperforming loans
- Amount of largest exposure to a single client/group, who are these and how many are non-performing
- Sector from where the gross NPL are coming from
- Are classified loans being followed regularly with clear action plan for recovery?
- Have Credit Risk Grading of clients are in place and effective.
- Portfolio Diversity (Industry wise breakdown of loans) & sectoral Concentration
- Nature of security/collateral and the frequency of valuation
- Quality of non-industrial lending

Key Parameters for Earnings Quality

- Level of earnings
- Diversity of earnings
- Return on Assets (ROA)
- Return on Equity (ROE)
- Interest Rate Management, Interest rate policy (extent of change in lending and deposit rates and how this is likely to affect margins and profitability)

- Non funded business prospects and its contribution towards earnings
- Average cost of fund,
- Average lending rate
- Average net spread
- Net Interest Income Margin (NIIM) trend is satisfactory
- Yield per taka staff cost

Key Parameters for Liquidity and Capacity of External Fund Mobilization

- Statutory Liquidity Reserve (SLR), Cash Reserve Requirement (CRR) and Loan Deposit Ratio compliance
- Asset liability maturity structure
- Bank's liquidity ratio is satisfactory
- Core asset funded by core liabilities
- Impact on interest rate volatility on deposit and its trend
- Ability to raise fund through stable sources in cost effective manner
- Credibility of funding sources in distress situation

Key Parameters for Size of the Bank & Market Presence:

- Number of branch network and employees
- Level of automation
- Products and services offered are regularly reviewed

ii) Key parameters for qualitative factors:

Key parameters corresponding to the Principal Risk Components of Qualitative Factors are as follows. Each of the key parameters mentioned below shall be evaluated, analyzed and reviewed in order to conclude on the credit risk grading of a banking company.

Key Parameters for Management:

- Human resource based institutions
- Quality of Management (details of Senior Management, background of MD and other top executives)
- Experience and educational background of the senior, mid level and junior management

- Management Philosophy (Vision & Mission)
- Human resource development plans
- Quality of training being offered
- Management operating efficiency calculated on the basis of earning
- Staff turnover
- Emphasis to Information Technology and staff knowledge in this area

Key Parameters for Regulatory Environment & Compliance:

- Policy on loan classification and provisioning
- Policy on large loans
- Loan against Shares, Debentures etc.
- Disclosure requirement for banks
- Delegation of power at operating level
- Instructions for compliance of provisions of Money Laundering Prevention Act, 2002
- Company has been operating satisfactorily in complying to the regulations of SEC and related bodies
- Internal Control and Compliance mechanism
- Status on Basel II compliance

Key Parameters for Risk Management:

- Implementation of risk management in the areas of Credit Risk,
- Implementation of risk management in the areas of Operational Risk
- Implementation of risk management in the areas of and Market Risk

Key Parameters for Sensitivity to Market Risk

- Degree to which changes in interest rates can adversely affect company's earnings
- Degree to which changes in foreign exchange rates can adversely affect company's earnings
- Degree to which changes in commodity prices can adversely affect company's business

Key Parameters for Ownership (Share holding Pattern) & Corporate Governance:

- Ownership pattern & composition of Board (current shareholding with name promoters)
- Conflict of interest issues in the operational management
- Personal policy and employee satisfaction
- Application of information technology in the system

Key Parameters for Accounting Quality:

- Policies for income recognition
- Provisioning and valuation of investment are examined
- Quality of Auditors

Key Parameters for Franchise Value:

- Joint venture partner or Strategic Alliance
- Management contract or Technical collaboration
- Alliance/arrangement with World Bank/ADB/IFC/SEDF or awards/certification/recognition

5.1.2 How to Compute Credit Risk Grading:

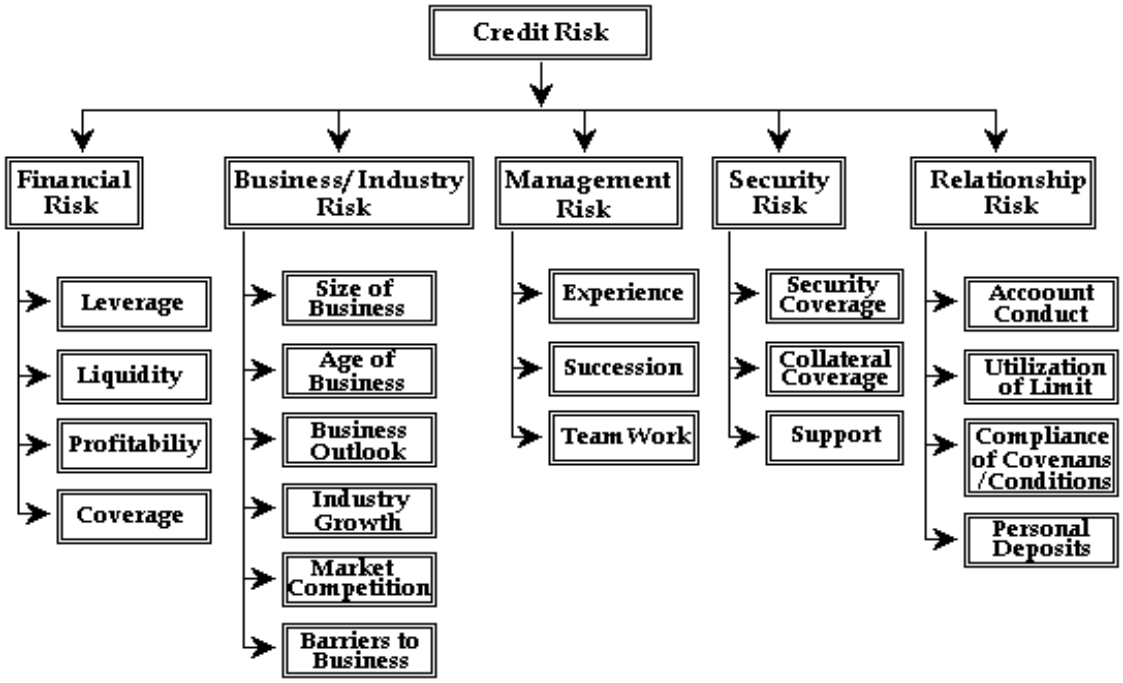
The following step–wise activities outline the detail process for arriving at credit risk grading. First of all, Financial Spread Sheets (as Appendix-6) are prepared by the lending bank on the basis of financial information provided by the borrower and secondly, the Credit Risk Grading Scoring Sheet (as Appendix-7) is prepared to compute the composite score of the loan proposal in order to judge the merit of the case for achieving approval of the loan.

Step -1: Identify all the Principal Risk Components

Credit risk for counterparty arises from an aggregation of the following:

- Financial Risk.
- Business/Industry Risk.
- Management Risk.
- Security Risk.
- Relationship Risk.

Fig: 5.1 Risk Components



Each of the above mentioned key risk areas required to be evaluated and aggregated to arrive at an overall risk grading measure.

Evaluation of Financial Risk:

Risk that counterparties will fail to meet obligation due to financial distress. This typically entails analysis of financials i.e. analysis of leverage, liquidity, profitability & interest coverage ratios. To conclude, this capitalizes on the risk of high leverage, poor liquidity, low profitability & insufficient cash flow.

Evaluation of Business/ Industry Risk:

Risk that adverse industry situation or unfavorable business condition will impact borrowers' capacity to meet obligation. The evaluation of this category of risk looks at parameters such as business outlook, size of business, industry growth, market competition & barriers to entry/exit. To conclude, this capitalizes on the risk of failure due to low market share & poor industry growth.

Evaluation of Management Risk:

Risk that counterparties may default as a result of poor managerial ability including experience of the management, its succession plan and team work.

Evaluation of Security Risk:

This is the risk that the bank might be exposed due to poor quality or strength of the security in case of default. This may entail strength of security & collateral, location of collateral and support.

Evaluation of Relationship Risk:

These risk areas cover evaluation of limits utilization, account performance, conditions/covenants compliance by the borrower and deposit relationship.

Step 2: Allocate weights to Principal Risk Components

According to the importance of risk profile, the following weights are proposed for corresponding principal risks:

Principal Risk Components	Weight
• Financial Risk	50%
• Business/ Industry Risk	18%
• Management Risk	12%
• Security Risk	10%
• Relationship Risk	10%
TOTAL	**100%**

Step 3: Establish the Key Parameters

According to the importance of risk profile, the following weights are proposed for corresponding principal risks:

Principal Risk Components	Key Parameters
• Financial Risk	Leverage, Liquidity, Profitability & Coverage ratio
• Business/ Industry Risk	Size of Business, Age of Business, Business Outlook, Industry Growth, Competition & Barriers to Business
• Management Risk	Experience, Succession & Team Work.
• Security Risk	Security Coverage, Collateral Coverage and Support.
• Relationship Risk	Account Conduct, Utilization of Limit, Compliance of covenants/conditions & Personal Deposit.

Step -4: Weight the Key Parameters

According to the importance of risk profile, the following weights are proposed for corresponding principal risks:

Principal Risk Components	Key Parameters	Weight	
		Individual	Total
• Financial Risk	➲ Leverage	15%	
	➲ Liquidity	15%	**50%**
	➲ Profitability	15%	
	➲ Coverage	5%	
• Business/ Industry Risk	➲ Size of Business	5%	
	➲ Age of Business	3%	**18%**
	➲ Business Outlook	3%	
	➲ Industry Growth	3%	
	➲ Market Competition	2%	
	➲ Entry/ Exit Barriers	2%	
• Management Risk	➲ Experience	5%	
	➲ Succession	4%	**12%**
	➲ Team Work.	3%	
• Security Risk	➲ Security Coverage	4%	
	➲ Collateral Coverage	4%	**10%**
	➲ Support	2%	
• Relationship Risk	➲ Account Conduct	5%	
	➲ Utilization of Limit	2%	
	➲ Compliance of covenants/conditions	2%	**10%**
	➲ Personal Deposit	1%	

Step -5: Input Data to arrive at the Score on the Key Parameters

After the risk identification & weight assignment process (as mentioned above), the next step will be to give input in actual parameters in the score sheet to arrive at the scores corresponding to the actual parameters.

The CRG Manual (CRGM) provided by Bangladesh Bank also includes a well programmed MS Excel based Credit Risk Scoring Sheet to arrive at a total score on each borrower. The excel program requires inputting data accurately in particular cells for input and will automatically calculate the risk grade for a particular borrower based on the total score obtained.

Step -6: Arrive at the Credit Risk Grading based on Total Score Obtained

The following is the proposed Credit Risk Grade matrix based on the total score obtained by an obligor:

Number	Risk Grading	Short Name	Score
1	Superior	SUP	➲ 100% Cash Covered ➲ Government Guarantee ➲ International Bank Guarantee
2	Good	GD	85+
3	Acceptable	ACCPT	75 – 84
4	Marginal/ Watch List	MG/ WL	65 – 74
5	Special Mention	SM	55 – 64
6	Sub–Standard	SS	45 – 54
7	Doubtful	DF	35 – 44
8	Bad & Loss	BL	< 35

5.1.3 Credit Risk Grading Process:

- Credit Risk Grading should be completed by a Bank for all exposures (irrespective of amount) other than those covered under Consumer and Small Enterprises Financing Prudential Guidelines and also under the Short–Term Agricultural and Micro Credit.
- For Superior Risk Grading (SUP-1) the score sheet is not applicable. This will be guided by the criterion mentioned for superior grade account i.e. 100% cash covered, covered by government & bank guarantee.
- Credit Risk Grading Matrix would be useful in analyzing credit proposal, new or renewal for regular limits or specific transactions, if basic information on a borrowing client to determine the degree of each factor is a) readily available, b) current, c) dependable, and d) parameters/risk factors are assessed judiciously and objectively. The Relationship Manager as per Data Collection Checklist should collect required information.
- Relationship manager should ensure to correctly fill up the Limit Utilization Form in order to arrive at a realistic earning status for the borrower.
- Risk factors are to be evaluated and weighted very carefully, on the basis of most up–to–date & reliable data and complete objectivity must be ensured to assign the correct grading. Actual parameter should be inputted in the Credit Risk Grading Score Sheet.
- Credit risk grading exercise should be originated by Relationship Manager and should be an on-going and continuous process. Relationship Manager shall complete the Credit Risk Grading Score Sheet and shall arrive at a risk grading in consultation with a Senior Relationship Manager and document it as per Credit Risk Grading Form,

which shall then be concurred by the Credit Officer in consultation with a Senior Credit Officer.

- All credit proposals whether new, renewal or specific facility should consist of a) Data Collection Checklist, b) Limit Utilization Form c) Credit Risk Grading Score Sheet, and d) Credit Risk Grading Form.
- The credit officers then would pass the approved Credit Risk Grading Form to Credit Administration Department and Corporate Banking/Line of Business/Recovery Unit for updating their MIS/record.
- The appropriate approving authority through the same Credit Risk Grading Form shall approve any subsequent change/revision i.e. upgrade or downgrade in credit risk grade.

Early Warning Signals (EWS):

- Early Warning Signals (EWS) indicate risks or potential weaknesses of an exposure requiring monitoring, supervision, or close attention by management.
- If these weaknesses are left uncorrected, they may result in deterioration of the repayment prospects in the Bank's assets at some future date with a likely prospect of being downgraded to classified assets.
- Early identification, prompt reporting and proactive management of Early Warning Accounts are prime credit responsibilities of all Relationship Managers and must be undertaken on a continuous basis.
- Despite a prudent credit approval process, loans may still become troubled. Therefore, it is essential that early identification and prompt reporting of deteriorating credit signs be done to ensure swift action to protect the Bank's interest. The symptoms of early warning signals as mentioned below are by no means exhaustive and hence, if there are other concerns, such as a breach of credit covenants or adverse market rumors that warrant additional caution, a Credit Risk Grading Form should be presented.
- Irrespective of credit score obtained by any obligor as per the proposed risk grade score sheet, the grading of the account highlighted as Early Warning Signals (EWS) accounts shall have the following risk symptoms :

- **Marginal/ Watch List (MG/WL - 4) :** if –
  - Any credit is past due/overdue for 60 days and above.
  - Frequent drop in security value or shortfall in drawing power exists.

- **Special Mention (SM - 5) :** if –
  - Any credit is past due/overdue for 90 days and above.
  - Major document deficiency prevails (such deficiencies include but not limited to; board resolution for borrowing not obtained, sanction letter not accepted by client, charges/hypothecation over assets favoring bank not filed with Registrar, Joint Stock Companies, mortgage not in place, guarantees not obtained, etc.).
  - A significant petition or claim is lodged against the borrower.

The CRG Form of accounts having Early Warning Signals should be completed by the Relationship Manager and sent to the approving authority in CRM Department. The CRG should be updated as soon as possible and no delay should be there in referring Early Warning Signal accounts or any problem accounts to the CRM Department for their early involvement and assistance in recovery.

5.1.4 Exceptions to Credit Risk Grading:

- Head of Credit Risk Management may also downgrade/classify an account in the normal course of inspection of a Branch or during the periodic portfolio review. In such event, the Credit Risk Grading Form will then be filled up by Credit Risk Management Department and will be referred to Corporate Banking/Line of Business/Credit Administration Department/Recovery Unit for updating their MIS/records.
- Recommendation for upgrading of an account has to be well justified by the recommending officers. Essentially complete removal of the reasons for downgrade should be the basis of any upgrading.
- In case an account is rated marginal, special mention or unacceptable credit risk as per the risk grading score sheet, this may be substantiated and credit risk may be accepted if the exposure is additionally collateralized through cash collateral, good tangible collaterals and strong guarantees. These are exceptions and should be exceptionally approved by the appropriate approving authority.

- Whenever required an independent assessment of the credit risk grading of an individual account may be conducted by the Head of Credit Risk Management or by the Internal Auditor documenting as to why the credit deteriorated and also pointing out the lapses.
- If a Bank has its own well established risk grading system equivalent to the proposed credit risk grading or stricter, then they will have the option to continue with their own risk grading system.

5.1.5 Credit Risk Grading Review:

Credit Risk Grading for each borrower should be assigned at the inception of lending and should be periodically updated. Frequencies of the review of the credit risk grading are mentioned below:

Number	Risk Grading	Short Name	Score
1	Superior	SUP	Annually
2	Good	GD	Annually
3	Acceptable	ACCPT	Annually
4	Marginal/ Watch List	MG/ WL	Half yearly
5	Special Mention	SM	Quarterly
6	Sub–Standard	SS	Quarterly
7	Doubtful	DF	Quarterly
8	Bad & Loss	BL	Quarterly

MIS on Credit Risk Grading:

Bank should have comprehensive MIS reports on credit risk grading to evaluate entire credit portfolio of the Bank. MIS reports should be prepared and circulated at least on a quarterly basis as mentioned below:

- Credit Risk Grading Report (Consolidated).
- Credit Risk Grading Report (Branch Wise).
- Credit Risk Grading Report (Branch & Risk Grade Wise).
- Credit Risk Grading Report (Grade Wise Borrower List).

Financial Spread Sheet (FSS):

A Financial Spread Sheet (FSS) has been developed by Bangladesh Bank which may be used by the Banks while analyzing the credit risk elements of a credit proposal from financial point of view.

The FSS is well designed and programmed software having two parts. Input and Output Sheets. The financial numbers of borrowers need to be inputted in the Input Sheets which will then automatically generate the Output Sheets.

5.2 Classification & Provisioning of loans & Advances

In order to strengthen credit discipline and improve the recovery positions of Loans and Advances by the Banks, Bangladesh Bank vide BCD Circular No.34/ 1989 introduced a new system covering loans and advances classification, the suspension of interest due and the making of provisions against potential loan loss. With a view to further strengthening credit discipline and bring classification and provisioning regulation in line with international standard, a phase wise program for loan classification and provisioning was undertaken by Bangladesh Bank through BCD Circular No. 20/1994. Afterwards, a comprehensive circular, BRPD Circular No. 16/1998 was issued with major amendments in previous circulars with a view to achieving a more specified and simplified system of loan classification and provisioning.

Later on, as part of the process i.e. regarding the changes meanwhile Bangladesh Bank has already introduced "Special Mention Account" vide BRPD Circular No. 02/2005 and 09/2005 for the banks and raise early warning signals for accounts showing first signs of weakness and making appropriate provisioning therein. As a further move towards this end, changes in the formats for classification and provisioning have been made vide BRPD Circular No. 08/2005. Moreover, some changes have been made in the provisioning requirement for Consumer Financing and Small Enterprise Financing. Meanwhile, in order enable the banks to have all existing instructions on the subject at one place a Master Circular has been issued by Bangladesh Bank vide BRPD Circular No. 05/2006 by incorporating all instructions issued from time to time, which includes a few new instructions as well.

Basis for Loan Classification:

All loans and advances are grouped into 04 (four) categories as follows:

Past Due/ Overdue:

- Any **Continuous Loan** if not repaid/ renewed within the fixed expiry date for repayment will be treated as past due/ overdue from the following day of the expiry date.
- Any **Demand Loan** if not repaid/ re–scheduled within the fixed expiry date for repayment will be treated as past due/ overdue from the following day of the expiry date.
- In case of any installment(s) or part thereof of a **Fixed Term Loan (not over five years)** is not repaid within the fixed expiry date, the amount of unpaid installment(s) will be treated as past due/ overdue from the following day of the expiry date.

- In case of any installment(s) or part thereof of a **Fixed Term Loan (over five years)** is not repaid within the fixed expiry date, the amount of unpaid installment(s) will be treated as past due/ overdue after 06(six) months of the expiry date.
- The Short–term Agricultural and Micro Credit if not repaid/ renewed within the fixed expiry date will be considered as past due/ overdue after 06(six) months of the expiry date.
- All unclassified loans other than Special Mention Account (SMA) will be treated as Standard.
- A Continuous Credit, Demand Loan or a Term Loan which will remain overdue for a period of 90(ninety) days or more but less than 180(one eighty) days, will be put into the "Special Mention Account (SMA)" and interest accrued on such loan will be credited to Interest Suspense Account, instead of crediting the same to Income Account. This will help banks to look at accounts with potential problems in a focused manner and it will capture early warning signals for accounts showing first sign of weakness.
- Loans under "Special Mention Account (SMA)" will have to be reported to the Credit Information Bureau (CIB) of Bangladesh Bank. However, it is reiterated that loans in the "Special Mention Account (SMA)" will not be treated as default loan for the purpose of section 27 KaKa (3) of the Bank Company Act, 1991.

- **Any Continuous Loan will be classified as :**
  - "Sub Standard (SS)" if it is past due/ overdue for 06(six) months but less than 09(nine) months.
  - "Doubtful (DF)" if it is past due/ overdue for 09(nine) months but less than 12(twelve) months.
  - "Bad & Loss (BL)" if it is past due/ overdue for 12(twelve) months or beyond.

- **Any Demand Loan will be classified as :**
  - "Sub Standard (SS)" if it remains past due/ overdue for 06(six) months or beyond but not over 09(nine) months from the date of claim by the bank or from creation of the loan.
- "Doubtful (DF)" if it remains past due/ overdue for 09(nine) months or beyond but not over 12(twelve) months from the date of claim by the bank or from the date of creation of the loan.

- "Bad & Loss (BL)" if it remains past due/ overdue for 12(twelve) months or beyond from the date of claim by the bank or from the date of creation of the loan.

➲ In case of any installment(s) or part of installment(s) of Fixed Term Loan is not repaid within the due date, the amount of the unpaid installment(s) will be termed as "Defaulted Installment".

➲ In case of Fixed Term Loans, which are repayable within maximum 05(five) years of time :

- If the amount of "Defaulted Installment" is equal to or more than the amount of installment(s) due within 12(twelve) months, the entire loan will be classified as "Sub Standard (SS)".
- If the amount of "Defaulted Installment" is equal to or more than the amount of installment(s) due within 18(eighteen) months, the entire loan will be classified as "Doubtful (DF)".
- If the amount of "Defaulted Installment" is equal to or more than the amount of installment(s) due within 24(twenty four) months, the entire loan will be classified as "Bad & Loss (BL)".

➲ In case of Fixed Term Loans, which are repayable more than 05(five) years of time :

- If the amount of "Defaulted Installment" is equal to or more than the amount of installment(s) due within 06(six) months, the entire loan will be classified as "Sub Standard (SS)".
- If the amount of "Defaulted Installment" is equal to or more than the amount of installment(s) due within 12(twelve) months, the entire loan will be classified as "Doubtful (DF)".
- If the amount of "Defaulted Installment" is equal to or more than the amount of installment(s) due within 18(eighteen) months, the entire loan will be classified as "Bad & Loss (BL)".

Explanation: If any Fixed Term Loan is repayable on monthly installment basis, the amount of installments due within 06(six) month will be equal to the sum of 06(six) monthly installments. Similarly, if the loan is repayable on quarterly installment basis, the amount of installments due within 06(six) month will be equal to the sum of 02(two) quarterly installments.

Qualitative Judgment (QJ):

If any uncertainty or doubt arises in respect of recovery of any Continuous loan, Demand Loan or Fixed Term Loan, the same will have to be classified on the basis of qualitative judgment be it classifiable or not on the basis of objective criteria. If any situational changes occur in the stipulations in terms of which the credit was extended or if the capital of the borrower is impaired due to adverse conditions or if the value of the securities decreases or if the recovery of the credit becomes uncertain due to any other unfavorable situation, the credit will have to be classified on the basis of qualitative judgment.

Besides, if any loan is illogically or repeatedly re–scheduled or the norms of re–scheduling are violated or instances of (propensity to) frequently exceeding the credit limit are noticed or legal action is lodged for recovery of the credit or the credit extended without approval of the competent authority, it will have to be classified on the basis of qualitative judgment.

Despite the probability of any credit being affected due to the reasons stated above or for any other reasons, if there exists any hope for change of the existing condition by resorting to proper steps, the credit, on the basis of qualitative judgment, will be classified as **"Sub Standard (SS)".** But, even if after resorting to proper steps, there exists no certainty of total recovery of the Bank's dues, it will be classified as **"Doubtful (DF)"** and even after exerting the all–out effort, there exists no chance of recovery, it will be classified as **"Bad & Loss (BL)"** on the basis of qualitative judgment. The concerned bank will classify on the basis of qualitative judgment and can declassify the credits if quality improvement does occur. But if any loan is classified by the Inspection team of Bangladesh Bank, the same can be declassified with the approval of the Board of Directors of the respective bank. However, before placing such case to the Board of Directors, the MD/ CEO and the respective Branch Manager of the Bank shall have to certify that the terms and conditions of declassification have been duly fulfilled by the borrowers. The Bank will have to inform such declassifications to the Department of Banking Inspection/ concerned offices of Bangladesh Bank within 15(fifteen) days of such decision taken by the Board of Directors. Bangladesh Bank will examine these matters on case–to–case basis and if any irregularities/ deviations are detected, necessary legal action will be taken against the concerned officials.

Accounting of the Interest of Classified Loans & Advances:

If any loan or advance is classified as **"Sub Standard (SS)"** and **"Doubtful (DF)"**, interest accrued on such loan will be credited to **"Interest Suspense Account"**, instead of crediting the same to Income Account. In case of re–scheduled loans the unrealized interest, if any,

will be credited to **"Interest Suspense Account"**, instead of crediting the same to Income Account. As soon as any loan or advance is classified as **"Bad & Loss (BL)"**, charging interest in the same account will cease. In case of filing a law–suit for recovery of such loan, interest for the period till filing of the suit can be charged in the loan account has to be preserved in the **"Interest Suspense Account"**. If any interest is charged on any **"Bad & Loss (BL)"** account for any other special reason, the same will preserved in the **"Interest Suspense Account"**.

If classified loan or part of it is recovered i.e. real deposit is effected in the loan account, first the interest charged and not charged is to be recovered from the said deposit and the principal to be adjusted afterwards.

5.3 Maintenance of Provision

Banks require maintaining General Provision in respect of the **unclassified loans & Advances** in the following manner:

Type of Classification	Required Provision
• **Standard** (other than loans under Small Enterprise and Consumer Financing)	@ 1%
• **Unclassified Small Enterprise Financing**	@ 2%
• **Unclassified Consumer Financing**	@ 5%
• **Unclassified Housing Financing & Loans for Professionals to set Business Consumer Financing Scheme**	@ 2%
• **Special Mention Account (SMA)**	@ 5%

- Banks require to maintain Provision in respect of Classified Continuous, Demand and Fixed Term loans in the following manner :

Type of Classification	Required Provision
• **Sub Standard (SS)**	@ 20%
• **Doubtful (DF)**	@ 50%
• **Bad & Loss (BL)**	@100%

- Banks require to maintain Provision in respect of Short–term Agricultural and Micro Credits in the following rates :

Type of Classification	Required Provision
• **All Credits except Bad & Loss (BL)**	@ 5%
• **Bad & Loss (BL)**	@100%

Base for Provision:

Provision will be maintained at the above rate on balance to be ascertained by deducting the amount kept in **"Interest Suspense Account"** and Value **of Eligible Securities** from the **Outstanding Balance** of the Classified accounts.

Eligible Securities:

If the definition of **"Eligible Securities"** as mentioned hereinabove the following securities will be included as **"Eligible Securities"** in determining base for provision**:**

- 100% of Deposit under lien against the loan.
- 100% of the Value of Government Bond/ Savings Certificates under lien.
- 100% of Value of Guarantee given by Government or Bangladesh Bank.
- 100% of Market Value of Gold or Gold Ornaments pledged with the Bank.
- 50% of Market Value of Easily Marketable Commodities kept under control of the Bank.
- Maximum 50% of the Market Value of Land and Building mortgaged with the Bank.
- 50% of the Average Market Value for the last 06(six) months or 50% of the Face Value, whichever is less, of the Shares traded in the Stock Exchanges.

Determination of Market Value of the Eligible Securities:

In determining the market value of easily marketable commodities, land & building as banks are advised by the Bangladesh Bank to follow the instructions mentioned below:

- Easily Marketable Commodities mean pledged easily encashable/ saleable goods that remain under full control of the Bank. However, while the concerned Bank Branch official will conduct periodic inspection to verify as to whether issues such as the suitability of goods for use, expiry period, appropriateness of documentary evidences, up–to–date insurance coverage; same will have to be assessed by the professional assessor from time to time.

- For Land & Building, banks have to ensure whether title documents are in order and concerned land and building will have to be valued by the professional valuation firm along with completion of proper documentation in favor the bank. In absence of Professional valuation firm, certificate in favor of such valuation will have to be collected from specialized engineer. Nevertheless, temporary house including Tin–shed structure shall not be shown as building.
- In order to facilitate the on–site inspection by Department of Bank Inspection of Bangladesh Bank is also advised to maintain complete statement of eligible securities on a separate sheet in the concerned loan file. Information such as description of eligible securities, their assessment by recognized firm, marketability of the commodity, control of the bank and reasons for considering eligible securities etc. have to be included in that sheet.

Period of Conducting Classification:

In terms of above policies Banks requires to conduct their classification activities on quarterly basis.

5.4 Bank Credit Risk Management Policy:

The banking industry has long viewed the problem of risk management as the need to control four of the above risks which make up most, if not all, of their risk exposure, viz., credit, interest rate, foreign exchange and liquidity risk. While they recognize counterparty and legal risks, they view them as less central to their concerns. Where counterparty risk is significant, it is evaluated using standard credit risk procedures, and often within the credit department itself. Likewise, most bankers would view legal risks as arising from their credit decisions or, more likely, proper process not employed in financial contracting. Accordingly, the study of bank risk management processes is essentially an investigation of how they manage these four risks. In each case, the procedure outlined above is adapted to the risk considered so as to standardize, measure, constrain and manage each of these risks. To illustrate how this is achieved, this review of firm-level risk management begins with a discussion of risk management controls in each area. The more difficult issue of summing over these risks and adding still other, more amorphous, ones such as legal, regulatory or reputation risk will be left to the end.

Policy on Single Borrower Exposure

As a prudential measure intended for ensuring improved risk management through restriction on credit concentration, Bangladesh Bank has from time to time advised the scheduled banks in Bangladesh to fix limits on their large credit exposures and their exposures to single and group borrowers.

In general, and as practiced internationally, exposure ceiling is derived from a bank's total capital as defined under capital adequacy standards (Tier I and Tier II Capital). Following the same practice, Bangladesh Bank issued BRPD Circular No. 08 dated March 18, 2003, recommending uniform exposure limits for both local and foreign banks. In order to enable the banks to improve their credit risk management further, Bangladesh Bank is issuing this circular by consolidating all the instructions issued so far and incorporating some amendments to the previous circular.

First As a result of increase in capital of almost all the banks, now it has been decided to reduce the single borrower exposure limit from 50% to 35%. Thus-

- The total outstanding financing facilities by a bank to any single person or enterprise or organization of a group shall not at any point of time exceed 35% of the bank's total capital subject to the condition that the maximum outstanding against fund based financing facilities (funded facilities) do not exceed 15% of the total capital. In this case total capital shall mean the capital held by banks as per sectioin-13 of the Bank Company Act, 1991.
- Non-funded credit facilities, e.g. letter of credit, guarantee etc. can be provided to a single large borrower. But under no circumstances, the total amount of the funded and non-funded credit facilities shall exceed 35% of a bank's total capital. However, in case of export sector single borrower exposure limit shall remain unchanged at 50% of the bank's total capital. But funded facilities in case of export credit shall also not exceed 15% of the total capital. In addition, the banks shall follow the following prudential norms, where applicable:

Second

- Loan sanctioned to any individual or enterprise or any organization of a group amounting to 10% or more of a bank's total capital shall be considered as large loan.
- The banks will be able to sanction large loans as per the following limits set against their respective classified loans :

Rate of net classified loans	The highest rate fixed for large loan against bank's total loans & advances
Up to 5%	56%
More than 5% but up to 10%	52%
More than 10% but up to 15%	48%
More than 15% but up to 20%	44%
More than 20%	40%

- In order to determine the above maximum rates of large loans, all non-funded credit facilities e.g. letter of credit, guarantee etc. included in the loan shall be considered as 50% credit equivalent. However, the entire amount of non-funded credit facilities shall be included in determining the total credit facilities provided to an individual or enterprises or an organization of a group.

Third

- A public limited company, which has 50% or more public shareholdings, shall not be considered as an enterprise/organization of any group.
- In the cases of credit facilities provided against government guarantees and AAA rated Multilateral Development Banks (MDBs) guarantee, the aforementioned restrictions shall not be applicable. 24
- In the cases of loans backed by cash and encashable securities (e.g.FDR), the actual lending facilities shall be determined by deducting the amount of such securities from the outstanding balance of the loans.

Fourth

I. Banks should collect the large loan information on their borrowers form Credit Information Bureau (CIB) of Bangladesh Bank before sanctioning renewing or rescheduling large loans in order to ensure that credit facilities are not being provided to defaulters.

II. Banks must perform Lending Risk Analysis (LRA) before sanctioning or renewing large loans. If the rating of an LRA turns out to be "marginal", a bank shall not sanction the large loan, but it can consider renewal of an existing large loan taking into account other favorable, conditions and factors. However if the result of an LRA is unsatisfactory, neither sanction nor renewal of large loans can be considered.

III. While sanctioning or renewing of large loan, a bank should judge its borrowers overall debt repayment capacity taking into consideration the borrower's liabilities with other banks and financial institutions.

IV. A banks shall examine is borrower's Cash Flow Statement, Audited Balance Sheet, Income Statement and other financial statements to make sure that its borrower has the ability to repay the loan.

V. Sanctioning, renewing or rescheduling of large loans should be approved by the Board of Directors in case of local banks. Such decisions should be taken by the Chief Executives in case of foreign banks. However, while approving proposals of large loans, among other things, compliance with the above guidelines must be ensured.

5.5 Policy for Rescheduling of Loans

Experience shows that the existing system of loan rescheduling has created impediments in the way of realizing defaulted loans. Specially, a tendency has been observed among the defaulted borrowers to avail the opportunity of loan rescheduling again and again without any definite business rationale. Some confusion has also cropped up relating to the condition of cash deposit as down payment for loan rescheduling. After careful and overall review of the previously mentioned problems and in suppression of all previous instructions, the following detailed policies for rescheduling of loans are being issued for compliance by banks:

Guidelines for Consideration of Loan Rescheduling Applications:

While considering loan rescheduling application the banks shall follow the under mentioned guidelines:

When a borrower asks for rescheduling of loans the banks shall examine the causes as to why the loan has become non-performing. If it is found from such review that the borrower has diverted the funds elsewhere or the borrower is a habitual loan defaulter the bank shall not consider the application for loan rescheduling. Instead, the bank shall take/continue all legal steps for recovery of the loans.

At the time of considering loan rescheduling proposal bank must assess the borrower's overall repayment capacity taking into account the borrower's liability position with other banks.

If a bank is satisfied after due diligence mentioned above that the borrower will be able to repay, the loan may be rescheduled. Otherwise, bank shall take all legal steps to realize the loan, make necessary provision and take measures to write-off.

The rescheduling shall be for a minimum reasonable period of time.

At the time of placing the rescheduling proposal before the Board of Directors the Bank shall apprise the Board in details, what would be implications of such loan rescheduling on the income and other areas of the bank.

Rescheduling of Term Loans:

The loans which are repayable within a specific time period under a prescribed repayment schedule are treated as Term Loans. For rescheduling such loans following policies shall, henceforth, be followed:

Application for first rescheduling will be considered only after cash payment of at least 15% of the overdue installments or 10% of the total outstanding amount of loan, whichever, is less; Rescheduling application for the second time will be considered after cash payment of minimum 30% of the overdue installments or 20% of the total outstanding amount of loan, whichever, is less;

Application for rescheduling for more than two times will be considered after cash payment of minimum 50% of the overdue installments or 30% of the total outstanding amount of loan, whichever is less; Explanation: If any loan is rescheduled once before issuance of this policy the conditions set forth in this circular for second rescheduling shall be applicable for rescheduling of such loans. Likewise, the terms for 3rd rescheduling as per this circular shall be applicable for rescheduling of any loan which has already been rescheduled twice.

Rescheduling of Demand and Continuous Loan:

The loans which can be transacted without any specific repayment schedule but have an expiry date for repayment and a limit are treated as Continuous Loan. In addition, the loans which become repayable after those are claimed by the bank, are treated as Demand Loans. If any contingent or any other liabilities are turned to forced loan (i.e. without any prior approval as regular loan) those also are treated as Demand Loans. For rescheduling of Demand and Continuous Loans the rates of down payment, depending on the loan amount, shall be as under:

Amount of Overdue Loan	**Rates of Down payment**
Up to Tk.1.00 (one) crore	15%
Tk. 1.00(one) crore to Tk. 5.00 (five) crore	10% (but not less than Tk.15.00 lac)
Tk. 5.00(five) crore and above	5% (but not less than Tk.50.00 lac)

If any Continuous or Demand Loan is rescheduled by restructuring/converting partly or wholly into Term Loan and repayment installments have been fixed, application for rescheduling such loans shall be considered on cash payment of minimum 30% of the overdue installments or 20% of the total outstanding amount of loan, whichever is less. For subsequent rescheduling minimum 50% of the overdue installments or 30% of the total outstanding amount of loan amount shall have to be deposited in cash.

5.6 Policy for Loan Write Off

In course of conducting credit operations by banks the quality of a portion of their loan portfolio, in many cases, deteriorates and uncertainty arises in realizing such loans and advances. These loans are adversely classified as per existing rules and necessary provision has to be made against such loans. Writing off bad loans having adequate provision is an internationally accepted normal phenomenon in banking business. Owing to the reluctance of banks in Bangladesh in resorting to this system their balance sheets are becoming unnecessarily and artificially inflated. In order to avoid possible legal complications in retaining the claims of the banks over the loans written off section 28 ka has been incorporated in 2001 in the Bank Company Act, 1991. In this context the following policies for writing off loans are being issued for compliance by banks: Banks may, at any time, write off loans classified as bad/loss. Those loans which have been classified as bad/loss for the last five years and for which 100% provisions have been kept should be written off without delay. After issuance of this circular the process of writing off all other loans classified as bad/loss should be started immediately. Under the process the oldest bad/loss classified loans should be considered first for written off.

Requirement for Obtaining Information on Large Loan from Credit Information Bureau (CIB)

Credit information on borrower shall have to be collected from the Credit Information Bureau before sanctioning of fresh loan, renewal of regular loan or rescheduling of loan for Tk. 50[33] lacs and above. Banks shall take the decision of sanctioning, renewing or rescheduling the loan at their own discretion and responsibility having examined the eligibility of the borrower in respect of availing of the loan after receiving the total information on the borrower from the Credit Information Bureau.

It was made compulsory to obtain information on borrower from the Credit Information Bureau before sanctioning of fresh loan, renewal of regular loan or rescheduling of loan for

Tk. 10 lacs and above in favor of any borrower vide BCD Circular No. 07 dated June 17, 1995. Subsequently, the amount was raised to Tk. 50 lacs and above and the issue of collecting information on borrowers/clients from the CIB in respect of opening of L/C and issuance of Bank Guarantee was made optional vide BCD Circular No.09 dated June 29, 1995. Rescinding this Circular dated 29.06.95 it was made compulsory to obtain information on borrower from the CIB before sanctioning, renewal and rescheduling of large loan as well as in case of opening of L/C and issuance of Bank Guarantee vide BRPD Circular No. 13 dated October 26, 2000. Further included in the same Circular is that it must have to be ensured that no loan facility shall be extended to any defaulters and for this purpose banks at their own interest shall collect credit information from the CIB. [Amount of large loan to be determined in terms of BRPD Circular No. 05 dated April 09, 2005].

5.7 Comparative Role of BASEL ACCORDS in Credit Risk Management

Background:

The deterioration of asset quality of banks has caused major turmoil across the world. Since 1980, over 130 countries, comprising almost three fourth of the International Monetary Fund's member countries, have experienced significant banking sector distress. This is particularly problematic as banks universally faced the dilemma of balancing profitability and stability. The increased integration of financial markets across the countries and the need to make level playing field for banks of different countries led to establish Basel Accord in June 1988 by a Committee on Banking Supervision, a panel of Regulators from the Group of G-10 Countries under the auspices of the International Bank for Settlement in Basel, Switzerland under the title of 'Basel Accord 1988'. The Basel Capital Accord in 1988 proposed by Basel Committee of Bank Supervision (BCBS) of the Bank for International Settlement (BIS) focused on reducing credit risk, prescribing a minimum capital risk adjusted ratio (CRAR) of 8 percent of the risk weighted assets. Although it was originally meant for banks in G10 countries, more than 190 countries claimed to adhere to it, and Bangladesh also began implementing the Basel I in the banking sector.

5.7.1 BASEL I ACCORD:

Norms:

The standards are almost entirely addressed to credit risk, the main risk incurred by banks. The document encompassed the following main sections:

- Established the First International Standard on the Capital Adequacy based on risk weighted Capital Adequacy Ratio (CAR)
- Recommended a lower limit of 8 percent for the ratio of total capital to risk adjusted assets.
- Specified the Risk Weight against each asset or Asset Category

Based on the Basel norms, the Bangladesh Bank (BB) also issued similar capital adequacy norms for the Banks in Bangladesh. According to these guidelines, the banks will have to identify their Tier-I and Tier-II capital and assign risk weights to the assets. Having done this they will have to assess the Capital to Risk Weighted Assets Ratio (CRAR).

Tier-I Capital

- Paid-up capital
- Statutory Reserves
- Disclosed free reserves
- Capital reserves representing surplus arising out of sale proceeds of assets Equity investments in subsidiaries, intangible assets and losses in the current period and those brought forward from previous periods will be deducted from Tier I capital.

Tier-II Capital

- Undisclosed Reserves and Cumulative Perpetual Preference Shares
- Revaluation Reserves
- General Provisions and Loss Reserves

Benefits from Basel I:

- Substantial increases in capital adequacy ratios of internationally active banks;
- Relatively simple structure;
- Worldwide adoption;
- Increased competitive equality among internationally active banks;
- Greater discipline in managing capital;
- A benchmark for assessment by market participants.

Limitations of Basel I:

- In spite of advantages and positive effects, weaknesses of Basel I standards eventually became evident:
- Capital adequacy depends on credit risk, while other risks (e.g. market and
- operational) are excluded from the analysis;
- In credit risk assessment there is no difference between debtors of different credit quality and rating;
- Emphasis is on book values and not market values;
- Inadequate assessment of risks and effects of the use of new financial instruments, as well as risk mitigation techniques.

Some of the weaknesses of Basel I, especially those related to market risk, were over bridged by the amendment to recommendations from 1993 and 1996, by means of introducing capital requirements for market risk.

5.7.2 BASEL II ACCORD:

Basel II is the second of the Basel Accords, which are recommendations on banking laws and regulations issued by the Basel Committee on Banking Supervision. Its purpose was initially published in June 2004, to create an international standard that banking regulators can use when creating regulations about how much capital banks need to put aside to guard against the types of financial and operational risks banks face. Advocates of Basel II believe that such an international standard can help protect the international financial system from the types of problems that might arise should a major bank or a series of banks collapse. In practice, Basel II attempts to accomplish this by setting up rigorous risk and capital management requirements designed to ensure that a bank holds capital reserves appropriate to face exposure of risk through its lending and investment practices. Generally speaking, these rules mean that the greater risk to which the bank is exposed, the greater the amount of capital the bank needs to hold to safeguard its solvency and overall economic sustainability.

The Basel II accord aims at:

- Ensuring that capital allocation is more risk sensitive;
- Separating operational risk from credit risk, and quantifying both;
- Attempting to align economic and regulatory capital more closely to reduce the scope for regulatory arbitrage;

Principles of Management of Credit Risk recommended by Basel Committee on Banking Supervision:

Establishing an appropriate credit risk environment

Principle 1: The board of directors should have responsibility for approving and periodically (at least annually) reviewing the credit risk strategy and significant credit risk policies of the bank. The strategy should reflect the bank's tolerance for risk and the level of profitability the bank expects to achieve for incurring various credit risks.

Principle 2: Senior management should have responsibility for implementing the credit risk strategy approved by the board of directors and for developing policies and procedures for identifying, measuring, monitoring and controlling credit risk. Such policies and procedures should address credit risk in all of the bank's activities and at both the individual credit and portfolio levels.

Principle 3: Banks should identify and manage credit risk inherent in all products and activities. Banks should ensure that the risks of products and activities new to them are subject to adequate risk management procedures and controls before being introduced or undertaken, and approved in advance by the board of directors or its appropriate committee.

Operating under a sound credit granting process

Principle 4: Banks must operate within sound, well-defined credit-granting criteria. These criteria should include a clear indication of the bank's target market and a thorough understanding of the borrower or counterparty, as well as the purpose and structure of the credit, and its source of repayment.

Principle 5: Banks should establish overall credit limits at the level of individual borrowers and counterparties, and groups of connected counterparties that aggregate in a comparable and meaningful manner different types of exposures, both in the banking and trading book and on and off the balance sheet.

Principle 6: Banks should have a clearly-established process in place for approving new credits as well as the amendment, renewal and re-financing of existing credits.

Principle 7: All extensions of credit must be made on an arm's-length basis. In particular, credits to related companies and individuals must be authorized on an exception basis, monitored with particular care and other appropriate steps taken to control or mitigate the risks of non-arm's length lending.

Maintaining an appropriate credit administration, measurement and monitoring process

Principle 8: Banks should have in place a system for the ongoing administration of their various credit risk-bearing portfolios.

Principle 9: Banks must have in place a system for monitoring the condition of individual credits, including determining the adequacy of provisions and reserves.

Principle 10: Banks are encouraged to develop and utilize an internal risk rating system in managing credit risk. The rating system should be consistent with the nature, size and complexity of a bank's activities.

Principle 11: Banks must have information systems and analytical techniques that enable management to measure the credit risk inherent in all on- and off-balance sheet activities. The management information system should provide adequate information on the composition of the credit portfolio, including identification of any concentrations of risk.

Principle 12: Banks must have in place a system for monitoring the overall composition and quality of the credit portfolio.

Principle 13: Banks should take into consideration potential future changes in economic conditions when assessing individual credits and their credit portfolios, and should assess their credit risk exposures under stressful conditions.

Ensuring adequate controls over credit risk

Principle 14: Banks must establish a system of independent, ongoing assessment of the bank's credit risk management processes and the results of such reviews should be communicated directly to the board of directors and senior management.

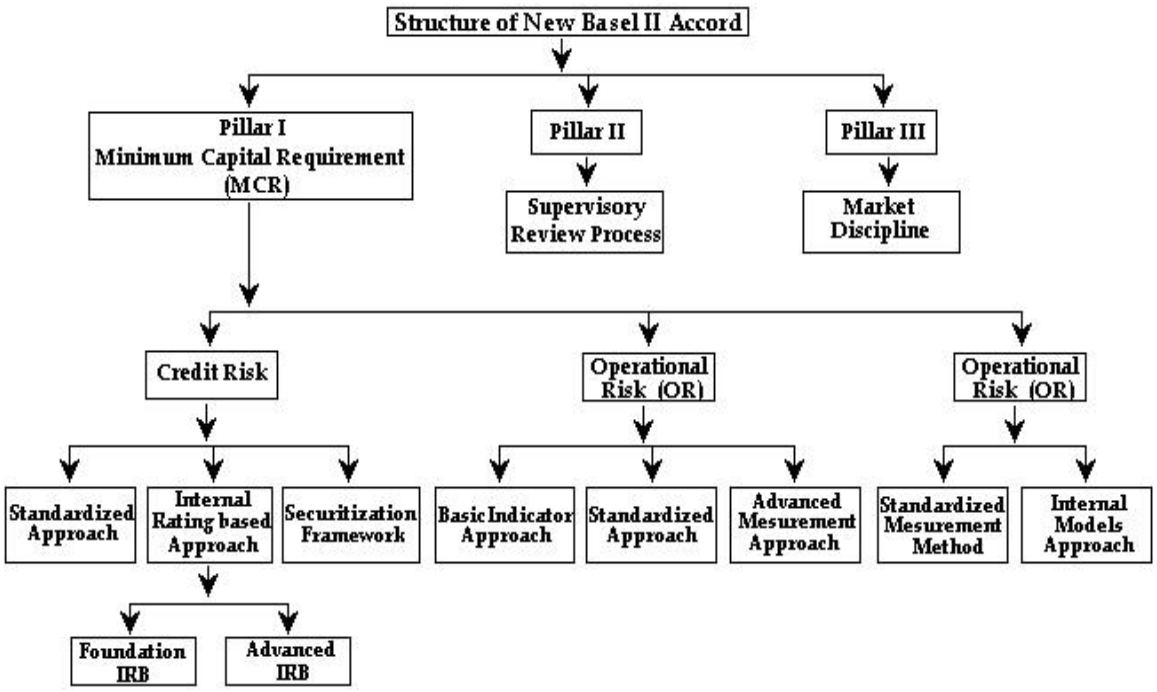
Principle 15: Banks must ensure that the credit-granting function is being properly managed and that credit exposures are within levels consistent with prudential standards and internal limits. Banks should establish and enforce internal controls and other practices to ensure that exceptions to policies, procedures and limits are reported in a timely manner to the appropriate level of management for action.

Principle 16: Banks must have a system in place for early remedial action on deteriorating credits, managing problem credits and similar workout situations.

The role of supervisors

Principle 17: Supervisors should require that banks have an effective system in place to identify measure, monitor and control credit risk as part of an overall approach to risk management. Supervisors should conduct an independent evaluation of a bank's strategies, policies, procedures and practices related to the granting of credit and the ongoing management of the portfolio. Supervisors should consider setting prudential limits to restrict bank exposures to single borrowers or groups of connected counterparties.

Fig 5.3: The Structure of Basel II Accord



The Structure of Basel II Accord is described as under:

The First Pillar

The first pillar deals with maintenance of regulatory capital calculated for three major components of risk that a bank faces: **credit risk, operational risk** and **market risk**. Other risks are not considered fully quantifiable at this stage. The **credit risk** component can be calculated in three different ways of varying degree of sophistication, namely standardized approach, Foundation IRB and Advanced IRB. IRB stands for "Internal Rating-Based Approach". For **operational risk**, there are three different approaches - basic indicator approach or BIA, standardized approach or TSA, and advanced measurement approach or AMA. For **market risk** the preferred approach is VaR (value at risk)

The Second Pillar

The second pillar deals with the regulatory response to the first pillar, giving regulators much improved 'tools' over those available to them under Basel I. It also provides a framework for dealing with all the other risks a bank may face, such as systemic risk, pension risk, concentration risk, strategic risk, reputation risk, liquidity risk and legal risk, which the accord combines under the title of residual risk. It gives bank a power to review their risk management system.

The third Pillar

The third pillar greatly increases the disclosures that the bank must make. This is designed to allow the market to have a better picture of the overall risk position of the bank and to allow the counterparties of the bank to price and deal appropriately.

The Basel II Accord focuses on the following three areas:

Minimum Capital Requirement:

The committee recognizes that to have a sound bank it is necessary to have a minimum volume of capital matching the risk profile of the Bank. The capital provides the bank with safety cushion to absorb losses without compromising on its obligations. The minimum ratio of regulatory capital with risk–weighted assets should not be less than 8%.

The committee recognizes that banks have to determine the minimum capital requirement on the basis of the following three major kinds of risks faced by them:

- Credit Risk
- Operational Risk
- Market Risk (Trading Book Issues)

Total risk–weighted assets are determined by multiplying the capital requirements for market risk and operational risk by 12.50 and adding the resulting figures to the sum of risk–weighted assets for credit risks.

Supervisory Review:

The committee has laid out key principles of supervisory review, risk management guidance, supervisory transparency and accountability with respect to banking risks. It also includes guidance relating to treatment of interest rate risk in the banking book, credit risk, enhanced cross–border communication and cooperation and securitization.

Public Disclosure:

The committee stresses on public disclosure as a means to improve on the market discipline. The disclosure will be in the area of Capital Structure, Capital Adequacy, Risk Exposure and assessment in the areas of Credit Risk, Market Risk, Operational Risk, Interest Rate Risk, etc.

5.7.3 BASEL III ACCORD

Basel III guidelines were released in December 2010. The financial crisis of 2008 was the main reason behind the introduction of these norms. A need was felt to further strengthen the system as banks in the developed economies were under-capitalized, over-leveraged and had a greater reliance on short term funding. Also the quantity and quality of capital under Basel II were deemed insufficient to contain any further risk. These norms aim at making most banking activities such as their trading book activities more capital intensive. The purpose is to promote a more resilient banking system by focusing on four vital banking parameters viz. Capital, Leverage, Funding and Liquidity.

Features of the Basel III Accord:

1. Enhanced Capital Requirement: New requirements represent tighter definitions of Common Equity. Banks will be required to hold more reserves by January 1, 2015, with Common Equity requirements raised to 4.5% from 2% of the present Tier- 1 Capital requirements. Under the new rules, the mandatory reserve (known as Tier-1 capital) will be raised from 4% to 6% by 2015. With a view to improving the quality and quantity of regulatory capital, it has been decided that the predominant form of Tier-1 capital must be Common Equity; since it is critical that banks' risk exposures are backed by high quality capital base. Non-equity Tier 1 and Tier 2 capital would continue to form part of regulatory capital subject to eligibility criteria as laid down in Basel III. Accordingly, under revised guidelines (Basel III), total regulatory capital will consist of the sum of the following categories:

(i) Tier 1 Capital (going-concern capital)

- (a) Common Equity Tier 1
- (b) Additional Tier 1

(ii) Tier 2 Capital (gone-concern capital)

2. Introduction of a Capital Conservation Buffer

The Capital Conservation Buffer is an additional reserve buffer of 2.5% to "withstand future periods of stress", bringing the total Tier 1 Capital reserves required to 7%. This buffer is introduced to meet one of the four key objectives identified by the committee in December 2009. Consultative Document "S*trengthening the resilience of the banking sector";* conserve enough capital to build buffers at individual banks and the entire banking sector which can then be used in times of stress.

If a bank has complied with the minimum Common Equity Tier 1 and Tier 1 capital ratios, then the excess Additional Tier 1 capital can be admitted for compliance with the minimum CRAR of 9% of RWAs. In addition to the minimum Common Equity Tier 1 capital of 5.5% of RWAs, banks are also required to maintain a capital conservation buffer (CCB) of 2.5% of RWAs in the form of Common Equity Tier 1 capital.

3. Introduction of Countercyclical Buffer

According to the new rules local regulators are not only responsible for controlling banks' compliance with the Basel requirements but also for regulating credit volume in their national economies. If credit is expanding faster than GDP, bank regulators can increase their capital requirements with the help of the Countercyclical Buffer. Varying between 0% - 2.5% it can thus, preserve national economies from excess credit growth.

4. Leverage Ratio (Ratio of Tier 1 Capital to Total Assets)

Capital requirements are supplemented by a non-risk-based leverage ratio that will serve as a backstop to the risk-based measures described above. According to Basel III; Tier 1 Capital has to be at least 3% of Total Assets even where there is no risk weighting. The Basel III rules agree to test a minimum Tier 1 leverage ratio of 3% during the parallel run period by 2017.

5. Liquidity Risk Measurement: Basel III introduces a new instrument for liquidity risk measurement – Liquidity Coverage Ratio (LCR). It is designed to ensure that a bank maintains an adequate level of unencumbered, high-quality assets that can be converted into cash to meet its liquidity needs for a 30-day time horizon under an acute liquidity stress scenario specified by supervisors. The standard requires that the ratio be no lower than 100%. Its implementation is planned for 2015. To ensure that investment banking inventories, off-balance sheet exposures, securitization pipelines and other assets and activities are funded with at least a minimum amount of stable liabilities in relation to their liquidity risk profiles the new Accord introduces ***Net Funding Stability Ratio (NFSR).*** It is defined as the ratio, for a bank, of its "available amount of stable funding" divided by its "required amount of stable funding". The standard requires that the ratio be no lower than 100%.

Transition Phase for the Liquidity Standards under Basel III: Both the LCR and NSFR are currently subject to an observation period by the BCBS, with a view to addressing any unintended consequences that the standards may have for financial markets, credit extension

and economic growth. At the latest, any revisions would be made to the LCR by mid-2013 and to the NSFR by mid-2016. Accordingly, the LCR, including any revisions, will be introduced as on 1 January 2015 and the NSFR, including any revisions, will move to a minimum standard by 1 January 2018. The LCR and NSFR will thus become binding for the banks from 1 January 2015 and 2018, respectively i.e. banks will have to ensure that they maintain the required LCR and NSFR at all times starting from January 2015 and January 2018, respectively. While the LCR and NSFR standards would become binding only from January 2015 and 2018, respectively, the supervisory reporting under the Basel III framework has come into effect from 2012.

How is Basel III an improvement over Basel II?

The enhancements of Basel III over Basel II come primarily in four areas: (i) augmentation in the level and quality of capital; (ii) introduction of liquidity standards; (iii) modifications in provisioning norms; and (iv) better and more comprehensive disclosures.

(i) Higher Capital Requirement: Basel III requires higher and better quality capital. The minimum total capital remains unchanged at 8 per cent of risk weighted assets (RWA). However, Basel III introduces a capital conservation buffer of 2.5 per cent of RWA over and above the minimum capital requirement, raising the total capital requirement to 10.5 per cent against 8.0 per cent under Basel II. This buffer is intended to ensure that banks are able to absorb losses without breaching the minimum capital requirement, and are able to carry on business even in a downturn without deleveraging. This buffer is not part of the regulatory minimum; however, the level of the buffer will determine the dividend distributed to shareholders and the bonus paid to staff.

(ii) Liquidity Standards: To mitigate liquidity risk, Basel III addresses both potential short-term liquidity stress and longer-term structural liquidity mismatches in banks' balance sheets. To cover short-term liquidity stress, banks will be required to maintain sufficient high-quality unencumbered liquid assets to withstand any stressed funding scenario over a 30-day horizon as measured by the liquidity coverage ratio (LCR). To mitigate liquidity mismatches in the longer term, banks will be mandated to maintain a net stable funding ratio (NSFR). The NSFR mandates a minimum amount of stable sources of funding relative to the liquidity profile of the assets, as well as the potential for contingent liquidity needs arising from off-balance sheet commitments over a one year horizon. In essence, the NSFR is aimed at encouraging banks to exploit stable sources of funding.

(iii) Provisioning norms: The Basel Committee is supporting the proposal for adoption of an 'expected loss' based measure of provisioning which captures actual losses more transparently and is also less procyclical than the current 'incurred loss' approach. The expected loss approach for provisioning will make financial reporting more useful for all stakeholders, including regulators and supervisors.

(iv)Disclosure requirement: The disclosures made by banks are important for market participants to make informed decisions. One of the lessons of the crisis is that the disclosures made by banks on their risk exposures and on regulatory capital were neither appropriate nor sufficiently transparent to afford any comparative analysis. To resolve this, Basel III requires banks to disclose all relevant details, including any regulatory adjustments, as regards the composition of the regulatory capital of the bank.

5.7.4 Application of BASEL ACCORDS in Bangladesh:

At present, banks in Bangladesh follow revised guidelines in the case of risk-based capital adequacy in line with Basel-II, as per instruction of Bangladesh Bank (BB). The BB has revised guidelines allowing the capital market investments as supplementary capital of the banks to meet overall capital requirement under the Basel-II framework. Under the revised guidelines, 10 percent of revaluation reserves for equity instruments are eligible for Tier-2 capital, generally known as supplementary capital. Under the amended guidelines, the banks were required to comply with the minimum capital required (MCR) at 8 percent from January 1, 2010 to June 30, 2010 while a rate of 9 percent was supposed to be maintained from July 1, 2010 to June 30, 2011. The banks, however, complied with the MCR at 10 percent from July 1, 2011 and onwards. The MCR had been set at 9 percent with the risk-weighted assets of the banks or Tk. 4.0 billion of the total capital. Whichever of the two was higher would be treated as MCR of the banks under the Basel-II accord. The Basel-II accord came into force in Bangladesh on January 1, 2010 to consolidate the capital base of banks in line with international standard. The new Basel accord has been prepared on the basis of three pillars: minimum capital requirement, supervisory review process and market discipline. In respect to the application of BASEL III, Bangladesh has started preparations to implement the Basel-III framework for bank companies from 2014 in line with the global standard (Source: Bangladesh Business News). The central bank has already started the ground work to implement the Basel-III for bank companies by 2014. Bangladesh Bank (BB), the country's central bank has put emphasized to deal with the liquidity coverage ratio (LCR) and net stable funding ratio (NSFR) at the initial areas to apply the suggestion of the Basel-III

framework. The BB is providing training to the commercial bankers about the LCR and NSFR, he added. The LCR is a new liquidity standard introduced by the Basel Committee to ensure that a bank maintain an adequate level of unencumbered, high-quality liquid assets that can be converted into cash to meet its liquidity needs for 30 calendar days. The NSFR is a new standard introduced by the Basel Committee aiming to limit over-reliance on short-term wholesale funding assessment of liquidity risk across all on and off-balance sheet items. As part of the preparations, the central bank has already organized a three-day long training program on liquidity risk management tools. The BB has organized the training program aiming to improve efficiency of the commercial bank officials about measuring, identifying and controlling of liquidity risks in line with the existing Basel-II and Basel-III frameworks. The Basel-III strengthens bank capital requirements and introduces new regulatory requirements on bank liquidity and bank leverage. Bangladesh is now implementing the Basel-II accord to consolidate capital base of the banks in line with the international standard. It has been prepared on the basis of three pillars: minimum capital requirement, supervisory review process and market discipline. Three types of risks – credit risk, market risk and operational risk – have to be considered under the minimum capital requirement. It is expected that through the compliance of the suggestions and guidelines provided by the BASEL committee, Bangladesh will also be able to bring down the anomalies and indiscipline prevailing in the banking sector.

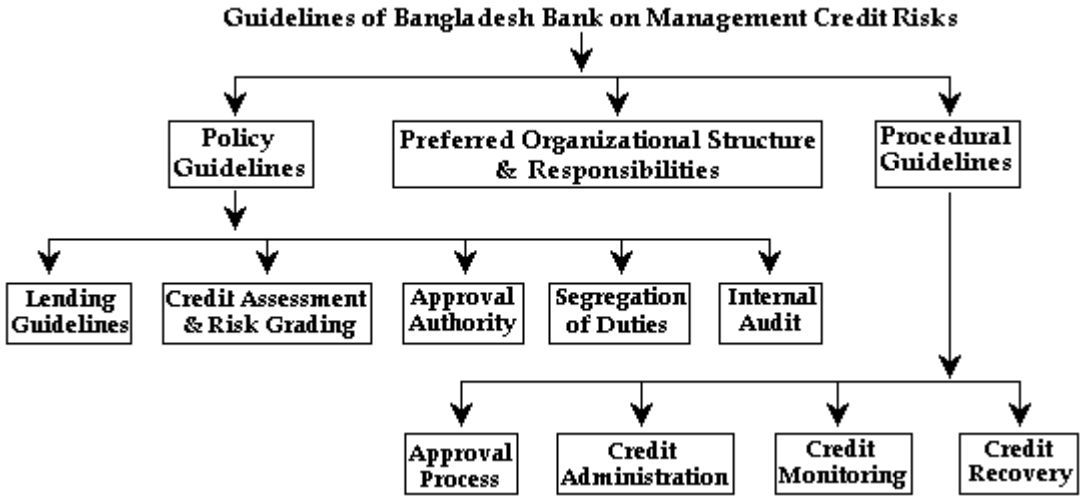
B) Bangladesh Bank's Guidelines for Management of Credit Risks

5.8 Background:

Bangladesh Bank has provided directional guidelines to the banking sector with a view to improve the Credit Risk Management culture, establish minimum standards for segregation of duties and responsibilities and assist in the ongoing improvement of the banking sector in Bangladesh. These guidelines were prepared and endorsed by the senior credit executives from private sector, foreign and nationalized commercial banks operating in Bangladesh. Credit Risk Management is of utmost importance to Banks, and as such, policies and procedures should be endorsed and strictly enforced by the MD/CEO and the Board of the Bank.

The guidelines of Bangladesh Bank related with Management of Credit Risks have been organized into the following segments:

Fig 5.4: Guidelines of Bangladesh Bank on Management Credit Risks



5.8.1 Policy Guidelines

Policy Guidelines focus on fundamental credit risk management policies that are recommended for adoption by all banks in Bangladesh. The guidelines outline general principles that are designed the implementation of more detailed lending procedures and risk grading systems within individual Banks.

Different segments of Policy guidelines are discussed as follows:

All banks should establish Credit Policies (Lending Guidelines) that clearly outline the management's view of business development priorities and the terms and conditions that should be adhered to in order for credits to be approved.

The lending guidelines should be updated at least annually to reflect changes in the economic outlook and the evaluation of the bank's credit portfolio. The lending guidelines should be approved by the MD/ CEO and the Board of Directors of the Bank based on the endorsement of the bank's Head of Credit Risk Management and the Head of Corporate. Any departure and deviation from the lending guidelines should be explicitly identified in credit applications and a justification for approval provided. Approval of credits that don't comply with lending guidelines should be restricted to the bank's Head of Credit or Managing Director/ CEO and the Board of Directors.

The lending guidelines should provide the key foundations for account officers/ relationship managers to formulate their recommendations for approval and should include the following ones:

1. Industry and Business Segment Focus – The lending guidelines should clearly identify the business/ industry sectors that should constitute the majority of the

bank's credit portfolio. For each sector, a clear indication of the bank's appetite for growth should be indicated for example Textiles: Grow; Cement: Maintain; Construction: Shrink.

2. Types of Credit facilities – The type of credits that are permitted should be clearly indicated, such as Working Capital, Trade Finance, Term Loan, etc.
3. Single Borrower/ Group Limits – Details of the Bank's single Borrower/ Group limits should be included as per Bangladesh Bank guidelines. Banks may wish to establish more conservative criteria in this regard.
4. Lending Caps – Bank should establish a specific industry sector exposure cap to avoid over concentration in any one industry sector.
5. Discouraged Business Types – Banks should outline industries or lending activities that are discouraged. As a minimum the following should be discouraged :
    - Military Equipment/ Weapons finance.
    - Highly leveraged Transactions.
    - Finance of Speculative Investments.
    - Logging, Mineral Extraction/ Mining, or other activity that is Ethically or Environmentally Sensitive.
    - Lending to companies listed on CIB black list or known defaulters.
    - Counterparties in countries subject to UN sanctions.
    - Share Lending.
    - Taking an Equity Stake in Borrowers.
    - Lending to Holding Companies.
    - Bridge Loans relying on equity/ debt issuance as a source of repayment.
6. Credit Facility Parameters – Facility parameters e.g. maximum size, maximum tenor, covenant and security requirements, etc. should be clearly stated. As a minimum the following parameters should be adopted :
    - Banks should not grant facilities where the Bank's security position is inferior to that of any other financial institution.
    - Assets pledged as security should be properly insured.
    - Valuations of property taken as security should be performed prior to credits being granted. A recognized 3rd part professional valuation firm should be appointed to conduct the valuations.

7. Cross Border Risk – Risk associated with cross border lending. Borrowers of a particular country may be unable or unwilling to fulfill principle and/ or interest obligations. Distinguished from ordinary credit risk because the difficulty arises from a political event, such as suspension of external payments :
    - Synonymous with political and sovereign risk.
    - Third world debt crisis. For example, export documents negotiated for countries like Nigeria.

5.8.2 Credit Assessment & Risk Grading

Credit Assessment – A thorough credit and risk assessment should be conducted prior to the granting of credits and at least annually thereafter for all facilities. The results of this assessment should be presented in a credit application that originates from the Account Officer/ Relationship Manager (RM), and is approved by Credit Risk Management (CRM). The RM should be the owner of the customer relationship, and must be held responsible to ensure the accuracy of the entire credit proposal submitted for approval. RM(s) must be familiar with the bank's Lending Guidelines and should conduct due diligence on new borrowers, principals and guarantors.

All Banks should have established KYC (Know Your Customer) and Money Laundering guidelines which should be adhered to at all times.

Credit Applications should summaries the results of the risk assessment and include, as a minimum, the following details:

- Amount and Type of Credit(s) proposed.
- Purpose of Credit(s) applied for.
- Credit Structure (Tenor, Covenants, Repayment Schedule, Interest)
- Security Arrangements.

In addition the following areas should be addressed:

- **Borrower Analysis:** The majority shareholders, management team, and group or affiliate companies should be assessed. Any issues regarding lack of management depth, complicated ownership structures or inter–group transactions should be addressed and risks mitigated.
- **Industry Analysis:** The key risk factors of the borrower's industry should be assessed. Any issues regarding the borrower's position in the industry, overall

industry concerns or competitive forces should be addressed and the strengths and weaknesses of the borrower relative to its competition should be identified.

- **Supplier/ Buyer Analysis:** Any customer or supplier concentration should be addressed, as these could have a significant impact on the future viability of the borrower.
- **Historical Financial Analysis:** An analysis of a minimum of 03(three) years historical financial statements of the borrower should be presented. Where reliance is placed on a corporate guarantor, guarantor financial statements should also be analyzed. The analysis should address the quality and sustainability of earnings, cash flow, leverage and profitability.
- **Projected Financial Performance:** Where term facilities are being proposed, a projection of the borrower's future financial performance should be provided, indicating an analysis of the sufficiency of cash flow to service debt repayments. Credit should not be granted if projected cash flow in insufficient to repay debts.
- **Account Conduct:** For existing borrowers, the historic performance in meeting repayment obligations (trade payments, cheques, interest and principal payments, etc.) should be assessed.
- **Adherence to Lending Guidelines:** Credit applications should clearly state whether or not the proposed application is in compliance with the bank's Lending Guidelines.
- **Mitigating Factors:** Mitigating factors for risks identified in the credit assessment should be identified. Possible risks include, but are not limited to: margin sustainability and /or volatility, high debt load (leverage/ gearing), overstocking or debtor issues; rapid growth, acquisition or expansion; new business line/ product expansion; management changes or succession issues; customer or supplier concentration; and lack of transparency or industry issues.
- **Credit Structure:** The amount(s) and tenor(s) of financing proposed should be justified based on the projected repayment ability and credit purpose. Excessive tenor or amount relative to business needs increases the risk of fund diversion and may adversely impact the borrower's repayment ability.
- **Security:** A current valuation of collateral should be obtained and the quality and priority of security being proposed should be assessed. Credit should not be sanctioned based solely on security. Adequacy and the extent of the insurance coverage should be assessed.

- **Name Lending:** Credit proposals should not be unduly influenced by an over reliance on the sponsoring principal's reputation, reported independent means, or their perceived willingness to inject funds into various business enterprises in case of need. Rather, credit proposals and the granting of credits should be based on sound fundamentals, supported by a thorough financial and risk analysis.
- **Risk Grading** – All banks should adopt a credit risk grading system. The system should define the risk profile of borrower's to ensure that account management, structure and pricing are commensurate with the risk involved. Risk grading is a key measurement of a Bank's asset quality and as such, it is essential that grading is a robust process. All facilities should be assigned a risk grade. Where deterioration in risk is noted, the Risk Grade assigned to a borrower and its facilities should be immediately changed. Borrower Risk Grades should be clearly stated on Credit proposal.
- **Approval of Authority**: The authority to sanction/ approve credits must be clearly delegated to senior credit executives by the Managing Director/ CEO and the Board based on the executive's knowledge and experiences. Approval authority should be delegated to individual executives and not to committees to ensure accountability in the approval process.

The following guidelines should apply in the approval/ sanctioning of credits:

a. Credit approval authority must be delegated in writing from the MD/CEO and Board (as appropriate), acknowledged by recipients and records of all delegation retained in CRM.

b. Delegation approval authorities must be reviewed annually by MD/ CEO/ Board.

c. The credit approval function should be separate from the marketing/ relationship management (RM) function.

d. The role of Credit Committee may be restricted to only review of proposals i.e. recommendations or review of bank's credit portfolios.

e. Approvals must be evidenced in writing, or by electronic signature. Approval records must be kept on file with the Credit applications.

f. Credit approval should be centralized within CRM function. Regional Credit Centers may be established.

g. All credit risks must be authorized by executives within the authority limit delegated to them by the MD/ CEO/ Board. The "pooling" or combining of authority limits should not be permitted.

h. The aggregate exposure to any borrower or borrowing group must be used to determine the approval authority required.

i. Any Credit proposal that does not comply with the Lending Guidelines, regardless of amount, should be referred to Head Office for approval.

j. MD/ Head of Credit Risk Management must approve and monitor any cross–border exposure risk.

k. Any breaches of lending authority should be reported to MD/CEO, Head of Internal Control and Head of CRM.

l. It is essential that executives charged with approving credits have relevant training and experience to carry out their responsibilities effectively. As a minimum, approving executives should have :

- At least 5(five) years experience working in corporate/ commercial banking as a relationship manager or account executive.
- Training and Experience in Financial Statement, Cash Flow and Risk Analysis.
- A thorough working knowledge of Accounting.
- A good understanding of the local industry/ market dynamics.
- Successfully completed and assessment test demonstrating adequate knowledge of the following areas :
  - Introduction of accrual accounting.
  - Industry/ Business Risk Analysis
  - Borrowing causes.
  - Financial Statement Analysis.
  - The Asset Conversion/ Trade Cycle.
  - Cash Flow Analysis.
  - Projections.
  - Credit Structure and Documentation.
  - Credit Management.

- A monthly summary of all new facilities approved, renewed, enhanced and a list of proposals declined stating reasons thereof should be reported by CRM to the MD/ CEO.

- **Segregation of Duties** : Banks should aim to segregate the following lending functions:
    - Credit Approval/ Risk Management.
    - Relationship Management/ Marketing.
    - Credit Administration.

The purpose of the segregation is to improve the knowledge and expertise in each department, to impose controls over the disbursement of authorized credit facilities and obtain an objective and independent judgment of credit proposals.

- **Internal Audit:** Banks should have a segregated internal audit/ control department charged with conducting audits of all departments. Audits should be carried out annually and should ensure compliance with regulatory guidelines, internal procedures, Lending Guidelines and Bangladesh Bank requirements.

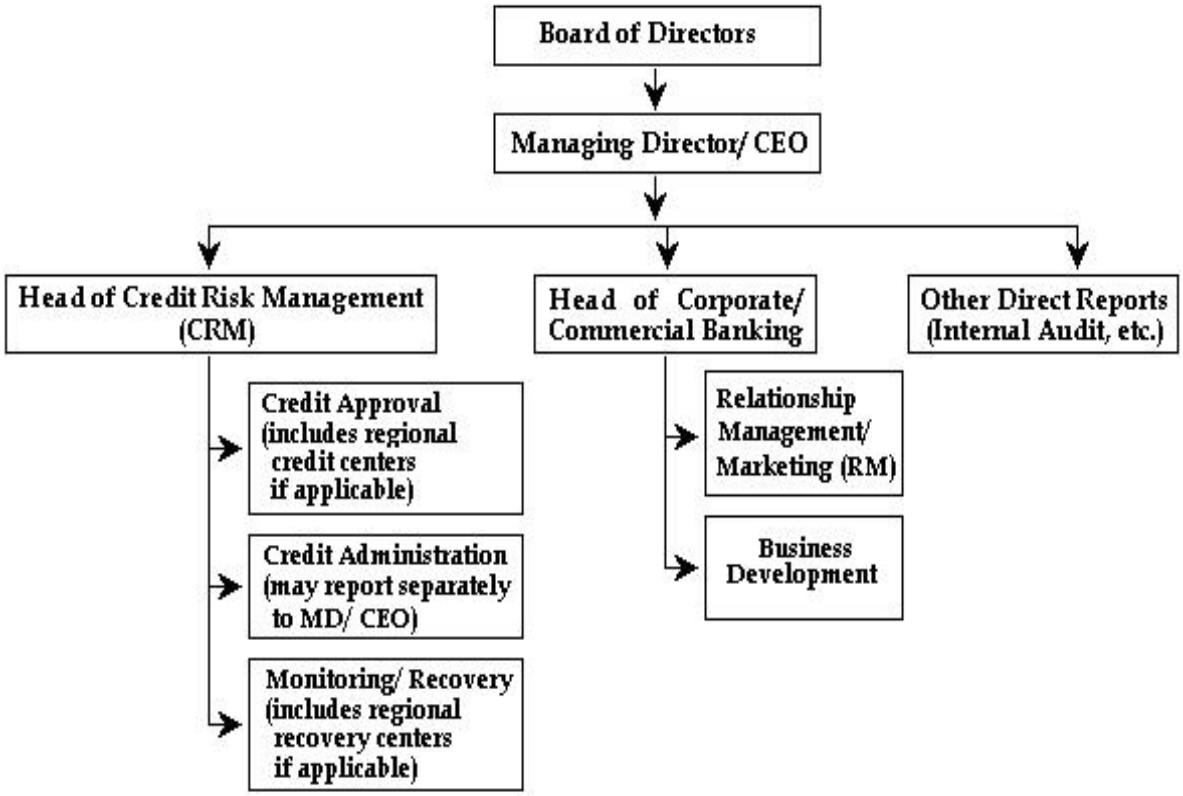
5.9 Preferred Organizational Structure & Responsibilities

The appropriate organizational structure must be in place to support the adoption of the policies. The key feature is the segregation of the Marketing/ Relationship Management/ Administration functions.

Credit approval should be centralized within the CRM function. Regional Credit Centers may be established; however, all applications must be approved by the Head of Credit and Risk Management or MD/ CEO/ Boards or delegated Head Office Credit executives.

- **Key Responsibilities :** The key responsibilities of the above functions are as follows
- **Preferred Organizational Structure :** The following chart represents the preferred organizational structure **:**

Fig 5.5: Preferred organizational structure



Credit Risk Management (CRM):

- Oversight of the bank's credit policies, procedures and controls relating to all credit risks arising from corporate/ commercial/ institutional banking, personal banking and treasury operations.
- Oversight of the bank's asset quality.
- Directly manage all Substandard (SS), Doubtful (DF) and Bad & Loss (BL) accounts to maximize recovery and ensure that appropriate and timely Loan Loss Provisions (LLP) have been made.
- To approve (or decline) within the delegated authority, Credit Applications recommended by RM. Where aggregate borrower exposure is in excess of approval limits, to provide recommendation to MD/CEO for approval.
- To provide advice/assistance regarding all credit matters to line management/RM(s).
- To ensure that lending executives have adequate experience and/or training in order to carry out job duties effectively.

Credit Administration:

- To ensure that all security documentation complies with the terms of approval and is enforceable.
- To monitor insurance coverage to ensure appropriate coverage is in place over assets pledged as collateral, and is properly assigned to the bank.
- To control credit disbursements only after all terms and conditions of approval have been met and all security documentation is in place.
- To maintain control over all security documentations.
- To monitor borrower's compliance with covenants and agreed terms and conditions and general monitoring of account conduct/ performance.

Relationship Management/ Marketing (RM):

- To act as the primary bank contact with the borrowers.
- To maintain thorough knowledge of borrower's business and industry through regular contact, factory/ warehouse inspections, etc. RMs should proactively monitor the financial performance and account conduct of borrowers.
- To be responsible for the timely and accurate submission of Credit Applications for new proposals and annual reviews, taking into account the credit assessment requirements.
- To highlight any deterioration in borrower's financial standing and amend the borrower's Risk Grade in a timely manner. Changes in Risk Grades should be advised to and approved by CRM.
- To seek assistance/ advice at the earliest from CRM regarding the structuring of facilities, potential deterioration in account or for any credit related issues.

Internal Audit/ Control

- Conducts independent inspections annually to ensure compliance with Lending Guidelines, operating procedures, bank policies and Bangladesh Bank directives. Reports directly to MD/ CEO or Audit Committee of the Board.

5.10 Procedural Guidelines

Procedural Guidelines outline of the main procedures that are needed to ensure compliance with the policy guidelines.

- Approval Process: The approval process must reinforce the segregation of Relationship Management/ Marketing from approving authority. The responsibility for preparing the Credit Applications should rest with the RM

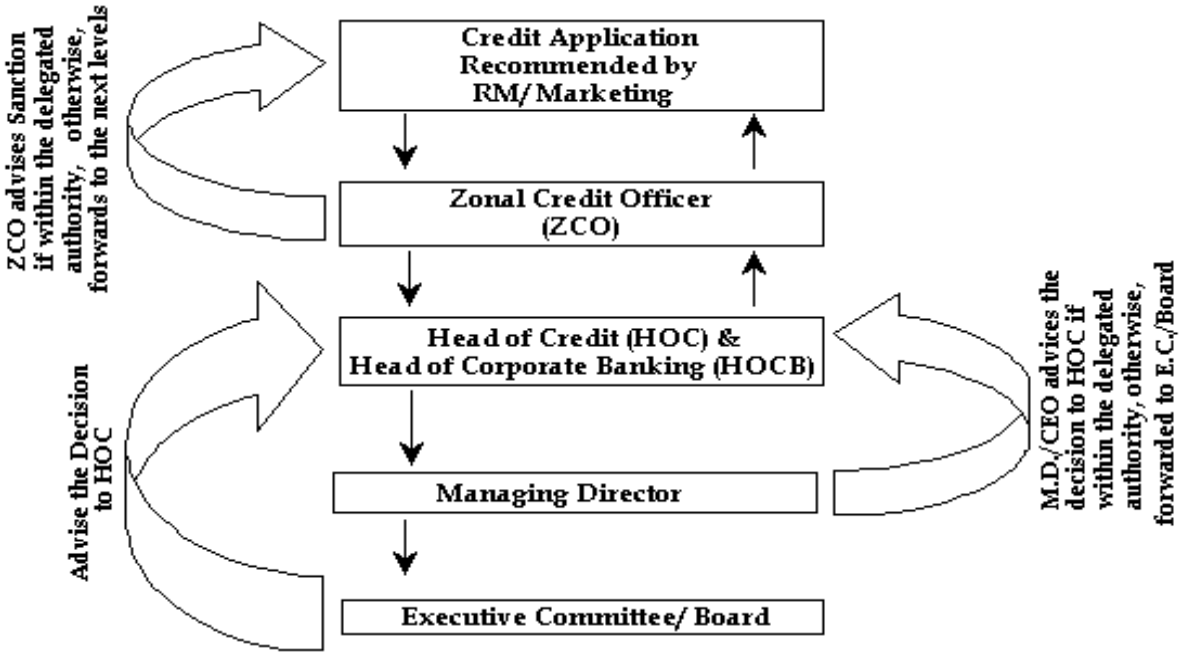
within the corporate/ commercial banking department. Credit applications should be recommended for approval by the RM team and forwarded to approval team within CRM and approved by individual executives.

- The recommending or approving executives should take responsibility for and be held accountable for their recommendations or approval. Delegation of approval limits should be such that all proposals where the facilities are up to 15% of the bank's capital should be approved at CRM level, facilities up t 25% of capital should be approved by CEO/MD, with proposals in excess of 25% of capital to be approved by the Executive Committee/ Board only after recommendation of CRM, Corporate Banking and MD/ CEO.

Credit Administration

The Credit Administration function is critical in ensuring that proper documentation and approvals are in place prior to the disbursement of credit facilities. For this reason, it is essential that the functions of Credit Administration be strictly segregated from Relationship/ Marketing in order to avoid the possibility of controls being compromised or issues not being highlighted at the appropriate level.

Fig 5.6: The diagram illustrates the preferred approval process



- **Recommended Delegated Approval Authority Levels :**
  - HOC/ CRM Executives – up to 15% of Capital
  - Managing Director/ CEO – up to 25% of Capital
  - Executive Committee/ Board – all exceed 25% of Capital

- **Appeal Process :**
  - Any declined credit proposal may be resubmitted to the next higher authority for re–assessment/ approval. However, there should no appeal process beyond the M.D./ CEO.

Disbursement

- Security documents are prepared in accordance with the approval terms and are legally enforceable. Standard credit facility documentation that has been reviewed by legal counsel should be used in all cases. Exceptions should be referred to legal counsel for advice based on authorization from an appropriate executive in CRM.
- Disbursements under credit facilities are only be made when all security documentation is in place.

Custodial Duties:

- Credit disbursements and the preparation and storage of security documents should be centralized in the regional credit centers.
- Appropriate insurance coverage is maintained and renewed on a timely basis on assets pledged as collateral.
- Security documentation is held under strict control, preferably in locked fireproof storage.

Compliance Requirements:

- All required Bangladesh Bank returns are submitted in the correct format in a timely manner.
- Bangladesh Bank circulars/ regulations are maintained centrally, and advised to all relevant departments to ensure compliance.
- All third party service providers i.e. Surveyors, Lawyers, Insurers, CPAs, etc. are approved and performance reviewed on an annual basis. Banks are referred to Bangladesh Bank circular outlining approved external audit firms that are acceptable.

Credit Monitoring:

To minimize credit losses, monitoring procedures and systems should be in place that provides an early indication of the deteriorating financial health of a borrower. At a minimum, systems should be in place to report the following exceptions to relevant executives in CRM and RM team:

- Past due principal or interest payments, past due trade bills, account excesses and breach of credit covenants.
- Credit terms and conditions are mentioned, financial statements are received on a regular basis and any covenant breaches or exceptions are referred to CRM and the RM team for timely follow–up.
- Timely corrective action is taken to address findings of any internal, external or regulator inspection/ audit.
- All borrower relationships/ credit facilities are reviewed and approved through the submission of credit application at least annually.

Computer systems must be able to produce the above information for central/ Head Office as well as local review. Where automated systems are not available, a manual process should have the capability to produce accurate exception reports.

Credit Recovery:

The Recovery Unit (RU) of CRM should directly manage accounts with sustained deterioration (a Risk Rating of Sub Standard i.e. 6 or worse). Banks may wish to transfer EXIT accounts graded 4–5 to the RU for efficient exit based on recommendation of CRM and Corporate banking. Whenever an account is handed over from Relationship Management to Recovery Unit, a Handover/ Downgrade Checklist should be completed.

The RU's primary functions are:

- Determine Account Action Plan/ Recovery Strategy.
- Pursue all options to maximize recovery, including placing customers into receivership or liquidation as appropriate.
- Ensure adequate and timely loan loss provisions are made based on actual and expected losses.
- Regular review of grade 6 or worse accounts.

The management problem loans (NPL) must be a dynamic process and the associated strategy together with the adequacy of provisions must be regularly reviewed. A process should be established to share the **lessons learned** from the experience of credit losses in order to update the lending guidelines.

5.10.1 NPL Account Management

All NPLs should be assigned to an Account Manager within the RU, who is responsible for coordinating and administering the action plan/ recovery of the account and should serve as the primary customer contact after the account is downgraded to substandard.

Account Transfer Procedure

Within 07(seven) days of an account being downgraded to substandard (grade 6), a Request for Action (RFA) and handover/ downgrade checklist should completed by the RM and forwarded to RU for acknowledgement. The account should be assigned to an account manager within the RU, who should review all the documentation, meet the customer and prepare a Classified Loan Review Report (CLR) within 15(fifteen) days of the transfer.

Recovery units should ensure that the following s carried out when an account is classified as Sub Standard or worse:

- Facilities are withdrawn or repayment is demanded as appropriate. Any drawings or advances should be restricted and only approved after carefully scrutiny and approval from appropriate executives within CRM.
- CIB reporting is updated according Bangladesh Bank guidelines and the borrower's Risk Grade is changed as appropriate.
- Loan Loss Provisions (LLP) are taken based on Force Sale Value (FSV).
- Credits are only re–scheduled in conjunction with the Large Loan Re–scheduling guidelines of Bangladesh Bank. Any re–scheduling should be based on projected future cash flows and should be strictly monitored.
- Prompt Legal Action is taken if the borrower is uncooperative.

Non-Performing Loan (NPL) Monitoring

On a quarterly basis, a Classified Loan Review (CLR) should be prepared by the RU Account Manager to update the status of the Action/ Recovery Plan, review and assess the adequacy of provisions and modify the bank's strategy as appropriate.

Non Provisioning and Write–off – The guidelines established by Bangladesh Bank for CIB reporting, provisioning and write–off of bad and doubtful debts and suspension of interest should be followed in all cases. These requirements are the minimum, and Banks are encouraged to adopt more stringent provisioning/ write–off policies. Regardless of the length of time a credit past due, provisions should be raised against the actual and expected losses at the time they are estimated. The approval to take provisions, write–offs, or release of provisions/ upgrade of an account should be restricted to the Head of Credit or MD/ CEO based on recommendation from the Recovery Unit.

The following formula is to be applied in determining the required amount of provision:

Particulars	**Amount**
Gross Outstanding	XXX
Less : (i) Cash Margin held or Fixed Deposits/ SP under lien	(XXX)
(ii) Interest kept in Suspense Account	(XXX)
Credit Value (for which provision is to be created before considering estimated realizable value of Collateral Security held)	XXX
Less : Eligible Security (the value of Eligible security is determined as half of the estimated Force Sale Value of the Collateral security held)	(XXX)
Net Credit Value	XXX

Chapter Six

Financial Performance of Banking Sector in Bangladesh

6.1 Introduction

This chapter provides an overview of the developments and performance of the banking sector in Bangladesh. The banking sector in Bangladesh comprises of four types of scheduled banks, namely, State Owned Commercial Banks (SCBs), Government owned Development Finance Institutions (DFIs), Private Commercial Banks (PCBs) and Foreign Commercial Banks (FCBs). These banks have a total number of 8427 branches upto 2012. The number of bank branches increased due to opening of new branches by the PCBs mainly during the year. Structure of the banking sector with breakdown by type of banks is shown in the following table.

Table 6.01: Total banks, branches, assets and deposits

2012						(billion Taka)
Bank types	**Number of banks**	**Number of branches**	**Total assets**	**% of industry assets**	**Deposits**	**% of deposits**
SCBs	4	3499	2013.15	26.75	1522.88	26.75
DFIs	4	1476	424.02	5.63	301.84	5.30
PCBs	38	3386	4628.21	61.49	3551.17	62.38
FCBs	9	66	461.26	6.13	316.95	5.57
Total	55	8427	7526.51	100	5692.84	100

Source: Annual Report, Bangladesh Bank

Table 6.01 shows that PCBs are playing major role in the banking industry in Bangladesh. In terms of number of banks, total assets, and deposits, this category represents the largest one but according to number of branches, SCBs are the biggest.

Figure 6.1: Total Income, Total Expenditure and Net Income

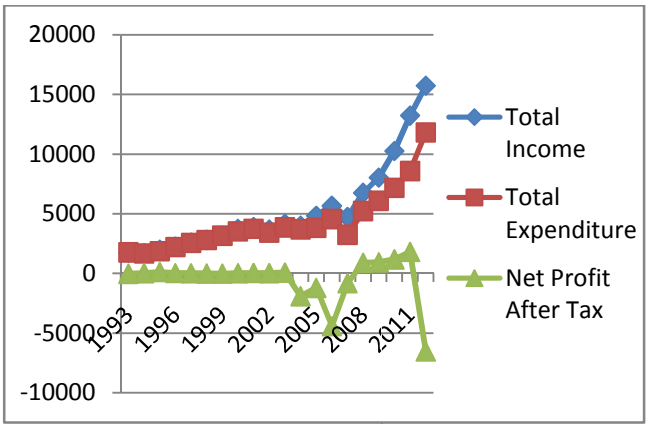


Figure 6.2: Avg. & StDv of TI, TE and NI

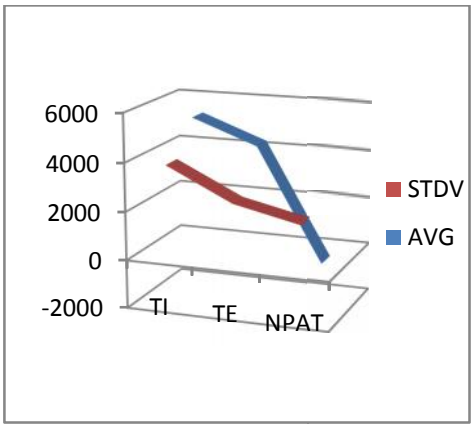


Figure 6.1 shows that SCBs had an increasing trend in total income and total expenditure during the study period of 1993 to 2012, but the corresponding trend of net profit after tax was not satisfactory, rather in between 2005- 2008 that was negative. In the following years that started growing again with unfortunate drastic fall in the year of 2012.

Table 6.02: Total Income, Total Expenditure and Net Profit after Tax of SCBs

State Owned Commercial Banks (SCBs) (Taka in Crore)						
Period	Total Income	Growth Rate	Total Expenditure	Growth Rate	Net Profit After Tax	Growth Rate
1993	1738.30		1769.70		-31.90	
1994	1702.56	-2.06%	1683.24	-4.89%	18.82	159%
1995	1982.08	16.42%	1869.11	11.04%	112.37	497%
1996	2249.11	13.47%	2220.50	18.80%	28.11	-75%
1997	2574.08	14.45%	2556.81	15.15%	16.77	-40%
1998	2815.17	9.37%	2808.69	9.85%	-5.98	-136%
1999	3161.26	12.29%	3164.79	12.68%	-16.66	179%
2000	3726.27	17.87%	3532.16	11.61%	24.58	-248%
2001	3878.16	4.08%	3735.96	5.77%	38.24	56%
2002	3665.52	-5.48%	3420.35	-8.45%	19.88	-48%
2003	4165.22	13.63%	3860.79	12.88%	68.21	243%
2004	4008.46	-3.76%	3693.77	-4.33%	-1904.72	-2892%
2005	4836.34	20.65%	3814.70	3.27%	-1209.41	-37%
2006	5657.36	16.98%	4551.77	19.32%	-4415.92	265%
2007	4713.37	-16.69%	3243.54	-28.74%	-809.10	-82%
2008	6750.95	43.23%	5227.88	61.18%	897.68	-211%
2009	8026.68	18.90%	6083.51	16.37%	931.35	4%
2010	10260.46	27.83%	7163.33	17.75%	1176.26	26%
2011	13224.12	28.88%	8569.50	19.63%	1799.33	52.97%
2012	15725.25	18.91%	11794.04	37.63%	-6522.88	-462.52%
AVG	5243.036	0.13	4238.207	0.12	-489.249	-1.45
STDV	3842.246	0.14	2515.689	0.18	1910.128	6.98
CV	73.28285	1.05	59.3574	1.54	-390.421	-4.82

Source: Statistics Department, Bangladesh Bank.

Table 6.02 shows the total income, total expenditure and net profit of the State Owned Commercial Banks (SCBs) in Bangladesh. The table reveals that the average of total income, total expenditure and net profit of SCBs were Tk. 5243.036, Tk. 4238.207 and Tk. -489.249 respectively and the standard deviations were 3842.246, 2515.689 and 1910.128 respectively. The coefficients of variations were 73.28285 percent, 59.3574 percent and -390.421 percent respectively.

The performance of SCBs is very dreadful. For 18 years (1993-2012) net profit after tax (NPAT) was very disappointing. NPAT started to become negative from 2004 to 2007 and it will be worth mentioning that the losses incurred in those years were very abnormal, especially, in 2006, loss amounted to Tk. 4415.92 crore which is very huge.

But for the following 3 years, SCBs earned a sizable profit and it was a very good turn-around by the banks and finally in 2011 and 2012 it again slipped. Their average profit during the whole period was Tk. -489.249 crore which is not a good sign and SD of 1910.128 implies an abnormal variability in income.

Table 6.03: Total Income, Total Expenditure and Net Profit after Tax of All Banks

Overall (All Commercial Banks) (Taka in Crore)						
Period	Total Income	Growth Rate	Total Expenditure	Growth Rate	Net Profit After Tax	Growth Rate
1993	2769.32		2675.06		25.69	
1994	2796.81	0.99%	2590.23	-3.17%	101.94	-297%
1995	3261.62	16.62%	2964.39	14.45%	259.69	155%
1996	3789.8	16.19%	3381.98	14.09%	258.32	-1%
1997	4552.4	20.12%	4072.49	20.42%	295.46	14%
1998	5097.22	11.97%	4593.14	12.78%	301.8	2%
1999	5969.42	17.11%	5373.1	16.98%	311.48	3%
2000	7961.39	33.37%	6542.33	21.76%	555.01	78%
2001	9268.07	16.41%	7450.13	13.88%	812.53	46%
2002	9748.97	5.19%	7922.01	6.33%	702.75	-14%
2003	10859.4	11.39%	8656.88	9.28%	820.24	17%
2004	12608.68	16.11%	9628.03	11.22%	-776.22	-195%
2005	15344.1	21.69%	10944.17	13.67%	215.48	-128%
2006	20786.84	35.47%	14940.4	36.51%	-2860.26	-1427%
2007	23392.9	12.54%	15872.78	6.24%	1909.98	-167%
2008	31159.22	33.20%	21605.97	36.12%	4854.76	154%
2009	36899.82	18.42%	25396.1	17.54%	5587.85	15%
2010	45766.37	24.03%	28937.85	13.95%	7853.91	41%
2011	58652.71	28.16%	39574.8	36.76%	9579.65	21.97%
2012	73549.97	25.40%	53564.27	35.35%	-1095.08	-111.43%
AVG	19211.75	0.19	13834.31	0.18	1485.749	-0.94
SD	20201.34	0.09	13728.57	0.11	3080.756	3.42
CV	105.15%	0.48	99.24%	0.64	207.35%	-3.63

Source: Statistics Department, Bangladesh Bank.

Figure 6.3: TI, TE and NI of all banks

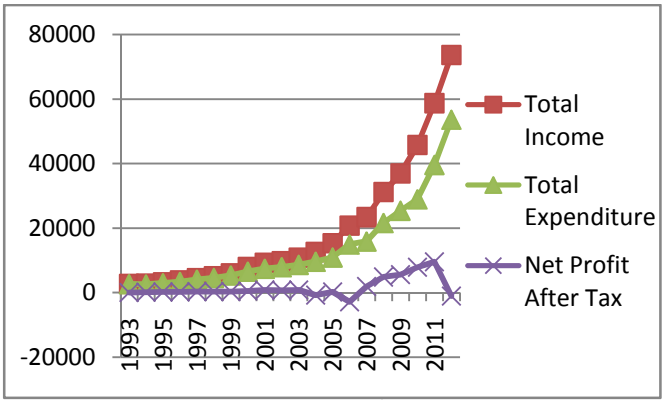


Figure 6.4: Avg. & StDv of TI, TE and NI

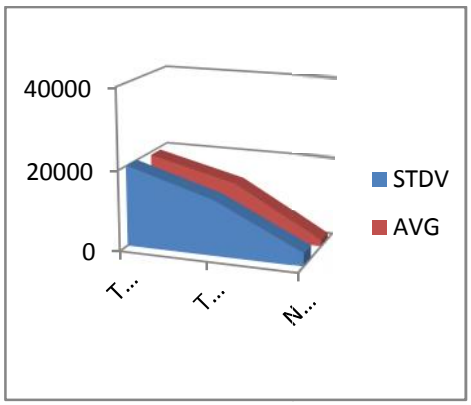


Table 6.03 tells that overall banking sector performance did not seem well upto 2006 but the situation began to change from 2007. We can seen that there was a growing trend of NPAT from year 2007 and continued up to 2010 which was a good sign of banking sector performance and finally, in 2012, it again got the shock of huge loss.

Table 6.04: Total manpower of All Banks

Total Manpower					
Year	**BB**	**SCBS**	**DFIs**	**PCBs**	**FCBs**
1993	6435	64492	16871	18276	826
1994	6345	63804	16856	18794	888
1995	6281	63803	16459	20083	966
1996	6215	63731	16273	21140	1016
1997	6129	62723	16342	22194	1125
1998	6178	63583	16114	22893	1262
1999	6061	62419	16036	24281	1311
2000	5926	62091	16164	25975	1280
2001	5769	61325	16475	28068	1588
2002	5576	60169	15837	28336	1305
2003	5461	58629	15300	32576	1409
2004	5596	57588	14350	34786	1394
2005	5481	56417	15406	36715	1713
2006	5402	54591	15515	42512	2384
2007	5304	52177	15400	45074	2388
2008	5259	53786	15388	46308	2384
2009	5071	50600	15293	59874	2760
2010	4878	50069	14367	68720	3143
2011	4958	54025	16393	75649	3137
2012	5239	57989	16209	81944	3140
AVG	5678.2	58700.55	15852.4	37709.9	1770.95
SD	489.58	4800.53	712.70	19622.67	803.93
CV	8.62%	8.18%	4.50%	52.04%	45.40%

Source: Statistics Department, Bangladesh Bank.

Figure 6.5: Total Manpower

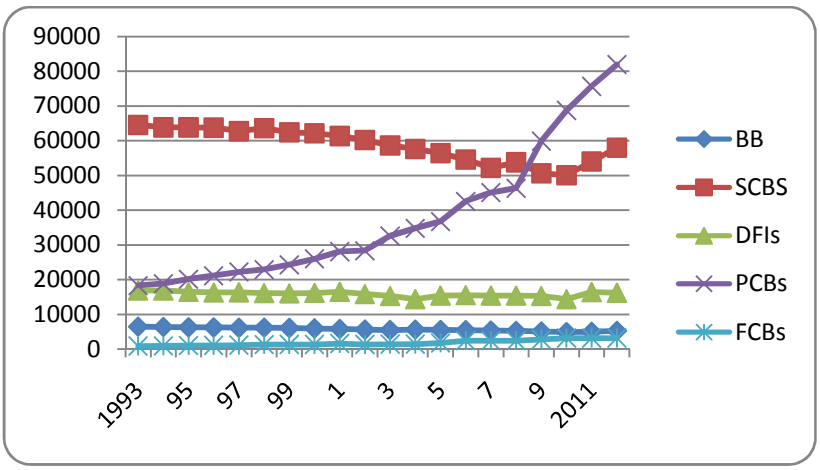


Table 6.04 indicates that except for BB, DFIs and FCBs, the total manpower of PCBs had been growing rapidly during the study period. It was due to increase in bank branches by the PCBs. But the total manpower of SCBs had a falling trend with a better improvement after 2010.

6.2 Performances of the Banks according to CAMEL Rating:

Performance of the banking sector under CAMEL rating technique of banking operations has been discussed in this chapter. The five indicators used in the rating system are (i) Capital adequacy, (ii) Asset quality, (iii) Management soundness, (iv) Earnings and (v) Liquidity.

6.2.1 Capital Adequacy

Capital adequacy focuses on the total risk weighted capital intended to protect the depositors from the potential shocks of losses that a bank might incur. It helps absorbing major financial risks like credit risk, foreign exchange risk, interest rate risk and risk involved in off-balance sheet operations. Banks in Bangladesh have to maintain a minimum Capital Adequacy Ratio (CAR) of not less that 10.0 percent of their risk-weighted assets (RWA) (with at least 4.5 percent in crore capital) or Tk.1.0 billion, whichever is higher.

Table 6.05: Capital to Risk Weighted Assets Ratio (CAR)

Period	SCBs	Growth Rate	DFIs	Growth Rate	PCBs	Growth Rate	FCBs	Growth Rate
1997	6.60		6.00		8.30		16.70	
1998	5.20	-0.21	6.90	0.15	9.20	0.11	17.10	0.02
1999	5.30	0.02	5.80	-0.16	11.00	0.20	15.80	-0.08
2000	4.40	-0.17	3.20	-0.45	10.90	-0.01	18.40	0.16
2001	4.20	-0.05	3.90	0.22	9.90	-0.09	16.80	-0.09
2002	4.10	-0.02	6.90	0.77	9.70	-0.02	21.40	0.27
2003	4.30	0.05	7.70	0.12	10.50	0.08	22.90	0.07
2004	4.10	-0.05	9.10	0.18	10.30	-0.02	24.20	0.06
2005	-0.40	-1.10	-7.50	-1.82	9.10	-0.12	26.00	0.07
2006	1.10	-3.75	-6.70	-0.11	9.80	0.08	22.70	-0.13
2007	7.90	6.18	-5.50	-0.18	10.60	0.08	22.70	0.00
2008	6.90	-0.13	-5.30	-0.04	11.40	0.08	24.00	0.06
2009	9.00	0.30	0.40	-1.08	12.10	0.06	28.10	0.17
2010	8.90	-0.01	-7.30	-19.25	10.10	-0.17	15.60	-0.44
2011	11.70	0.31	-4.50	-0.38	11.50	0.14	21.00	0.35
2012	8.10	-0.31	-7.80	0.73	11.40	-0.01	20.60	-0.02
Avg.	5.71	0.07	0.33	-1.42	10.36	0.03	20.88	0.03
SD	3.05	1.96	6.45	4.97	1.02	0.10	3.82	0.18
CV	0.53	27.73	19.48	-3.50	0.1	3.89	0.18	5.90

Source: Statistics Department, Bangladesh Bank.

Figure 6.6: Capital to risk weighted assets ratio

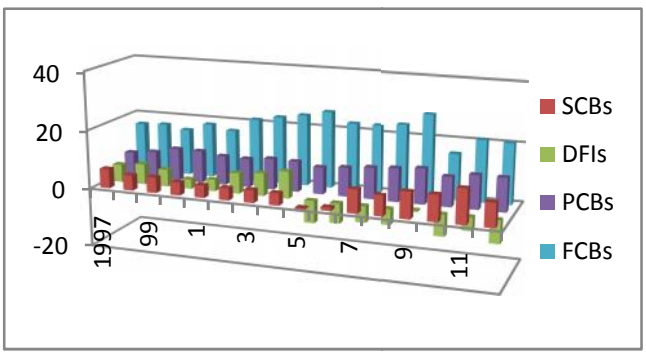


Figure 6.7: Avg. & StDv of CAR

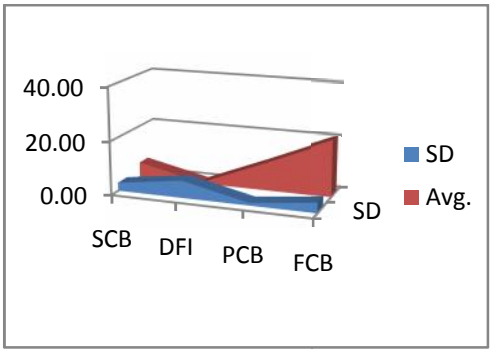


Table 6.05 shows the Capital Adequacy Ratio. During the study period the average CAR of SCBs, DFIs, PCBs and FCBs were 5.71 percent, 0.33 percent, 10.36 percent, and 20.88 percent respectively and the standard deviations were 3.05, 6.45, 1.02 and 3.82 respectively. The coefficients of variations of CAR were 0.53, 19.48, 0.10 and 0.18 respectively.

The CAR of SCBs continued to remain below the minimum required CAR. The table shows that the aggregate capital adequacy ratio of the banking sector depicted a downward movement during 1997-2001. Thereafter, the trend reversed and in 2002, the ratio rose to 7.5 percent and in 2003 the ratio stood at 8.40 percent, the highest during last 7 years. All FCBs maintained minimum required capital but the fact was not so favorable for the SCBs on an average.

6.2.2 Asset Quality

The assets compositions of all banks represented a high proportion of loans and advances in total assets. A high proportion of loans and advances indicate vulnerability of assets to credit risk, especially since the portion of non-performing assets was significant. A large non-performing loan portfolio had been the major predicament of banks, particularly of the State-Owned Banks (SCBs).

As per the regulations of Bangladesh Bank, banks are not allowed to approve large loans in favor of any individual or group of borrowers in excess of 50 percent of their total capital. The portion of funded loan in the approved large loan shall not be more than 25 percent of the bank's total capital. However, the proportions of large loans of SCBs, PCBs, FCBs and DFIs, were higher than their own funds.

Figure 6.8: Comparative Position of NPL

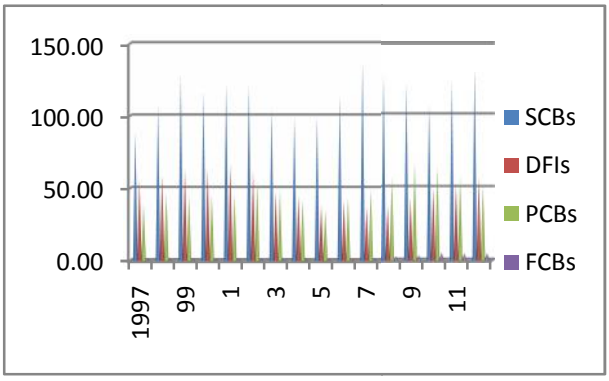


Figure 6.9: Avg. & StDv of NPL of different banks

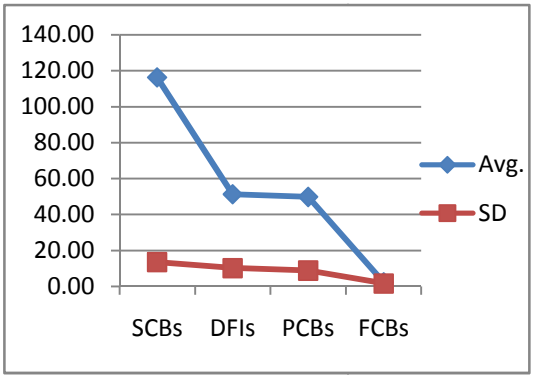


Table 6.06: Comparative Position of Non-Performing Loan

(Taka in billion)

Period	SCBs	Growth Rate	DFIs	Growth Rate	PCBs	Growth Rate	FCBs	Growth Rate
1997	89.10		56.00		39.50		0.90	
1998	107.60	0.21	59.10	0.06	46.40	0.17	1.30	0.44
1999	128.90	0.20	63.30	0.07	45.30	-0.02	1.30	0.00
2000	117.30	-0.09	63.70	0.01	46.20	0.02	1.30	0.00
2001	122.30	0.04	66.70	0.05	45.70	-0.01	1.40	0.08
2002	121.80	0.00	61.60	-0.08	54.80	0.20	1.40	0.00
2003	105.70	-0.13	47.30	-0.23	48.50	-0.11	1.70	0.21
2004	99.60	-0.06	44.70	-0.05	41.90	-0.14	1.10	-0.35
2005	100.20	0.01	38.40	-0.14	35.40	-0.16	1.00	-0.09
2006	115.00	0.15	41.40	0.08	43.70	0.23	0.80	-0.20
2007	137.90	0.20	37.20	-0.10	49.20	0.13	1.90	1.38
2008	127.60	-0.07	37.30	0.00	57.00	0.16	2.90	0.53
2009	121.60	-0.05	42.90	0.15	67.70	0.19	3.68	0.27
2010	107.60	-0.12	49.70	0.16	64.30	-0.05	5.49	0.49
2011	123.40	0.15	52.70	0.06	57.90	-0.10	4.90	-0.11
2012	132.70	0.08	56.60	0.07	51.70	-0.11	5.10	0.04
Avg.	116.14	0.03	51.16	0.01	49.7	0.03	2.26	0.18
SD	13.44	0.12	10.15	0.11	8.77	0.14	1.62	0.42
CV	0.12	3.53	0.2	14.79	0.18	5.23	0.72	2.33

Source: Bangladesh Bank (1997-2012)

Table 6.06 displays the amount of NPLs of the four SCBs since 1997 through 2012. Amount of NPLs of the SCBs decreased from Taka 117.3 billion in 2000 to Taka 107.6 billion in 2010 and again it rose to tk. 132.7 billion in 2102 which was not a good sign for those banks. The PCBs recorded a total increase of Taka 18.1 billion in their NPL accounts, which stood at Taka 64.3 billion in 2010 as against Taka 46.2 billion in 2000. The amount of NPLs of the DFIs decreased to Taka 56.6 billion in 2012 from Taka 63.7 billion in 2000.

Figure 6.10: Comparative Position of NPL to Loan Ratio

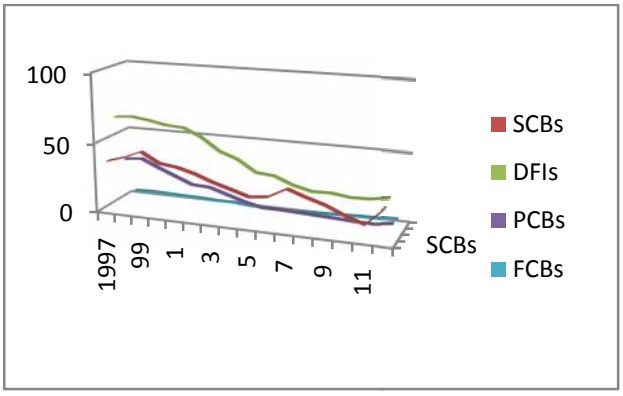


Figure 6.11: Avg. & SD of NPL to loan ratio

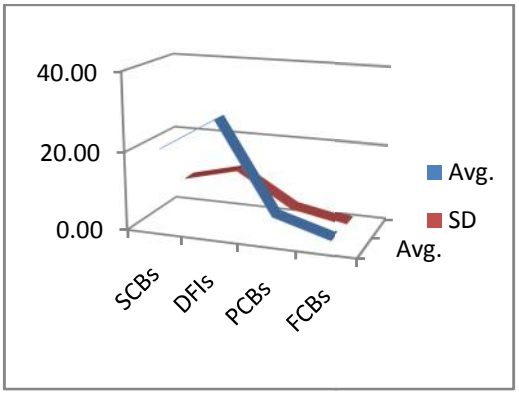


Table 6.07: NPL to total loan ratios

Period	SCBs	Growth Rate	DFIs	Growth Rate	PCBs	Growth Rate	FCBs	Growth Rate
1997	36.60		65.70		31.40		3.60	
1998	40.40	0.10	66.70	0.02	32.70	0.04	4.10	0.14
1999	45.60	0.13	65.00	-0.03	27.10	-0.17	3.80	-0.07
2000	38.60	-0.15	62.60	-0.04	22.00	-0.19	3.40	-0.11
2001	37.00	-0.04	61.80	-0.01	17.00	-0.23	3.30	-0.03
2002	33.70	-0.09	56.10	-0.09	16.40	-0.04	2.60	-0.21
2003	29.00	-0.14	47.40	-0.16	12.40	-0.24	2.70	0.04
2004	25.30	-0.13	42.90	-0.09	8.50	-0.31	1.50	-0.44
2005	21.40	-0.15	34.90	-0.19	5.60	-0.34	1.30	-0.13
2006	22.90	0.07	33.70	-0.03	5.50	-0.02	0.80	-0.38
2007	29.90	0.31	28.60	-0.15	5.00	-0.09	1.40	0.75
2008	25.40	-0.15	25.50	-0.11	4.40	-0.12	1.90	0.36
2009	21.40	-0.16	25.90	0.02	3.90	-0.11	2.30	0.21
2010	15.70	-0.27	24.20	-0.07	3.20	-0.18	3.00	0.30
2011	11.30	-0.28	24.60	0.02	2.90	-0.09	3.00	0.00
2012	23.90	1.12	26.80	0.09	4.60	0.59	3.50	0.17
Avg.	28.63	0.01	43.28	-0.05	12.66	-0.10	2.64	0.04
SD	9.44	0.35	17.13	0.08	10.5	0.22	1	0.30
CV	0.33	30.48	0.4	-1.43	0.83	-2.18	0.38	7.53

Source: Bangladesh Bank (1997-2012)

Table 6.07 tells the most important indicator intended to identify problems with asset quality in the loan portfolio that is the ratio of gross nonperforming loan (NPL) to total loans and net NPL to net total loans. In 2012, FCBs have the lowest and DFIs have the highest ratio of gross NPL to total loan. SCBs had gross NPL to total loan ratio of 23.9 percent whereas in case of PCBs, FCBs and DFIs, the ratios were 4.6, 3.5 and 26.8 percent respectively at the end December of 2012. In the above figure we can see that there was a decreasing trend in NPL over the years which was a good picture for the financial sector.

Figure 6.12: Comparative Position of Net NPL to Loan Ratio

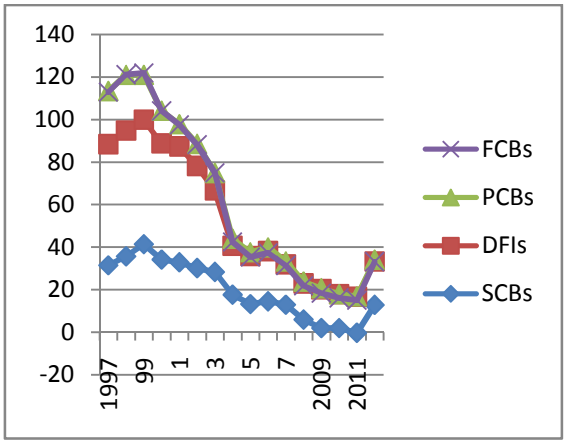


Figure 6.13: Avg. & SD of Net NPL to loan ratio

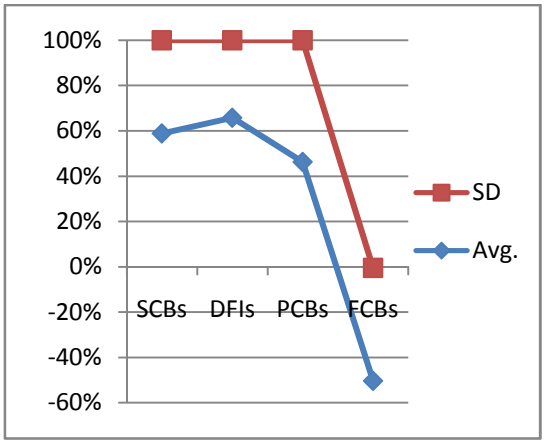


Table 6.08: Ratio of net NPL to total loans

Period	SCBs	Growth Rate	DFIs	Growth Rate	PCBs	Growth Rate	FCBs	Growth Rate
1997	31.40		56.90		25.10		-0.50	
1998	35.60	0.13	59.10	0.04	26.30	0.05	0.10	-1.20
1999	41.30	0.16	58.50	-0.01	21.20	-0.19	0.90	8.00
2000	34.10	-0.17	54.60	-0.07	15.50	-0.27	-0.10	-1.11
2001	32.80	-0.04	54.50	0.00	10.50	-0.32	-0.30	2.00
2002	30.10	-0.08	48.00	-0.12	10.50	0.00	-0.40	0.33
2003	28.30	-0.06	38.30	-0.20	8.30	-0.21	0.10	-1.25
2004	17.60	-0.38	23.00	-0.40	3.40	-0.59	-1.50	-16.00
2005	13.20	-0.25	22.60	-0.02	1.80	-0.47	-2.20	0.47
2006	14.50	0.10	23.60	0.04	1.80	0.00	-2.60	0.18
2007	12.90	-0.11	19.00	-0.19	1.40	-0.22	-1.90	-0.27
2008	5.90	-0.54	17.00	-0.11	0.90	-0.36	-2.00	0.05
2009	1.90	-0.68	18.30	0.08	0.50	-0.44	-2.30	0.15
2010	1.90	0.00	16.00	-0.13	0.00	-1.00	-1.70	-0.26
2011	-0.30	-1.16	17.00	0.06	0.20	0.00	-1.80	0.06
2012	12.80	-43.67	20.40	0.20	0.90	3.50	-0.90	-0.50
Avg.	19.63	-3.12	34.18	-0.06	8.02	-0.04	-1.07	-0.62
SD	13.68	11.22	17.76	0.14	9.29	1.05	1.06	4.80
CV	0.7	-3.60	0.52	-2.61	1.16	-28.36	-0.99	-7.71

Source: Bangladesh Bank (1997-2012)

It is shown in the above Table 6.08 and Figure 6.12 that the ratio of net NPLs (net of provisions and interest suspense) to net total loan (net of provisions and interest suspense) stood at 12.8 percent (SCBs), 20.4 percent (DFIs), 0.9 percent (PCBs) and -0.9 percent (FCBs) in 2012. It is evident from the table that DFIs' non-performing portfolios were still high after adjustment of actual provision and interest suspense, whereas FCBs and PCBs had excess provision against their NPLs.

In the year 2012, again the ratio of SCBs grew sharply to the danger level that signifies non-favorable situation for those types of banks.

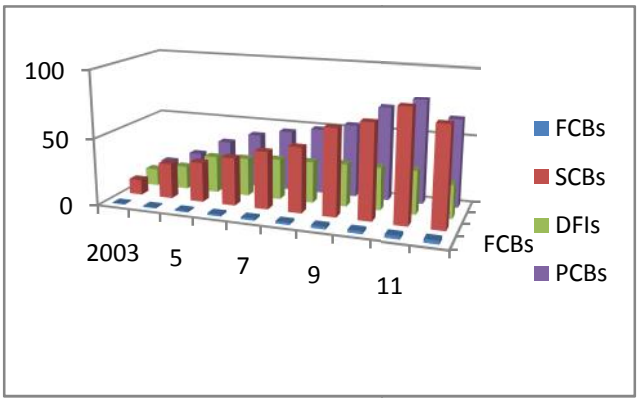
Table 6.09: Writing-off bad debts

(Tk. In Billion)

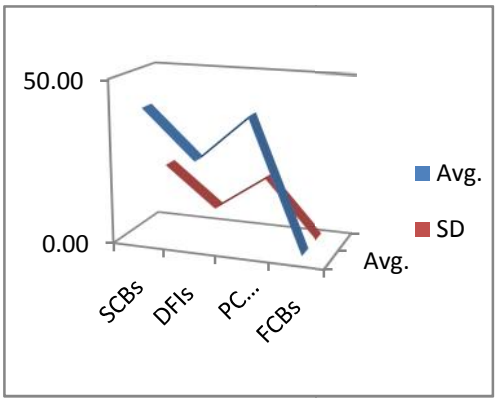
Period	SCBs	Growth Rate	DFIs	Growth Rate	PCBs	Growth Rate	FCBs	Growth Rate
2003	11.40		12.80		12.60		0.50	
2004	26.30	1.31	17.40	0.36	21.20	0.68	0.90	0.80
2005	29.70	0.13	27.60	0.59	32.90	0.55	1.10	0.22
2006	35.70	0.20	28.60	0.04	40.70	0.24	1.50	0.36
2007	42.80	0.20	30.40	0.06	45.50	0.12	1.60	0.07
2008	48.40	0.13	31.00	0.02	49.40	0.09	1.70	0.06
2009	64.50	0.33	31.80	0.03	54.70	0.11	2.00	0.18
2010	70.50	0.09	31.80	0.00	69.60	0.27	2.10	0.05
2011	82.40	0.17	32.00	0.01	77.1	0.11	2.40	0.14
2012	72.90	-0.12	24.50	-0.23	64.9	-0.16	2.60	0.08
Avg.	44.12	0.27	24.4	0.10	42.71	0.22	1.4	0.22
SD	26.41	0.41	10.14	0.24	24.06	0.25	1.01	0.24
CV	0.6	1.50	0.42	2.43	0.56	1.14	0.72	1.10

Source: Bangladesh Bank (1997-2012)

Figure 6.14: Writing-off bad debts



6. 15: Avg. & StDv of Writing-off bad debts



To wipe out unnecessarily and artificially inflated size of balance sheet, uniform guidelines of write-off have been introduced in 2003. According to the policy, banks may, at any time write-off loans as bad/loss. Those loans, which have been classified as bad/loss for last 5 years and above and loans for which 100 percent provisions have been kept, should be written off immediately (annual report 2011,Bangladesh Bank). The total amount of written-off bad debts from 2003 to 2012 in different bank categories is given in above Table (Table 6.09)

Figure 6.14 shows the increasing trend of write-off of SCBs and PCBs but stable in case of DFIs and FCBs. The highest amount of loan written off was found in SCBs that is Tk. 72.9 billion in 2012. Besides, there was a high degree of variations in loan write off of SCBs (26.41%) and PCBs (24.06%).

6.2.3 Management Soundness

Sound management is a fundamental prerequisite for the profitability and growth of any financial institution. Since indicators of management quality are primarily specific to individual institution, these cannot be easily aggregated across the sector.

In addition, it is difficult to draw any conclusion regarding management soundness on the basis of monetary indicators, as characteristics of good management are generally qualitative in nature.

Nevertheless, ratios such as total expenditure to total income, operating expenses to total expenses, earnings and operating expenses per employee, and interest rate spread are generally used to assess management soundness. In particular, a high and increasing expenditure to income ratio indicates the operating inefficiency that could be due to weaknesses in management.

Table 6.10: Expenditure-income Ratio

Period	SCBs	Growth Rate	DFIs	Growth Rate	PCBs	Growth Rate	FCBs	Growth Rate
1997	99.40		142.30		85.90		59.70	
1998	99.80	0.00	180.40	0.27	85.30	-0.01	60.10	0.01
1999	100.50	0.01	145.20	-0.20	90.40	0.06	67.40	0.12
2000	99.40	-0.01	175.30	0.21	90.80	0.00	77.70	0.15
2001	99.00	0.00	89.10	-0.49	88.10	-0.03	75.70	-0.03
2002	98.50	-0.01	95.90	0.08	91.90	0.04	78.30	0.03
2003	98.80	0.00	101.10	0.05	93.10	0.01	80.30	0.03
2004	102.30	0.04	104.00	0.03	87.10	-0.06	76.30	-0.05
2005	101.90	0.00	103.90	0.00	89.30	0.03	70.80	-0.07
2006	100.00	-0.02	103.50	0.00	90.20	0.01	71.10	0.00
2007	100.00	0.00	107.70	0.04	88.80	-0.02	72.90	0.03
2008	89.60	-0.10	103.70	-0.04	88.40	0.00	75.80	0.04
2009	75.60	-0.16	112.10	0.08	72.60	-0.18	59.00	-0.22
2010	80.70	0.07	87.80	-0.22	67.60	-0.07	64.70	0.10
2011	62.7	-0.22	88.6	0.01	71.7	0.06	47.3	-0.27
2012	73.2	0.17	91.2	0.03	76	0.06	49.6	0.05
Avg.	92.59	-0.02	114.49	-0.01	84.83	-0.01	67.92	-0.01
SD	12.44	0.09	29.85	0.18	8.07	0.06	10.24	0.11
CV	0.13	-5.95	0.26	-18.21	0.1	-9.41	0.15	-21.44

Source: Bangladesh Bank (1997-2012)

Figure 6.16. Expenditure-income Ratio

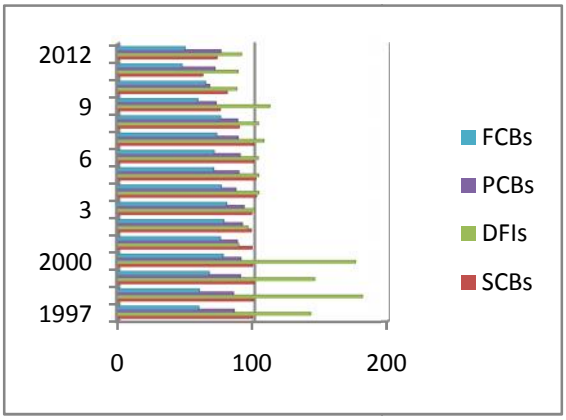
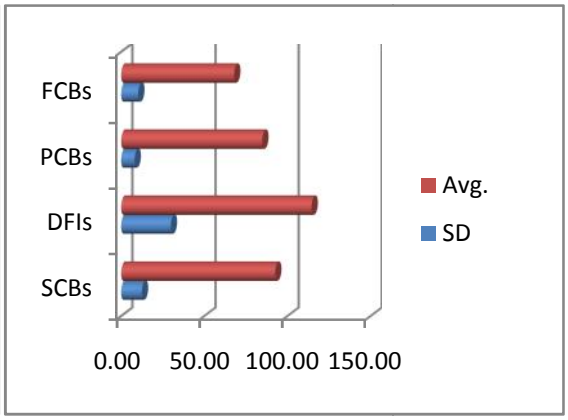


Figure 6.17: Avg. & StDv of Expenditure-income Ratio



As evident from above Table – 6.10 and Figure – 6.16, in 2012, expenditure-income (EI) ratio of the DFIs was the highest among the shown bank clusters due to huge operating loss incurred by BKB and RAKUB. The EI ratio of the SCBs was 73.2 which could mainly attributable to high administrative and overhead expenses and suspension of income against NPLs. EI ratio of PCBs was also substantially high due to deduction of loan loss provision, other assets and corporate tax from current income.

6.2.4 Earnings and Profitability

Strong earnings and profitability profile of a bank reflect good health and banks its ability to support present and future operations. More specifically, this determines the capacity to absorb losses by building an adequate capital base, finance its expansion and pay adequate

dividends to its shareholders. Although there are various measures of earning and profitability, the best and widely used indicator is returns on assets (ROA), which is supplemented by return on equity (ROE) and net interest margin (NIM).

Table 6.11: Return on Assets (ROA)

Period	SCBs	Growth Rate	DFIs	Growth Rate	PCBs	Growth Rate	FCBs	Growth Rate
1997	0.00		-2.10		1.10		4.80	
1998	0.00	0.00	-2.80	0.33	1.20	0.09	4.70	-0.02
1999	0.00	0.00	-1.60	-0.43	0.80	-0.33	3.50	-0.26
2000	0.10	0.00	-3.70	1.31	0.80	0.00	2.70	-0.23
2001	0.10	0.00	0.70	-1.19	1.10	0.38	2.80	0.04
2002	0.10	0.00	0.30	-0.57	0.80	-0.27	2.40	-0.14
2003	0.10	0.00	0.00	-1.00	0.70	-0.13	2.60	0.08
2004	-0.10	-2.00	-0.20	0.00	1.20	0.71	3.20	0.23
2005	-0.10	0.00	-0.10	-0.50	1.10	-0.08	3.10	-0.03
2006	0.00	-1.00	-0.20	1.00	1.10	0.00	2.20	-0.29
2007	0.00	0.00	-0.30	0.50	1.30	0.18	3.10	0.41
2008	0.70	0.00	-0.60	1.00	1.40	0.08	2.90	-0.06
2009	1.00	0.43	0.40	-1.67	1.60	0.14	3.20	0.10
2010	1.10	0.10	0.20	-0.50	2.10	0.31	2.90	-0.09
2011	1.30	0.18	0.10	-0.50	1.60	-0.24	3.20	0.10
2012	-0.60	-1.46	0.10	0.00	0.90	-0.44	3.30	0.03
Avg.	0.23	-0.25	-0.61	-0.15	1.18	0.03	3.16	-0.01
SD	0.51	0.68	1.26	0.85	0.37	0.30	0.71	0.19
CV	2.22	-2.71	-2.06	-5.77	0.31	11.24	0.22	-21.50

Source: Bangladesh Bank (1997-2012)

Figure 6.18: Return on Assets (ROA)

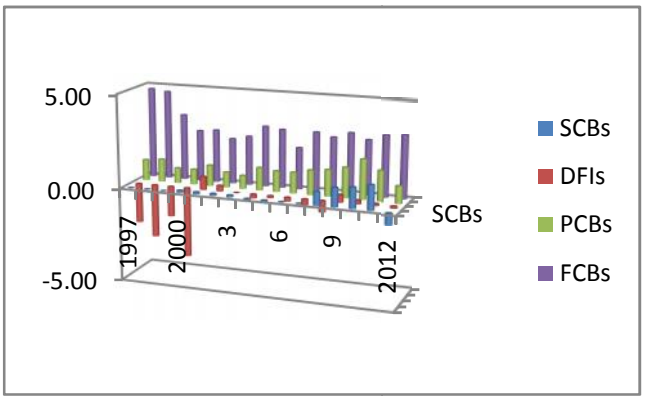


Figure 6.19: Avg. & SD of Return on Assets (ROA)

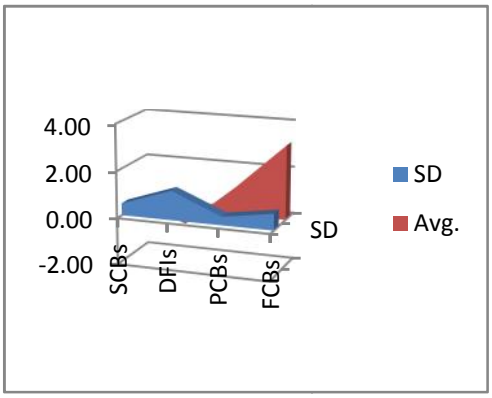


Table – 6.11 shows ROA position of banks. Analysis of these indicators reveals that the ROA of the SCBs was less than industry average considering huge provision shortfall and that of the PCBs even negative though after 2000 it shows consistently strong position. FCBs' ROA has been consistently strong during the last couple of years.

Table 6.12: Return on Equity (ROE)

Period	SCBs	Growth Rate	DFIs	Growth Rate	PCBs	Growth Rate	FCBs	Growth Rate
1997	1.30		-29.10		24.40		38.20	
1998	0.30	-0.77	-36.30	0.25	26.80	0.10	40.70	0.07
1999	-1.10	-4.67	-29.40	-0.19	15.30	-0.43	41.80	0.03
2000	1.70	-2.55	-68.00	1.31	17.00	0.11	27.30	-0.35
2001	2.40	0.41	12.30	-1.18	20.90	0.23	32.40	0.19
2002	4.20	0.75	5.80	-0.53	13.60	-0.35	21.50	-0.34
2003	3.00	-0.29	-0.60	-1.10	11.40	-0.16	20.40	-0.05
2004	-5.30	-2.77	-2.10	2.50	19.50	0.71	22.50	0.10
2005	-6.90	0.30	-2.00	-0.05	18.10	-0.07	18.40	-0.18
2006	0.00	-1.00	-2.00	0.00	15.20	-0.16	21.50	0.17
2007	0.00	0.00	-3.40	0.70	16.70	0.10	20.40	-0.05
2008	22.50	0.00	-6.90	1.03	16.40	-0.02	17.80	-0.13
2009	26.20	0.16	-171.70	23.88	21.00	0.28	22.40	0.26
2010	18.40	-0.30	-3.20	-0.98	20.90	0.00	17.00	-0.24
2011	19.7	0.07	-0.9	-0.72	15.7	-0.25	16.6	-0.02
2012	-11.9	-1.60	-1.1	0.22	10.2	-0.35	17.3	0.04
Avg.	4.66	-0.82	-21.16	1.68	17.69	-0.02	24.76	-0.03
SD	11.04	1.49	44.9	6.22	4.43	0.29	8.68	0.19
CV	2.37	-1.82	-2.12	3.71	0.25	-16.97	0.35	-5.58

Source: Bangladesh Bank

Figure 6.20: Return on Equity (ROE)

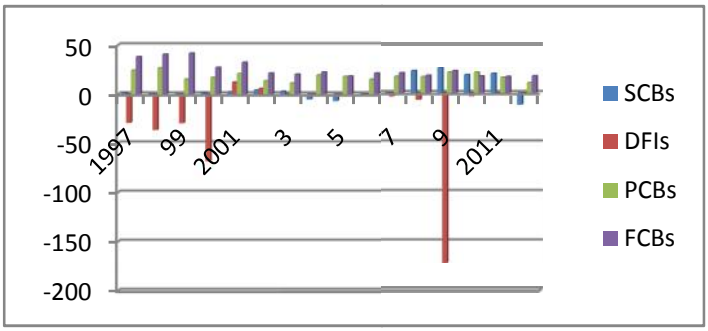
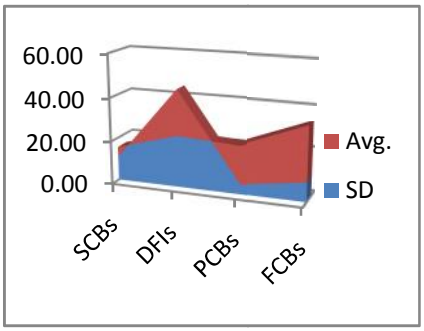


Figure 6.21: Avg. & SD of ROE



According to Table – 6.12, SCBs' ROE was 1.3 percent in 1997 and rose to 26.2 percent in 2009, but dropped down to -11.9 percent in 2012. In case of DFIs, the ROE was still negative in 2012. The ROE of PCBs was robust for last five years. The ROE of FCBs was 22.4 percent in 2009, but decreased to 17.3 percent as two FCBs incurred net loss in 2010.

Figure 6.22: Net interest income by type of banks

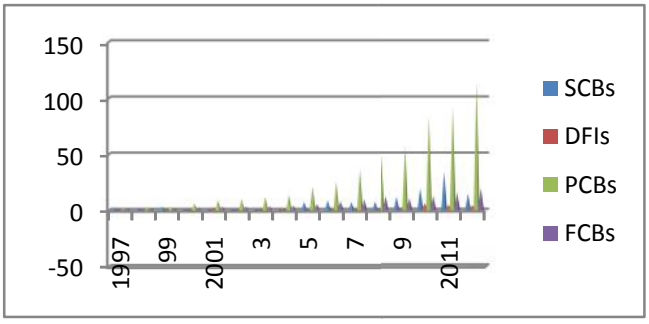


Figure 6.23: Avg. & SD of NI

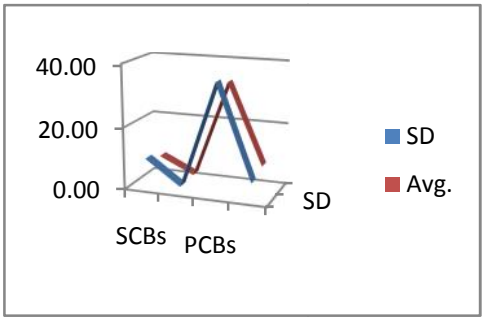


Table 6.13: Net interest income by type of banks

(Tk. In Billions)

Period	SCBs	Growth Rate	DFIs	Growth Rate	PCBs	Growth Rate	FCBs	Growth Rate
1997	2.70		-0.10		1.70		2.00	
1998	2.20	-0.19	0.50	-6.00	2.30	0.35	2.20	0.10
1999	3.10	0.41	-0.10	-1.20	3.00	0.30	1.80	-0.18
2000	-1.20	-1.39	1.00	-11.00	6.10	1.03	2.50	0.39
2001	-1.80	0.50	2.70	1.70	9.20	0.51	3.30	0.32
2002	-1.50	-0.17	1.40	-0.48	10.20	0.11	3.40	0.03
2003	-0.30	-0.80	1.30	-0.07	12.00	0.18	3.60	0.06
2004	-1.10	2.67	1.80	0.38	13.70	0.14	4.20	0.17
2005	7.70	-8.00	1.00	-0.44	21.00	0.53	5.60	0.33
2006	9.00	0.17	1.70	0.70	25.40	0.21	8.20	0.46
2007	7.40	-0.18	1.40	-0.18	36.10	0.42	9.90	0.21
2008	7.90	0.07	1.90	0.36	48.50	0.34	12.60	0.27
2009	12.10	0.53	1.90	0.00	56.70	0.17	10.70	-0.15
2010	19.80	0.64	6.20	2.26	82.80	0.46	13.00	0.21
2011	34.30	0.73	4.90	-0.21	91.40	0.10	16.10	0.24
2012	14.90	-0.57	4.70	-0.04	114.70	0.25	19.60	0.22
Avg.	7.2	-0.37	2.01	-0.95	33.43	0.34	7.42	0.18
SD	9.64	2.29	1.79	3.32	35.61	0.24	5.62	0.18
CV	1.34	-6.17	0.89	-3.50	1.07	0.70	0.76	1.02

Source: Bangladesh Bank

Table – 6.13 shows that SCBs were able to increase their net interest income (NII) by reducing their cost of fund though in the year 2012 that again sharply declined to 14.9 from 34.4 from the previous year. The NII of the PCBs had been incredibly high over the period from 2003 through 2012. Overall industry NII shows a consistently upward trend. The trend of NII indicates that the interest spread of PCBs and FCBs is higher than that of SCBs and DFIs.

6.2.5 Liquidity

Commercial banks' demand and time liabilities are at present subject to a statutory liquidity requirement (SLR) of 19.0 percent inclusive of average 6.0 percent (at least 5.5 percent in any day) cash reserve ratio (CRR) on bi-weekly basis. The CRR is to be kept with the BB and the remainder as qualifying secured assets under the SLR, either in cash or in Government securities.

SLR for the banks operating under the Islamic Shariah is 10 percent and the specialized banks are except from maintaining the SLR. Liquidity indicators measured as percentage of demand and time liabilities (excluding inter-bank items) of the banks indicate that all the banks had excess liquidity.

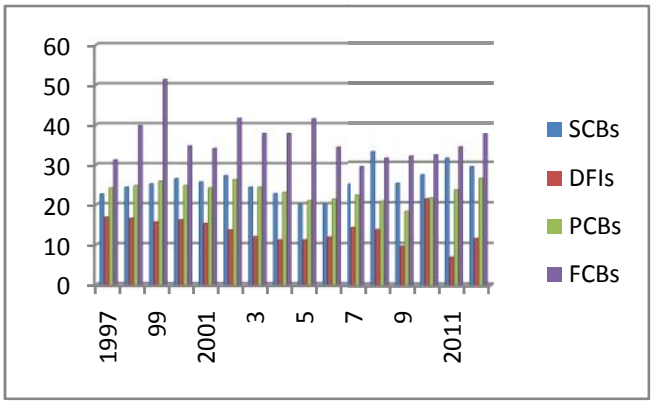
Table 6.14: Liquid Assets in Banking Sector

(Tk. In Billions)

Period	SCBs	Growth Rate	DFIs	Growth Rate	PCBs	Growth Rate	FCBs	Growth Rate
1997	22.70		16.90		24.20		31.20	
1998	24.40	0.07	16.60	-0.02	24.80	0.02	39.80	0.28
1999	25.20	0.03	15.70	-0.05	25.90	0.04	51.30	0.29
2000	26.50	0.05	16.20	0.03	24.80	-0.04	34.70	-0.32
2001	25.70	-0.03	15.30	-0.06	24.20	-0.02	34.10	-0.02
2002	27.30	0.06	13.70	-0.10	26.30	0.09	41.60	0.22
2003	24.40	-0.11	12.00	-0.12	24.40	-0.07	37.80	-0.09
2004	22.80	-0.07	11.20	-0.07	23.10	-0.05	37.80	0.00
2005	20.00	-0.12	11.20	0.00	21.00	-0.09	41.50	0.10
2006	20.10	0.01	11.90	0.06	21.40	0.02	34.40	-0.17
2007	24.90	0.24	14.20	0.19	22.20	0.04	29.20	-0.15
2008	32.90	0.32	13.70	-0.04	20.70	-0.07	31.30	0.07
2009	25.10	-0.24	9.60	-0.30	18.20	-0.12	31.80	0.02
2010	27.20	0.08	21.30	1.22	21.50	0.18	32.10	0.01
2011	31.30	0.15	6.90	-0.68	23.50	0.09	34.10	0.06
2012	29.20	-0.07	11.50	0.67	26.30	0.12	37.50	0.10
Avg.	25.61		13.62		23.28		36.26	
SD	3.53		3.42		2.28		5.50	
CV	0.14		0.25		0.10		0.15	

Source: Bangladesh Bank

Figure 6.24: Liquid Assets in Banking Sector



6.25: Avg. & SD of Liquid Assets

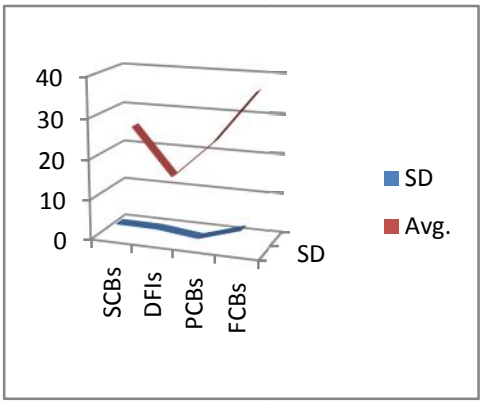


Table – 6.14 shows the liquid assets in banking sector in Bangladesh during 1997 to 2012. The table reveals that the average liquid assets of SCBs, DFIs, PCBs and FCBs during the period were 25.61billion, 13.62 billion, 23.28 billion and 36.26 billion respectively and the standard deviations were 3.53, 3.42, 2.28 and 5.50 respectively. The coefficients of variations were 0.14 percent, 0.25 percent, 0.10 percent and 0.15 percent respectively. The table indicates the increasing trends during the period for all types of banks in Bangladesh except DFIs, its liquidity decreased over the period.

Table 6.15: Excess Liquidity in Banking Sector

(Tk. In Billions)

Period	SCBs	Growth Rate	DFIs	Growth Rate	PCBs	Growth Rate	FCBs	Growth Rate
1997	2.70		9.70		6.00		11.20	
1998	4.40	0.63	9.20	-0.05	6.70	0.12	19.90	0.78
1999	5.20	0.18	8.70	-0.05	8.00	0.19	31.40	0.58
2000	6.50	0.25	9.90	0.14	6.80	-0.15	14.80	-0.53
2001	5.00	-0.23	8.90	-0.10	6.20	-0.09	14.30	-0.03
2002	7.30	0.46	6.90	-0.22	8.50	0.37	21.80	0.52
2003	8.40	0.15	5.80	-0.16	9.80	0.15	21.90	0.00
2004	6.80	-0.19	4.70	-0.19	8.80	-0.10	21.90	0.00
2005	2.00	-0.71	6.20	0.32	5.10	-0.42	23.60	0.08
2006	2.10	0.05	3.80	-0.39	5.60	0.10	16.40	-0.31
2007	6.90	2.29	5.60	0.47	6.40	0.14	11.20	-0.32
2008	14.90	1.16	4.90	-0.13	4.70	-0.27	13.30	0.19
2009	17.60	0.18	7.10	0.45	5.30	0.13	21.80	0.64
2010	8.20	-0.53	2.30	-0.68	4.60	-0.13	13.20	-0.39
2011	12.30	0.50	1.30	-0.43	6.60	0.43	15.30	0.16
2012	10.20	-0.17	1.40	0.08	9.50	0.44	18.70	0.22
Avg.	7.53		6.03		6.79		18.17	
SD	4.43		2.85		1.67		5.45	
CV	0.59		0.47		0.25		0.30	

Source: Bangladesh Bank

Figure 6.26: Excess Liquidity in Banking Sector

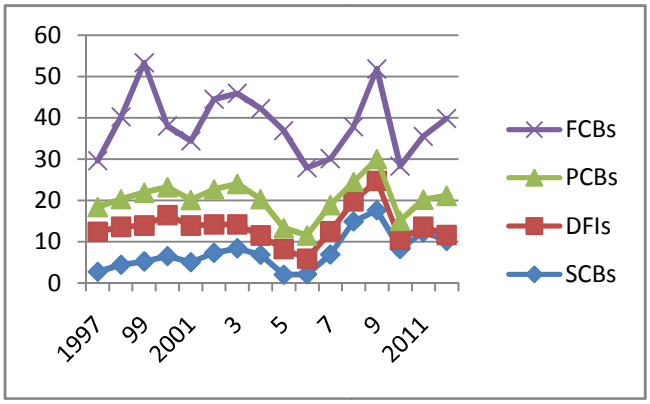
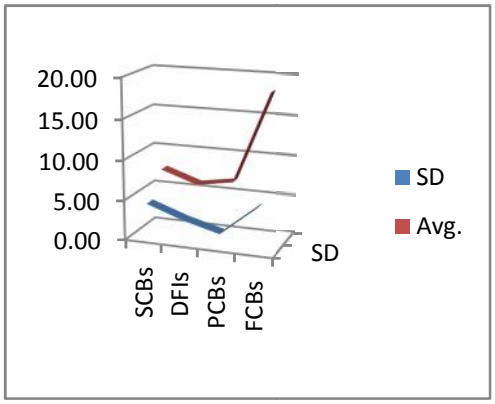


Figure 6.27: Avg. & SD of Excess Liquidity



In the above Figure- 6.26 we can see that the FCBs are maintaining high degree of excess liquidity and it is because of tackling sudden risk. Whereas, SCBs are keeping the second position in that order of maintain excess liquidity.

The table reflects that the FCBs have the highest liquidity ratios followed by the PCBs. This continuing surplus liquidity seem to suggest scope for reducing lending rate and help raise the growth of credit to private sector.

Table 6.16: Amount of NPL, Required and Maintained provisions with excess or shortfall of all banks

(Tk. in Billions)

Period	Amount of NPLs	Growth Rate	Required Provision	Growth Rate	Provision maintained	Growth Rate	Excess/ shortfall	Growth Rate	Provision maintenance ratio (%)	Growth Rate
1997	173.3		79.1		46.7		-32.4		59.1	
1998	214.3	0.24	93.5	0.18	50.1	0.07	-43.4	0.34	53.5	-0.09
1999	238.8	0.11	100.2	0.07	51.5	0.03	-48.7	0.12	51.4	-0.04
2000	228.5	-0.04	98.4	-0.02	58.1	0.13	-40.3	-0.17	59.1	0.15
2001	236	0.03	101.6	0.03	61.4	0.06	-40.2	0	60.5	0.02
2002	238.6	0.01	106.8	0.05	59.6	-0.03	-47.2	0.17	55.8	-0.08
2003	203.2	-0.15	92.5	-0.13	37.3	-0.37	-55.2	0.17	40.3	-0.28
2004	187.3	-0.08	87.8	-0.05	35.9	-0.04	-51.9	-0.06	40.9	0.01
2005	175.1	-0.07	88.3	0.01	42.6	0.19	-45.7	-0.12	48.2	0.18
2006	200.1	0.14	106.1	0.2	52.9	0.24	-53.2	0.16	49.9	0.04
2007	226.2	0.13	127.2	0.2	97.1	0.84	-30.1	-0.43	76.3	0.53
2008	224.8	-0.01	136.1	0.07	126.2	0.3	-9.9	-0.67	92.7	0.21
2009	224.8	0	134.8	-0.01	137.9	0.09	3.1	-1.31	102.3	0.1
2010	227.1	0.01	149.2	0.11	142.3	0.03	-6.9	-3.23	95.4	-0.07
2011	232.23	0,02	148.2	-0.01	152.6	0.07	4.4	-1.64	1.03	-0.99
2012	358.54	0.54	242.3	0.63	189.7	0.24	-52.6	-12.95	0.78	-0.24
Avg.	224.3	0.06	118.25	0.09	83.86	0.12	-34.38	-1.31	55.45	-0.04
SD	41.78	0.17	39.85	0.18	49.45	0.25	20.59	3.36	28.47	0.33
CV	0.18	2.79	0.34	1.99	0.59	2.05	-0.59	-2.57	0.51	-8.95

Source: Bangladesh Bank

Figure 6.28: Amount of NPL, Required and Maintained provisions with excess or shortfall

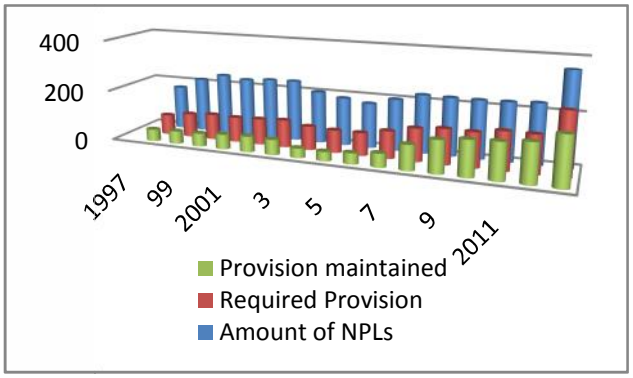


Table – 6.16 suggests that amount of NPL had increased day by day, especially in the year 2012, that went too high which is a matter of concern and the more important thing is provisions maintained were always lower than the required provisions.

Table 6.17: Required Provision & Provision Maintained by different banks

(Tk. in '00 crores)

Year	Items	SCBs	DFIs	PCBs	FCBs	Avg.	SD	CV
2001	Required Provision	59.54	18.37	23.08	1.25	25.56	24.52	95.93%
	Provision Maintained	20.71	17.99	19.61	1.56	14.97	9.01	60.18%
	Provision Maintenance Ratio (%)	34.78	97.93	84.97	124.80	85.62	37.73	44.07%
2002	Required Provision	61.51	17.09	27.85	1.23	26.92	25.52	94.80%
	Provision Maintained	18.94	17.30	22.81	1.57	15.16	9.35	61.67%
	Provision Maintenance Ratio (%)	30.79	101.22	81.90	127.64	85.39	40.94	47.95%
2003	Required Provision	53.30	14.70	23.10	1.40	23.13	22.01	95.18%
	Provision Maintained	3.50	14.60	17.50	1.70	9.33	7.89	84.60%
	Provision Maintenance Ratio (%)	6.60	99.20	75.40	125.20	76.60	50.91	66.46%
2004	Required Provision	50.70	13.50	22.30	1.30	21.95	21.01	95.73%
	Provision Maintained	3.40	12.40	18.50	1.60	8.98	7.91	88.19%
	Provision Maintenance Ratio (%)	6.70	91.90	83.00	123.10	76.18	49.41	64.86%
2005	Required Provision	52.80	13.40	20.50	1.60	22.08	21.92	99.28%
	Provision Maintained	13.20	9.30	17.80	2.20	10.63	6.60	62.16%
	Provision Maintenance Ratio (%)	25.00	69.40	86.80	137.50	79.68	46.51	58.37%
2006	Required Provision	61.60	14.80	27.50	2.20	26.53	25.56	96.37%
	Provision Maintained	18.20	9.10	22.60	3.10	13.25	8.80	66.39%
	Provision Maintenance Ratio (%)	229.50	61.50	82.20	140.90	128.53	75.25	58.55%
2007	Required Provision	71.40	17.30	34.90	3.50	31.78	29.38	92.45%
	Provision Maintained	56.50	8.70	28.20	3.80	24.30	23.91	98.41%
	Provision Maintenance Ratio (%)	79.10	50.30	80.80	108.60	79.70	23.81	29.88%
2008	Required Provision	73.10	17.00	41.30	4.60	34.00	30.20	88.81%
	Provision Maintained	75.60	8.60	37.00	5.00	31.55	32.67	103.55%
	Provision Maintenance Ratio (%)	103.40	50.60	89.60	108.70	88.08	26.25	29.80%
2009	Required Provision	66.00	17.50	46.50	4.60	33.65	27.79	82.58%
	Provision Maintained	79.50	8.90	43.60	5.90	34.48	34.55	100.22%
	Provision Maintenance Ratio (%)	120.50	50.90	93.80	128.30	98.38	34.93	35.50%
2010	Required Provision	70.64	19.07	53.31	6.19	37.30	29.82	79.95%
	Provision Maintained	69.87	13.29	51.78	7.39	35.58	30.16	84.77%
	Provision Maintenance Ratio (%)	98.90	69.70	97.10	119.40	96.28	20.40	21.19%
2011	Required Provision	60.80	21.70	58.30	7.40	37.05	26.65	71.92%
	Provision Maintained	69.00	13.90	61.20	8.50	38.15	31.36	82.20%
	Provision Maintenance Ratio (%)	113.50	64.10	105.00	114.90	99.38	23.92	24.07%
2012	Required Provision	119.20	29.80	84.40	8.90	60.58	50.40	83.21%
	Provision Maintained	81.90	13.60	84.90	9.30	47.43	41.60	87.71%
	Provision Maintenance Ratio (%)	68.70	45.70	100.60	104.30	79.83	27.80	34.83%

Source: Bangladesh Bank (1997-2012)

From the Table (6.17) above, it has been seen that FCBs maintained more provision than the loan loss over the period. In the year of 2012, FCBs maintained 104.3% provision against their loan loss. The scenario is opposite in the case of DFIs which suffers provision shortfall

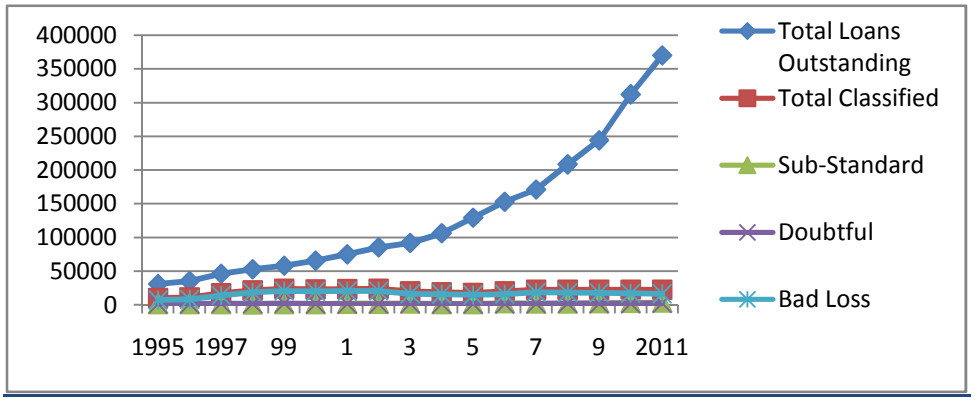
over the whole period. SCBs loan loss provision maintenance ratio is 68.7% in the year of 2012. PCBs provision maintenance ratio is 100.6% in the year of 2012 whereas it was only 82.2% in 2006.

Table 6.18: Status of TL, TCL, SS, DF, and BL of all banks

(Tk. In Billions)

Year	Total Loans Outstanding	Total Classified	Total Classified (%)	Sub-Standard	SS/TCL %	Doubtful	DF/TCL %	Bad Loss
1995	31028.53	9942.23	32.04	1300.39	13.08	1229.05	12.36	7412.79
1996	35100.29	11054.47	31.49	1483.39	13.42	1355.88	12.27	8215.2
1997	46227.15	17331.72	37.49	1366.68	7.89	2026.98	11.70	13938.06
1998	52731.84	21437.22	40.65	913.28	4.26	1546.51	7.21	18977.43
1999	58083.3	23879.26	41.11	1255.24	5.26	1973.87	8.27	20650.15
2000	65442.86	22851.03	34.92	1163.31	5.09	1446.55	6.33	20241.17
2001	74947.66	23599.43	31.49	1870.55	7.93	1292.94	5.48	20435.94
2002	85273.98	23962.22	28.10	2074.83	8.66	1263.43	5.27	20623.96
2003	91827.49	20319.52	22.13	2085.53	10.26	1779.91	8.76	16454.08
2004	106209.22	18726.43	17.63	1350.60	7.21	1236.22	6.60	16139.61
2005	129258.69	17511.42	13.55	1521.16	8.69	1215.26	6.94	14775.00
2006	152857.87	20098.12	13.15	2638.77	13.13	1436.23	7.15	16023.12
2007	171044.9	22624.10	13.23	2205.16	9.75	1698.7	7.51	18720.24
2008	208362.04	22481.41	10.79	2120.88	9.43	2117.21	9.42	18243.32
2009	243977.67	22482.23	9.21	2752.52	12.24	1876.56	8.35	17853.15
2010	312209.29	22709.48	7.27	3368.50	14.83	1871.67	8.24	17469.31
2011	369901.11	22644.16	6.12	3647.75	16.11	2364.65	10.44	16631.76
Source: BRPD, Bangladesh Bank								

Figure 6.29: Status of TL, TCL, SS, DF, and BL of all banks



The Figure- 6.29 explains that total outstanding loan has increased sharply over the years and the message of hope is that total classified, sub standard, doubtful and bad or loss loan were maintained steadily to some extent.

Table 6.19: Classified Loan as % of Total Loan by Types of Banks and by Loan Type

(Tk. In Billions)

Categories of Loan	Types of Banks	2004	2005	2006	2007	2008	2009	2010
Continuous	NCBs	22.40	19.95	17.66	25.07	21.66	17.10	11.58
	PCBs	9.48	6.43	6.73	5.90	4.85	3.84	3.42
	FCBs	3.64	2.31	1.22	1.46	2.59	4.06	6.17
	SBs	22.30	18.44	14.81	17.41	14.47	13.96	10.48
	G. Total	57.82	47.13	40.42	49.84	43.57	38.96	31.65
Demand	NCBs	19.98	10.21	11.93	24.03	18.11	14.44	9.67
	PCBs	5.65	3.83	3.46	3.16	3.13	2.38	1.66
	FCBs	0.76	0.78	0.53	0.91	2.13	1.26	1.58
	SBs	17.21	5.25	10.91	10.13	10.97	9.78	5.71
	G. Total	43.6	20.07	26.83	38.23	34.34	27.86	18.62
Term Loan (upto 5 years)	NCBs	38.56	33.83	38.87	41.28	31.91	24.75	19.72
	PCBs	7.54	5.91	6.28	5.84	6.26	6.07	5.40
	FCBs	0.66	0.90	0.77	2.02	1.41	2.24	3.09
	SBs	48.47	40.45	38.05	33.23	31.55	33.44	28.93
	G. Total	95.23	81.09	83.97	82.37	71.13	66.5	57.14
Term Loan (more than 5 years)	NCBs	28.07	24.54	29.17	32.99	31.28	26.62	20.52
	PCBs	12.15	5.37	3.70	4.27	2.94	3.61	2.51
	FCBs	0.00	0.49	0.35	0.17	0.18	0.09	0.19
	SBs	56.64	42.09	38.34	40.25	32.97	29.63	29.64
	G. Total	96.86	72.49	71.56	77.68	67.37	59.95	52.86
Short Term Agri Loan and Micro Credit	NCBs	30.35	47.09	53.97	51.25	46.64	43.78	39.04
	PCBs	2.37	2.73	1.15	0.79	0.69	0.92	0.24
	FCBs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	SBs	41.24	39.20	41.58	30.08	28.48	30.20	34.15
	G. Total	73.96	89.02	96.7	82.12	75.81	74.9	73.43

Source: BRPD, Bangladesh Bank

6.3 Comparative trends of NPL in some Asian Countries

Table 6.20: Trends of NPL/Total Loan for some Asian Countries

Year	Bangladesh	India	Sri Lanka
2001	31.50	11.40	15.30
2002	28.10	10.40	15.30
2003	22.10	8.80	13.70
2004	17.60	7.20	9.10
2005	13.60	5.20	9.60
2006	13.15	5.30	9.50
2007	13.23	5.10	8.50
2008	10.79	4.90	7.30
2009	9.21	5.20	6.00
2010	7.27	4.60	6.90
2011	6.12	4.30	6.50

Source: Global Financial Stability Reports, IMF and Bangladesh Bank.

Figure 6.30: Trends of NPL/Total loan for some Asian Countries

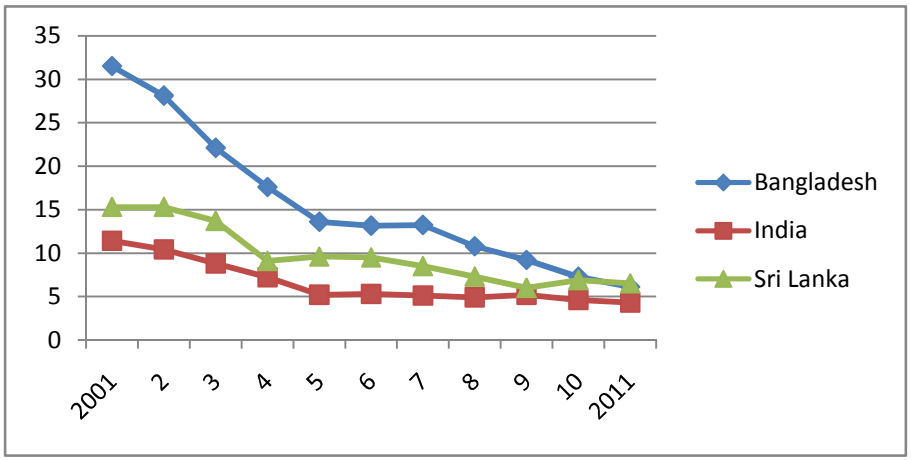


Table 6.20 and Figure 6.30 show the NPL to Total Loan ratio of some Asian countries. From there we see that Bangladesh is not in good trend because through the years from 2001 that was higher in Bangladesh in comparison to Sri Lanka and India. But trends of NPL/Total loan ratio of all the countries were improving over time, where it was superior in Bangladesh.

Chapter Seven

Lending Risk Analysis & Its Impact on the Selected Banks

7.1 Introduction

In this chapter the impact of lending risk analysis practiced by the SCBs will be evaluated through their functional parameters firstly in group and then bank wise. A sound analysis of loan proposals should result in, other things being the same, good picture of loan management parameters of banks. In order to investigate those things, different aspects of the selected banks having the bearing of credit analysis and management will be reviewed and analyzed in tabular and graphical forms containing the findings thereof. And at the end of this chapter, hypotheses will be tested through correlation and regression analysis, followed by a SWOT analysis of the SCBs.

7.2 Bank wise evaluation of impact of lending risk analysis of SCBs

Table 7.1: Total Outstanding Loan of SCBs **(Tk. in Millions)**

Year	Sonali	Growth	Janata	Growth	Agrani	Growth	Rupali	Growth
1994	38214.80		30007.90		30358.80		14471.70	
1995	38565.80	0.92	31452.60	4.81	38411.90	26.53	14628.10	1.08
1996	45438.50	17.82	37081.70	17.90	41184.10	7.22	16588.30	13.40
1997	52907.80	16.44	39988.20	7.84	45860.90	11.36	18088.50	9.04
1998	61457.70	16.16	45593.60	14.02	50215.20	9.49	20798.20	14.98
1999	69570.00	13.20	52590.00	15.35	52800.00	5.15	22570.00	8.52
2000	78380.00	12.66	66730.00	26.89	54360.00	2.95	26380.00	16.88
2001	87510.00	11.65	67040.00	0.46	63990.00	17.72	34390.00	30.36
2002	94180.00	7.62	69000.00	2.92	68990.00	7.81	34220.00	-0.49
2003	145465.63	54.45	94706.89	37.26	83734.94	21.37	40208.65	17.50
2004	159758.83	9.83	100193.83	5.79	90076.53	7.57	43522.66	8.24
2005	217446.36	36.11	116126.06	15.90	93091.38	3.35	42767.36	-1.74
2006	229891.73	5.72	129063.67	11.14	98990.67	6.34	43619.44	1.99
2007	194006.19	-15.61	111718.72	-13.44	110884.56	12.02	45163.61	3.54
2008	216859.00	11.78	133918.00	19.87	103751.70	-6.43	47255.40	4.63
2009	234943.20	8.34	154252.40	15.18	110200.50	6.22	49919.20	5.64
2010	263006.20	11.94	211322.50	37.00	149464.20	35.63	63231.90	26.67
2011	345991.34	0.32	257801.03	0.22	194085.65	0.30	76524.92	0.21
2012	378147.06	0.09	305339.5	0.18	212663.02	0.10	90641.56	0.18
Avg.	155354.74	-0.59	108101.40	-0.65	89111.27	-0.58	39209.97	-0.57
SD	105169.53	-0.32	77851.29	-0.28	50809.27	-0.43	20928.39	-0.47
CV	0.68	-1.00	0.72	-1.00	0.57	-1.00	0.53	-1.00
Source: BRPD, Bangladesh Bank								

Figure 7.1: Total Outstanding Loan

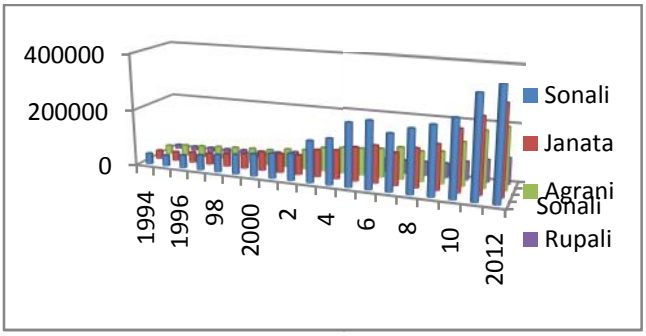
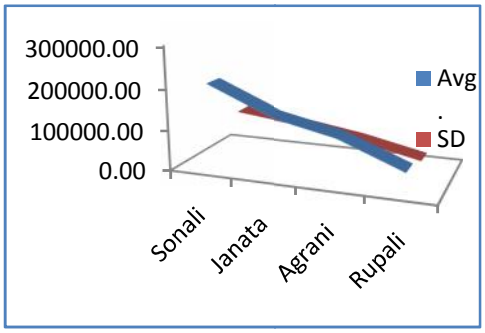


Figure 7.2: Avg. & SD of Total Outstanding Loan



Analysis & Findings: Table – 7.1 shows the total outstanding loan amount of SCBs in Bangladesh during 1994 to 2012. The average outstanding loan amount of Sonali Bank, Janata Bank, Agrani Bank and Rupali Bank were Tk.155354.74, Tk. 108101.40, Tk. 89111.27, and Tk. 39209.97 million respectively and the standard deviations were 105169.53, 77851.29, 50809.27, and 20928.39 respectively.

The coefficients of variations were 68 percent, 72 percent, 57 percent and 53 percent respectively. The table shows an increasing trend of outstanding loan in magnitude for all the SCBs in Bangladesh during the study period.

Table 7.2: Total Classified Loan of SCBs **(Tk. in Millions)**

Year	Sonali	Growth	Janata	Growth	Agrani	Growth	Rupali	Growth
1994	13626.50		6222.40		7098.60		5547.20	
1995	9446.40	-30.68	6494.30	4.37	9353.70	31.77	5865.30	5.73
1996	12599.10	33.37	8678.30	33.63	13165.40	40.75	4834.60	-17.57
1997	18354.50	45.68	9332.90	7.54	17246.90	31.00	4729.80	-2.17
1998	22569.70	22.97	14133.00	51.43	20864.30	20.97	6493.20	37.28
1999	31240.00	38.42	20760.00	46.89	25730.00	23.32	9350.00	44.00
2000	33870.00	8.42	21790.00	4.96	26380.00	2.53	10580.00	13.16
2001	30810.00	-9.03	22040.00	1.15	27140.00	2.88	14310.00	35.26
2002	35000.00	13.60	24050.00	9.12	30280.00	11.57	12650.00	-11.60
2003	10035.36	-71.33	10410.35	-56.71	11062.33	-63.47	5784.54	-54.27
2004	47579.48	374.12	17336.37	66.53	26920.62	143.35	7721.16	33.48
2005	51053.85	7.30	13535.47	-21.92	28143.60	4.54	7509.20	-2.75
2006	58826.00	15.22	17038.41	25.88	27816.95	-1.16	11354.56	51.21
2007	68594.03	16.60	19231.62	12.87	31788.87	14.28	18297.21	61.14
2008	72179.60	5.23	14630.10	-23.93	25489.30	-19.82	15342.50	-16.15
2009	69749.70	-3.37	13036.10	-10.90	23739.20	-6.87	10944.00	-28.67
2010	68238.50	-2.17	10585.90	-18.80	20845.60	-12.19	7902.60	-27.79
2011	61828.65	-0.09	14343.00	0.35	21488.48	0.03	4546.64	-0.42
2012	126225.48	1.04	52405.89	2.65	53801.28	1.50	22627.89	3.98
Avg.	44306.68	-0.65	16634.43	-0.68	23597.64	-0.56	9810.02	-0.57
SD	29723.23	-0.33	10154.52	-0.39	10281.74	-0.56	5012.37	-0.49
CV	61828.65	-0.09	14343	0.35	21488.48	0.03	4546.64	-0.42

Source: BRPD, Bangladesh Bank

Figure 7.3: Total Classified Loan

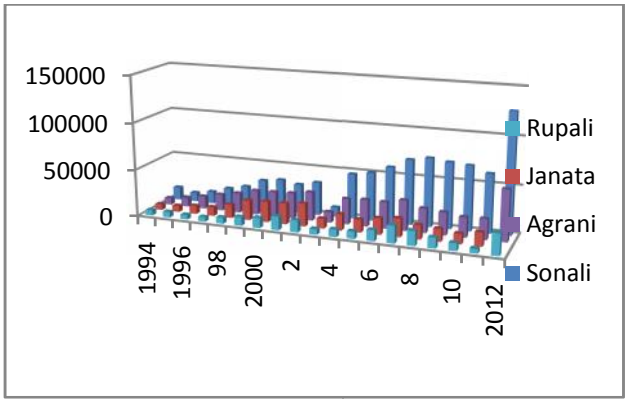
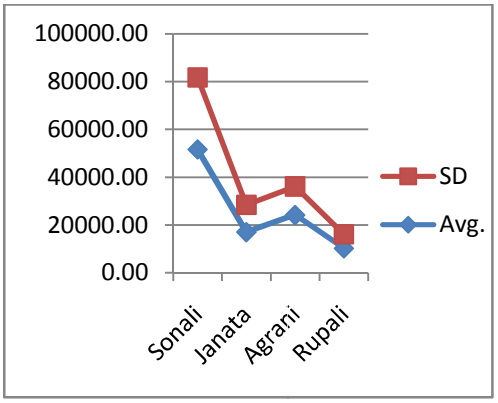


Figure 7.4: Avg. & SD of Total Classified Loan



Analysis & Findings: Table – 7.2 shows the total classified loan amount of SCBs in Bangladesh during 1994 to 2012. The average classified loan amount of Sonali Bank, Janata Bank, Agrani Bank and Rupali Bank were Tk. 44306.68 million, Tk. 16634.43million, Tk. 23597.64 million and Tk. 9810.02 million respectively and the standard deviations were -.33, -.39, -.56 and -.49 respectively. The coefficients of variations were -9 percent, 35 percent, 3 percent and -42 percent respectively. The table shows an increasing trend of classified loan amount for all the State Owned Commercial Banks (SCBs) in Bangladesh during the study period.

Table 7.3: Standard loan of the selected banks (Tk. in Millions)

Year	Sonali Bank	Growth Rate	Janata Bank	Growth Rate	Agrani Bank	Growth Rate	Rupali Bank	Growth Rate
2008	153048.51		126796.00		85530.36		33524.91	
2009	180050.68	0.18	151451.00	0.19	97004.64	0.13	41012.74	0.22
2010	213021.15	0.18	210268.00	0.39	139972.05	0.44	58016.81	0.41
2011	279663.37	0.31	231667.00	0.10	162911.13	0.16	71541.01	0.23
2012	245662.00	-0.12	247891.00	0.07	150512.97	-0.08	66125.60	-0.08
Avg.	214289.14	0.14	193614.60	0.19	127186.23	0.17	54044.21	0.20
SD	50453.79	0.18	52234.43	0.14	34022.13	0.21	16269.15	0.20
CV	0.24	1.34	0.27	0.76	0.27	1.28	0.30	1.02

Source: Annual Report, SCB's

Figure 7.5: Standard loan of the selected bank

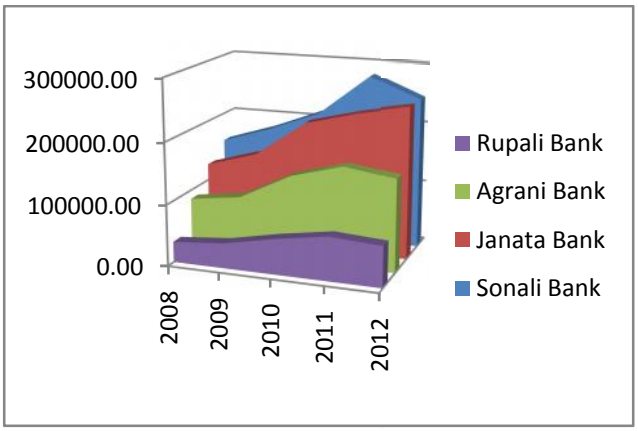
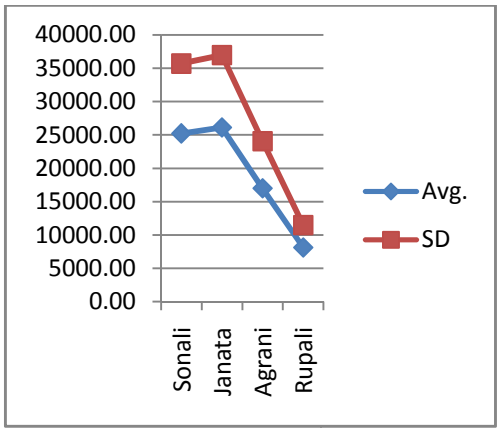


Figure 7.6: Avg. & SD of Standard loan



Analysis & Findings: In Table 7.3 and Figure 7.5, we see that every bank was improving to have more standard loans in their loan portfolios, i.e. a positive trend, but in the year 2012, all other SCBs experienced negative trends except, Janata Bank. Positive and stable growth in Standard loan indicates a good sign of improvement in credit management of banks where credit can be extended to the contribution of better lending risk analysis of loan proposals and supervision of loan recovery by bank officials.

Table 7.4 SMA loan of the selected banks

(Tk. in Millions)

Year	Sonali Bank	Growth Rate	Janata Bank	Growth Rate	Agrani Bank	Growth Rate	Rupali Bank	Growth Rate
2008	5371.68		2636.00		2342.72		162.73	
2009	4044.88	-0.25	871.00	-0.67	1492.17	-0.36	387.29	1.38
2010	4651.16	0.15	3637.00	3.18	2263.51	0.52	129.45	-0.67
2011	4487.15	-0.04	11094.00	2.05	9686.03	3.28	437.27	2.38
2012	6229.69	0.39	4245.00	-0.62	8348.78	-0.14	1888.07	3.32
Avg.	4956.91	0.06	4496.60	0.98	4826.64	0.82	600.96	1.60
SD	857.02	0.27	3903.03	1.94	3869.02	1.68	732.03	1.71
CV	0.17	4.22	0.87	1.97	0.80	2.04	1.22	1.07

Source: Annual Report, SCB's

Figure 7.7: SMA loan of the selected banks

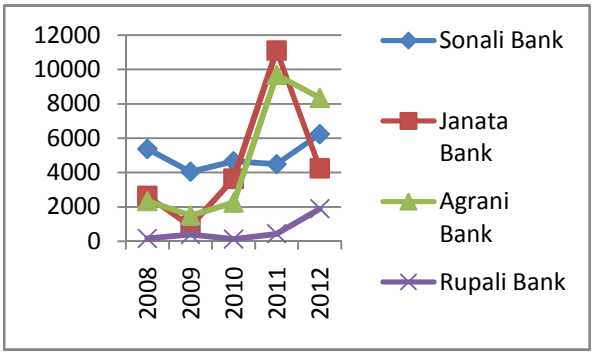
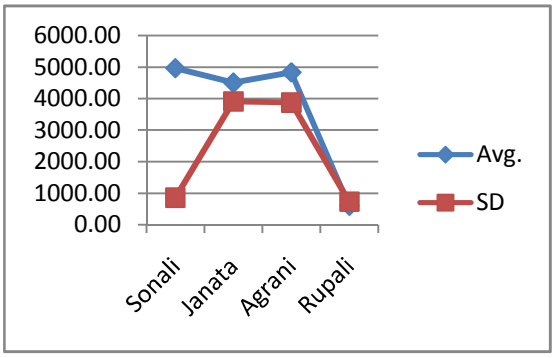


Figure 7.8: Avg. & SD of SMA loan



Analysis & Findings: Table 7.4 represents that Special Mention Account (SMA) loan of all banks started increasing from 2009. After 2011, Janata and Agrani Bank had experienced decrease in SMA loan while Sonali and Rupali still experienced an increasing trend in that area.

Table 7.5: Unclassified Loan & Advances

(Tk. in Millions)

Year	Sonali Bank	Growth Rate	Janata Bank	Growth Rate	Agrani Bank	Growth Rate	Rupali Bank	Growth Rate
2008	158420.19		129432.00		87873.08		33687.66	
2009	184095.57	0.16	152322.00	0.18	98496.60	0.12	41400.04	0.23
2010	68425.76	-0.63	213905.00	0.40	142235.50	0.44	58146.26	0.40
2011	284150.53	3.15	242761.00	0.13	172597.17	0.21	71978.28	0.24
2012	251891.69	-0.11	252137.00	0.04	158861.76	-0.08	68013.67	-0.06
Avg.	189396.75	0.64	198111.40	0.19	132012.82	0.17	54645.18	0.20
SD	84417.90	1.70	54715.90	0.15	37229.40	0.22	16628.75	0.19
CV	0.45	2.65	0.28	0.82	0.28	1.24	0.30	0.93

Source: Annual Report, SCBs

Figure 7.9 Unclassified Loan of the selected banks

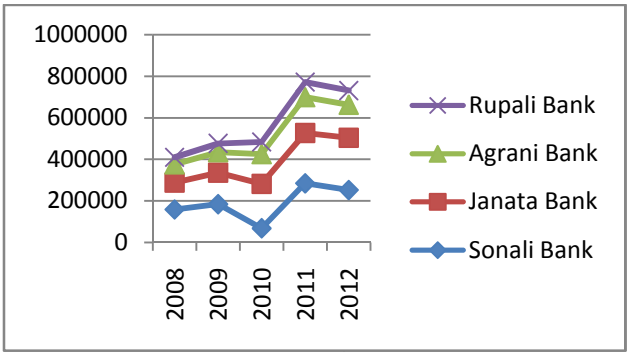
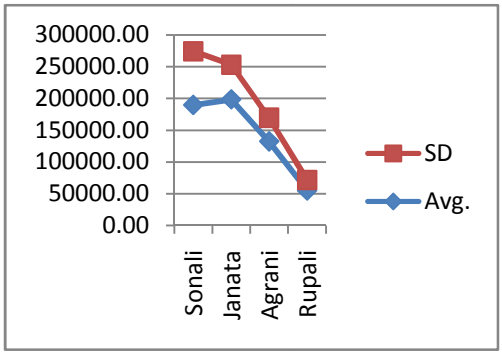


Figure 7.10: Avg. & SD of Unclassified loan



Analysis & Findings: According to Table 7.5 and Figure 7.9, total unclassified loans also show an increasing trend for all banks up to 2011 like SMA loan which reflects a very good sign. But after 2011, that started to decline in 2012 that has given the birth of tension again.

Table 7.6: Sub-standard Loan & Advances

(Tk. in Millions)

Year	Sonali Bank	Growth Rate	Janata Bank	Growth Rate	Agrani Bank	Growth Rate	Rupali Bank	Growth Rate
2008	4430.44		1643.00		1700.07		68.37	
2009	4246.67	-0.04	2046.00	0.25	1491.61	-0.12	66.13	-0.03
2010	4587.98	0.08	707.00	-0.65	2314.41	0.55	289.25	3.37
2011	2602.49	-0.43	2323.00	2.29	2095.63	-0.09	63.90	-0.78
2012	16181.40	5.22	12958.00	4.58	7119.46	2.40	2302.12	35.03
Avg.	6409.80	1.21	3935.40	1.61	2944.24	0.68	557.95	9.40
SD	5520.32	2.68	5080.71	2.33	2356.24	1.18	979.79	17.18
CV	0.86	2.23	1.29	1.44	0.80	1.73	1.76	1.83

Source: Annual Report, SCB's

Figure 7.11 Sub-standard Loan of the selected banks

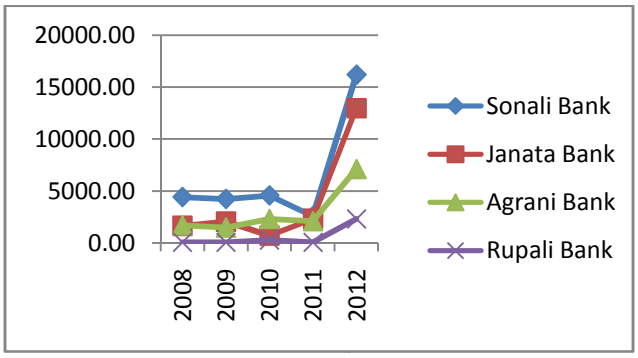
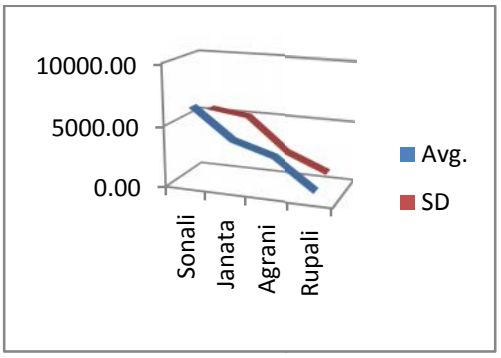


Figure 7.12: Avg. & SD of Sub-standard loan



Analysis & Findings: Table 7.6 and Figure 7.11 represent a poor picture of the banks in 2012 though the scenario was more or less stable up to 2011 but after that the Sub Standard loans of all SCBs started skyrocketing and Sonali Bank Ltd. was the leader in that race.

Table 7.7: Doubtful Loan & Advances

(Tk. in Millions)

Year	Sonali Bank	Growth Rate	Janata Bank	Growth Rate	Agrani Bank	Growth Rate	Rupali Bank	Growth Rate
2008	7092.07		1293.00		1065.52		40.94	
2009	5111.09	-0.28	1128.00	-0.13	1612.74	0.51	21.74	-0.47
2010	2004.46	-0.61	1086.00	-0.04	1330.57	-0.17	24.10	0.11
2011	5400.42	1.69	1825.00	0.68	2380.24	0.79	46.65	0.94
2012	10016.50	0.85	8081.00	3.43	9188.24	2.86	1731.46	36.12
Avg.	5924.91	0.42	2682.60	0.99	3115.46	1.00	372.98	9.17
SD	2933.03	1.06	3032.12	1.67	3430.21	1.31	759.49	17.97
CV	0.50	2.55	1.13	1.69	1.10	1.31	2.04	1.96

Source: Annual Report, SCB's

Figure 7.13 Doubtful Loan of the selected banks

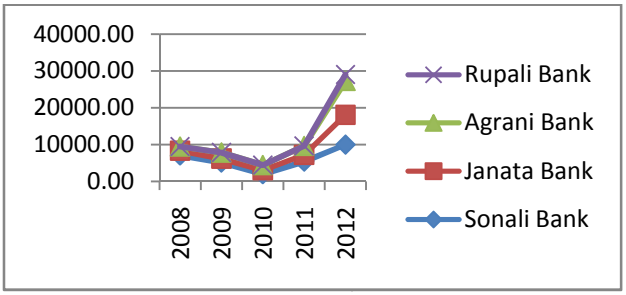
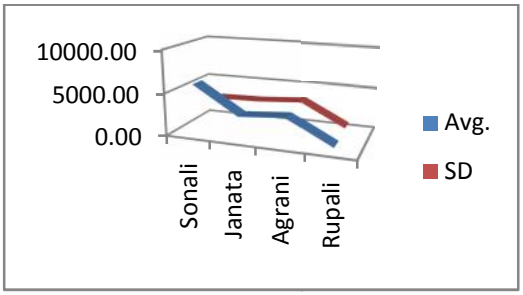


Figure 7.14: Avg. & SD of Doubtful loan



Analysis & Findings: The fact of Doubtful loan was almost the same as the Sub Standard loans. For each SCBs that was good up to 2010, after that it suddenly jumped sharply in the year 2012 which has been shown in Table 7.7 and in Figure 7.13. This sort of outlying abnormal flash of doubtful debt indicate a possibility of drainage of money from the targeted productive sectors to other nonproductive sectors inside the country or abroad which is a matter of investigation and monitoring.

Table 7.8: Bad/Loss Loan & Advances

(Tk. in Millions)

Year	Sonali Bank	Growth Rate	Janata Bank	Growth Rate	Agrani Bank	Growth Rate	Rupali Bank	Growth Rate
2008	61223.87		12310.00		22723.60		15233.06	
2009	60569.17	-0.01	10863.00	-0.12	20634.92	-0.09	10856.26	-0.29
2010	61833.30	0.02	10034.00	-0.08	17375.64	-0.16	7589.35	-0.30
2011	53837.88	-0.13	10892.00	0.09	17012.59	-0.02	4436.10	-0.42
2012	100057.46	0.86	32161.00	1.95	37493.53	219.39	18594.31	3.19
Avg.	67504.34	0.18	15252.00	0.46	765419.95	54.78	11341.82	0.55
SD	18480.93	0.45	9487.76	1.00	1668070.96	109.74	5695.31	1.76
CV	0.27	2.45	0.62	2.17	2.18	2.00	0.50	3.23

Source: Annual Report, SCB's

Figure 7.15 Bad/Loss Loan of the selected banks

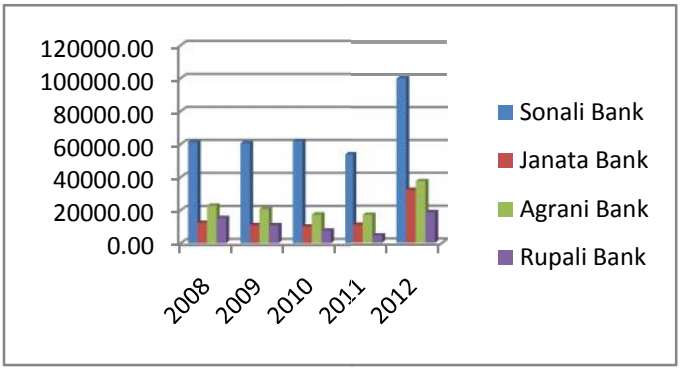
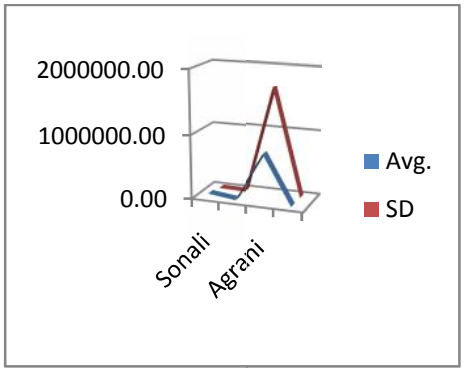


Figure 7.16: Avg. & SD of Bad/Loss loan



Analysis & Findings: Table 7.8 and Figure 7.15 show that Bad /Loss loans were steady with a declining trend up to the year 2011 but after that this escalated sharply in all the SCBs in 2012. This also deserves an in-depth inquiry like the Doubtful loan as Bad/Loss loan are the root causes of declining the profitability of banks and ultimately their sustainability as market forces in the industry.

Table 7.9: Reserve Position of the Selected Banks

(Tk. in Millions)

Year	Sonali Bank	Growth Rates	Janata Bank	Growth Rates	Agrani Bank	Growth Rates	Rupali Bank	Growth Rates
2008	112779.72		12490.95		29512.00		15651.90	
2009	134537.25	0.19	12920.12	0.03	41468.18	0.41	18188.05	0.16
2010	124820.18	-0.07	16021.05	0.24	41514.93	0.00	16500.13	-0.09
2011	145612.80	0.17	106773.21	5.66	93370.40	1.25	27845.92	0.69
2012	158224.95	0.09	122350.39	0.15	112125.81	0.20	31953.60	0.15
Avg.	135194.98	0.09	54111.14	1.52	63598.26	0.46	22027.92	0.23
SD	17673.59	0.12	55474.51	2.76	36676.25	0.55	7387.88	0.33
CV	0.13	1.28	1.03	1.82	0.58	1.18	0.34	1.46

Source: Annual Report, SCB's

Figure 7.17: Reserve Position of the selected banks

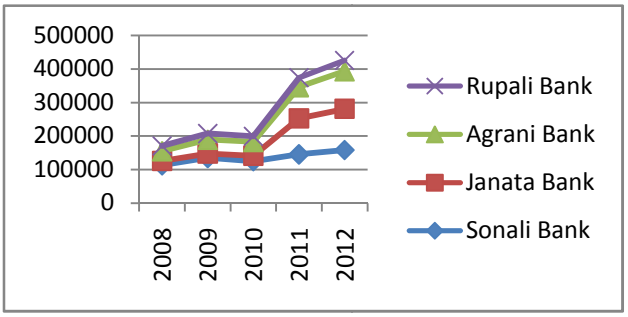
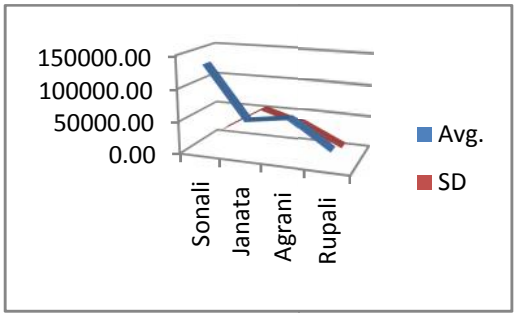


Figure 7.18: Avg. & SD of Reserve



Analysis & Findings: Table 7.9 and Figure 7.17 represent that reserve positions of all SCBs were increasing at normal rate since 2008. This indicates a healthy growth of the size of capital and meets up the CAR of the banks.

Table 7.10: Cash Position of the Selected Banks

(Tk. in Millions)

Year	Sonali Bank	Growth Rates	Janata Bank	Growth Rates	Agrani Bank	Growth Rates	Rupali Bank	Growth Rates
2008	20641.6		16527.17		8663.29		6608.2	
2009	28415.1	0.38	16531.85	0.00	9536.3	0.10	5286.4	-0.20
2010	33230.63	0.17	17597.6	0.06	13016.65	0.36	7542.64	0.43
2011	65634.77	0.98	24115.27	0.37	18975.9	0.46	7378.7	-0.02
2012	41690.26	-0.36	31814.34	0.32	20738.21	0.09	11290.53	0.53
Avg.	37922.47	0.29	21317.25	0.19	14186.07	0.25	7621.29	0.18
SD	17271.36	0.55	6665.18	0.18	5462.65	0.19	2236.43	0.35
CV	0.46	1.92	0.31	0.97	0.39	0.73	0.29	1.91

Source: Annual Report, SCB's

Figure 7.19: Cash Position of the selected banks

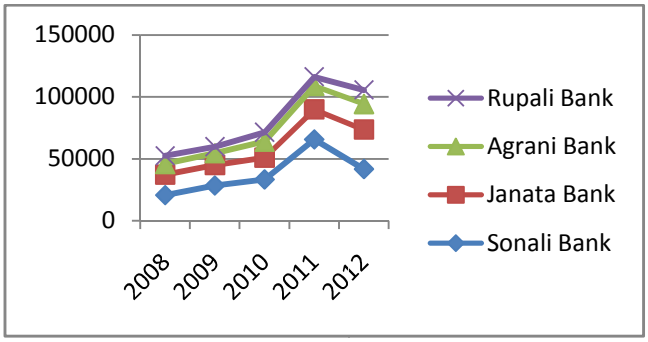
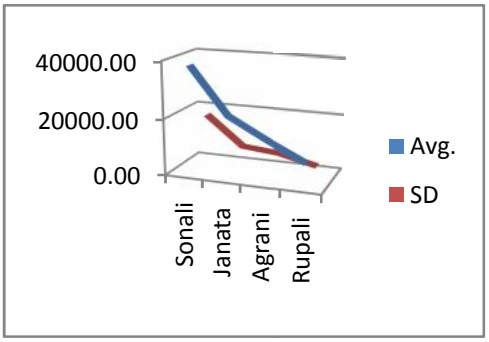


Figure 7.20: Avg. & SD of Cash



Analysis & Findings: Table – 7.10 and Figure – 7.19 represent an upward picture of the selected banks in respect to holding cash up to 2012, except the case of Sonali Bank which faced a sudden fall in its cash holding in 2012. This was also an alarming and unique situation.

Table 7.11: Deposit Positions of the Selected Banks (Tk. in Millions)

Year	Sonali Bank	Growth Rates	Janata Bank	Growth Rates	Agrani Bank	Growth Rates	Rupali Bank	Growth Rates
2008	364385.97		221335.75		146814.62		70287.57	
2009	406151.56	0.11	246175.05	0.11	166283.62	0.13	72989.15	0.04
2010	478134.08	0.18	286566.89	0.16	206326.01	0.24	89827.07	0.23
2011	533123.03	0.12	361676.69	0.26	251702.79	0.22	107233.95	0.19
2012	599207.73	0.12	409767.01	0.13	291645.45	0.16	136598.77	0.27
Avg.	476200.47	0.13	305104.28	0.17	212554.50	0.19	95387.30	0.18
SD	94583.34	0.03	79038.25	0.07	59769.32	0.05	27392.14	0.10
CV	0.20	0.23	0.26	0.40	0.28	0.27	0.29	0.56

Source: Annual Report, SCB's

Figure 7.21*:* Deposit Positions of the selected banks

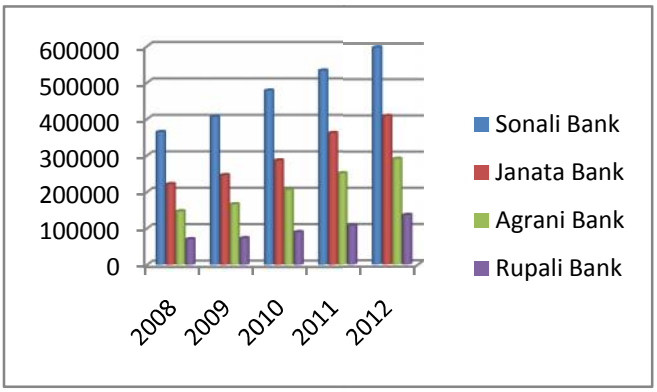
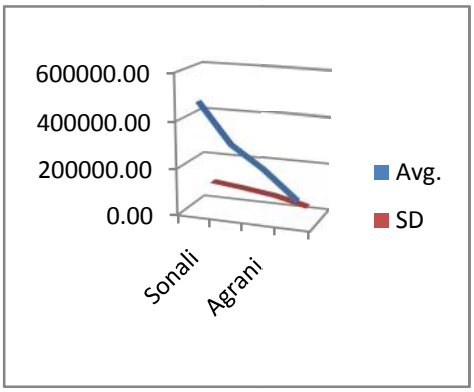


Figure 7.22: Avg. & SD of Deposit



Analysis & Findings: In terms of collecting deposits, the growth rate is very positive for all SCBs. Deposits have increased satisfactorily over the years under study which indicates a sign of good performance in mobilizing savings of the economy. In this case Sonali Bank was also ahead of others as shown in Table-7.11 and Figure-7.21.

Table 7.12: Investment Positions of the Selected Banks

(Tk. in Millions)

Year	Sonali Bank	Growth Rates	Janata Bank	Growth Rates	Agrani Bank	Growth Rates	Rupali Bank	Growth Rates
2008	95093.24		57823.52		29329.78		12545.72	
2009	113479.96	0.19	72533.2	0.25	40897.18	0.39	14303.0	0.14
2010	111745.09	-0.02	57514	-0.21	43916.29	0.07	15717.19	0.10
2011	132089.16	0.18	95257.29	0.66	88279.9	1.01	23611.15	0.50
2012	147018.99	0.11	108342.04	0.14	96590.99	0.09	26572.25	0.13
Avg.	119885.29	0.12	78294.01	0.21	59802.83	0.39	18549.86	0.22
SD	20044.38	0.10	22774.29	0.36	30425.01	0.44	6166.14	0.19
CV	0.17	0.81	0.29	1.69	0.51	1.11	0.33	0.88

Source: Annual Report, SCB's

Figure 7.23*:* Investment Positions of the selected banks

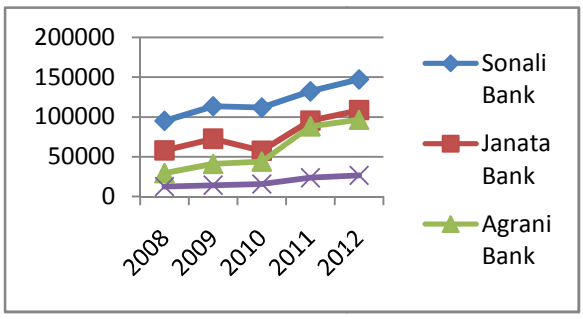
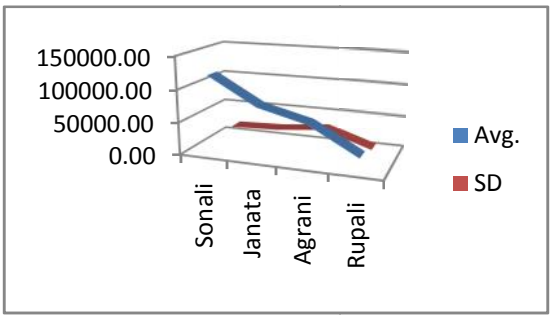


Figure 7.24: Avg. & SD of Investments



Analysis & Findings: The investments of all types of selected banks also show a positive trend during the covered period. In the year 2010 that was a little bit negative but after that it again started regaining (shown in Table 7.12).

Table 7.13: Borrowing Positions of the Selected Banks

(Tk. in Millions)

Year	Sonali Bank	Growth Rates	Janata Bank	Growth Rates	Agrani Bank	Growth Rates	Rupali Bank	Growth Rates
2008	545.95		0.59		2105.91		23.3	
2009	60.12	-0.89	31.57	52.51	1192.7	-0.43	337.21	13.47
2010	26.38	-0.56	50.49	0.60	6216.82	4.21	269.5	-0.20
2011	2096.26	78.46	167.52	2.32	25758.15	3.14	1604.97	4.96
2012	9994.3	3.77	11310.48	66.52	10074.39	-0.61	2138.97	0.33
Avg.	2544.60	20.20	2312.13	30.49	9069.59	1.58	874.79	4.64
SD	4248.76	38.90	5030.63	34.01	9977.40	2.46	936.98	6.33
CV	1.67	1.93	2.18	1.12	1.10	1.56	1.07	1.36

Source: Annual Report, SCB's

Figure 7.25: Borrowing Positions of the selected banks

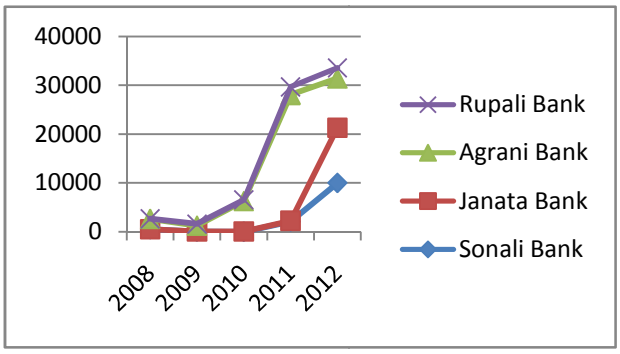
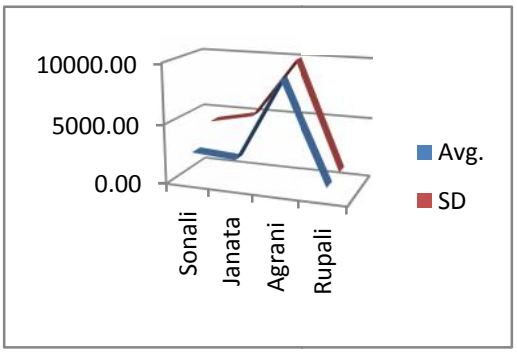


Figure 7.26: Avg. & SD of Borrowing



Analysis & Findings: Table 7.13 and Figure 7.25 depict that borrowing swept at increasing rate throughout the years of study.

Table 7.14: Loan & Advances Position of the Selected Banks

(Tk. in Millions)

Year	Sonali Bank	Growth Rates	Janata Bank	Growth Rates	Agrani Bank	Growth Rates	Rupali Bank	Growth Rates
2008	231166.58		144678.18		113362.26		49030.03	
2009	254022.5	0.10	166359.49	0.15	122236.08	0.08	52344.17	0.07
2010	286098.07	0.13	225732.21	0.36	163256.18	0.34	66048.97	0.26
2011	348091.75	0.22	257801.03	0.14	193805.31	0.19	76524.92	0.16
2012	380670.70	0.09	305339.58	0.18	211089.47	0.09	90718.31	0.19
Avg.	300009.92	0.13	219982.10	0.21	160749.86	0.17	66933.28	0.17
SD	62979.78	0.06	65755.80	0.10	42900.81	0.12	17261.79	0.08
CV	0.21	0.43	0.30	0.48	0.27	0.69	0.26	0.48

Source: Annual Report, SCB's

Figure 7.27: Loan & Adv. Position of the selected banks

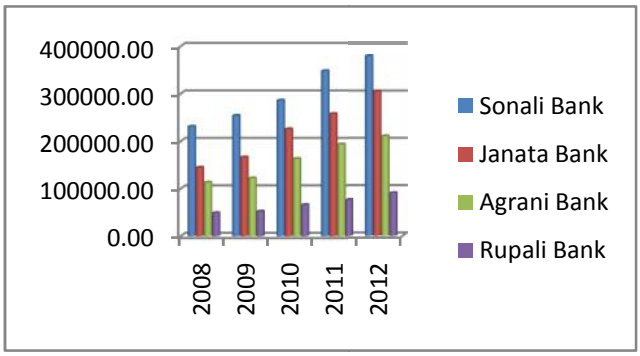
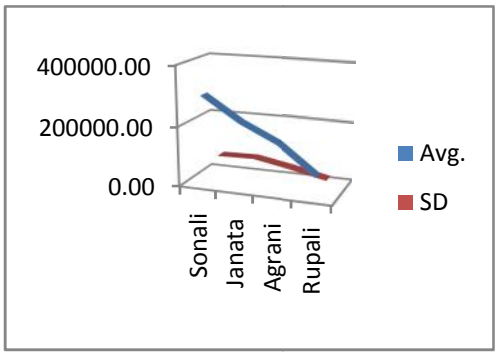


Figure 7.28: Avg. & SD of Loan & Adv.



Analysis & Findings: Table- 7.14 and Figure- 7.27 depict that the magnitude of Loans and Advances of all SCBs also increased during the covered period. The volume of loans and advances of Sonali bank was ahead of other selected banks, but the growth rate in this category was higher in the other three SCBs.

Table 7.15: Net Income of the Selected Banks

(Tk. in Millions)

Year	Sonali Bank	Growth Rates	Janata Bank	Growth Rates	Agrani Bank	Growth Rates	Rupali Bank	Growth Rates
2008	2311.11		3145.38		2646.22		874.09	
2009	1536.77	-0.34	2804.25	-0.11	1355.52	-0.49	1668.49	0.91
2010	-974.51	-1.63	4907.97	0.75	3516.77	1.59	600.29	-0.64
2011	9981.95	-11.24	4214.54	-0.14	1607.69	-0.54	1090.51	0.82
2012	-31554.09	-4.16	16221.22	2.85	-18697.7	-12.63	1215.65	0.11
Avg.	-3739.75	-4.34	6258.67	0.84	-1914.30	-3.02	1089.81	0.30
SD	16078.12	4.87	5632.07	1.40	9421.70	6.49	399.02	0.72
CV	-4.30	-1.12	0.90	1.68	-4.92	-2.15	0.37	2.40

Source: Annual Report, SCB's

Figure 7.29: Net Income of the selected banks

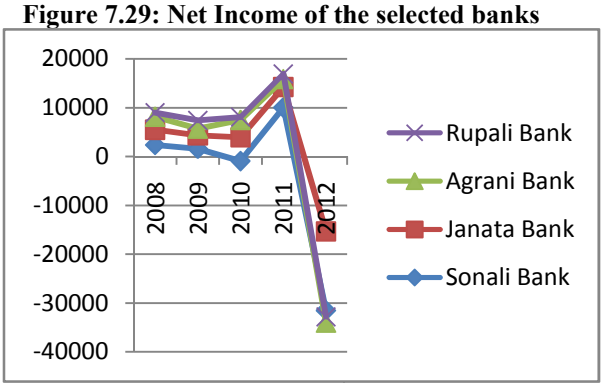
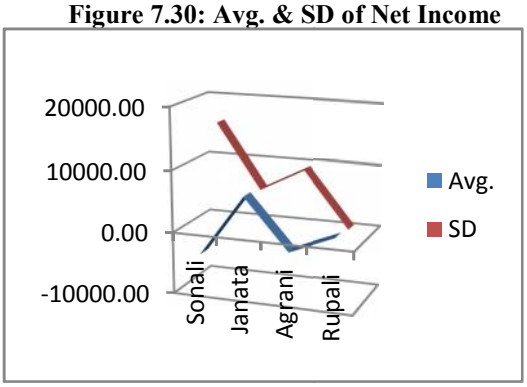


Figure 7.30: Avg. & SD of Net Income



Analysis & Findings: Table 7.15 and Figure 7.29 represent that the net income of the selected banks were volatile during the whole period of study. In year 2011 all banks earned profit but in 2012, Janata and Rupali earned very handsome profit but Sonali and Agrani

experienced huge losses due to swindling of huge fund by some big but influential borrowers from these two banks as has been unearthed by the law enforcing agencies of the country and now under judiciary process.

Table 7.16: Interest income of the Selected Banks (Tk. in Millions)

Year	Sonali Bank	Growth Rates	Janata Bank	Growth Rates	Agrani Bank	Growth Rates	Rupali Bank	Growth Rates
2008	13101.86		12953.19		9547.81		4090.58	
2009	17683.10	0.35	14867.96	0.15	10122.41	0.06	4978.54	0.22
2010	22841.41	0.29	19027.54	0.28	13997.62	0.38	5552.62	0.12
2011	28092.05	0.23	26335.63	0.38	22434.67	0.60	9382.33	0.69
2012	30693.16	0.09	34219.02	0.30	23894.79	0.07	11727.49	0.25
Avg.	22482.32	0.24	21480.67	0.28	15999.46	0.28	7146.31	0.32
SD	7246.40	0.11	8779.24	0.10	6780.84	0.26	3262.04	0.25
CV	0.32	0.46	0.41	0.35	0.42	0.95	0.46	0.80

Source: Annual Report, SCB's

Figure 7.31: Interest Income of the selected banks

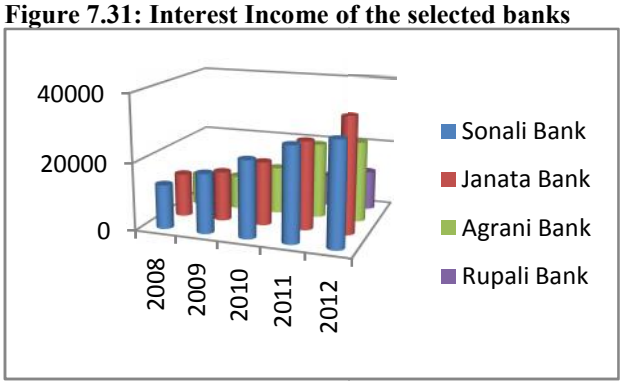
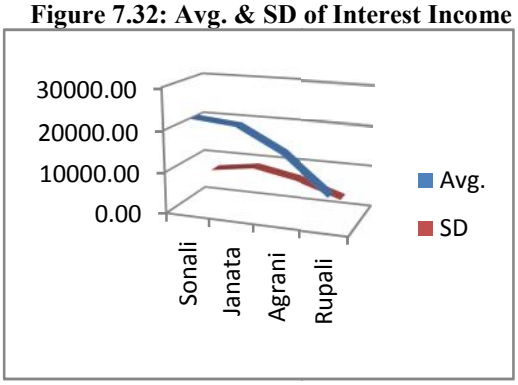


Figure 7.32: Avg. & SD of Interest Income



Analysis & Findings: Table 7.16 tells that the Interest incomes of all the selected banks reflected a steady growth during the covered period. All the SCBs had the close rate of growth in interest income during this period.

Table 7.17: Net Interest income of the Selected Banks

(Tk. in Millions)

Year	Sonali Bank	Growth Rates	Janata Bank	Growth Rates	Agrani Bank	Growth Rates	Rupali Bank	Growth Rates
2008	-864.07		3646.70		4306.35		1010.07	
2009	1883.08	-3.18	4490.98	0.23	4038.85	-0.06	1739.78	0.72
2010	3709.61	0.97	7067.21	0.57	6910.94	0.71	2088.80	0.20
2011	5676.29	0.53	8547.32	0.21	10468.68	0.51	4218.40	1.02
2012	-2272.92	-1.40	6717.54	-0.21	3982.74	-0.62	3034.71	-0.28
Avg.	1626.40	-0.77	6093.95	0.20	5941.51	0.14	2418.35	0.42
SD	3248.63	1.91	1994.60	0.32	2809.17	0.60	1242.22	0.57
CV	2.00	-2.48	0.33	1.61	0.47	4.42	0.51	1.38

Source: Annual Report, SCB's

Figure 7.33: Net interest Income of the selected banks

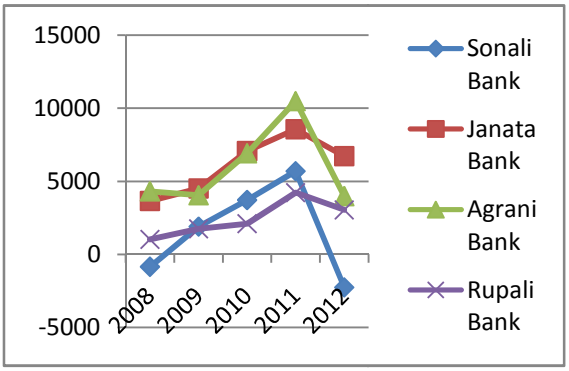
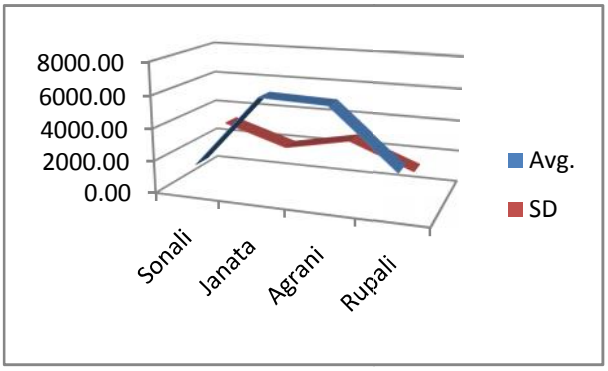


Figure 7.34: Avg. & SD of Net interest Income



Analysis & Findings: Table 7.17 and Figure 7.33 show that the net interest income of the SCBs increased up to 2011 which contributed positively in the overall profitability of each bank during this period. But in 2012, all banks experienced sudden decline in net interest income inflicting the aggregate performance of these banks and Sonali bank was the worst performer in the race.

Table 7.18: Interest Expenses of the Selected Banks

(Tk. in Millions)

Year	Sonali Bank	Growth Rates	Janata Bank	Growth Rates	Agrani Bank	Growth Rates	Rupali Bank	Growth Rates
2008	13965.93		9306.5		5241.45		3080.51	
2009	15800.03	0.13	10376.98	0.12	6083.55	0.16	2338.75	-0.24
2010	19131.79	0.21	11906.33	0.15	7086.68	0.16	3463.82	0.48
2011	22415.76	0.17	17788.31	0.49	11965.99	0.69	5163.92	0.49
2012	32966.09	0.47	27501.48	0.55	19912.05	0.66	8692.77	0.68
Avg.	20855.92	0.25	15375.92	0.33	10057.94	0.42	4547.95	0.35
SD	7501.60	0.15	7528.51	0.23	6094.40	0.30	2538.12	0.41
CV	0.36	0.62	0.49	0.69	0.61	0.71	0.56	1.15

Source: Annual Report, SCB's

Figure 7.35: Interest Expense of the selected banks

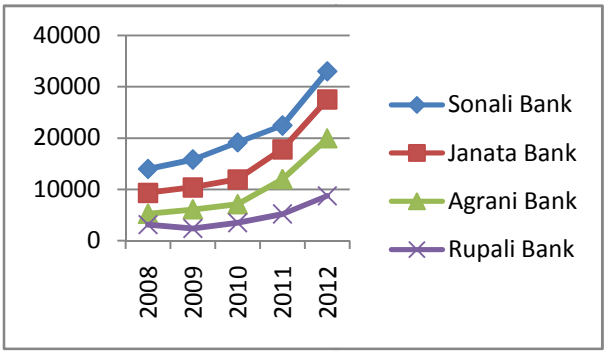
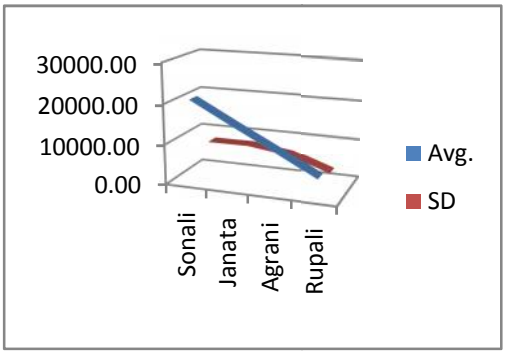


Figure 7.36: Avg. & SD of Interest Expense



Analysis & Findings: Table 7.18 tells that the Interest Expense of all the selected banks also increased during the covered period. The size of interest expense of Sonali bank was always higher than other banks in terms of size as its volume of deposits was also larger than other three banks under study.

Table 7.19: Total Operating Income of the Selected Banks

(Tk. in Millions)

Year	Sonali Bank	Growth Rates	Janata Bank	Growth Rates	Agrani Bank	Growth Rates	Rupali Bank	Growth Rates
2008	12655.13		11615.55		9739.26		2769.2	
2009	16765.92	0.32	13697.13	0.18	10283.47	0.06	4020.99	0.45
2010	20588.35	0.23	18653.6	0.36	16930.21	0.65	4789.82	0.19
2011	23714.98	0.15	23084.21	0.24	21046.66	0.24	7298.31	0.52
2012	22620.41	-0.05	22264.33	-0.04	17090.41	-0.19	6729.44	-0.08
Avg.	19268.96	0.16	17862.96	0.19	15018.00	0.19	5121.55	0.27
SD	4548.30	0.16	5090.26	0.17	4862.54	0.35	1882.71	0.27
CV	0.24	0.96	0.28	0.89	0.32	1.86	0.37	1.01

Source: Annual Report, SCB's

Figure 7.37: Operating Income of the selected banks

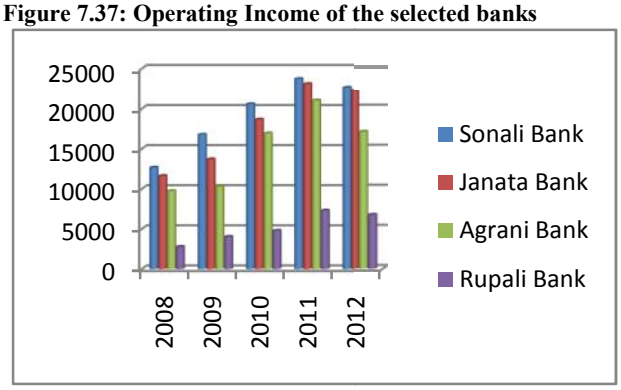
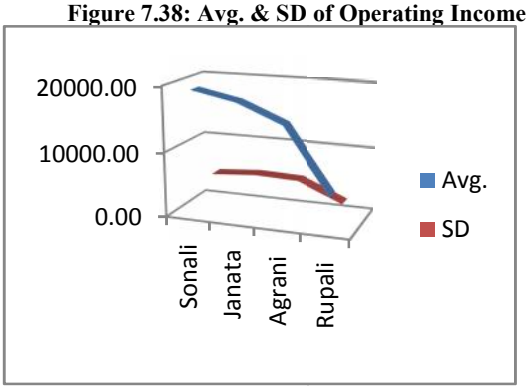


Figure 7.38: Avg. & SD of Operating Income



Analysis & Findings: Table – 7.19 and Figure – 7.37 represent that the operating income of all banks were increasing upto 2011 but in 2012, all banks experienced decline in operating income.

Table 7.20: Total Operating Expenditure of the Selected Banks

(Tk. in Millions)

Year	Sonali Bank	Growth Rates	Janata Bank	Growth Rates	Agrani Bank	Growth Rates	Rupali Bank	Growth Rates
2008	11038.25		4612.48		3409.53		1624.11	
2009	14455.45	0.31	5119.00	0.11	3839.03	0.13	1922.28	0.18
2010	8488.19	-0.41	6617.19	0.29	6068.18	0.58	2342.96	0.22
2011	12477.73	0.47	7224.19	0.09	6304.06	0.04	3694.74	0.58
2012	11063.51	-0.11	7572.88	0.05	7023.04	0.11	3054.86	-0.17
Avg.	11504.63	0.06	6229.15	0.14	5328.77	0.21	2527.79	0.20
SD	2188.91	0.40	1303.11	0.11	1602.44	0.25	845.14	0.31
CV	0.19	6.34	0.21	0.80	0.30	1.15	0.33	1.52

Source: Annual Report, SCB's

Figure 7.39: Operating Expenditures of the selected banks

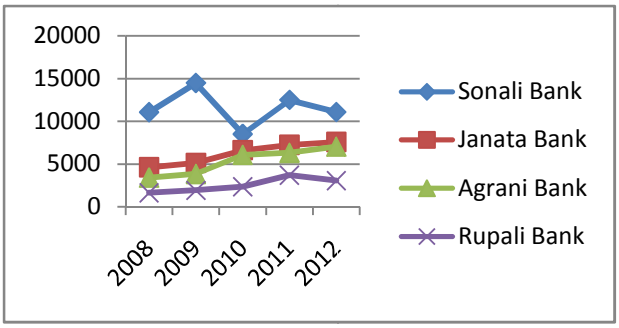
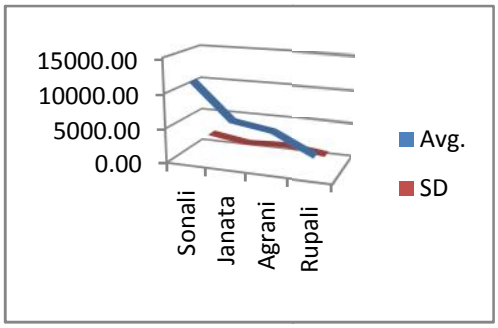


Figure 7.40: Avg. & SD of Operating Expenditures



Analysis & Findings: From the Table- 7.20 and Figure- 7.39, we get that operating expenditures of all SCBs were also moving in steady rate over time.

7.3 Data Presentation and Analysis of Individual State Owned Banks(SCBs)

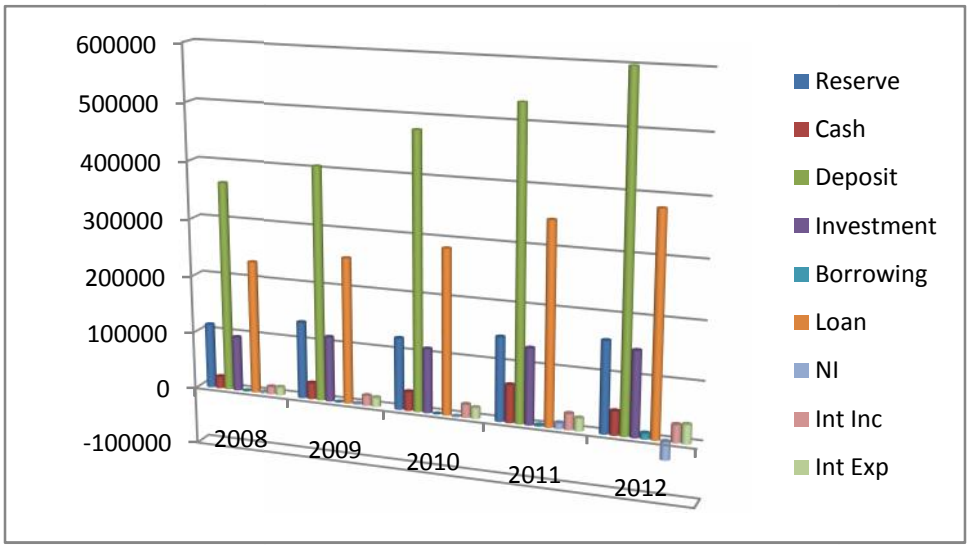
Table 7.21 Reserve, Cash, Deposit, Investment, Borrowing, Loan, NI, Interest Income and Interest Expense of Sonali Bank

(Tk. in Millions)

Year	Reserve	Cash	Deposit	Investment	Borrowing	Loan	NI	Int Inc	Int Exp
2008	112779.72	20641.6	364385.97	95093.24	545.95	231166.58	2311.11	13101.86	13965.93
2009	134537.25	28415.1	406151.56	113479.96	60.12	254022.5	1536.77	17683.1	15800.03
2010	124820.18	33230.63	478134.08	111745.09	26.38	286098.07	-974.51	22841.41	19131.79
2011	145612.8	65634.77	533123.03	132089.16	2096.26	348091.75	9981.95	28092.05	22415.76
2012	158224.95	41690.26	599207.73	147018.99	9994.3	380670.7	31554.09	30693.16	32966.09

Source: Annual Report, SCB's

Figure 7.41 Different aspects of Sonali Bank



Analysis & Findings: Table - 7.21 and Figure 7.41 represent reserve, cash position, deposit, investment, borrowing, loan, net income, interest income and interest expense of Sonali Bank. From there we see that almost everything increased over the years except net income, which went negative in 2012.

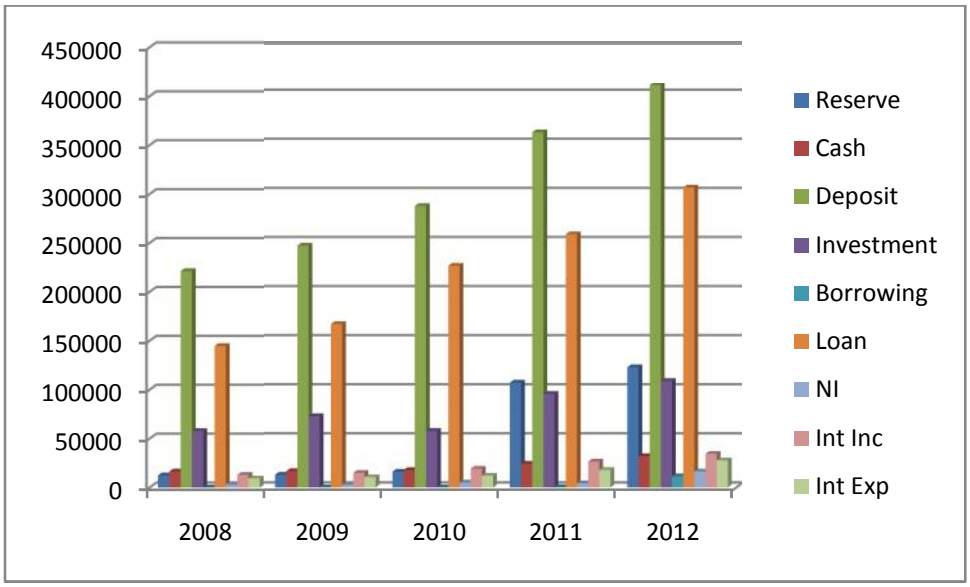
Table 7.22 Reserve, Cash, Deposit, Investment, Borrowing, Loan, NI, Interest Income and Interest Expense of Janata Bank

(Tk. in Millions)

Year	Reserve	Cash	Deposit	Investment	Borrowing	Loan	NI	Int Inc	Int Exp
2008	12490.95	16527.17	221335.75	57823.52	0.59	144678.18	3145.38	12953.19	9306.50
2009	12920.12	16531.85	246175.05	72533.20	31.57	166359.49	2804.25	14867.96	10376.98
2010	16021.05	17597.60	286566.89	57514.00	50.49	225732.21	4907.97	19027.54	11906.33
2011	106773.21	24115.27	361676.69	95257.29	167.52	257801.03	4214.54	26335.63	17788.31
2012	122350.39	31814.34	409767.01	108342.04	11310.48	305339.58	16221.22	34219.02	27501.48

Source: Annual Report, SCB's

Figure 7.42 Different aspects of Janata Bank



Analysis & Findings: Table - 7.22 and Figure 7.42 represent reserve, cash position, deposit, investment, borrowing, loan, net income, interest income and interest expense of Janata Bank. From there we see that almost everything increased over the years. In this case, all on a sudden, the net income of the bank increased sharply approximately four times from 2011 to 2012.

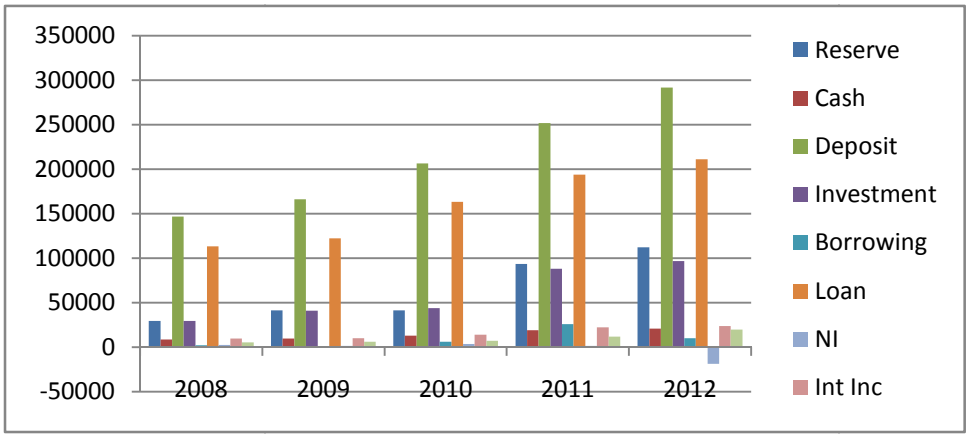
Table 7.23 Reserve, Cash, Deposit, Investment, Borrowing, Loan, NI, Interest Income and Interest Expense of Agrani Bank

(Tk. in Millions)

Year	Reserve	Cash	Deposit	Investment	Borrowing	Loan	NI	Int Inc	Int Exp
2008	29512.00	8663.29	146814.62	29329.78	2105.91	113362.26	2646.22	9547.81	5241.45
2009	41468.18	9536.3	166283.62	40897.18	1192.70	122236.08	1355.52	10122.41	6083.55
2010	41514.93	13016.65	206326.01	43916.29	6216.82	163256.18	3516.77	13997.62	7086.68
2011	93370.40	18975.9	251702.79	88279.9	25758.15	193805.31	1607.69	22434.67	11965.99
2012	112125.81	20738.21	291645.45	96590.99	10074.39	211089.47	-8697.7	23894.79	19912.05

Source: Annual Report, SCB's

Figure 7.43 Different aspects of Agrani Bank



Analysis & Findings: Table - 7.23 and Figure 7.43 represent reserve, cash position, deposit, investment, borrowing, loan, net income, interest income and interest expense of Agrani Bank. From there we see that almost everything was increasing over the years except net income that went negative in 2012.

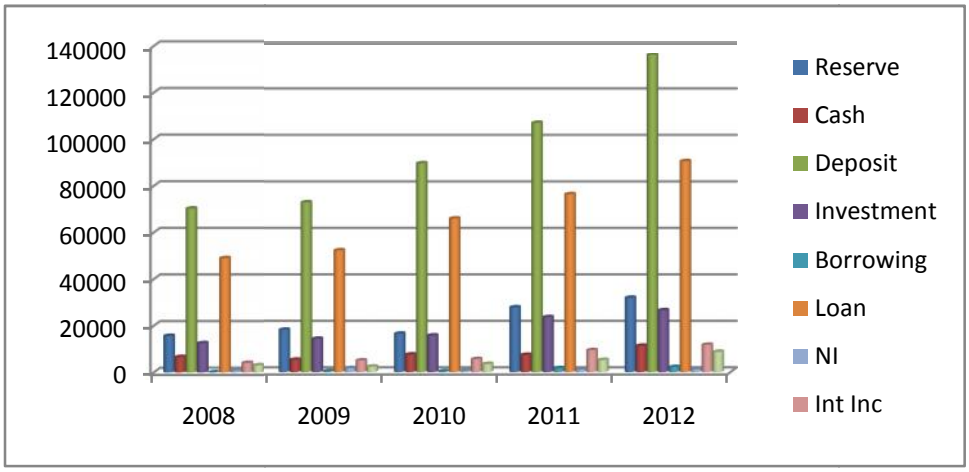
Table 7.24 Reserve, Cash, Deposit, Investment, Borrowing, Loan, NI, Interest Income and Interest Expense of Rupali Bank

(Tk. in Millions)

Year	Reserve	Cash	Deposit	Investment	Borrowing	Loan	NI	Int Inc	Int Exp
2008	15651.9	6608.2	70287.57	12545.72	23.3	49030.03	874.09	4090.58	3080.51
2009	18188.05	5286.4	72989.15	14303.00	337.21	52344.17	1668.49	4978.54	2338.75
2010	16500.13	7542.64	89827.07	15717.19	269.5	66048.97	600.29	5552.62	3463.82
2011	27845.92	7378.7	107233.95	23611.15	1604.97	76524.92	1090.51	9382.33	5163.92
2012	31953.6	11290.53	136598.77	26572.25	2138.97	90718.31	1215.65	11727.49	8692.77

Source: Annual Report, SCB's

Figure 7.44 Different aspects of Rupali Bank



Analysis & Findings: Table - 7.24 and Figure 7.44 represent reserve, cash position, deposit, investment, borrowing, loan, net income, interest income, and interest expense of Rupali Bank. From there we see that almost everything increased over the years except net income, which remained stable over the period.

7.4 Bank Wise Loan Classification Status

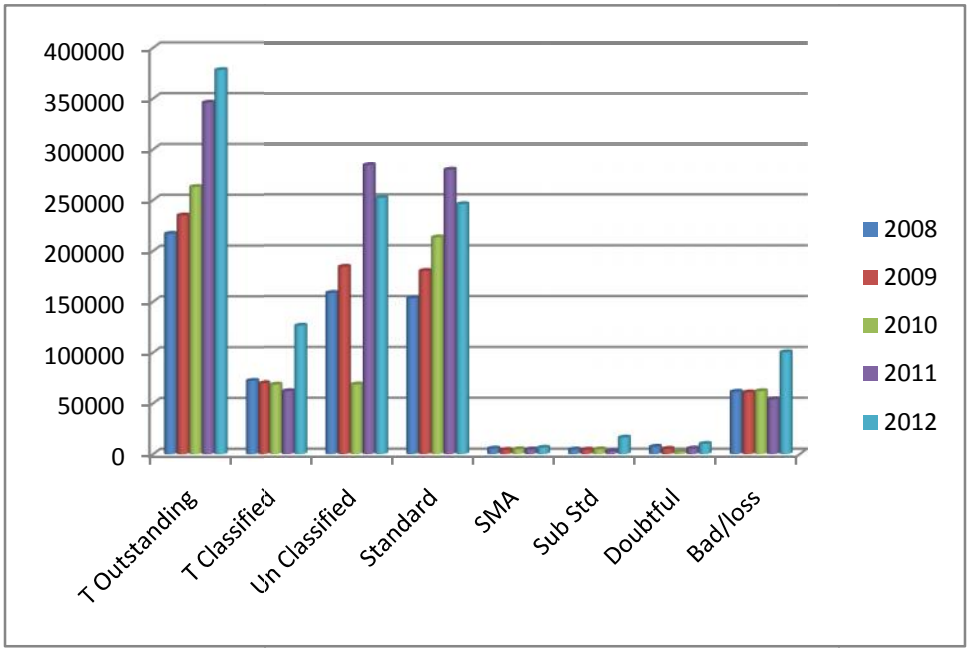
Table 7.25 Loan Classification of Sonali Bank

(Tk. in Millions)

Year	Outstanding	Classified	Un Classified	Standard	SMA	Sub Std	Doubtful	Bad/loss
2008	216859.00	72179.60	158420.19	153048.51	5371.68	4430.44	7092.07	61223.87
2009	234943.20	69749.70	184095.57	180050.68	4044.88	4246.67	5111.09	60569.17
2010	263006.20	68238.50	68425.76	213021.15	4651.16	4587.98	2004.46	61833.30
2011	345991.34	61828.65	284150.53	279663.37	4487.15	2602.49	5400.42	53837.88
2012	378147.06	126225.48	251891.69	245662.00	6229.69	16181.40	10016.50	100057.46

Source: Annual Report, SCB's

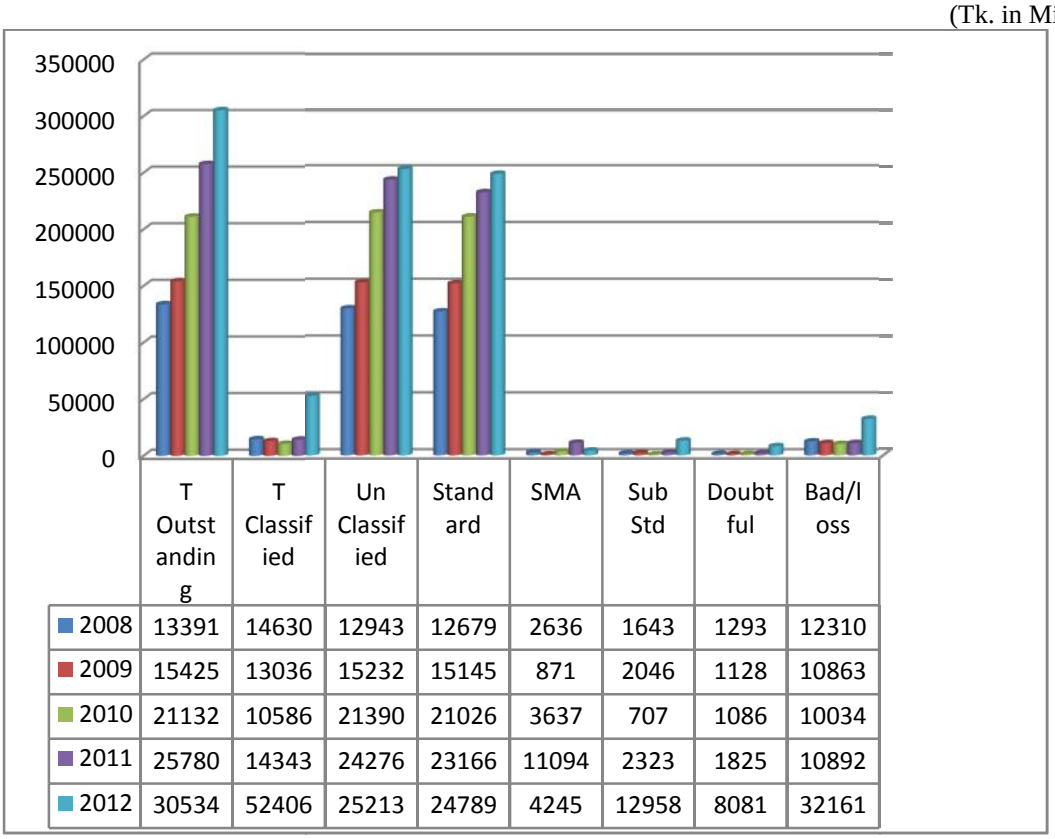
Figure 7.45 Loan Classification of Sonali Bank



Analysis & Findings: Table – 7.25 and Figure – 7.45 show total outstanding loan, total classified loan, unclassified loan, standard loan, SMA loan, doubtful loan and bad/loss loan of Sonali Bank. From there we see that outstanding loan had an upward trend. The worst message is that the total classified loan especially the bad/loss loan increased sharply in 2012 than the previous years. In addition to this, total unclassified loan (combination of standard and SMA) reduced in 2012, which was a setback for Sonali Bank's positive growth.

Figure 7.46 Loan Classification of Janata Bank

(Tk. in Millions)



	T Outstanding	T Classified	Un Classified	Standard	SMA	Sub Std	Doubtful	Bad/loss
2008	13391	14630	12943	12679	2636	1643	1293	12310
2009	15425	13036	15232	15145	871	2046	1128	10863
2010	21132	10586	21390	21026	3637	707	1086	10034
2011	25780	14343	24276	23166	11094	2323	1825	10892
2012	30534	52406	25213	24789	4245	12958	8081	32161

Source: Annual Report, SCB's

Analysis & Findings: Figure – 7.46 show total outstanding loan, total classified loan, unclassified loan, standard loan, SMA loan, doubtful loan and bad/loss loan of Janata Bank. From there we see that every item had an increasing trend. The increase in unclassified (standard) loan was a positive change but since classified loans were also increasing especially for increasing bad/loss loans, that should be considered seriously. Because that would be a burden for that bank.

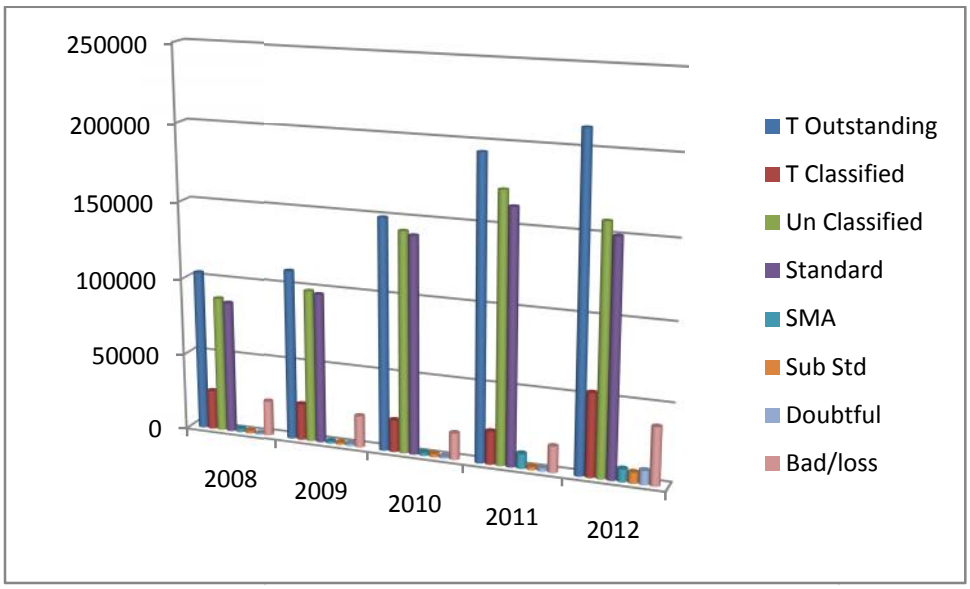
Table 7.26 Loan Classification of Agrani Bank

(Tk. in Millions)

Year	Outstanding	Classified	Un Classified	Standard	SMA	Sub Std	Doubtful	Bad/loss
2008	103751.70	25489.30	87873.08	85530.36	2342.72	1700.07	1065.52	22723.60
2009	110200.50	23739.20	98496.60	97004.64	1492.17	1491.61	1612.74	20634.92
2010	149464.20	20845.60	142235.50	139972.05	2263.51	2314.41	1330.57	17375.64
2011	194085.65	21488.48	172597.17	162911.13	9686.03	2095.63	2380.24	17012.59
2012	212663.02	53801.28	158861.76	150512.97	8348.78	7119.46	9188.24	37493.53

Source: Annual Report, SCB's

Figure 7.47 Loan Classification of Agrani Bank



Analysis & Findings: Table – 7.26 and Figure – 7.47 show total outstanding loan, total classified loan, unclassified loan, standard loan, SMA loan, doubtful loan and bad/loss loan of Agrani Bank. From there we see that outstanding loans were in increasing trend. The worst message is that total classified loans especially, the bad/loss loan increased sharply in 2012 than the previous years. In addition to this, total unclassified loan (combination of standard and SMA) reduced in 2012, which was alarming for Agrani Bank.

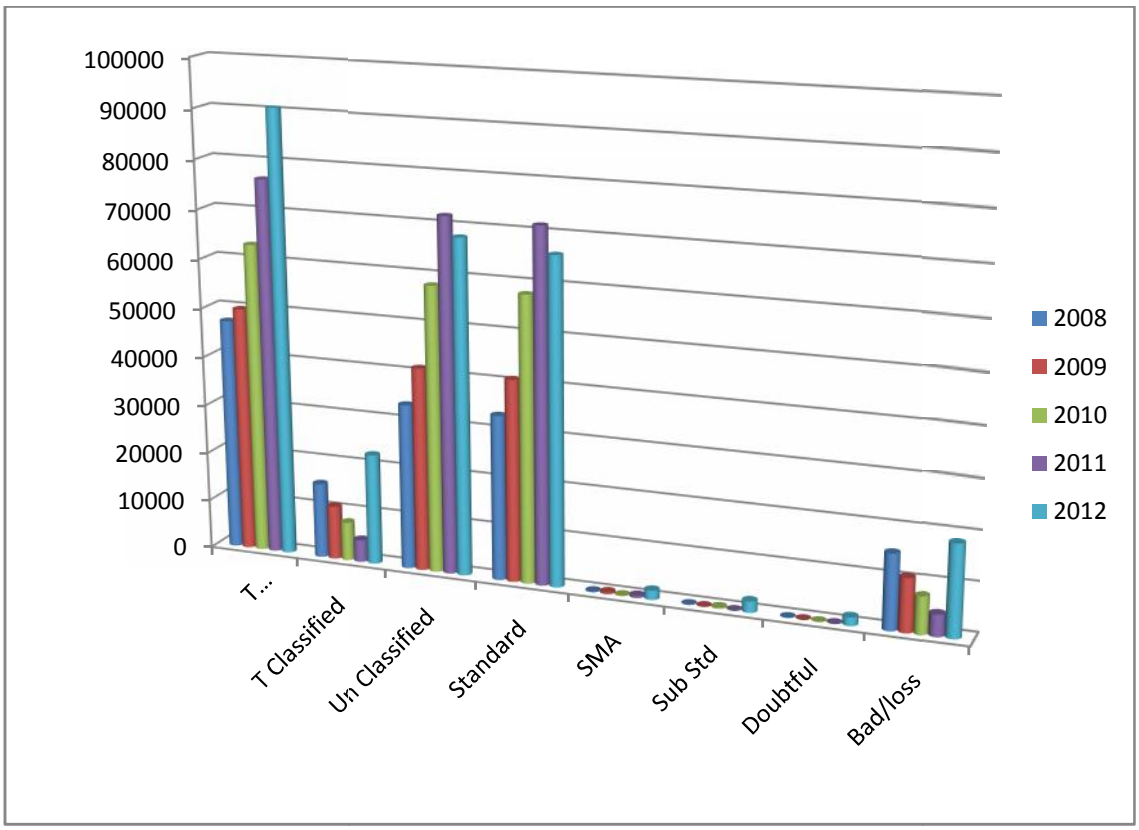
Table 7.27 Loan Classification of Rupali Bank

(Tk. in Millions)

Year	Outstanding	Classified	Un Classified	Standard	SMA	Sub Std	Doubtful	Bad/loss
2008	47255.40	15342.50	33687.66	33524.91	162.73	68.37	40.94	15233.06
2009	49919.20	10944.00	41400.04	41012.74	387.29	66.13	21.74	10856.26
2010	63231.90	7902.60	58146.26	58016.81	129.45	289.25	24.10	7589.35
2011	76524.92	4546.64	71978.28	71541.01	437.27	63.90	46.65	4436.10
2012	90641.56	22627.89	68013.67	66125.60	1888.07	2302.12	1731.46	18594.31

Source: Annual Report, SCB's

Figure 7.48 Loan Classification of Rupali Bank



Analysis & Findings: Table – 7.27 and Figure – 7.48 show total outstanding, total classified, unclassified, standard, SMA, doubtful loan and bad/loss loans of Rupali Bank from 2008-2012. From there, we see that outstanding and classified loan figures had an increasing trend. The increase in unclassified (standard) loan was a positive change but since classified loans also increased sharply, especially, for increasing bad/loss loan that should be considered seriously.

Table 7.28: Spread of the Selected Banks
(Tk. in Millions)

Year	Sonali	Janata	Agrani	Rupali
2008	-864.07	3646.69	4306.36	1010.07
2009	1883.07	4490.98	4038.86	2639.79
2010	3709.62	7121.21	6910.94	2088.8
2011	5676.29	8547.32	10468.68	4218.41
2012	-2272.93	6717.54	3982.74	3034.72
Avg.	1626.396	6104.748	5941.516	2598.358
SD	3248.635	2001.322	2809.165	1183.111
CV	1.997444	0.32783	0.472803	0.45533

Analysis & Findings: Table –7.28 shows the Spread position of the SCBs individually. Each bank was in good trend up to 2011 but in the year 2012, those have been fallen for each bank especially for the Sonali Bank that has even gone to negative.

Table 7.29: Burden of the Selected Banks
(Tk. in Millions)

Year	Sonali	Janata	Agrani	Rupali
2008	1616.88	7003.07	6329.73	1145.09
2009	2310.47	8578.13	6444.44	2098.71
2010	12100.16	12036.41	10862.03	2446.86
2011	11237.25	15860.02	14742.60	3603.57
2012	11556.90	14691.45	10067.37	3674.58
Avg.	7764.33	11633.82	9689.23	2593.76
SD	5309.89	3812.91	3495.35	1066.91
CV	0.68	0.33	0.36	0.41

Analysis & Findings: Table –7.29 shows the Burden position of the SCBs individually. Each bank was in good trend except Janata and Agrani Bank. In the year 2012, those banks' burden has declined.

7.5 Summary of Findings

The main objective of this study is to evaluate the lending risk analysis among State Owned Commercial Banks (SCBs) with their effectiveness in real form in terms of use of loan, loan recovery, banks' achievement to fulfill their goals specially, through effective credit administration etc. Since the comparative analysis of the performance has been made in two cross ways, one among the different categories of banks and the other, in between the group i.e. SCBs. Therefore, the key issues identified here by me are the major findings about these banks. In this chapter, the findings related to credit analysis and management by the banking sector will be discussed.

7.5.1 Findings among different categories of commercial banks (SCBs, PCBs, FCBs)

From the analysis it has been found that among the three categories of commercial banks operating in Bangladesh, SCBs earned lowest income compared to other categories during the study period of 1993- 2012. On the other side, FCBs were in the top position in terms of growth of income. The growth rate of income of FCBs and PCBs were much more than that of SCBs. FCBs had minimum manpower compared to SCBs and PCBs. SCBs were in top position in case of manpower position since 1994 but the growth rate started declining from the year 2003. FCBs maintained a good amount of capital compared to its risk weighted assets than the PCBs and SCBs. SCBs were third in that race followed by the DFIs. Amount of NPLs of the SCBs decreased from Taka 117.3 billion in 2000 to Taka 107.6 billion in 2010 and again it rose to tk. 132.7 billion in 2102. The PCBs also recorded a total increase of Taka 18.1 billion in their NPL accounts, which stood at Taka 64.3 billion in 2010 as against Taka 46.2 billion in 2000. FCBs maintained more provision than the loan loss over the period. In the year of 2012, FCBs maintained 104.3% provision against their loan loss. The scenario is opposite in the case of DFIs which suffered provision shortfall over the whole period. SCBs loan loss provision maintenance ratio was 68.7% in the year of 2012. PCBs provision maintenance ratio was 100.6% in the year of 2012.

So, as whole, it can be deduced that credit management in the overall banking sector is very weak resulting huge amount loan default and ultimately paralyzing the backbones of the financial sector. This in turn shatters the confidence of the savers of the country to deposit their savings with the bank lest they loss their money at the end.

7.5.2 Findings among the selected banks of SCBs:

The various situations faced by the SCBs both from the viewpoint of financial and non financial aspects have been identified as below:

In case of ***quantitative evaluation*** of the selected State Owned Banks (SCBs), I experienced a mixed nature of picture in different parameters of performance among these four banks. There was no stable pattern in any area of the activities of these banks. We found that Sonali bank had the maximum volume of outstanding, classified, substandard, doubtful, and bad/loss loans among the others during the study period. This is not only in terms of magnitude but also in terms of average and growth rate. Others picture was also not satisfactory except in some few areas in isolated ways. In some cases, Janata Bank and Rupali Bank represented better scenario than those of Sonali Bank and Agrani Bank. For example, interest income of all the SCBs showed a positive trend during the period.

Sonali Bank:

The average outstanding loan amount of Sonali Bank was Tk.155354.74 millions and the standard deviation was 105169.53. Sonali Bank being the largest SCB in terms of number of branches and customers size has the highest magnitude of outstanding loan among the SCBs. But, if we take a look at the growth rate of these figures (Table 7.1), then we find that except for few scattered years, the growth rates of this outstanding loan show a decreasing trend during the study period. The average classified loan amount of Sonali Bank was Tk. 44306.68 millions during the study period. Table 7.2 also shows the increasing trend of classified loan amount for all the SCBs in Bangladesh including Sonali Bank. Here, we also find through analysis that though the volume has raised over time, but the growth rate of classified loan started falling after the year 2000 (except 2004) which might be the positive impact of better credit risk management of the bank.

Like other SCBs, Sonali Bank is improving to have more unclassified, standard loan and SMA loan at its disposal i.e. in positive trend except the year 2012. We get a poor picture of Sonali Bank in 2012 about the Sub Standard loan, though the scenario was more or less steady up to 2011 but after that Sub Standard loan of all banks jumped in 2012 in isolated way including Sonali Bank. The case of Doubtful loan is almost the same as Sub Standard loan. Bad /Loss loan position was also stable up to the year 2011 but after that it started increasing sharply. In case of Reserve position, Sonali Bank showed a normal growth. But its cash holding position represent a sudden fall in 2012, though the scenario was more or less stable up to 2011. Deposits and Investments positions of Sonali Bank depict a smooth

positive growth during the period of study which indicates a sign of good performance in terms of management of bank fund. Loans and Advances of all the selected SCBs were also increasing during the covered period including the Sonali Bank. The size of loan and advances of Sonali bank were always higher than other banks in magnitude. Though the Interest income and expenses of Sonali Bank have increased in parallel form during the covered period, yet the size of its Net Income showed ups and down figures during that period.

Janata Bank:

The average outstanding loan amount of Janata Bank was Tk. 108101.40 millions and the standard deviation was 77851.29. Over the years under study, this figure had a steady growth which indicates that the size of outstanding loan of Janata Bank has piled up reflecting negligence of fund management and poor recovery scenario. The average classified loan amount of Janata Bank was Tk. 16634.43 millions during 1994-2012. The standard deviation was -.39 and the coefficients of variation was 35 percent (Table-7.2). The table shows an increasing trend of classified loan amount for all the Nationalized Commercial Banks in Bangladesh during the study period. But Janata Bank was a little bit exception to that, particularly, after the year 2006 the growth rate of such classified loan started declining and in some years the growth rates were also negative. This indicates that the bank was cautious to improve its loan classification affair during the last years of study though the cumulative outstanding loan size had escalated throughout the period.

Like other SCBs, Janata Bank also showed an improving trend in the areas of volume of standard loan, SMA, and unclassified loan, (Tables 7.3 – 7.5) at its disposal i.e. in positive trend during the period of study. Even in the year 2012, when all the SCBs were possessing negative pictures in different parameters of performance at that stage Janata Bank was superior to others in respect to the above issues.

We got a steady rate of growth in the Sub Standard, Doubtful, Bad /Loss loan positions of Janata Bank up to the year 2011 but after that it increased sharply in 2012 (Tables 7.6-7.8). In case of reserve position, Janata Bank showed a normal growth. But its cash holding position represented a sudden fall in 2012, though the scenario was more or less stable up to 2011.

Agrani Bank:

In the case of Agrani bank, we see that total outstanding and classified loans have crept over time at a very fast rate during the period under study, especially, the bad/loss loan increased sharply in 2012 than the previous years. In addition to this total unclassified loan (combination of standard and SMA) reduced in 2012, which was alarming for Agrani Bank (Table- 7.26 and Figure-7.47).The average outstanding loan amount of Agrani Bank was Tk. 89111.27 million and the standard deviation was 50809.27 and the average classified amount of the same was Tk. 23597.64 million (Table-7.2) during 1993-2012 which were, independently, a major part of the total loans sanctioned and disbursed.

Though the magnitude of investments in the form of Loans and Advances of Agrani Bank showed a positive trend like other SCBs during the covered period, but Table 7.15 and Figure 7.29 represent that the net income of this bank was volatile during the whole period of study. That indicates an increase in operating expenditures as well as poorness in generating income through new products. Increasing loan default was also contributive to this.

Rupali Bank:

The average outstanding loan amount of Rupali Bank was 39209.97 million and the standard deviation was 20928.39.The reserve, cash position, deposit, investment, borrowing, loan, net income, interest income and interest expense of Rupali Bank have been shown in Table - 7.24 and Figure 7.44. From there we see that deposit and corresponding volume of loan had tremendous growth during the period of study but interest expenses was soaring along with interest income resulting very poor position of Net Income at the end.

After 2011, Rupali Bank had positive picture in the case of managing standard and SMA loans except for a sudden break in 2012.

Table – 7.27 and Figure – 7.48 show total outstanding, total classified, unclassified, standard, SMA, doubtful loan and bad/loss loans of Rupali Bank from 2008-2012. From there, we see that outstanding and classified loan figures had an increasing trend. The increase in unclassified (standard) loan was a positive change but since classified loans also increased sharply, especially, for increasing bad/loss loan that should be considered seriously.

7.6 Findings through Statistical Analysis

7.6.1 Regression Analysis:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.929[a]	.863	.813	824.95702

a. Predictors: (Constant), roe, te, npl, car, ti

The above table shows the value of R which stands for coefficient of correlations. The value of R lies from -1 to 1. The closer R is to 1, the better is the linear relationship between the variables. When R = 1, the correlation is perfect. From the above table, we got R = 0.929 which indicates that there is a strong linear relationship among Net Profit, Total Income, Total Expense, Capital Adequacy ratio, Non performing loan and ROE of SCBs.

Correlation (R^2) equals .813 means that the independent variables are predicting the 81.3% change in the dependent variable.

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.980E7	5	1.196E7	17.573	.000[a]
	Residual	9527757.157	14	680554.083		
	Total	6.932E7	19			

a. Predictors: (Constant), roe, te, npl, car, ti

b. Dependent Variable: np

The F-test is used to determine whether a significant relationship exists between dependent variable independent variables. In this ANOVA model, the hypothesis for the F-test involves the parameters of the multiple regression models and formulates the following hypothesis:

Hypothesis 1: Net profit cannot be explained by total income, total expenditure, capital adequacy ratio, nonperforming loan and return on equity.

H_0= Net profit cannot be explained by TI, TE, CAR, NPL and ROE

H_1= Net profit can be explained by TI, TE, CAR, NPL and ROE

The p-value (sig.) in the last column of the ANOVA table also indicates that we can reject Ho because the P-value is less than **α** = 0.05

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2379.013	1221.031		-1.948	.072
	ti	.097	.571	.195	.170	.867
	te	-.464	.784	-.611	-.592	.563
	car	47.365	126.782	.068	.374	.714
	npl	76.373	40.841	.356	1.870	.083
	roe	3855.141	680.376	.923	5.666	.000

a. Dependent Variable: np

From this table, we got the parameters of the regression line. Here, the constant 'a' is -2379.013 and the slopes b1 is .097, b2 -.464, b3 47.365, b4 76.373 and b5 is 3855.141.
But from the level of significance column we see that except ROE all other variables are very much insignificant because p values are more than .005. Therefore from these data we can construct our regression equation as:

Y= -2379.013+ 3855.141X1

The coefficient β1= 3855.141 expresses that if the ROE increases by 1 percent, Net Income (NI) will increase by 3855.141 because of existing a positive relationship between ROE and NI along with the condition that the other things especially the other independent variables remain same and it is statistically significant as the p value is less than the .005.

7.6.2 Correlation

Hypothesis 2: There is no positive correlation between effective lending risk analysis and productive uses of fund.

Correlations							
		Ti	**te**	**np**	**car**	**npl**	**roe**
ti	Pearson Correlation	1	.989**	-.311	.612**	-.643**	.310

	Sig. (2-tailed)		.000	.183	.004	.002	.184
	N	20	20	20	20	20	20
te	Pearson Correlation	.989**	1	-.382	.556*	-.571**	.219
	Sig. (2-tailed)	.000		.097	.011	.009	.354
	N	20	20	20	20	20	20
np	Pearson Correlation	-.311	-.382	1	.294	.061	.702**
	Sig. (2-tailed)	.183	.097		.209	.798	.001
	N	20	20	20	20	20	20
car	Pearson Correlation	.612**	.556*	.294	1	-.359	.621**
	Sig. (2-tailed)	.004	.011	.209		.121	.003
	N	20	20	20	20	20	20
npl	Pearson Correlation	-.643**	-.571**	.061	-.359	1	-.535*
	Sig. (2-tailed)	.002	.009	.798	.121		.015
	N	20	20	20	20	20	20
roe	Pearson Correlation	.310	.219	.702**	.621**	-.535*	1
	Sig. (2-tailed)	.184	.354	.001	.003	.015	
	N	20	20	20	20	20	20
**. Correlation is significant at the 0.01 level (2-tailed).							
*. Correlation is significant at the 0.05 level (2-tailed).							

H_0 = Net profit is not positively related with Non Performing Loan

H_1 = Net profit is positively related with Non Performing Loan

From the correlation value (0.061), we can say that there is very insignificant positive relation between Net Profit and Non Performing Loan.

Hypothesis 3: Efficiency in lending risk analysis varies within the SCBs.

Correlations					
		SB	**JB**	**AB**	**RB**
SB	Pearson Correlation	1	-.955*	.949*	-.121
	Sig. (2-tailed)		.011	.014	.847
	N	5	5	5	5

JB	Pearson Correlation	-.955*	1	-.976**	.065
	Sig. (2-tailed)	.011		.004	.917
	N	5	5	5	5
AB	Pearson Correlation	.949*	-.976**	1	-.257
	Sig. (2-tailed)	.014	.004		.677
	N	5	5	5	5
RB	Pearson Correlation	-.121	.065	-.257	1
	Sig. (2-tailed)	.847	.917	.677	
	N	5	5	5	5
*. Correlation is significant at the 0.05 level (2-tailed).					
**. Correlation is significant at the 0.01 level (2-tailed).					

H_0 = Net profit of different selected Banks (Sonali, Janata, Agrani, Rupali) are not related

H_1 = Net profit of different selected Banks (Sonali (SB), Janata (JB), Agrani (AB), Rupali (RB) are related

From the correlation value, we get that SB and JB are almost perfectly negatively correlated, SB and AB are almost perfectly positively correlated, SB and RB are almost partially negatively correlated. Therefore, we can say that efficiency in lending risk varies within SCBs.

7.7 Time Series Analysis (Using Log-lin Model)

Time series analysis helps us to predict the approximate Net Profit after Tax (NPAT) of State Owned Commercial Banks (SCBs) in future.

Time series analysis for Net profit after tax of SCBs

Year	X (Deviation)	Y (NPAT)	XY	X^2
2008	-2	897.68	-1795.36	4
2009	-1	931.35	-931.35	1
2010	0	1176.26	0	0
2011	1	1799.33	1799.33	1
2012	2	-6522.88	-13045.8	4
N = 5		**ΣY** = -1718.26	**ΣXY** = -13973.1	**$\Sigma X^2 = 10$**

The equation of straight line trend is $\hat{Y}$ = a + bx

Where a = ∑Y/ N = -1718.26/5 = -343.652

And b = ∑ **XY**/ $\sum x^2$ = -13973.1/10 = -1397.31

Time series of capital to risk weighted asset ratio is $\hat{Y}$ = -343.65 + -1397.31 (X)

So, Where x= 4, there

$\hat{Y}$ = -343.65 + -1397.31 (4)

= -5932.91 Million

Result: In 2014, approximate NPAT of state owned commercial banks would be, (5932.91) million

In 2020, approximate capital to risk weighted ratio of state owned commercial bank would be,

$\hat{Y}$ = -343.65 + -1397.31 (10)

= -14316.8 Million

Interpretation: From the time series analysis we can see that state owned commercial banks are expected to have negative NPAT in future which indicates worse position.

Time series analysis for Classified loan of Sonali Bank Ltd.

Year	**X (Deviation)**	**Y (Classified Loan)**	**XY**	**X^2**
2008	-2	72179.6	-144359	4
2009	-1	69749.7	-69749.7	1
2010	0	68238.5	0	0
2011	1	61828.65	61828.65	1
2012	2	126225.48	252451	4
N = 5		**ΣY** = 398221.93	**ΣXY** = 100170.7	**ΣX^2 = 10**

The equation of straight line trend is $\hat{Y}$ = a + bx

Where a = ∑Y/ N = 398221.93/5 = 79644.39

And b = ∑ **XY**/ $\sum x^2$ = 100170.7/10 = 10017.07

Time series of capital to risk weighted asset ratio is $\hat{Y}$ = 79644.39+ 10017.07 (X)

So, Where x= 4, there

$\hat{Y}$ = 79644.39+ 10017.07 (4)

= 119712.7 Miilion

Result: In 2014, approximate Classified Loan of Sonali Banks would be, 119712.7 million.

In 2020, approximate capital to risk weighted ratio of state owned commercial bank would be,

$\hat{Y}$ = 79644.39+ 10017.07 (10)

= 179815.1 Million

Interpretation: From the time series analysis we can see that Sonali Bank banks are expected to have positively increasing classified loan in future which indicates a worse position.

Time series analysis for Classified loan of Janata Bank Ltd.

Year	X (Deviation)	Y (Classified Loan)	XY	X^2
2008	-2	14630.1	-29260.2	4
2009	-1	13036.1	-13036.1	1
2010	0	10585.9	0	0
2011	1	14343	14343	1
2012	2	52405.89	104811.8	4
N = 5		**ΣY** = 105000.99	**ΣXY** = 76858.48	**ΣX²** = 10

The equation of straight line trend is $\hat{Y}$ = a + bx

Where a = $\sum Y/ N$ = 105000.99/5 = 21000.2

And b = $\sum$ **XY**/ $\sum x^2$ = 76858.48/10 = 7685.848

Time series of capital to risk weighted asset ratio is $\hat{Y}$ = 21000.2+ 7685.848 (X)

So, Where x= 4, there

$\hat{Y}$ = 21000.2+ 7685.848 (4)

= 51743.59 Miilion

Result: In 2014, approximate Classified Loan of Sonali Banks would be, 119712.7 million.

In 2020, approximate capital to risk weighted ratio of state owned commercial bank would be,

$\hat{Y}$ = 21000.2+ 7685.848 (10)

= 97858.68 Million

Interpretation: From the time series analysis we can see that Janata Bank banks are expected to have positively increasing classifed loan in future which indicates a worse position.

Time series analysis for Classified loan of Agrani Bank Ltd.

Year	X (Deviation)	Y (Classified Loan)	XY	X^2
2008	-2	25489.3	-50978.6	4
2009	-1	23739.2	-23739.2	1
2010	0	20845.6	0	0
2011	1	21488.48	21488.48	1
2012	2	53801.28	107602.6	4
N = 5		**ΣY** = 145363.86	**ΣXY** = 54373.24	**ΣX²** = 10

The equation of straight line trend is $\hat{Y}$ = a + bx

Where a = ∑Y/ N = 145363.86/5 = 29072.77

And b = ∑ **XY**/ $\sum x^2$ = 54373.24/10 = 5437.324

Time series of capital to risk weighted asset ratio is $\hat{Y}$ = 29072.77 + 5437.324 (X)

So, Where x= 4, there

$\hat{Y}$ = 29072.77 + 5437.324 (4)

= 50822.07 Miilion

Result: In 2014, approximate Classified Loan of Sonali Banks would be, 50822.07 million.

In 2020, approximate capital to risk weighted ratio of state owned commercial bank would be,

$\hat{Y}$ = 29072.77 + 5437.324 (10)

= 83446.01 Million

Interpretation: From the time series analysis we can see that Agrani Bank banks are expected to have positively increasing classifed loan in future which indicates a worse position.

Time series analysis for Classified loan of Rupali Bank Ltd.

Year	X (Deviation)	Y (Classified Loan)	XY	X^2
2008	-2	15342.5	-30685	4
2009	-1	10944	-10944	1
2010	0	7902.6	0	0
2011	1	4546.64	4546.64	1
2012	2	22627.89	45255.78	4
N = 5		**ΣY** = 61363.63	**ΣXY** = 8173.42	**ΣX^2** = 10

The equation of straight line trend is $\hat{Y}$ = a + bx

Where a = $\sum Y/ N$ = 61363.63/5 = 12272.73

And b = $\sum$ **XY**/ $\sum x^2$ = 8173.42/10 = 817.342

Time series of capital to risk weighted asset ratio is $\hat{Y}$ = 12272.73+ 817.342 (X)

So, Where x= 4, there

$\hat{Y}$ = 12272.73+ 817.342 (4)

= 15542.09 Miilion

Result: In 2014, approximate Classified Loan of Rupali Banks would be, 15542.09 million.

In 2020, approximate capital to risk weighted ratio of state owned commercial bank would be,

$\hat{Y}$ = 12272.73+ 817.342 (10)

= 20446.15 Million

Interpretation: From the time series analysis we can see that Rupali Bank banks are expected to have positively increasing classifed loan in future which indicates a worse position.

7.8 SWOT Analysis

This analysis is a strategic planning method used to evaluate the Strengths, Weaknesses, Opportunities, and Threats involved in a project or in a business venture. SWOT is an acronym for the internal strength and weakness of a firm and the environmental Opportunity and Threat facing that firm. It involves specifying the objective of the business venture or project and identifying the internal and external factors that are favorable and unfavorable to achieving that objective. The technique is credited by **Albert Humphrey**

Figure 7.49: SWOT Model

Strengths:

- SCBs have wide branch image, government close monitoring and guidance,
- It has strong commitment to the customers, the tradition of good feedback,
- Good management competence, heavy competition etc. are the major strength of SCBs

Weaknesses:

- The major weakness of SCBs are lack of motivation of employees, inefficient employees, and dependence on head office,.
- SCBs have lengthy network &weak ancillary services, chronic stuck-up advances and default culture, lack of good entrepreneurs, high cost of fund, promotion systems
- There are lack of job satisfaction, poor salary structure, delay disbursement of sanctioned loans &technological barriers etc.

Opportunities:

- There is high demand for customer finance.
- SCBs have the potential of making good relationship with rapid growth multinational Companies.

- ❖ Financial sectors reforms program made by Bangladesh Bank and increasing demand for foreign exchange etc. are the opportunities of SCBs.

Threats:

- ❖ Unfair competition with PCBs & FCBs, rural & retail banking services, special rules & regulations,
- ❖ Less control on fund management, political unrests, dependence on govt.'s decisions, Political violence & pressure, poor recovery performance due to willful defaulters, CBAs and trade union pressure & organizational discipline etc. are the threats of SCBs.

Chapter Eight

Identification of Problems & Policy Implications

The main intention of this study was to lending risk analysis among State Owned Commercial Banks. Since the comparative analyses of the performance have been made from two dimensions, one among the groups of different banks and another one in between the group of SCBs, therefore, the major problems identified about these banks have been discussed from two angles as the following:

Common problems faced by all the SCBs in Bangladesh:

From the view point of ***subjective analysis*****,** it was found that the State Owned Commercial Banks (SCBs) of Bangladesh are especially in challenge with many problems including crisis in efficient risk management, high default rate leading to increasing non-performing loans and deteriorating customer service standards. An alarmingly high rate of default, especially of willful default, has put undue pressure on banks' capability to increase investment and/or reduce lending rate despite high profile demand for such promotional intervention of the banks to boost up the economy. Efficient Credit Risk Analysis and selection of investment proposals on the basis of sound financial merits are the preconditions of good recovery of credit funds as well as the sustainability of the lending banks. But the real situations depict a poor analysis of lending risks inherent in loan projects, flawed credit delivery system, high debt equity ratio, delayed credit disbursement, and inappropriate loan repayment installment due to poor supervision, are the common scenario of the banking sector, particularly the SCBs are the worst affected ones. From the study, I found the following nature of problems encountered by the NCBs of Bangladesh.

a) The credit analysts of SCBs lack a strong background in accounting, financial statement analysis, business law, and economics along with good negotiating skills. This lessens the possibility of bad debt.

b) For credit appraisal, the banks some time depend on the clients for its authentication. In case of default cases, it has been found that the financial disclosures the borrowers had furnished to the banks were false, fabricated, and manipulated. Due to ignorance and insincere commitment on the part of the bank officials, these things are neither properly investigated nor unearthed. So, weaknesses remain in the appraisal and selection process of loan projects which ultimately end as sick ones.

c) The major reasons of classification of huge amount of loans and advances of the banks may be any one of the following or combination of more than one**:**

- ***Political and undue interference in loan sanctioning and repayments***
- ***Diversion of fund in non productive sectors***
- ***Poor follow up and monitoring in post loan disbursement stage***

d) Out of all types of commercial banks, SCBs especially, suffer from the proper realization from the proceeds of sale of the securities the borrowers keep against their loans in case of default due to the fake titles of collaterals, proper valuation of mortgaged assts, poor qualities of assets and so on which are absolute negligence and malice done by the bank officials. Huge amount of bank funds have been swindled in recent years by some unscrupulous big borrowers by providing poor and fake securities.

e) A huge amount of loans disbursed by the SCBs as industrial loans during the study period were diverted by the borrowers to the stock market for investment in securities bypassing the direct form of investment and the two stock market debacles happened in 1996 and in 2010 were one of the major reasons behind failure of the borrowers to repay loans and the increase the size of default loans. This scenario is very meager in case of Private Commercial Banks (PCBs). Moreover, the commercial banks also at their own, invested huge capital breaking the statutory rules of Bangladesh Bank in this market endangering the security limit of bank investment in the stock market. But sudden withdrawal of Banks' investment accompanied by volatility in the stock market in 2010 has put the markets into near crash condition putting the general investors at massive capital losses. This has aggravated the loan recovery situation of commercial banks more or less.

f) Financial Institutions, especially the commercial banks suffer from risk resilience capacity Building. *The banks don't have the sufficient resilience capacity against market risks*. The recent "Hall mark" scandal has reminded the banking industry of a bitter resilience capacity against operational risks. Consequently, a question has arisen about whether the banking sector has enough preparation to protect their assets from further sequential or other unexpected losses.

g) A key risk run by commercial banks against loans is ***credit risk,*** the risk that the borrower will default on the debt. SCBs don't have any strategic weapon to fight back against such risk and minimize loss.

h) *Interest rates against loans and advances are too high at the moment causing shyness in the private sector investment in the country. The interest rate spread is also too high resulting*

opposing set back in the arena of savings and investment in the economy. This has further diverted general people to get interest in the Stock market to be a safe place for investment. But, later, the Stock Market debacle has also proved a wrong place for them causing a measurable capital loss.

i) *Regarding regulating the banking sector, the Government has all through been reluctant to give its management control over the SCBs to the central bank. What people expect is an effective control over the SCBs by an independent and sovereign authority. Most people do not know about the activities of the Banks and Financial Institutions Division (BFID) of the Finance Ministry of Bangladesh and the power it enjoys over the SCBs. The discord over 'independence' of BB in fact lies in regulatory control over the SCBs.* According to the suggestions of advisory body appointed in 2004 by the advice of the World Bank, the three SCBs; Sonali, Janata, and Agrani were converted into companies in November 2007. Rupali had been working as a company before that. After formation of company, according to rules, government can't exercise any direct intervention in the affairs of these banks. The Board of Directors has to be appointed through direct election from among the shareholder in the Annual General Meeting (AGM) and this board will later on elect a Chairman for its own. But, the reality is that this position is filled in by the Government. As a result, Bangladesh Bank loses its control over these banks and so is the one of the vital reasons of the deterioration of the conditions of the SCBs.

j) The SCBs have very traditional views regarding carrying on business. They are very reluctant as well as ineffective to initiate new products and lines of businesses to survive in the commercial arena with competitive zeal. So, if we take a look at the comparative positions of performance among the SCBs, PCBs, and FCBs, we always find a distressed picture of The SCBs in all spheres of business activities.

k) Inadequate reporting standards substantially understate the portfolio problems of public banks.

l) Bank licenses are being given in indiscriminate way to the people having vested political interest and immoral connection with power groups, not considering the merit of the case which ultimately turns to be the den of abusing the proper way in providing loans to the genuine borrowers. This is one of the major causes of recent big scams in the banking sector.

8.2 Policy Implications:

I would like to recommend the following suggestions in light of the above problems detected:

a) For efficient management of credit risks SCBs should emphasize on building cordial rapport and relationship with the customers to ensure that neither the business nor the business relationship between the banker and the customer does hamper in any manner whatsoever. Rather it gives an impetus to enhance the same and improve the standard of customers' services of banks. The banks should focus on procedural guidelines that have been devised for meticulous compliance by the branches for effective Management of Credit Risks. The banks should aim at increasing the number of Credit Analysts equipped with adequate and proper training and exposure to reduce deal with the analysis and efficient management of credit risks. *Moreover, banks can resort to the service of independent professional firms or teams to get the unbiased and quality credit appraisal reports of the borrowers applied for loans.* This may defeat the possibility of bank officials to get less involved in corrupt practices of approving poor type of loan proposals and improve the ultimate trend of loan defaults.

b) As the banks are mostly deceived or misguided by the borrowers by the way of furnishing false and fabricated financial and non financial information, *so it has become imperative for the government to pass the Financial Reporting Act very soon to curb such kind of malpractices of the borrowers. The banks also should hire expert personnel having sound background in Accounting, Finance, Law etc. to translate and grasp the intricacies of financial and nonfinancial information provided by the prospective borrowers.*

c) For the greater interest to save the SCBS from grip of bad loans, constant monitoring and supervision of the credit play a vital role for keeping the credit portfolios out of risk. Banks should exert constant efforts on keeping the existing credits up to the mark through regular follow-up and visiting to the borrowers that could help the banks to identify the reasons much earlier so that right early treatment can be taken. Supervision of loan has to be started right from the stage of selection of a borrower, whereas, Follow-up of loan has to be started immediately after disbursement of the loan. *For this, the Recovery Unit officials may be offered different types of pecuniary and non-pecuniary incentives apart from the salary package to get more motivated in loan supervision and recovery as well. These sorts of preventive/ remedial measures might save the accounts from being classified and the banks might get positive marginal benefits from this measure at the end.*

d) In the creation process of charges on securities, negligence, unethical, and unlawful practices prevail within the SCBs in Bangladesh. Genuine and proper documentation of loans and advances are very essential for the borrowers to keep them under obligations by the

lending banks to secure the bank funds against investments. *Here, every bank should scrutinize the borrowers' securities properly whether they cover the loans amount accurately, the quality of assets in terms of marketability, and the authentication of documents supporting the securities. What is needed here is the integrity, diligence, and watch dog attitude of the credit officers with a commitment to protect the interest of their institutions.* Though, of late, the quality of assets of the banks started improving gradually as a result of improved Management of Credit Risks in recent times which would help to recoup the downturn and boost up the overall financial conditions of SCBs.

e) In case of investment in the capital market, particularly, in the two stock markets of Bangladesh, it has been experienced that due to market manipulations in two different years, a huge chunk of capital of most investors eroded which were originally extended as loans for direct investment by all commercial banks of Bangladesh. *Here, the banks should go soft in case of defaulters to reschedule their loans in such a way that the borrowers can pay off their loans with tolerable burden. If necessary, banks can give waiver of the burden of interest of small borrowers and also write off the principal amount if permissible from the provision.*

f) The role of risk control framework is to evaluate the risk inherent in the business activities of an institution and to ensure that these risks don't endanger the institution even in extreme circumstances. Industry reports highlight that the risk control framework in many institutions is not robust enough, due primarily to weak governance and lack of understanding of the risks inherent in the business strategies adopted. *Risk management reforms are necessary to create strong institutions and a resilient financial system. Recognizing the relationship between development and risk and investing in disaster risk reduction can lead to better development practices which are also cost-effective. So, all the SCBs should be concerned and watchful about the updated emergence of new risk factors and the creation of new ways and means tools to defeat those risk factors. For this, all The SCBs can have a strong research cell in the Credit Division to study with this particular area.*

g) *To meet the need of investing banks to hedge Credit Risk is the use of* ***credit derivatives****.* These are financial instruments originally introduced to protect banks and other institutions against losses arising from default. As such, they are instruments designed to lay off or take on credit risk. Since their inception, they have been used by banks, portfolio managers and corporate treasurers to enhance returns, to trade credit, for speculative purposes and as hedging instruments in developed nations. The commercial banks of Bangladesh should introduce and emphasize more on the use of credit derivatives in order to swap against credit risk.

h) It was thought that liberalization in the banking sector would lead to a cut in interest rate due to competition. But it has been proved wrong as rates of interest went too high after lifting cap on rates. It has been observed that some kind of in disciplinary tendency lies among some banks of Bangladesh to overrule or to defy the norms of financial regulations. *Amendment of the Bank Company Act 1991(original) and Bank Company Act, 2003 (Amended) are essential to end complex regulatory control on the banking sector for good governance in the sector.* Moreover, newly licensed banks (mostly politically considered) might trigger unhealthy competition in the financial sector. So, the government also should show prudence in granting new bank licenses keeping totally free from the political and unethical bias nesses.

i) *The banking sector should be rescued from the pressure of dual control of BB and the Ministry of Finance. The situation would have been far better had the BB been entrusted with full regulatory responsibility in the case of SCBs.* The board of directors of SCBs should have the full autonomy to exercise their own mandate to elect their own members as well as the Chairman of the board considering who can best serve in the better interest of the banks, not to be appointed by the Government to materialize the ill motivated political agenda.

j) *The research cells of the SCBs should be strengthened with vibrant business strategies and the efficient manpower by studying the feasibility of introduction of new products, analysis of manpower productivity and similar other research works and eventually the efficient management of credit risks.* Moreover, for sustainable growth, banks should identify and reinvest in productive sectors and terminate unproductive operations/divisions. Banks should establish investment priorities and develop corporate budgets that steer resources into those internal activities critical to strategic success. It should be involved in channeling resources into areas where earning potentials are higher and away from areas where they are lower.

k) *Establishment of Independent Financial Reporting Council to adopt and monitor international accounting and auditing standards as well as license accountants and auditors is a must.*

l) *Formulating sustained policy strategies for sound supervision, banks have to get rid from the clutch of political interference as well as other unethical practices by their officials for selecting sound and sustainable loan proposals in order to get out from this perennial trend of bad loans.*

Chapter Nine

Conclusion

It is evident that credit is the vital component of investment for any commercial bank. These credit schemes serve as the major source of revenue generation for the banks and as such needs to be handled with a lot of care. Successful loan application will have positive impact in attaining corporate mission and vision and ultimately to capitalize the wealth maximization objectives of the corporation. A banker cannot remain indifferent with bad debts in his portfolio. The failure of commercial banks occurs mainly due to bad loans, which occurs due to inefficient management of the loans and advances portfolio. Therefore, any bank must be extremely cautious about its lending portfolio and credit policy. From a recent report of a daily newspaper of Bangladesh, it has been found that the classified loans of 38 state-owned enterprises (SoEs) with four public sector commercial banks stood at Tk. 12. 50 billion in a period of six months through December 2012, whereas, in June, 2012, the amount of non-performing loans of those SoEs with SCBs was Tk. 2. 95 biliion. With repeated appeal and persuasion to the Finance Ministry, the banks haven't got their loans repaid. If this is the picture then how come the SCBs can minimize their size of non-performing loan from their shoulders, recap the size of their capital, and sustain as commercial banks? As defaults arise both from public and private sectors' loan projects, so coordinated approaches and initiatives from both sides are essential to eradicate the culture of loan defaults and salvage these banks from the grip of this kind of perennial diseases as well as let the SCBs survive as profitable commercial banks.

Financial resources lent by the banks to the business firms work as the main input in the production process of the country. Since credit is exposed to risk, so proper evaluation of loan proposals, utilization of loans, supervision (follow-up) of loan recovery etc. are very much essential for the sake of borrowers as well as from the point of view of lending banks. *The loans applied for by the borrowers must not be diverted from its original purposes and employed for unproductive purposes. So, a purpose-oriented loan must be followed up regularly by the banks so that the borrowers properly use the fund. All the banks should try to improve their credit policy and credit portfolio for minimizing loss and maximizing profit and various measures should be undertaken to develop the credit management system.* This will be an ever updating mechanism. Recently, Janata Bank Ltd has gone in real time online

banking. In addition, they are exploring new ideas, implementing new technology to serve the better service to their clients.

The marketing department of the individual bank should think freshly about their marketing objectives and practices. Rapid changes can quickly make yesterday's wining strategies out of date. In competitive age, the SCBs shouldn't allow their clients to get dissatisfied with their services. They have their competitors who are actively striving to take the advantages in every side. We have to consider that the SCBs in addition to meeting social goals of the government do play a critical role during stressful time of the economy.

In case of SCBs, the most weakness that is revealed among majority of the employees is the absence of sincerity, apathy towards duties, and immoral dealings with customers. Apart from financial incentives, moral pursuation of employees to pay their utmost sincerity and integrity should be extended by the top management to gear up the productivity of SCBs. Here, the top executives must have to be set the norms in terms of their own honesty and integrity. If the employees of any organization as a whole don't possess the attributes of loyalty and commitments towards the institutions they serve, it would be very difficult for them to get away from the path of corrupt practices and negligence. This area should be the deep concern of the SCBs and be treated by the policy makers with utmost importance.

The SCBs can focus on their strengths to materialize the opportunities hidden for them in the banking industry and also they can work on their weakness to develop the product effectively and grab more opportunities remaining untapped in the banking industry. Irrespective of nature, *all commercial banks including SCBs should observe their competitors closely to analyze any new course of actions taken by them and react competitively to that action. It can be accomplished by having information about a certain competitor's business policies through recruiting their employees or by getting information from the people who do business with those rivals or by collecting information about other banks from published materials and published documents.*

In fact, the economic development of any country depends mostly on the development of its banking sector. The banks provide loans to the entrepreneurs who develop themselves and ultimately the country's overall economy. The foreign remittance is mostly transferred through our banking sector. If our banks can reduce the size of default to a substantial level, our economy must be developed. Because, the repaid loan of borrowers can be reinvested in cumulative form in different economic development programs of the macro economy of Bangladesh.

Issues for further Research

This research addressed the techniques of lending risk analysis followed by the State Owned Commercial Banks(NCBs) of Bangladesh and the limitations of such practices. There are a lot of issues relating to credit risk management and proftability of commercial banks which need to be looked at. Further research in this and the related areas may include issues like management of monetary policy and role of commercial banks, impact of non-performing loans of public banks on fiscal objectives of the government, Costs of government-directed credits and policies and strategies to defeat them, Impact of Scientific Financial Reporting system on proper evaluation of loan projects, Good governance in banking sector and impact on loan default etc.

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Appendices

Appendix- 1

List of Banks operating in Bangladesh

A) State owned commercial banks (4)

1. Agrani Bank Limited
2. Janata Bank Limited
3. Rupali Bank Limited
4. Sonali Bank Limited

B) Specialized banks (6)

1. Bangladesh Krishi Bank
2. Rajshahi Krishi Unnayan Bank
3. Bangladesh Development Bank Limited
4. BASIC Bank Limited
5. Karma Sangsthan Bank
6. Ansar-VDP Bank

C) Private commercial banks (39)

1. AB Bank Limited
2. Al-Arafah Islami Bank Limited
3. Bangladesh Commerce Bank Limited
4. Bank Asia Limited
5. BRAC Bank Limited
6. Dhaka Bank Limited
7. Dutch-Bangla Bank Limited
8. Eastern Bank Limited
9. EXIM Bank Limited
10. First Security Islami Bank Limited
11. ICB Islamic Bank Ltd.
12. IFIC Bank Limited
13. Islami Bank Bangladesh Ltd
14. Jamuna Bank Ltd
15. Meghna Bank Limited
16. Mercantile Bank Limited
17. Midland Bank Limited
18. Modhumoti Bank Ltd.
19. Mutual Trust Bank Limited
20. National Bank Limited
21. National Credit & Commerce Bank Ltd
22. NRB Bank Limited
23. NRB Commercial Bank Limited
24. NRB Global Bank Limited
25. One Bank Limited
26. Premier Bank Limited
27. Prime Bank Ltd
28. Pubali Bank Limited
29. Shahjalal Bank Limited
30. Social Islami Bank Ltd.
31. South Bangla Agriculture & Commerce Bank Limited
32. Southeast Bank Limited
33. Standard Bank Limited
34. The City Bank Ltd.
35. The Farmers Bank Ltd
36. Trust Bank Limited
37. Union Bank Limited
38. United Commercial Bank Limited
39. Uttara Bank Limited

D) Foreign commercial banks (9)

1. Bank Alfalah Limited
2. Citibank N.A
3. Commercial Bank of Ceylon
4. Habib Bank Limited
5. National Bank of Pakistan
6. Standard Chartered Bank
7. State Bank of India
8. The Hongkong and Shanghai Banking Corporation Limited
9. Woori Bank

Appendix-2

Profile of Selected SCBs

Agrani Bank Limited

Genesis : Agrani Bank Limited (ABL) was incorporated as a State owned Commercial Bank (SCB) on 17 May 2007 under the Companies Act 1994. Agrani Bank emerged as a Nationalized Commercial Bank (NCB) following the Bangladesh Banks (Nationalization) Order 1972 vide President's Order No. 26 of 1972. On a going concern basis ABL took over the business, assets, liabilities, rights and obligations of Agrani Bank through a vendor's agreement signed on 15 November 2007 between the Ministry of Finance of the People's Republic of Bangladesh & the Board of Directors of ABL with retrospective effect from 1 July 2007

Legal Status : Public Limited Company (governed by the Bank Companies Act 1991)

Chairman : Khondoker Bazlul Hoque, PhD

M. D. & CEO : Syed Abdul Hamid, PhD, FCA

Company Secretary : Badal Chandra Dey

Registered Office : 9/D Dilkusha Commercial Area Dhaka 1000 Bangladesh

Authorized Capital : Tk. 2500.00 Crore

Paid up Capital : Tk. 991.29 Crore

Operating Profit : Tk. 1006.74 Crore

Credit Rating : By CRISL (Rating declared on 26 September 2012)

Entity Rating 2011 (As Government Guaranteed Bank)	Long Term AAA	Short Term ST- 1
Surveillance Rating 2011 (Stand Alone Basis)	A +	ST - 2
Outlook 2011	Stable	

Employees : 13,890 (9,917 officers and 3,973 staffs)

Branches : 889 **Subsidiary Companies** : 6

Performance of Agrani Bank Ltd. at a glance

(Taka in crore)

Particulars	**2012**	**2011**	**2010**	**2009**	**2008**
Balance Sheet					
Authorized Capital	2,500	1,000	800	800	800
Paid-up Capital	991	901	547	497	248
Reserves	1,168	1,168	486	139	74
Revaluation Reserve on Investment in Govt. Securities	12	27	90	207	43
Retained Profit (Loss)	(1454)	498	449	74	277
Total Equity	717	2,594	1,572	1,144	642
Total Deposits	**29,242**	**25,221**	**20,633**	**16,628**	**14,681**
Core Deposit	9,932	9,255	8,505	7,357	7,209
i. Savings Deposit	8,926	8,532	8,013	6,966	6,486
ii. Deposit Pension Scheme	127	133	131	125	127
iii. Agrani Bank Pension Scheme	71	68	66	136	567
iv. Agrani Bank Bishesh Shanchay Scheme	808	522	295	130	29
Total Loans and Advances	**21,266**	**19,409**	**16,326**	**12,224**	**11,336**
Interest Suspense and Penal Interest	735	602	579	691	672
Provision for Loans and Advances	3,466	1,235	1,064	1,187	1,153
Net Loans and Advances	17,065	17,572	14,683	10,345	9,511
Net Investments	8,921	8,376	4,264	4,089	2,933
Fixed Assets	1,138	1,123	544	288	253
Total Assets	**37,872**	**34,882**	**26,485**	**21,406**	**18,732**
Net Current Assets	4,823	5,859	5,960	4,798	(6,854)
Operating Results					
Total Income	3,700	3,301	2,402	1,636	1,498
Total Expenditure	2,693	1,827	1,316	992	865
Operating Profit before Amortization, Provision & Tax	1,007	1,474	1,086	644	633
Amortization of Valuation Adjustment	133	133	133	133	133
Provision during the year	2,738	607	312	185	211

Particulars	**2012**	**2011**	**2010**	**2009**	**2008**
Provision for Tax	(2)	484	289	190	24
Net Profit (loss) after Amortization, Provision&Tax	**(1,862)**	**250**	**352**	**136**	**265**
Financial Ratios					
Earnings per share	(187.84)	25.22	46.47	24.80	106.52
Cost of Fund in percentage	9.97	7.69	7.42	6.86	6.65
Return on Equity in percentage	(259.94)	9.64	22.38	53.75	41.28
Return on Assets in percentage	(4.92)	0.72	1.33	0.63	1.41
Net Interest Margin in percentage	1.61	3.83	6.25	4.61	4.24
Average Yield on Loan in percent (performing loan)	13.86	11.99	11.19	11.04	10.38
Loans as percentage of Deposit (AD Ratio)	72.72	76.95	79.13	73.51	77.21
Total Classified Loans to Total Loans in percentage	25.30	11.07	12.88	19.42	22.48
Net Classified Loans to Net Loans in % (including staff loan)	4.22	3.44	4.69	4.79	7.61

Some important facts of Agrani Bank Ltd. (Taka in crore)

Particulars	**2012**	**2011**	**2010**	**2009**	**2008**
Capital Measures (As per Basel II)					
Total Risk Weighted Assets	21,455	21,411	19,326	12,052	8,051
Core Capital (Tier-I)	(1,320)	1,688	1,163	710	599
Supplementary Capital (Tier-II)	-	665	616	281	138
Total Capital	(1,320)	2,353	1,779	991	737
Tier-I Capital Ratio	(6%)	8%	6%	6%	7%
Tier-II Capital Ratio	-	3%	3%	2%	2%
Total Capital Ratio	(6%)	11%	9%	8%	9%
Credit Quality					
Non-Performing Loans (NPLs)	5,380	2,149	2,102	2,374	2,549
Provision for Unclassified Loans	254	293	230	131	116

Particulars	2012	2011	2010	2009	2008
Provision for Classified Loans	3,212	942	834	1,056	1,037
Share Information					
No. of Shares Outstanding	9,91,29,404	9,01,17,640	5,46,52,400	4,96,84,000	2,48,42,000
No. of Shareholders	12	12	12	12	11
Net Asset Value per Share (Taka)	72	288	288	230	258
Other Key Operational Data					
Forex Business	37,482	44,869	30,332	17,801	21,175
i. Import	16,963	26,877	16,792	7,753	10,952
ii. Export	8,838	9,310	6,443	4,461	4,954
iii. Remittance	11,681	8,682	7,097	5,587	5,269
Guarantee Business	515	442	527	160	112
Branches	889	876	867	867	867
Employees	13,890	12,085	11,900	11,443	10,988
NOSTRO A/C with Foreign Banks	43	43	38	39	39
Exchange Houses (Remittance)	52	52	41	35	31
Foreign Correspondents	429	419	419	383	383
Subsidiary Companies	6	4	4	2	2

Sonali Bank Ltd.

Name of the Company	:	**Sonali Bank Limited**
Chairman	:	Dr. A.H.M. Habibur Rahman
CEO and Managing Director	:	Pradip Kumar Dutta
Company Secretary	:	Zaheed Hossain
Legal Status	:	Public Limited Company
Genesis	:	Emarged as Nationalised Commercial Bank in 1972, following the Bangladesh Bank (Nationlisation) Order No. 1972(PO No.26 of 1972)
Date of Incorporation	:	03 June, 2007

Date of Vendor's Agreement	:	15 November, 2007
Registered Office	:	35-42, 44 Motijheel Commercial Area, Dhaka, Bangladesh
Authorized Capital	:	Taka 2000.00 core
Paid-up Capital	:	Taka 1125.00 core
Number of Employee	:	21,839
Number of Branches	:	1203
Phone-PABX	:	9550426-31, 33, 34, 9552924
FAX	:	88-02-9561410, 9552007
SWIFT	:	BSONBDDH
Website	:	www.sonalibank.com.bd
E-mail	:	itd@sonalibank.net.bd

1. Total No of Branches	**1203**
a. No of Foreign branches	2
b. No of Local branches	1201
i) No of Rural Branches	857
ii) No of Urban Branches	344
2. No of Regional Offices	19
3. No of Principal Offices	42
4. No of G.M. Offices	10

Subsidiaries:

- Sonali Bank (UK) Limited has 6 (six) branches in UK.
- Sonali Exchange Company Incorporated (SECI) has 09 (nine) branches in USA.
- Sonali Investment Limited (Merchant Banking) has 4 (four) branches at Motijheel,Paltan,Uttara,Mirpur in Dhaka, Bangladesh.

Rupali Bank Ltd.

Present Capital Structure:

Authorized Capital	:	Tk. 7000 million (US$ 88.66 million)
Paid up Capital	:	Tk. 1650 million (US$ 20.9 million)

Break up of paid up Capital:

Government shareholding	:	90.19%
Private shareholding	:	09.81 %

Present Share Structure:

Total Number of share (Each lot 10)	:	16,50,00,000
Share Demated by shareholders as on 24.02.2013	:	124358890

Number of Branches:

Rupali Bank operates through 517 branches. It is linked to its foreign correspondents all over the world.

Number of Employees:

The total number of employees is 4293.

Chief Executive:

The Bank is headed by the Managing Director (Chief executive) who is a reputed professional Banker.

Name of the company	:	Rupali Bank Limited
Chairman	:	Ahmed Al-Kabir, PhD.
Managing Director	:	M. Farid Uddin
Company Secretary	:	Md. Shahjahan Khandaker
Legal Status	:	Public Limited Company
Genesis	:	Rupali Bank Limited has been incorporated on 14 December 1986 under the Companies Act 1913 after taking over and acquiring as a going concern the undertaking and businesses of Rupali Bank with all of its assets, liabilities, benefits, rights, powers, authorities, privileges, borrowings and obligations. Rupali Bank, which initially emerged as a Nationalized Commercial Bank (NCB) under the Bangladesh Banks (Nationalization) Order, 1972 (President's Order No. 26 of 1972), has now become a state-owned commercial bank (SCB) through a vendor's agreement dated 15 November 2007.
Date of Incorporation	:	14 December 1986
Registered Office	:	34, Dilkusha Commercial Area, Dhaka-1000, Bangladesh
Authorized Capital	:	Tk. 700 Crore

Paid-up Capital	:	Tk. 165 Crore
Reserves & Retained Earnings	:	Tk. 1374 Crore
Credit Rating by CRAB(2009)	:	Long Term - A3 Short Term - ST3 National Support- AAA
Listing with DSE	:	19-08-1987
Listing with CSE	:	10-10-1995
Commencement of Trading with DSE & CSE	:	23-12-1986
VAT Registration	:	9011039307
TIN Certificate	:	177-200-0021/LTU/Dhaka
Auditors	:	AHMAD & AKHTAR, Chartered Accountants, BCIC Bhaban (3rd Floor) 30-31 Dilkusha C/A, Dhaka-1000, Bangladesh. & G. KIBRIA & CO., Chartered Accountants Shadharan Bima Bhaban (6thFloor), 24-25 Dilkusha C/A, Dhaka-1000, Bangladesh.
Legal Advisor	:	S.M Atikur Rahman, Barister-at-Law, Suite- D (1st Floor), 105/A Kakrail Road Dhaka, Bangladesh.
Tax Consultant	:	K.M HASAN & CO. Chartered Accountants Hometown Apartment (8th & 9th Floor), 87, New Eskarton Road, Dhaka-1000, Bangladesh.
Number of Employees	:	4503
Number of Branches	:	511
Number of Subsidiary Companies	:	01 (Rupali Investment Limited)
Phone-PABX	:	+88-02-9551624-25, +88-02-9551525, +88-02-9551840, +88-02-9552746, +88-02-9552184 +88-02-9552214+88-02-955093-4
Fax	:	+88-02-9564148, +88-02-9552671
SWIFT BIC		RUPBBDDH
Website		www.rupalibank.org
E-mail		info@rupalibank.org, it@rupalibank.org

Janata Bank Ltd.

Corporate Profile

Janata Bank Limited, the second largest State Owned Commercial Bank (SCB) in Bangladesh, is playing pivotal role in overall financial activities of the country. The Bank emerged as 'Janata Bank' by combining the erstwhile United Bank Limited and Union Bank Limited under the Banks Nationalization Order (President's Order- 26) of 1972 and was restructured as a limited company in November, 2007. Since inception in 1972 the Bank has commendably contributed to the socio-economic development of Bangladesh and helped structuring solid financial ground of the country as well. Janata Bank runs its business with 884 branches across the country including 4 overseas branches in United Arab Emirates.

Legal Status:	Public Limited Company(governed by the Bank Companies Act 1991)
Chairman:	Dr. Abul Barkat, Professor, Economics Department, Dhaka University.
Managing Director & CEO :	S. M. Aminur Rahman
Company Secretary :	Md. Mosaddake-Ul-Alam
Registered Office :	Janata Bhaban, 110, Motijheel Commercial Area, Dhaka-1000, Bangladesh.
Employees:	15071
Branches :	884
Subsidiay Companies:	1. Janata Capital and Investment Company 2. Janata Exchange Company SRL, Italy
Phone PABX :	9560000, 9566020, 9556245-49, 9565041-45, 9560027-30; FAX 88-02-9554460, 9553329, 9552078
SWIFT :	JANB BD DH
Website:	www. janatabank-bd.com
E-mail :	md@janatabank-bd.com

Particulars	**2012 Taka (in millions)**	**2011 Taka (in millions)**
Authorized capital	2 0,000.00	2 0,000.00
Paid-up capital	1 1,000.00	8 ,125.00
Required capital (10% of RWA)	3 1,898.03	3 0,642.64
Capital kept	1 1,780.36	3 1,242.01
Capital surplus/(shortfall)	**(20,117.67)**	**599.37**
Total assets	511,129.41	440,389.37

Particulars	**2012 Taka (in millions)**	**2011 Taka (in millions)**
Total deposits	409,767.01	361,676.69
Total investment	108,342.04	90,905.87
Total loans and advances	305,339.58	257,801.04
Import	188,283.70	197,285.40
Export	156,524.70	153,758.20
Foreign remittance	100,089.40	72,284.70
Total contingent liabilities (Off balance sheet item)	112,558.95	151,206.83
Total loans deposits ratio	74.52%	71.28%
Total classified loans to total loans & advances (excluding overseas branch)	17.16%	5.60%
Total operating profit (after amortization)	14,533.80	14,722.32
Profit after provision and tax	(16,280.34)	4,444.91
Classified loans & advances during the year:		
In Bangladesh	52,405.89	14,343.00
Outside Bangladesh	795.80	697.00
Total	**5 3,201.69**	**1 5,040.00**
Provision held against classified advances (including general provision for unclassified loans and advances)	34,012.05	11,173.07
Cost of deposit	7.24%	5.57%
Operating cost	1.97%	2.23%
Performing assets/loans (including overseas)	252,137.89	242,761.04
Nonperforming assets/loans (including overseas)	53,201.69	15,040.00
Return on investment (ROI)	8.04%	7.72%
Return on assets (ROA)	-3.19%	1.01%
Cost earnings ratio	70.65%	61.31%
Total reduction of classified advances	4,357.30	3,644.60
Cash recovery	1,206.70	1,627.80
Noninterest income	8,133.60	9,356.70
Earnings per share	(148.00)	43.46

Selected Statistics of Scheduled Banks

(Billion Taka)

	Particulars	30 June 2007	30 June 2008	30 June 2009	30 June 2010	30 June 2011	30 June 2012	30 June 2013
	1	2	3	4	5	6	7	8
1.	**Bank deposits (excluding inter-bank items)**	**1970.1**	**2317.3**	**2786.8**	**3368.7**	**4104.8**	**4900.4**	**5729.7**
	(a) Demand deposits	234.6	270.5	302.3	416.2	481.1	510.6	557.4
	(b) Time deposits	1613.4	1889.5	2300.7	2750.4	3374.2	4073.9	4799.0
	(c) Restricted deposits	0.5	0.5	0.7	0.3	0.3	0.2	0.8
	(d) Government deposits	121.6	156.8	183.1	201.8	249.2	315.7	372.5
2.	Borrowings from the Bangladesh Bank	57.4	66.8	61.0	58.5	178.3	216.6	94.4
3.	Cash in tills	21.4	29.6	34.0	43.1	57.3	64.8	78.2
4. Balances with the Bangladesh Bank including FCD		152.7	167.1	287.7	308.8	384.0	472.4	453.4
5.	Balances with other banks in Bangladesh	49.6	55.9	74.4	94.1	104.3	120.2	159.4
6.	Money at call and short notice	8.7	22.3	20.8	36.5	29.4	57.4	53.0
7.	**Total investment[@]**	**223.1**	**379.3**	**486.5**	**581.4**	**781.1**	**1017.1**	**1530.2**
8.	(a) Government securities & treasury bills*	194.4	343.2	427.5	465.4	639.1	831.7	1208.1
	(b) Others	28.7	36.1	59.0	116.0	142.0	185.4	322.1
	Bank credit (exclude inter-bank items and foreign bills)	**1614.2**	**1928.7**	**2197.0**	**2719.3**	**3407.8**	**4055.0**	**4370.2**
9.	(a) Advances in Bangladesh**	1449.6	1790.9	2079.9	2578.6	3197.4	3816.5	4171.2
	(b) Inland bills purchased and discounted	164.6	137.8	117.1	140.7	210.4	238.5	199.0
	Credit/deposit ratio (excluding specialized banks)	0.8	0.8	0.8	0.8	0.8	0.8	0.8

Source: Statistics Department, Bangladesh bank.

Appendix-3
Statistical Workings-I

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	roe, npl, car, ti, te[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: npat

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.756[a]	.572	.394	979.61432

a. Predictors: (Constant), roe, npl, car, ti, te

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.539E7	5	3077199.894	3.207	.046[a]
	Residual	1.152E7	12	959644.212		
	Total	2.690E7	17			

a. Predictors: (Constant), roe, npl, car, ti, te

b. Dependent Variable: npat

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-947.529	2117.497		-.447	.663
	ti	-.584	.612	-1.056	-.954	.359
	te	.607	.981	.707	.619	.548
	car	274.257	157.777	.515	1.738	.108
	npl	-6.845	17.766	-.083	-.385	.707
	roe	68.629	52.639	.487	1.304	.217

a. Dependent Variable: npat

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	car[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: npat

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.676[a]	.457	.423	955.72172

a. Predictors: (Constant), car

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.229E7	1	1.229E7	13.452	.002[a]
	Residual	1.461E7	16	913404.015		
	Total	2.690E7	17			

a. Predictors: (Constant), car

b. Dependent Variable: npat

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2154.466	558.218		-3.860	.001
	car	360.245	98.221	.676	3.668	.002

a. Dependent Variable: npat

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	car[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: npat

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.676[a]	.457	.423	955.72172

a. Predictors: (Constant), car

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.229E7	1	1.229E7	13.452	.002[a]
	Residual	1.461E7	16	913404.015		
	Total	2.690E7	17			

a. Predictors: (Constant), car

b. Dependent Variable: npat

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2154.466	558.218		-3.860	.001
	car	360.245	98.221	.676	3.668	.002

a. Dependent Variable: npat

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	ti[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: npat

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.113[a]	.013	-.049	1288.34923

a. Predictors: (Constant), ti

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	344230.025	1	344230.025	.207	.655[a]
	Residual	2.656E7	16	1659843.750		
	Total	2.690E7	17			

a. Predictors: (Constant), ti

b. Dependent Variable: npat

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-544.983	654.029		-.833	.417
	ti	.063	.137	.113	.455	.655

a. Dependent Variable: npat

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	roe, te, npl, car, ti[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: np

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.929[a]	.863	.813	824.95702

a. Predictors: (Constant), roe, te, npl, car, ti

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.980E7	5	1.196E7	17.573	.000[a]
	Residual	9527757.157	14	680554.083		
	Total	6.932E7	19			

a. Predictors: (Constant), roe, te, npl, car, ti

b. Dependent Variable: np

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2379.013	1221.031		-1.948	.072
	ti	.097	.571	.195	.170	.867
	te	-.464	.784	-.611	-.592	.563
	car	47.365	126.782	.068	.374	.714
	npl	76.373	40.841	.356	1.870	.083
	roe	3855.141	680.376	.923	5.666	.000

a. Dependent Variable: np

Appendix-4
Statistical Workings-II

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	roe[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: np

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.702[a]	.493	.464	1397.95106

a. Predictors: (Constant), roe

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.415E7	1	3.415E7	17.473	.001[a]
	Residual	3.518E7	18	1954267.158		
	Total	6.932E7	19			

a. Predictors: (Constant), roe

b. Dependent Variable: np

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1148.498	350.124		-3.280	.004
	roe	2929.999	700.950	.702	4.180	.001

a. Dependent Variable: np

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	npl[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: np

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.061[a]	.004	-.052	1958.80599

a. Predictors: (Constant), npl

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	258644.640	1	258644.640	.067	.798[a]
	Residual	6.906E7	18	3836920.895		
	Total	6.932E7	19			

a. Predictors: (Constant), npl

b. Dependent Variable: np

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-869.817	1529.835		-.569	.577
	npl	13.087	50.406	.061	.260	.798

a. Dependent Variable: np

Correlations

		ti	te	np	car	npl	roe
ti	Pearson Correlation	1	.989**	-.311	.612**	-.643**	.310
	Sig. (2-tailed)		.000	.183	.004	.002	.184
	N	20	20	20	20	20	20
te	Pearson Correlation	.989**	1	-.382	.556*	-.571**	.219
	Sig. (2-tailed)	.000		.097	.011	.009	.354
	N	20	20	20	20	20	20
np	Pearson Correlation	-.311	-.382	1	.294	.061	.702**
	Sig. (2-tailed)	.183	.097		.209	.798	.001
	N	20	20	20	20	20	20
car	Pearson Correlation	.612**	.556*	.294	1	-.359	.621**
	Sig. (2-tailed)	.004	.011	.209		.121	.003
	N	20	20	20	20	20	20
npl	Pearson Correlation	-.643**	-.571**	.061	-.359	1	-.535*
	Sig. (2-tailed)	.002	.009	.798	.121		.015
	N	20	20	20	20	20	20
roe	Pearson Correlation	.310	.219	.702**	.621**	-.535*	1
	Sig. (2-tailed)	.184	.354	.001	.003	.015	
	N	20	20	20	20	20	20

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

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations

		SB	JB	AB	RB
SB	Pearson Correlation	1	-.955*	.949*	-.121
	Sig. (2-tailed)		.011	.014	.847
	N	5	5	5	5
JB	Pearson Correlation	-.955*	1	-.976**	.065
	Sig. (2-tailed)	.011		.004	.917
	N	5	5	5	5
AB	Pearson Correlation	.949*	-.976**	1	-.257
	Sig. (2-tailed)	.014	.004		.677
	N	5	5	5	5
RB	Pearson Correlation	-.121	.065	-.257	1
	Sig. (2-tailed)	.847	.917	.677	
	N	5	5	5	5

*. Correlation is significant at the 0.05 level (2-tailed).

Correlations

		SB	JB	AB	RB
SB	Pearson Correlation	1	-.955*	.949*	-.121
	Sig. (2-tailed)		.011	.014	.847
	N	5	5	5	5
JB	Pearson Correlation	-.955*	1	-.976**	.065
	Sig. (2-tailed)	.011		.004	.917
	N	5	5	5	5
AB	Pearson Correlation	.949*	-.976**	1	-.257
	Sig. (2-tailed)	.014	.004		.677
	N	5	5	5	5
RB	Pearson Correlation	-.121	.065	-.257	1
	Sig. (2-tailed)	.847	.917	.677	
	N	5	5	5	5

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

Appendix-5

Financial Spread Sheet

On basis of values in the following Spread Sheet, the particular ratio will be calculated. At last the Credit Risk Grading of the borrower will be completed according to the given format in Appendix-

Particulars	Projected	Year	Year	Year
Sales revenues (Less return, others if any)				
Other operating income				
Cost of Goods sold				
Gross Profit				
General and Admin, Expenses				
Selling Expenses				
Total Admin. & Selling Exp.				
Operating Profit (Loss) (EBIT)				
Other Income				
Other Expenses (Non Cash)				
Earning Before Interest & Tax (EIT)				
Financial Expenses (Interest)				
Earning Before Tax (EBT)				
Provision for Tax (for limited company)				
Net Profit/ Earning After Tax (EAT)				
Dividend				
Retained Earnings				
Particulars				
Current Asset				
Cash in Hand				
Cash at Bank				

Accounts Receivable				
L/C Margin				
Inventory/ Stock				
Advance Deposit				
Due from Affiliates				
Prepaid Expenses				
Other Current Assets				
Total Current Assets				
Fixed Asset				
Land & Building				
Depreciation				
Land & Building (Net of Dep.)				
Plant & Machinery				
Acc. Depreciation				
Plant & Machinery (Net of Dep.)				
Furniture & Fixture				
Acc. Depreciation				
Furniture & Fixture (Net of Dept.)				
Other Fixed Assets				
Particulars	**Projected**	**Year**	**Year**	**Year**
Other Non Current Assets				
Acc. Depreciation				
Other Fixed Assets (Net of Dep.)				
Total Fixed Assets				
Pre-Payments & Advances				
Investment in Associate				
Intangible Assets				
Loan to Directors				
Total Other Non Current Assets				
Total Assets				
Liabilities and Owners Equity				
Current Liabilities				
Accrued Items				
Accounts Payable/ Sundry Creditors				
Bank Loan (under 1 year)				
Long Term Loan Installment due for 1 Year				
Provision for Tax				
Provision for Dividend				
Provision for unclaimed Dividend				
Other Current Liabilities				
Total Current Liabilities				
Non-Current Liabilities				
Long Term Loan				
Other Non-Current Liabilities (Bank)				
Loan from Associates				
Total Non-Current Liabilities				
Total Liabilities				
Equity/ Net Worth: (For Company)				

Capital/ Paid-up Capital				
Retained Earnings				
Loan From Directors				
Reserves				
Less Intangible Assets (i.e. Goodwill, Patent)				
Tangible Net Worth				
Total Liabilities & Equity				

Calculation of Ratios

Major Ratios	**Projected**	**Year**	**Year**	**Year**
Profitability Ratios:				
Gross Profit Margin (%)				
Net Profit Margin (%)				
Operating Profit Margin (%)				
Return on Assets (%)				
Return on Equity (%)				
Liquidity Ratios:				
Current Ratio				
Quick Ratio				
Major Ratios	**Projected**	**Year**	**Year**	**Year**
Asset Utilization Ratios:				
Sales to Fixed Assets (times)				
Sales to Total Assets (times)				
Sales to Working Capital (times)				
Receivable Turnover in days				
Inventory Turnover in days				
Payable Turnover in days				
Debt Utilization Ratios:				
Debt to Equity (%)				
Debt to Total Assets (%)				
Coverage Ratios:				
Debt Service Coverage (times)				
Interest Coverage in Times				

Cash Flow Statement

Particulars	**Year**	**Year**	**Year**
Operating Activities			
Earning Before Interest & Tax (EIT)			
Add: Depreciation			
Add: Other non-Cash Expenses (If any)			
Change in Accounts Receivable			
Change in L/C Margin			
Change in Inventory/ Stock			
Change in Advance Deposit			
Change in Due from Affiliates			
Change in Prepaid Expenses			
Change in Other Current Assets			

Change in Accruable			
Change in Accounts Payable			
Change in Bank Loan (under 1 year)			
Change in term loan installment due for 1 (one) year			
Change in other Current Liabilities			
Net Cash from operating activities			
Investing Activities			
Change in Land & Building			
Change in plant and Machinery			
Change in Furniture and Fixtures			
Change in Other Fixed Assets			
Change in Other non current assets			
Net Cash from Investing activities			
Financing Activities			
Tax payment			
Dividend Payments			
Provision for unclaimed Dividend			
Change in Long term Loan			
Particulars	**Year**	**Year**	**Year**
Change in other non-current liability			
Change in loan from associates			
Change in Capital			
Change in Loan From Directors			
Change in Reserves			
Net Cash from Financing Activities			
Net Change in Cash Flow			
Opening Balance			
(Cash Withdrawal)/ Cash injection			
Ending Balance			

Appendix-6

Credit Risk Grading (CRG) Scoring Sheet

Borrower:			
Group Name (if any):			
Branch:			
Industry / Sector:			
Date of Financials:			
Completed by:			
Approved by:			
Number	**Grading**	**Short**	**Score**
1	Superior	SUP	Fully cash secured, secured by Government / International Bank Guarantee
2	Good	GD	85+
3	Acceptable	ACCPT	75-84
4	Marginal / Watch list	MG / WL	65-74
5	Special Mention	SM	55-64
6	Substandard	SS	45-54
7	Doubtful	DF	35-44
8	Bad & Loss	BL	<35

Criteria	**Weight**				
A. Financial Risk	**50%**		**Score**		
1. Leverage: (15%) Debt Equity Ratio (×)- Times Total Liabilities to Tangible Net worth All calculations should be based on annual financial statements of the borrower		1. Less than 0.25 x 2. 0.26 x to 0.35 x 3. 0.36 x to 0.50 x 4. 0.51 x to 0.75 x 5. 0.76 x to 1.25 x 6. 1.26 x to 2.00 x 7. 2.01 x to 2.50 x 8. 2.51 x to 2.75 x 9. More than 2.75 x	15 14 13 12 11 10 8 7 0		

2. Liquidity: (15%) Current Ration (x) – Times Current Assets to Current Liabilities All calculations should be based on annual financial statements of the borrower	10. Greater than 2.74 x 11. 2.50 x to 2.74 x 12. 2.00 x to 2.49 x 13. 1.50 x to 1.99 x 14. 1.10 x to 149 x 15. 0.90 x to 1.09 x 16. 0.80 x to 0.89 x 17. 0.70 x to 0.79 x 18. Less than 0.70 x	15 14 13 12 11 10 8 7 0		
3. Profitability: (15%) Operating Profit Margin (%) Operating Profit ×100 Sales	19. Greater than 25% 20. 20 % to 24 % 21. 15 % to 19 % 22. 10 % to 14 % 23. 7 % to 9 % 24. 4 % to 6 % 25. 1 % to 3 % 26. Less than 1 %	15 14 13 12 10 8 7 0		
4. Coverage: (5%) Interest Coverage Ratio (×) – Times Earnings Before Interest & Tax (EBIT) Interest on debt	27. More than 2.00 x 28. More than 1.51 x Less than 2.00 x 29. More than 1.25 x Less than 1.50 x 30. More than 1.00 x Less than 1.24 x 31. Less than 1.00 x	5 4 3 2 0		
Total Score – Financial Risk		**50**		

Criteria	**Weight**		**Score**		
B. Business / Industry Risk	**18%**				
1. Size of Business (Sales in BDT) crore) The size of the borrower's business measured by the most recent year's total sales. Preferably based on audited financial statements		32. >60.00 33. 30.00 – 59.99 34. 10.00 – 29.99 35. 5.00 – 9.99 36. 2.50 – 4.99 37. < 2.50	5 4 3 2 1 0		
2. Age of Business		38. > 10 years	3		

The number of years the borrower has been engaged in the primary line of business.	39. 40. 41.	> 5 – 10 years 2 – 5 years < 2 years	2 1 0		
3. Business Outlook A critical assessment of the medium term prospects of the borrower, taking into account the industry, market share and economic factors.	42. 43. 44. 45.	Favorable Stable Slightly Uncertain Cause for Concern	3 2 1 0		
4. Industry Growth	46. 47. 48. 49.	Strong (10%+) Good (>5% - 10%) Moderate (1% - 5%) No Growth (<1%)	3 2 1 0		
5. Market Competition	50. 51. 52.	Dominant Player Moderately Competitive Highly Competitive	2 1 0		
6. Entry / Exit Barriers	53. 54. 55.	Difficult Average Easy	2 1 0		
Total Score-Business/Industry Risk			**18**		

Criteria	**Weight**		**Score**		
C. Management Risk	**12%**				
1. Experience (Management & Management Team) The quality of management based on the aggregate number of years that the Senior Management Team has been in the industry.		56. 57. 58. 59.	More than 10 years in the related line of business 5–10 years in the related line of business 1–5 years in the related line of business No experience	5 3 2 0		
2. Second Line/ Succession		60. 61. 62. 63.	Ready Succession Succession within 1-2 years Succession within 2-3 years Succession in question	4 3 2 0		
3. Team Work		64. 65. 66.	Very Good Moderate Poor	3 2 1		

	67.	Regular Conflict	0		
Total Score-Management Risk			**12**		

Criteria	**Weight**		**Score**		
D. Security Risk	**10%**				
1. Security Coverage (Primary)	68.	Fully pledged facilities /substantially cash covered/ Reg. Mortg	4		
	69.	Registered Hypothecation (1st charge/ 1st Pari passu charge)	3		
	70.	2nd Charge/ Inferior charge.	2		
	71.	Simple hypothecation/ negative lien on assets.	1		
	72.	No security	0		
2. Collateral Coverage (Property Location)	73.	Registered Mortgage on Municipal Corporation/ Prime area property.	4		
	74.	Registered Mortgage on Pourashava/ semi-urban area property	3		
	75.	Equitable Mortagage or No property but plant & machinery as collateral	2		
	76.	Negative lien on collateral	1		
	77.	No collateral	0		
3. Support (Guarantee)	78.	Personal guarantee with high net worth or strong Corporate Guarantee	2		
	79.	Personal Guarantees or Corporate Guarantee with average financial strength.	1		
	80.	No Support/ Guarantee	0		

Total Score- Security Risk			**10**		

Criteria	**Weight**		**Score**		
E. Relationship Risk	**10%**				
1. Account Conduct		81. More than 3 (three) years accounts with faultless record	4		
		82. Less than 3 (three) years accounts with faultless record.	3		
		83. Accounts having satisfactory dealings with some late payments.	2 1		
		84. Frequent Past dues & Irregular dealings in account	0		
2. Utilization of Limit (actual/ projection)		85. More than 60% 86. 40 – 60% 87. Less than 40%	2 1 0		
3. Compliance of Covenants/ Conditions		88. Full Compliance 89. Some Non-Compliance 90. No Compliance	2 1 0		
4. Personal Deposits The extent to which the bank maintains a personal banking relationship with the key business sponsors/ principals.		91. Personal accounts of the key business Sponsors/ Principals are maintained in the bank, with significant deposits.	1		
		92. No depository relationship.	0		
Total Score-Relationship Risk			**10**		
Grand Total Score of All Risks			**100**		