Report On

Performance Evaluation of Ten Most Predominant Banks in Bangladesh following the CAMELS Approach

By

Syeda Tamrina Shahnewaz
Student ID: 15304006

An internship report submitted to BRAC Business School in partial fulfillment of the requirements for the degree of
Bachelors of Business Administration

BRAC Business School
BRAC University
September, 2019

Declaration

It is hereby declared that

1. The internship report submitted is my/our own original work while completing degree at BRAC University.
2. The report does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
3. The report does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
4. I have acknowledged all main sources of help.

Student's Full Name & Signature:

Syeda Tamrina Shahnewaz

Student ID: 15304006

Supervisor's Full Name & Signature:

N M Baki Billah

Lecturer & Assistant Dean, BRAC Business School

BRAC University

Letter of Transmittal

N M Baki Billah

Lecturer & Assistant Dean

BRAC Business School

BRAC University

Subject: Submission of internship report on "Performance Evaluation of Ten Most Predominant Banks in Bangladesh following the CAMELS Approach"

Dear Sir,

It is my pleasure to state that I have completed my internship report on "Performance Evaluation of Ten Most Predominant Banks in Bangladesh following the CAMELS Approach" by keeping accordance with the instructions and guidelines provided. In order to develop this paper, I have aggregated required information from secondary sources such as journals/ articles of respected authors and annual reports of respective banks.

I would like to express gratitude for allowing me to work on this topic. Through the progression of this report, I got the opportunity to gain valuable insights about the banking sector of Bangladesh and utilize my academic knowledge. I would also like to seek consideration on the unintended errors and request you to accept this paper.

Sincerely yours,

Syeda Tamrina Shanewaz

ID: 15304006

BRAC Business School

BRAC University

September 12, 2019

Non- Disclosure Agreement

This Non-Disclosure Agreement is entered into by and between IDLC Securities Limited and Syeda Tamrina Shahnewaz for the purpose of preventing the unauthorized disclosure of confidential information. The parties agree to enter into a confidential relationship with respect to the non- disclosure of certain proprietary and confidential information that might come across through the course of work.

Student's Full Name & Signature:

Syeda Tamrina Shahnewaz

Student ID: 15304006

On-sight Supervisor's Full Name & Signature:

Kazi Monirul Islam, CFA

Head of Research, IDLC Securities Limited

IDLC Finance Limited

Acknowledgement

I would like to start by expressing deepest gratitude to the Almighty who has given me strength and ability to work on this paper. Next I would like to acknowledge with gratefulness my parents who have provided me with unconditional support and inspiration throughout this course of time.

I offer my sincere gratitude to my internship supervisor Mr. N M Baki Billah Sir for his assistance, support, advice and valuable instructions throughout the period. I am truly grateful for the patience and effort you have put into to help me develop this paper.

I convey my special thanks to the entire Research Team of IDLC Securities Limited for their willingness to enlighten me with knowledge, encouragement to complete tasks effectively and invaluable help towards different stages my report completion. My heartfelt gratitude to Mr. Kazi Monirul Islam CFA, Head of Research, IDLC Securities Limited to allow me to avail internship opportunity under his supervision. My sincere thanks to Mr. S M Galibur Rahman, Financial Analyst, Research Team, IDLC Securities Limited for his incredible guidance throughout the internship period. I deeply acknowledge all the support, learnings and advises from these respected personalities that have enabled me to complete my internship in the Research team of IDLC Securities Limited.

Executive Summary

The growing economy of Bangladesh has caused introduction of new banks while existing ones are focusing on prospective developments. As impacts of various reasons, banks are not able to maintain consistency. This study comprehensively evaluates the financial soundness of ten banks which are selected according to the widespread network across the country. CAMELS approach has been addressed because it is one of the most credible methods of measuring bank's performance. Qualitative and quantitative data were collected from the annual reports, related researches and academics that served as rich sources of reference. Quantitative portion incorporated reviewing data that are average of last 3 years. The results showed that BRAC Bank secured first rank while Al-Arafah Islami Bank stood second; however, Rupali Bank Limited stood last in the ranking. It was comprehended that there are other major aspects beyond evaluating the listed ratios under CAMELS that increased the reliability of the ranking developed.

Keywords: CAMELS rating; Banking Ratios; Performance analysis

Table of Contents

List of Tables

List of Figures

List of Acronyms

NBFI	Non-Banking Financial Institution
MFS	Mobile Financial Services
ATM	Automated Teller Machine
ROA	Return on Asset
ROE	Return on Equity
CAR	Capital Adequacy ratio
VAR	Value at Risk
GDP	Gross Domestic Product
BSEC	Bangladesh Securities & Exchange Commission
DSE	Dhaka Stock Exchange
BBS	Bangladesh Bureau of Statistics
CRR	Cash Reserve Ratio
NPL	Non-performing Loan
PLL	Provision for Loan Losses
CRAB	Credit Rating Agency of Bangladesh
CMSME	Cottage, Micro, Small & Medium Enterprise
EPS	Earnings per Share

Glossary

Recapitalization	It is the way towards rebuilding an organization's obligation and value blend, regularly to make an organization's capital structure progressively steady.
Debenture	A long term security yielding a fixed pace of interest, issued by an organization and verified against resources.
Brexit	The removal of the United Kingdom (UK) from the European Union (EU).
Provision	A record which records a present risk of a substance. The chronicle of the obligation in the substance's asset report is coordinated to an appropriate business ledger in the entity's income statement
Subsidiary	An organization constrained by a holding organization
Subordinated debt	An obligation owed to an unbound lender that in case of a liquidation must be paid after the cases of verified loan bosses have been met.

CHAPTER 1

1.1 Introduction

1.1.1 Today's economy at a glance

Presently, the economy of Bangladesh has witnessed a healthy continuation of progression supported by incremental growth of both domestic and foreign demands caused by the rising public and private ventures and consumption. The economy has undergone many positive signs; higher economic growth and lower inflation rate, flourishment of the export sector, increased foreign remittance and most importantly, GDP has grown to 7.86% that was beyond the expected level. According to Bangladesh Bureau of Statistics (BBS), GDP of 7.86% has been the highest till now relative to that of 2005-2006 which is considered as the base year. The driving forces behind such growth is the development in industry, service and agricultural sector. Progress in the industry sector was 12.1% in 2018, 4.2% in agricultural sector and 6.4% in service sector. Growth of imports was higher than that of export being 25.2% and 6.4% respectively. Total remittance in 2018 accumulated to USD 14.9 billion which was an increment of 17.3% from previous year. In addition, foreign exchange reserve mounted up to USD 32.94 billion and exchange rate has decreased by 3.6%.

1.1.2 The banking sector at present

The banking industry has played a pivotal role to develop the economy of Bangladesh. At present, there are 59 scheduled banks in Bangladesh that operate under full control and supervision of Bangladesh Bank. Among the scheduled banks, there are 6 state-owned commercial banks; 3 specialized banks that focus on specific objectives like agricultural or industrial development; 41 private commercial banks which are primarily owned by private entities are dissected into two groups namely conventional PCB and Islami Shariah based PCBs.

Hence, there are 33 conventional PCBs that function on interest based operations and 8 Islami Shariah based PCBs in Bangladesh that are based on Islami Shariah principles. Apart from these, the banking sector includes 9 Foreign Commercial Banks that operate in Bangladesh as the branches multi-national banks and other 5 non-scheduled banks. The banking sector has magnificently expanded in the last few decades and introduced micro finance and micro credit policy to financially include rural economy and help expand the overall monetisation system of the country. The repo rate had been decreased by 75 basis points to 6% by the Bangladesh Bank in 2018 along with CRR which was reduced by 1% to 5.5%. Accumulated total assets of all the enlisted banks declined by 1.71% to reach BDT 2,551,695 million which resulted excess liquidity to decrease by BDT 103,032 million. Deposits of banks incremented by 9.05% to reach BDT 10.10 trillion whereas bank credit raised by 13% amounting to BDT 9.6 trillion by the end of 2018. According to Bangladesh Bank, weighted average interest rate of deposits prevailed in between 5% to 5.5% whereas that of advances ranged from 9.4% to 9.9% respectively. In addition, weighted average of call money rates ranged between 2% to 4%. 2018 was a prospectus year for agent banking since this method of financial inclusion earned huge acceptance and popularity. As a result, there were as many as 2.45 million agent banks with total balance of BDT 31,124 million. Thus, the banking sector has progressed remarkably in means of greater financial inclusion across the country through vast operation of digital payments, mobile financial services and agent banking. The central bank has also enforced Basel III accord to maintain stable capital adequacy.

However, the economy's inclination towards the influential have caused a particular segment to defraud banks and influence the system at large extent despite regulated banking practices like Basel III. In addition, relevant stakeholders of the banks have repeatedly shown concerns due to the constant degradation of the banking performances. Currently, the banking system is witnessing a slow motion crisis particularly through a few state owned and public-sector banks. Irregular loan allocations by the banks have grown chances of loans to default and as such developing huge amount of non-performing loan becomes inevitable. NPL is estimated to be BDT 1.0 trillion and estimated to be 11% of the total loan portfolio and half of it is liable for state owned banks. In order to tackle huge NPL, 'debt default' is often implemented that shows the bank's inability to collect interest and principal payments which is leading to lesser profits and ultimately cessation of the bank. Bangladesh Bank pointed out ten banks by mid-2018 that were under capital deficits and pleaded for state-funded recapitalisation or financial assistance. However, this might in turn fail to refrain banks from reaching to such situation. Capital inadequacy has prevailed since the existing regulatory capital clauses had not been viably yielded. Therefore, solutions for risks of misconduct and credit risk management are highly needed to be enforced in order to ensure loans are merged with ability to be repaid. Thus, as the financial sector is largely depended on the banks, under performance of the banking sector will hinder the growth of the economy.

1.2 Insights of Ten most predominant banks of Bangladesh

Table 1: Insights of 10 selected Banks

Selected Banks	Branches	Agent banks	Employees	ATM	Imports (million BDT)	Export (million BDT)	Remittance (million BDT)
Al Arafah Islami Bank	105	133	3,682		168,574	114,481.9	36,917.2
BRAC Bank	123	50	7,085	448	110,575	60,800.0	84,178.0
City Bank	186	154	3,858	338	173,847	120,698.0	28,631.0
DUTCH Bangla Bank	101	2150	8,195	4,705	167,371	151,484.4	
Eastern Bank	184		1,715	200	167,218	128,235.0	
First Security Islami Bank	118	20	3,898	139	92,431	10,337.7	12,995.0
Islami Bank	147	305	14,698	629	399,816	251,592.0	275,212.0
Pubali Bank	473		7,587		86,340	72,523.0	22,597.0
Rupali Bank	568		4,929		11,402	2,600.2	1,717.3
Uttara Bank	235		3,527		56,245	16,483.1	38,227.2

- **Al-Arafah Islami Bank Limited**

Established in the year 1995 with an authorized capital BDT 15,000 million, today Al-Arafah Islami Bank has reached every corners of Bangladesh through 168 branches with a workforce of 3,682 employees. The organization is under 100% local partnership of capital. In 2018, Paid-up capital amounted to BDT 10,440.22 million. Proportion of non-performing investment, NPI relative to Investments had increased by 0.69% in 2018 from 4.10% in 2017 to 4.79%; NPI percentage was much less in 2016 comparatively than 2018, 4.54%. EPS had declined by 0.66% in 2018 reaching 2.35 in 2018 from 3.15 in 2017. Both ROE and ROA witnessed negative growth of 3.61% and 0.21% respectively in 2018. However, cost to fund had increased by 1.2% from the previous year. Al-Arafah Islami Bank has put its focus on SME and Retail sector and has achieved 136% of the set target by emphasizing on industry, trade and services. Its attempt of establishing Cottage, Micro, Small and Medium Enterprises (CMSME) served as opportunities of job creation and income generation. As of now the bank has positioned 200 agent outlets in 44 districts around the country. According to Credit Rating Information and Services Limited (CRISL), Al-Arafah Islami Bank Limited had been rated AA for long term and ST-2 for short term in 2018.

- **BRAC Bank**

Established in the year 2001, BRAC Bank started its operation by bringing up the potential of Small and Medium Enterprises (SME) to generate growth and create employment in limelight. As of now, BRAC Bank holds an authorized capital of BDT 20.000 million and market capital of BDT 77,971 million. At present, there are a total of 186 branches, 50 Agent Bank outlets and 456 SME Unit offices with 7,085 employees across the country serving 1.2 million customers. The Bank primarily focuses on corporate banking since BDT 3,835 million had been earned from this segment in 2018. ROA in 2018 was 1.66%, 1.83% in 2017 and 1.55% in 2016 and ROE was 17.94% in 2018, 21.3% in 2017 and 18.33% in 2016. EPS showed a gradual increase from 4.55 in 2016 to 4.86 in 2017 till 5.17 in 2018. Cost to income ratio had also reached highest of 54% in 2018. BRAC Bank has 4 subsidiaries namely bKash Limited, BRAC Sajan Exchange Limited, BRAC EPL Stock Brokerage Limited and BRAC EPL Investments Limited that contributed to BDT 44 million worth of profit to the parent company. NPL in the year 2018 was 3.10%, 3.56% in 2017 and 3.40% in 2016 along with NPL coverage ratio being 76%, 86% and 94% respectively. CRAB rated AA1 for long term and ST-1 for short term. Steady growth of ROA and ROE are considered to be the strengths while the necessity of taking approval for every corporate loan from the Board of Directors is a major weakness.

- **City Bank**

Established in 1983, City bank is among the five largest private sector banks with market capitalization of BDT 29,233 million. As of now, the bank has 132 branches and engaging 3,858 employees who serve over 1,700,000 customers all over the country. In addition, it has 7 priority centers, 154 Agent bank outlets and 20 SME-s unit offices. City Bank majorly puts its focus on retail banking which is resembled by 47.4% of deposit contribution compared to 0.6% of commercial banking and 16.9% of corporate banking. However, much of the revenue contribution came from corporate banking (25.6%) in the last year. ROE showed a gradual decrease in past few years which was 8.2% in 2018, 15.9% in 2017 and 19% in 2016. In contrast, ROA was 0.7%, 1.4% and 0.7% respectively. Cost to income ratios has increased within the years reaching 58% from 53.9% which rise from 47.6%. Earnings per share witnessed a significant inclination from 4.5 to 4.1 till 2.1 in 2018. Provision for loan losses (PLL) were BDT 7,974 million against non-performing loans of BDT 12,326 million in 2018 compared to BDT

6,047 of PLL against BDT 10,678 million of NPL in 2016 and BDT 6,303 million of PLL against BDT 10.582 million of NPL in 2016. Hence, PLL had always been lower than NPL in last three years. City Bank considers brand salience, credit & debit card schemes and digital banking as its strengths to sustain in the banking sector, however, the NPL situation, high cost-to-income ratio and high cost-of-fund are taken to be the greatest challenges. According to Credit Rating Agency of Bangladesh Ltd (CRAB), City bank had been rated AA2 in long term and ST-2 in short term based on recent financial statements in 2018.

- **Dutch- Bangla Bank Limited**

Established in the year 1995, Dutch- Bangla Bank Limited commenced its operations with paid-up capital of BDT 2,000 million currently owns authorized capital of BDT 4,000 million and total capital of BDT 23,086 million. At present, the bank is facilitating customers through 184 branches employing 8,195 service providers in total. DBBL has prioritized customer reach and established strong base for customer touchpoints portrayed by 4,705 ATMs and 900 Fast Tracks. NPL in the year 2018 was 4.1% that was much less than the previous year's 4.7%. In addition, total revenue has grown by 24% in 2018 to BDT 29,215 million that has earned profit of BDT 4,201 million with 71% rise. Loans & advances and deposits have increased by 11% and 12% respectively. EPS has shown a remarkable growth from 12.3 to 21 in 2018. ROA and ROE were 1.3% and 17% that have increased significantly as well. Cost to income ratio has decreased to 68% in 2018 from 69% in 2017. Mobile banking service in the name of "Rocket" had been established in 2011 that currently serve 16 million customers across the country. DBBL has largely focused on SME financing and maintains a well-equipped SME division which had financed BDT 28,474 million last year. DBBL has also pioneered the first card less banking solution by introducing “NexusPay” which can be used with other bank cards and also for money transfer, mobile charge, bill payments etc.

- **Eastern Bank Limited**

Established in the year 1992, Eastern Bank Limited has achieved to be the first bank to be rated by the world’s top rating agency Moody’s and was awarded Ba3. EBL retained this rating for three consecutive years. In 2018, EBL hold BDT 24,648 million as regulatory capital that had increased by 5.8% from previous year and BDT 26,568 million as market capital that had decreased by 29.5% from 2017. EBL is considered to be the leader in Retail Banking since it offers a wide range of depository, loan and card products. As of now, EBL has 84 branches and 200 ATM booths across the country operating with 1,594 employees. ROE had been 12.94% in 2016 that decreased to 11.41% in 2017 but rise to 13.83% in 2018. Cost to income ratio had been the highest in 2018 among the last three years representing 48.53%. NPL coverage ratio has shown significant fluctuations while increasing to 159.52% in 2017 from 146.99% in 2016 but then decreasing to 150.39% in 2018. Proportion of investment against deposits had been 15% in 2018 and 16% for both 2017 and 2016. The alarming growth of NPL is handled by a number of strategies such as maintain a strong recovery system, maintaining a healthy credit culture and monitoring by a resolution expert. The subsidiaries of EBL include: EBL Securities Limited, EBL Investments Limited, EBL Asset Management Limited and EBL Finance (HK) Limited. The Bank has been awarded ‘AA+’ in the long-term and ‘ST-2’ in the short-term by Credit Rating Information and Services Limited (CRISL).

First Security Islami Bank Limited

Established in the year 1999 as conventional commercial bank and converting to Islami Shariah based bank in 2009, First Security Islami Bank Limited started its operations with an authorized capital of 1 billion Taka and currently the bank accumulates regulatory capital of BDT 21278.58 million. Since its inception, the bank has majorly focused on corporate banking which consists 73% of its investment portfolio comprising small, medium and large enterprises. At present, First Security Islami Bank Limited is comprised of 177 branches across the country holding a group of 3,898 employees to serve a large pool of customers. Proportion of investment against deposit has risen in recent years from 82.3% in 2016 to 91.3% in 2017 and finally reaching 97.3% in 2018. ROA had been 0.51% in 2016 but decreased to 0.41% in 2017 before rising to 0.45% in 2018. EPS has been fluctuating from BDT 2.08 in 2016, BDT 1.89 in 2017 and BDT 2.03 in 2018. Provision for loan losses (PLL) were BDT 9,326.96 million in 2018 compared to BDT 5,930.5 million of non-performing loan (NPL), BDT 7,104.4 million PLL against BDT 4,001.7 million NPL in 2017 and BDT 5,088.7 million PLL against BDT 2,513.5 million NPL. Hence, the bank has always maintained a significantly higher PLL than NPL. In addition, NPAT has witnessed a growth of 21% in 2018 and both import and export businesses grew considerably by 17% and 12% in recent years. In the year 2012, FSIBL commenced mobile financial services under the name “FirstPay Surecash” which currently has strong network coverage of 65 distributors, 31,512 MFS and 451,318 customers across the country. Similarly, FSIBL started agent banking services in 2015 and has 20 Agent bank outlets at present

Islami Bank Bangladesh Limited

Established in the year 1983, Islami Bank Bangladesh Limited is one of the largest Islami Shariah based commercial bank with regulatory capital of BDT 69,618.6 million and operating through 342 branches which are divided into 16 zones, with a workforce of 14,698 employees. The bank puts its focus on the industrial segment that contributes 42.44% of the total portfolio. EPS had increased gradually over the last three years, 3.77 in 2018, 2.91 in 2017 and 2.77 in 2016. In addition, ROA has been seen to be varying within a smaller range, from 0.59% in 2016 to 0.55% in 2017 till 0.64% in 2018. ROE has risen throughout the years to reach 11.07% in 2018 from 9.32% in 2017 and 9.28% in 2016. Islami Bank Bangladesh Limited had sufficiently maintained provision for non-performing loans and the adequate measures are: BDT 36,184 against 4.12% of NPL, BDT 31,362 against 3.589% of NPL, BDT 26,788 against 3.82% of NPL. As of now, the bank has 305 agent bank outlets. Subsidiaries include Islami Bank Securities Limited, Islami Bank Capital Management Limited and IBBL Exchange Singapore Pte. Ltd. IBBL has also pioneered Green Banking that includes investments which help recover environmental degradations and prevent deterioration of the environment from harmful events. The key challenge is considered to be the higher investment (credit) growth compared to deposit and increasing trend of non-performing loan triggering demand for larger maintained provision

Pubali Bank

Established in the year 1983, Pubali Bank is the largest commercial bank in the banking sector of Bangladesh with an authorized share capital of BDT 20,000 million and regulatory capital of BDT 34,467.53 million maintaining capital adequacy ratio of 12.17% of total risk-weighted assets. At present, the bank has 473 branches and 2 offshore unit branches with total workforce of 7,587 employees around the country. The bank mainly focuses on corporate banking (64.13%)

and then on CMSME (21.26%). EPS has seen to be fluctuating from BDT 1.40 in 2016 to BDT -0.28 in 2017 and then rising to BDT 3.43 in 2018. Proportion of investment against deposits show gradual increase from 17.8% in 2016 to 19.7% in 2017 till 18.67% in 2018. Investments were mainly done in government bonds, treasury bills and approved debentures of private institutions. ROE of recent three years has shown huge fluctuations; 5.31% in 2016 to -1.15% in 2017 to steep increase to 12.51%. Similarly, ROA has been variable considerably as well reaching -0.08% in 2017 from 0.42% in 2016 then rising to 0.84% in 2018. Provision for loan losses, PLL was 86.6% of non-performing loan, NPL in 2018, 59% in 2017 and 70.32% in 2016. Hence, PLL had always been maintained lower than NPL. Cost of fund had increased to 7.97% in 2018. Major challenges deliberated are cyber risks, US-China trade war leading to unstable prices and unavailability of goods and Brexit uncertainty slowing down economic growth of euro zone.

- **Rupali Bank Limited**

Established in the year 1986 with authorized capital of BDT 7,000 million and Paid-up capital of BDT 3,765 million and total capital of BDT 1,7076.9 million at present, Rupali Bank Limited is one of the most widely spread bank of the country with 568 branches altogether, half of which are rural. Number of employees by the end of 2018 were 4,929 who serve customers in each of the branches. The bank has 2 subsidiaries namely Rupali Investment Limited and Rupali Bank Securities Limited. Government owns almost 91% of shares while general public and institution occupy the rest. Throughout 2018, highest market price stood to be BDT 69.40 while lowest fall up to BDT 33.30. Cost of fund in 2018 was 6.8% while cost of deposit was 4.6%. ROE had been 0.62% while ROA was 0.02% after tax in 2018. Classified loans contributed to 19% of total loans whereas efficiency ratio was 11.6%. Although revenue earned were BDT 26,557.6 million but net profit was BDT 379 million in 2018. EPS had decreased to BDT 1.01 by 2018 from BDT 1.33 in 2017. According to National Credit Rating Limited, Rupali Bank has been rated A- for long term and ST-3 for short term resulting in 'developing' outlook.

- **Uttara Bank Limited**

Converted to a public limited company from national bank in 1983, Uttara Bank has 235 branches employing 3,527 staffs altogether at present through which it carries banking activities. Its authorized capital was BDT 6,000 million whereas paid-up capital being BDT 4,000.8 million. EPS has gradually increased over the years hitting 4.3 in 2018 from 3.89 in 2017. Since classified loans and advances has risen in the past years from BDT 6,458 million in 2016 to BDT 7104.6 million in 2017 to BDT 7,518 million in 2018, provision maintained had to be augmented accordingly reaching BDT 3,319 million in 2018. Non-performing loan contributes 3.54% of total loan in 2018 that was much higher in 2017 and 2016 comparatively, 4.61% and 5.36% respectively. ROE had been the highest in 2018, reaching 11.66% and ROA was 0.90% in the same year. Emerging Credit Rating Limited (ECRL) confirmed long term rating of Uttara Bank as AA and short term rating of ST-2.

1.3 Literature Review

CAMELS is a systematic way of rating implemented usually by the government policy body and the regulatory bodies that monitor commercial banks (Siems & Barr, 1998). It was originally introduced by North American Commercial Banks but was acknowledged much later in the 1970's by federal regulators of US and was officially adapted since then. With time, the rating system gained huge acceptance to evaluate the stance of a particular bank at a given time period, contributing immensely to money market decisions and rectifications (Kabir & Dey, 2012). The usage of CAMELS rating system in order to evaluate financial strengths of banks have been accepted vastly in both local and international platforms. In the international platform, the extent to which the supervision on proper regulation of capital should be enforced is commonly examined. CAMEL plays a significant role to predict bank's upcoming risks leading to certain failures (Barker & Holdsworth, 1993). Hence, CAMELS ratings is a useful tool to assess a bank's current condition and aids supervisory board to take corrective actions (Cole & Gunther, 1998). In Bangladesh, the central bank has adapted CAMELS rating as the regulatory body holding the position of supervisor and controller, apart from that, academicians are making use of CAMELS rating in order to determine financial stability and soundness of banks (Purohit & Mazumdar, 2003).

The Basel capital accord is a regulation that pertains between a country's central bank and bank supervisory council on the issue of maintaining adequate levels of capital to survive in cases of defaults and insolvency. However, maintain higher capital results in limited lending and earnings (Eubanks, 2010). Basel I was adopted in 1988 to ensure stability in the international banking system. Nonetheless, Basel I did not focus on measuring risk exposures and overlooked sensitivity towards risk. Hence, the adequacy level for capital could not be determined since the banking system is complex and dynamic (Ulrich & Zeroen, 2011).

Basel II, a three-pillared framework, came into play during the late 2006 by the European Union. The first pillar indicates the minimum capital required for a bank comprising banking instruments such as private & government securities, mortgages etc. (Eubanks, 2010) It also takes into account the existence of risk and sensitivity towards risk exposures. The second pillar enforces the role of supervision to conduct self-evaluation and keep track of reactions towards various risks. The third pillar portrays the need of incentives as a reward to upholding safety and sound practices ((Ulrich & Zeroen, 2011).

Basel III, an enhancement of Basel II inaugurated in 2009, is a set of clauses that summarizes the requirement of capital and liquidity for a certain bank designed at international standards that are regularly monitored and improvised. It has taken initiatives that create impact on minimum capital requirement (Slovik & Cornede, 2011). Basel III has redefined regulatory capital to augment it in quality, relevance and clarity. Under the clauses of Basel III, capital has been divided into core capital and supplementary capital. Amongst them, Tier 1 consists core capital the covers common shareholder's equity, reserves, retained earnings, etc. (Prakash, 2011). On the other hand, Tier 2 consists of subordinated debts, preferred stocks, goodwill, etc. The quality and quantity of capital have been focused upon to ensure loss-absorption ability in case of regular risk and liquidation situation (Elliott, 2010). The Capital Adequacy ratio has been kept at 8% while Tier 1 capital ratio has been raised to 6% in which common equity contributes 4.5%. Hence, there is 2.5% additional buffer to absorb potential risks.

Basel III has enforced the liquidity by introducing two measures- Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR). LCR focuses on the availability of high quality liquid assets such as cash, marketable securities, reserves with Central Bank etc. in contrast to total net cash outflows over a stressed period, usually 30days (Jatadev, 2013). In addition, NSFR puts light into the requirement of minimum sources of fund compared to the liquidity need of the assets and off-balance sheet commitments for a period of 1 year. The leverage ratio on the other hand, keeps track of excess leverage that might develop and thus Tier 1 leverage is required to be maintained at 3% minimum according to Basel III (Eubanks, 2010). Furthermore, Basel III attempts to rectify provisioning strategies through predicting potential losses in terms of 'expected loss method' which was banks maintaining provision to cover up for any loss incurred (Hannoun, 2010). To summarize, emphasizing on maintenance of strong risk coverage, Basel III has covered four areas: higher levels of quality capital, preserving liquidity standards, altering norms for provisions and bringing up the leverage ratio.

1.4 Objectives of the study

The prime objective of this research paper is to present an analysis regarding the financial soundness of 10 respective banks of Bangladesh and rank them based on the ratio evaluation under CAMELS approach. As a result, this study will check whether the selected banks are properly abiding by the regulations of central bank and supervisory body which in turn will help investors and customers to make better financial decisions. Hence, the study emphasizes on the following issues:

- To investigate capital adequacy of the 10 selected banks
- To analyse asset quality of the 10 selected banks
- To assess management capacity of the 10 selected banks
- To evaluate earning ability of the 10 selected banks
- To determine liquidity of the 10 selected banks
- To deduce sensitivity of the 10 selected banks

1.5 Limitation of the Study

This study has been developed on the basis of financial information regarding each of the selected banks. Hence, the major limitation of this paper lies on the significance and validity of the data. Secondary sources of information had been relied upon to collect necessary data. The sources include Annual reports of the respective banks, financial reports and journals, economic studies and researches done by academicians. Although authentic sources have been depended upon to accumulate required data, reliability that would have been ensured by incorporating data from primary sources was needed to be overlooked. However, the study was tried to be made as accurate as possible by investing sincere efforts.

1.6 Scope and methodology of the study

This research paper has aimed to portray a comparative analysis of 10 selected banks taken as sample for the period 2016 to 2018, a duration of three recent consecutive fiscal years. The banks selected for investigation are BRAC Bank, City Bank, First Security Islami Bank Limited, Pubali Bank, Rupali Bank, Uttara Bank, Dutch Bangla Bank, Islami Bank Bangladesh Limited, Eastern Bank and Al-Arafah Islami Bank Limited. These banks are selected on the basis of extend of customer reach hence these 10 banks have the highest number of branches across the country. CAMELS approach define all the calculations done and insights drawn from the analysis helping to deduce the ratings of the bank accordingly. Banks are chosen on the basis of distribution network represented by the number of branches across the country till December'2018, hence ten banks that have maximum numbers of branches are selected. The study has taken account of other thorough national and international researches in order to gather relevant information and gain useful insights. For the purpose of all necessary calculations, this paper has depended on secondary sources of data from articles, journals, annual reports of the banks and text books. Tabulation of the data and calculation of necessary ratios are carried in computerized formats. After the calculation of ratios, the banks are marked on a scale of 1-5 from best to worst followed by weighted average of these marks for each bank. Components of CAMELS rating have weights according to their impact on the performance of the bank. Capital adequacy has been weighted 30%, Asset Quality 10%, Management 10%, Earnings 20%, Liquidity 20% and

Sensitivity 10% based on the opinions of the experts (Bayraktar & Ghazavi, 2018). Rankings marked on individual components are combined to obtain a final rank that determine the bank's stand among the others in matters of performance. The ranking is explained by taking into account the studies of Wimkar & Tanko (2008), and Sarkar (2006).

Table 2: Ranking procedure of CAMELS

Rating	Rating Analysis	Interpretation
1	Strong	Bank is performing well in every aspect
2	Satisfactory	Overall performance is acceptable but the Bank needs to identify weaknesses
3	Fair	Supervision required for operational or financial drawbacks
4	Marginal	Bank has alarming financial, operational or compliance drawbacks
5	Unsatisfactory	Critical plight which may result drastic consequences

CHAPTER 2

2.0 Evaluation through CAMELS approach

CAMELS is a measurement approach designed as a rating system through which the soundness of banks are evaluated by the regulatory supervisors on the basis of sufficiency and quality of bank's **C**apital, **A**ssets, **M**anagement, **E**arnings, **L**iquidity and **S**ensitivity. The rating is done on a scale of 1-5 where banks rated as 1 are considered to be the most stable ones' while 2 or 3 represents average performance and 4 or 5 indicates below average performance. Distribution of weights depends on subjective judgement of each of the factor in CAMELS since not all factors contribute equally on the evaluation. In Bangladesh, the authorized regulatory body to assess CAMELS of all respective banks is Bangladesh Bank which is the central bank of the country.

2.1 C - Capital Adequacy

It determines the financial strength of a bank. The capital adequacy ratio indicates the ability of the bank to absorb the responsibility of meeting all sorts of liabilities and risks such as market risk, liquidity risk, operational risk, credit risk etc. It is calculated as a percentage of capital and reserve to risk weighted assets of the bank. It implies the abundance of capital to cover up for the risky assets bank is possessing at a time. In addition, net worth protection expresses percentage of total equity against non-performing loan. Hence, it indicates how far is the net worth of the bank threatened by loans that are default or about to default. The higher the values of these two ratios, the more financial sound the bank is regarding capital.

2.1.1 Capital Adequacy Ratio

Table 3: Capital Adequacy Ratio of 10 selected Banks

Selected Banks	Total Capital & Reserve	Total Risk Weighted Asset	Capital Adequacy Ratio
Al Arafah Islami Bank	27,682.93	194,429.64	14%
BRAC Bank	30,146.34	225,268.90	13%
City Bank	26,919.43	213,978.83	13%
DUTCH Bangla Bank	27,302.89	186,833.58	15%
Eastern Bank	24,183.35	176,620.69	14%
First Security Islami Bank	18,645.60	168,496.26	11%
Islami Bank	56,715.36	516,822.41	11%
Pubali Bank	30,865.68	256,356.26	12%
Rupali Bank	17,062.69	199,291.53	9%
Uttara Bank	13,058.34	101,278.87	13%

Analysing CAR% of the respective banks, it can be deduced that Dutch-Bangla Bank Limited has the highest level of capital & reserves relative to risk-weighted assets whereas Rupali Bank Limited owns the least amount of capital & reserves to compensate for total risk-weighted asset. However, despite the inequality in CAR%, all the banks have maintained the instructed level of capital in accordance with BASEL II and BASEL III. This is because, the minimum level to be maintained is 8.5%-10%, hence all these banks can be said to have maintained sufficient capital as per the clauses.

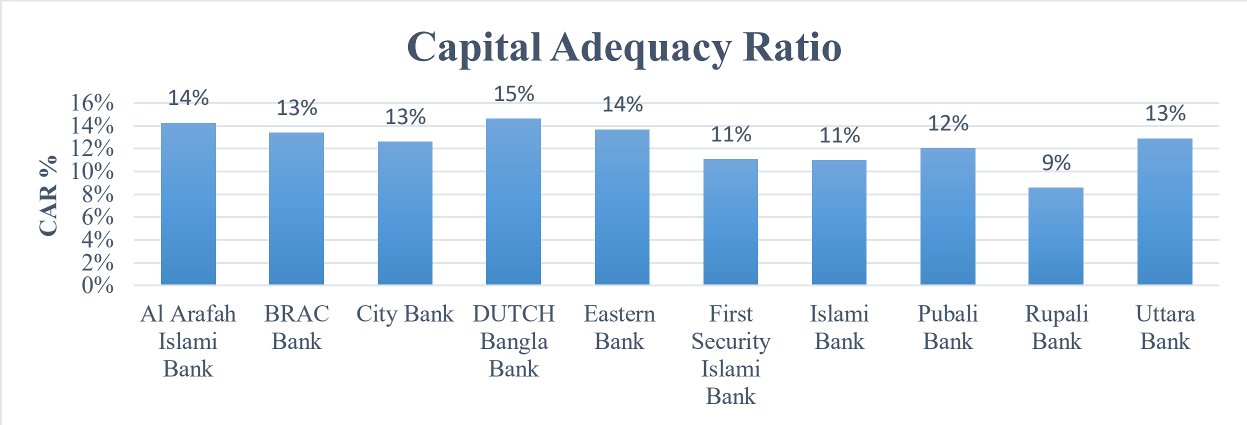

Figure 1: Capital Adequacy Ratio of 10 selected Banks

2.1.2 Common Equity Tier-1

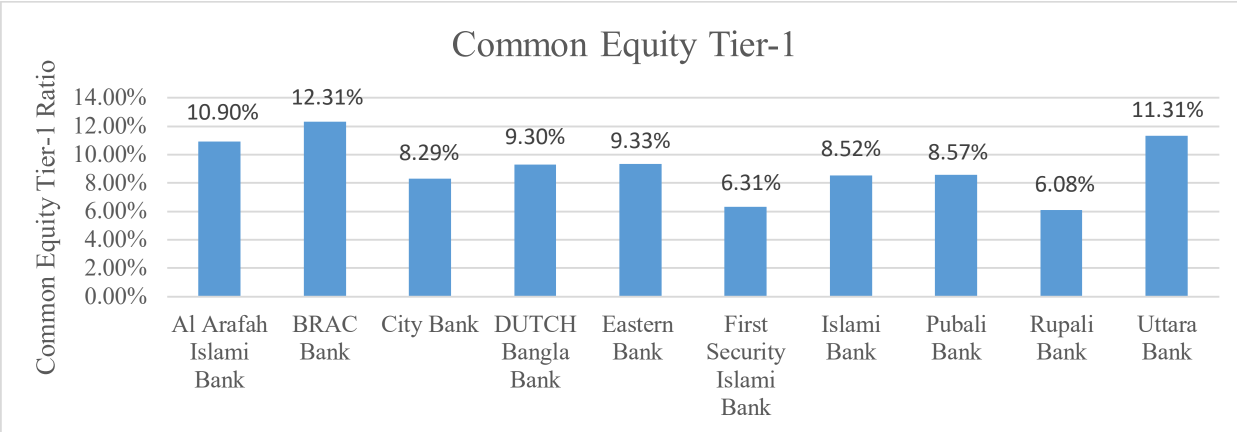

Figure 2: Common Equity Tier-1 Ratio of 10 selected Banks

Common Equity Tier-1 is a part of Tier-1 that comprises majorly of common stock held by the bank. Hence it includes bank's core capital, stock surpluses, retained earnings, common shares of subsidiaries etc. It signifies bank's solvency as during any event of crisis, any losses faced are to subtracted from this capital. It is instructed that CET-1 ratio is maintained at 4.5% from 2019. Among the selected 10 banks, BRAC bank has been found to have conserved the maximum level of common equity tier-1 (12.3%) against total risk-weighted assets while Rupali Bank had the lowest level (6.3%) on an average for the last 3 years. However, all the banks are above the minimum requirement that present them potent enough to cushion crisis.

2.1.3 Total Tier-1

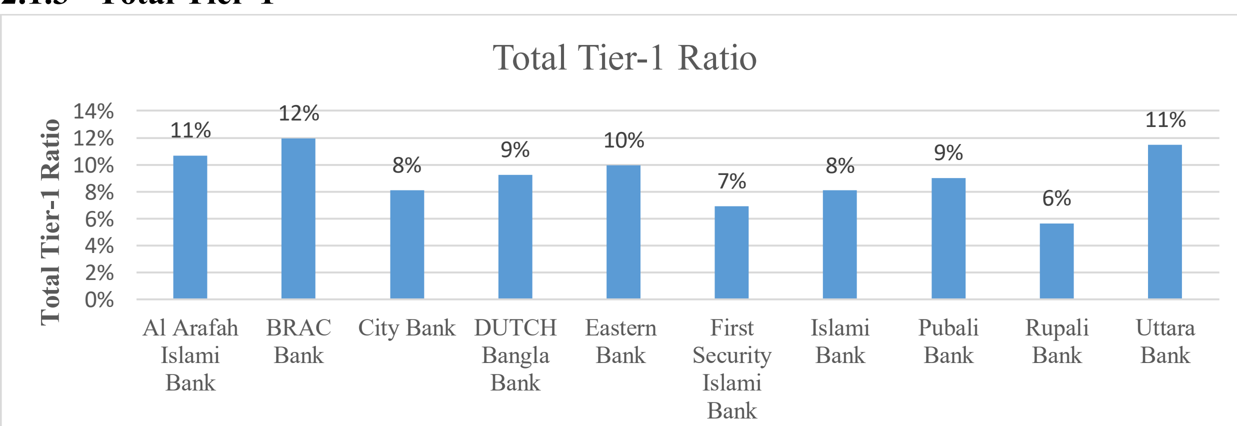

Figure 3: Total Tier-1 Ratio of 10 selected Banks

Total Tier-1 expresses the amount of equity capital and disclose reserves held by a bank compared to total risk-weighted assets. It contains common equity tier-1 capital plus non-cumulative perpetual preferred stock and other accumulated comprehensive income. Total Tier-1 ratio has been instructed to be maintained at least at 6% by the BASEL committee. Among the 10 banks, BRAC bank has preserved the highest amount (12%) of tier-1 capital in contrast to risk-weighted assets while Rupali bank maintained the lowest (6%). In this case, all the banks reside in safe levels since the minimum requirement had been fulfilled.

2.1.4 Net-worth Protection

Table 4: Net-worth Protection of 10 selected Banks

Selected Banks	Total Equity (Average)	Non-perfomring loan (Average)	Net Worth Protection:
Al Arafah Islami Bank	21,270.49	10,535.74	202%
BRAC Bank	28,001.00	7,648.51	366%
City Bank	25,200.18	11,195.11	225%
DUTCH Bangla Bank	20,076.11	9,408.12	213%
Eastern Bank	22,027.82	4,646.40	474%
First Security Islami Bank	11,963.98	8,219.46	146%
Islami Bank	51,658.98	27,429.83	188%
Pubali Bank	25,257.00	15,495.56	163%
Rupali Bank	14,143.31	41,652.54	34%
Uttara Bank	14,021.93	7,027.19	200%

Net-worth protection implies the availability of sufficient equity against classsified loans. The higher the value the better. Since net worth means the value of an entity, its protection will protray the size of the equity relative to credit risk, mainly classified loans. An entity which is consistently profitable will develop high net worth if the earnings are retained in the business. Among the 10 banks, Eastern Bank owns the highest net-worth protection of 474% followed by BRAC Bank (366%) while Rupali Bank has owned the lowest of 34% only. It means that Rupali Bank has failed to preserve sufficient equity to cover up for its enormous amont of default loans. All the other banks have avaerage net-worth protection above 100% to average non-performing loans in the last 3-year period.

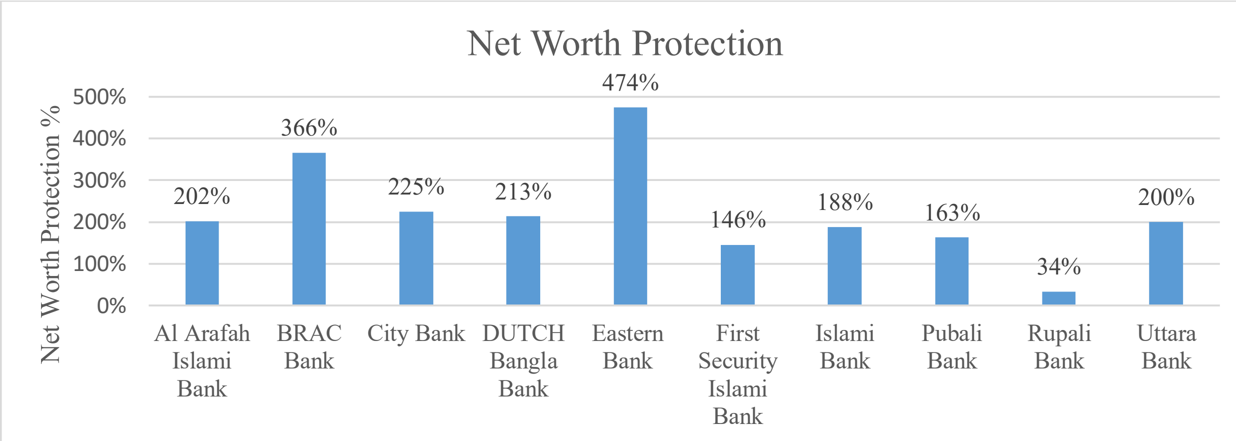

Figure 4: Net-worth protection of 10 selected Banks

Composite rating of Capital Adequacy:

Table 5: Composite Rating of Capital Adequacy of 10 selected Banks

Selected Banks	CAR %	CET-1 %	Total Tier -1 %	Net-worth protection %	Average
Al Arafah Islami Bank	1	2	1	3	1.75
BRAC Bank	2	1	1	1	1.25
City Bank	2	3	3	2	2.5
DUTCH Bangla Bank	1	3	2	2	2
Eastern Bank	1	3	2	1	1.75
First Security Islami Bank	3	4	3	4	3.5
Islami Bank	3	3	2	3	2.75
Pubali Bank	2	3	2	4	2.75
Rupali Bank	4	4	4	5	4.25
Uttara Bank	2	1	1	3	1.75

2.2 A - Asset Quality

It identifies the extent to which the assets of a bank are at risk, hence it determines financial strength of a bank as well. Since loans are major portion of asset for a bank, the risk of loan degradation as a result of non-performing loans serve as prime risk. Hence asset quality is judged by proportionating percentage of classified loan against total loan Moreover, how much loans contribute to total assets also determines asset quality for a bank since the extent of this category of asset greatly influences financial performance of a bank.

2.2.1 Percentage of Classified Loan

Table 6: Percentage of Classified Loan of 10 selected Banks

Selected Banks	Non-perfomring loan (Average)	Total Loan (Average)	Percentage of classified loan
Al Arafah Islami Bank	10,535.74	235,114.78	4%
BRAC Bank	7,648.51	205,147.82	4%
City Bank	11,195.11	201,004.14	6%
DUTCH Bangla Bank	9,408.12	204,069.71	5%
Eastern Bank	4,646.40	188,478.71	2%
First Security Islami Bank	8,219.46	270,447.96	3%
Islami Bank	27,429.83	710,969.27	4%
Pubali Bank	15,495.56	234,981.41	7%
Rupali Bank	41,652.54	209,771.22	20%
Uttara Bank	7,027.19	102,453.93	7%

Classified loans result in unpaid interest outstanding principal and this portion of total loan is doubtful whether the bank can recover or proceed towards default. Hence, classified loans have higher rate of borrower default. Classified loans fail to abide by credit standards. It can also raise cost of borrowing for other customers of the bank as well. Among the 10 chosen banks, Rupali Bank had the highest amount of classified loan throughout the last 3-year period, i.e. 20% of its total loan portfolio used to be classified. Moreover, Eastern Bank accumulated the least amount of classified loan on an average, i.e. only 2% of its total loan portfolio was classified. Maximum amount of loan disbursed was by Islami Bank Bangladesh Limited which was around BDT 711,000 million whereas Rupali Bank owned the largest amount of classified loan that was around BDT 42,000 million

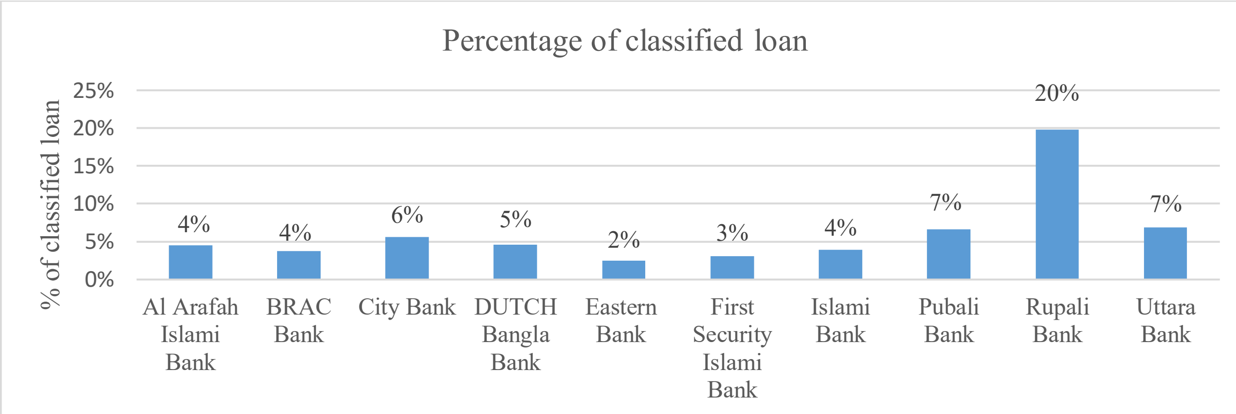

Figure 5: Percentage of Classified Loans of 10 selected Banks

2.2.2 Total Loans/ Total Assets

Table 7: Total loans/ Total Assets of 10 selected Banks

Selected Banks	Total Loan (Average)	Total Assets (Average)	Total Loans/ Total Assets
Al Arafah Islami Bank	235,114.78	310,206.88	76%
BRAC Bank	205,147.82	311,548.43	66%
City Bank	201,004.14	288,156.62	70%
DUTCH Bangla Bank	204,069.71	311,739.98	65%
Eastern Bank	188,478.71	251,392.34	75%
First Security Islami Bank	270,447.96	337,318.55	80%
Islami Bank	710,969.27	898,495.00	79%
Pubali Bank	234,981.41	366,372.48	64%
Rupali Bank	209,771.22	393,814.66	53%
Uttara Bank	102,453.93	177,042.10	58%

Loans usually comprise major portion of bank's asset. Interest income from loans serve as the prime source of operating income for the bank. Hence, banks thrive to seek for businesses and influence them to avail loans in order to expand assets. Among the 10 selected banks, loans occupied the highest portion of total assets for First Security Islami Bank that was 80% while loans occupied the lowest in assets of Rupali Bank which was 53% on an average. Since, highest amount of loans had been disbursed by Islami Bank Bnagladesh Limited, 79% of its total asset portfolio contained loans. On the other hand, Uttara Bank disbursed the lowest amount of loan (BDT 102,000 million approx.) and owned the least amount of total assets (BDT 171,000 million).

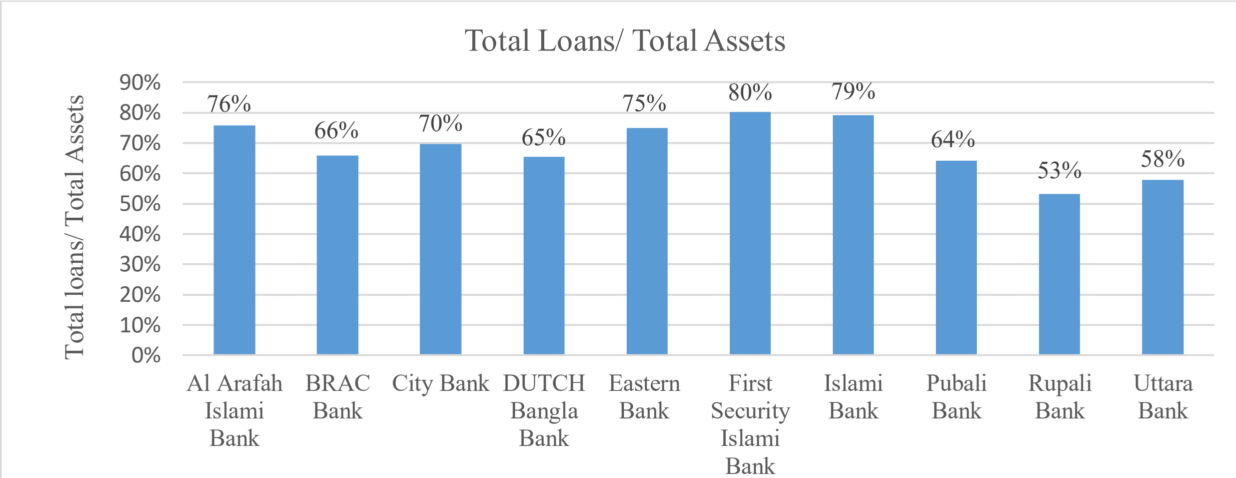

Figure 6: Total Loans/ Total Assets of 10 selected Banks

2.2.3 NPL-PLL (2018)

Table 8: NPL-PLL of 10 selected Banks

Selected Banks	% of Classified Loan	Provison as % of classified loan
Al Arafah Islami Bank	5%	31%
BRAC Bank	4%	71%
City Bank	5%	36%
DUTCH Bangla Bank	4%	54%
Eastern Bank	2%	84%
First Security Islami Bank	3%	57%
Islami Bank	4%	85%
Pubali Bank	5%	60%
Rupali Bank	18%	28%
Uttara Bank	6%	33%

Non-performing loans includes the sum of borrowed money that the debtors of the bank have not made scheduled payments. The scheduled payments comprise of both principle and interest amount. Banks evaluate total loans and identify non-performing loans for which they keep allowance in the name of provision which is considered as an expense. Although provision degrades earnings, bank can deduce its financial position more accurately by incorporating provision. From the 10 chosen banks, classified loan is highest (18%) for Rupali Bank, however, it maintained the lowest (28%) provision relative to classified loan. Highest (85%) provision has been kept by Islami Bank Bangladesh Limited against 4% classified loan since this bank had disbursed maximum amount of loans and 4% actually mean large value.

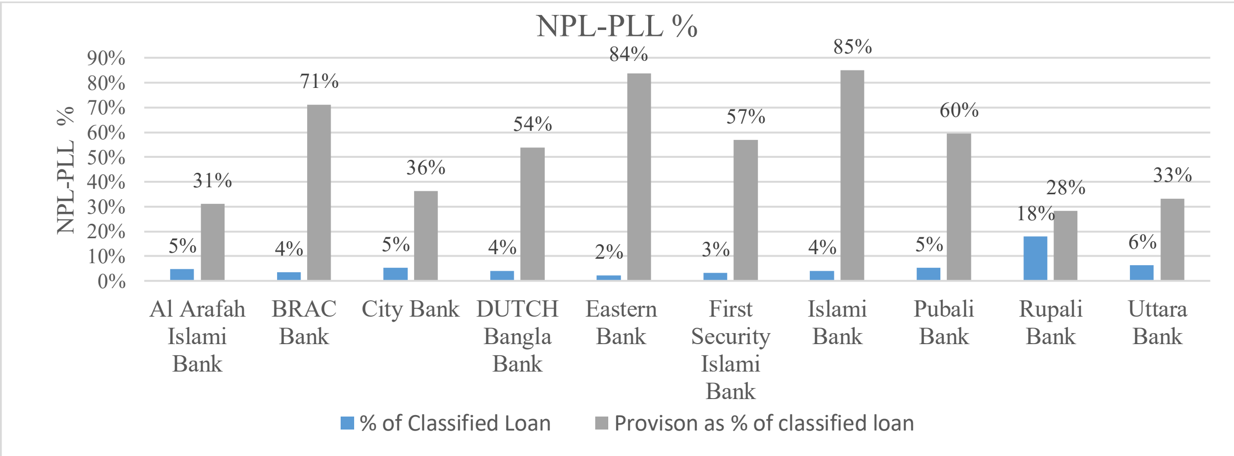

Figure 7: NPL-PLL % of 10 selected Banks

2.2.4 Composition of Asset Distribution

Banks own various kind of assets. Physical assets may contain equipment, land, office accessories etc. while non-physical assets contain loan (consumer or business), reserves (deposits of central bank and vault cash) and investments (securities).

- **Liquid Assets**

Table 9: Liquid Assets of 10 selected Banks

Selected Banks	Liquid Assets				
	Cash	Short term deposits	Treasury Bills	Total	% of Total Asset
Al Arafah Islami Bank	25,721.1	2,001.4	11,000.0	38,722.5	11%
BRAC Bank	22,394.5	9,338.9	13,816.0	45,549.3	13%
City Bank	19,440.4	628.3	2,893.2	22,961.9	7%
DUTCH Bangla Bank	50,148.3	229.658	4,240.2	54,618.1	16%
Eastern Bank	16,338.3	556.419	3,991.3	20,886.0	7%
First Security Islami Bank	19,518.3	14,568.2	15,100.0	49,186.5	13%
Islami Bank	67,463.9	57,874.3	31,103.6	156,441.9	16%
Pubali Bank	23,056.8	23	0	23,080.1	6%
Rupali Bank	23,823.2	0.0	13,854.5	37,677.7	8%
Uttara Bank	13,561.9	2	21,664.0	35,228.1	19%

Liquid assets can be readily converted into cash and the asset will be merely impacted regarding its value upon the sale. For an asset to be considered liquid, it is necessary to exit an established market, interested buyers and easy transfer of ownership. Cash, short-term deposits and treasury bills can be deliberated as liquid assets of a bank. Among the 10 selected banks, highest amount (around BDT 156,000 million) of liquid assets are owned by Islami Bank Bangladesh Limited that comprise 16% of its total assets. On the other hand, lowest amount (around BDT 21,000 million) of liquid assets are owned by Eastern Bank that comprise 7% of total assets. However, a low amount of liquid assets does not indicate bank's insolvency, rather keeping sufficient liquid assets aside and accumulating other more interest generating assets is better.

- **Investments**

Table 10: Investments of 10 selected Banks

Selected Banks	Investments	
	Investments (millions BDT)	% of Total Asset
Al Arafah Islami Bank	12,214.67	4%
BRAC Bank	35,133.27	10%
City Bank	33,488.22	10%
DUTCH Bangla Bank	32,208.45	9%
Eastern Bank	29,887.62	10%
First Security Islami Bank	16,100.53	4%
Islami Bank	41,192.52	4%
Pubali Bank	64,128.84	16%
Rupali Bank	84,005.95	18%
Uttara Bank	28,937.45	15%

Banks invest in higher yielding income sources such as mortgage securities, government bonds, treasury bills, repo, agency debt and other enterprises etc. Out of the 10 selected banks, Rupali Bank had utilized the most in investments which comprised 18% of its total assets. On the other hand, Al-Arafah Islami Bank, First Security Islami Bank and Islami Bank Bangladesh Limited invested the least so that investments contributed only 4% of their total assets. Other banks have invested marginally which do not occupy total assets at large.

➢ Loans & Advances

Table 11: Loans & Advances of 10 selected Banks

Selected Banks	Loans	
	Loans & Advances (millions BDT)	% of Total Asset
Al Arafah Islami Bank	261,874	77%
BRAC Bank	238,400	67%
City Bank	231,875	71%
DUTCH Bangla Bank	231,554	67%
Eastern Bank	217,380	76%
First Security Islami Bank	311,417	84%
Islami Bank	800,970	80%
Pubali Bank	271,495	66%
Rupali Bank	247,737	53%
Uttara Bank	118,624	62%

Loans & Advances are primary source of assets for a bank. Loans earn interest that contributes majorly to a bank's operating income. Banks accumulate money from depositors and lend them to businesses at higher interest rate. The difference between the deposit and lending rate in the spread which is actually the interest income. Primary loan market is where the borrowers get loans directly from a bank and secondary loan market is where loans are bought and sold by financial institutions. In the above selected banks, Islami Bank Bangladesh Limited had the largest loan portfolio of about BD 800,000 million that occupied 80% of its total assets. Since loans are the first category of bank assets, Islami Bank had been able to disburse maximum amount of loans relative to other banks. In contrast, Uttara Bank had the smallest loan portfolio of about BDT 118,000 million that contributed to 62% of its total assets.

Composite Rating of Asset Quality:

Table 12: Composite Rating of Asset Quality of 10 selected Banks

Selected Banks	% of classified loan	Total loans/ Total Assets	NPL-PLL	Composition of Asset Distribution	Average
Al Arafah Islami Bank	3	2	3	2	2.5
BRAC Bank	3	3	2	2	2.5
City Bank	4	2	3	2	2.75
DUTCH Bangla Bank	4	3	3	2	3
Eastern Bank	1	2	1	1	1.25
First Security Islami Bank	2	1	3	1	1.75
Islami Bank	3	1	1	1	1.5
Pubali Bank	4	3	2	2	2.75
Rupali Bank	5	4	5	3	4.25
Uttara Bank	4	4	4	2	3.5

2.3 M - Management capacity

It is vital to determine the sustainability and prosperity of a bank since the proficiency of the management is ultimately reflected in the performance of the bank. Management is responsible to set visions, develop strategies and identify benchmarks that have the potential to improve bank's overall performance. The management usually takes into account the risk factors before implementing a certain decision. As a result, management capacity addresses the maintenance of corporate governance, quality of human resource, transparency of processes and utilization of information technology system. Therefore, income per employee and expenses per employee represents management's expertise and level of skill while interest expense to deposits and operating expense to total assets are crucial ratios that represent the efficiency of the management in running the banking operations.

2.3.1 Shareholding Structure

Table 13: Shareholding structure of 10 selected Banks

Selected Banks	Sponsor/Director	Government	Institute	Foreign	Public	Shares outstanding
Al Arafah Islami Bank	41.7%	0.0%	21.7%	3.2%	33.4%	1,064,902,185
BRAC Bank	44.3%	0.0%	7.4%	42.5%	5.7%	1,233,375,327
City Bank	30.3%	0.0%	22.1%	11.7%	35.1%	1,016,386,661
DUTCH Bangla Bank	70.3%	0.0%	20.2%	0.0%	9.5%	500,000,000
Eastern Bank	31.6%	0.0%	44.0%	0.4%	24.1%	811,799,548
First Security Islami Bank	33.2%	0.0%	14.4%	4.3%	48.1%	862,509,275
Islami Bank	48.9%	0.0%	13.5%	24.1%	13.5%	1,609,990,668
Pubali Bank	30.0%	0.0%	26.6%	1.2%	42.2%	1,028,294,219
Rupali Bank	0.0%	90.2%	5.3%	0.0%	4.5%	414,168,633
Uttara Bank	24.5%	0.0%	19.9%	2.9%	52.7%	408,081,944

2.3.2 Operating Expense/ Total Asset

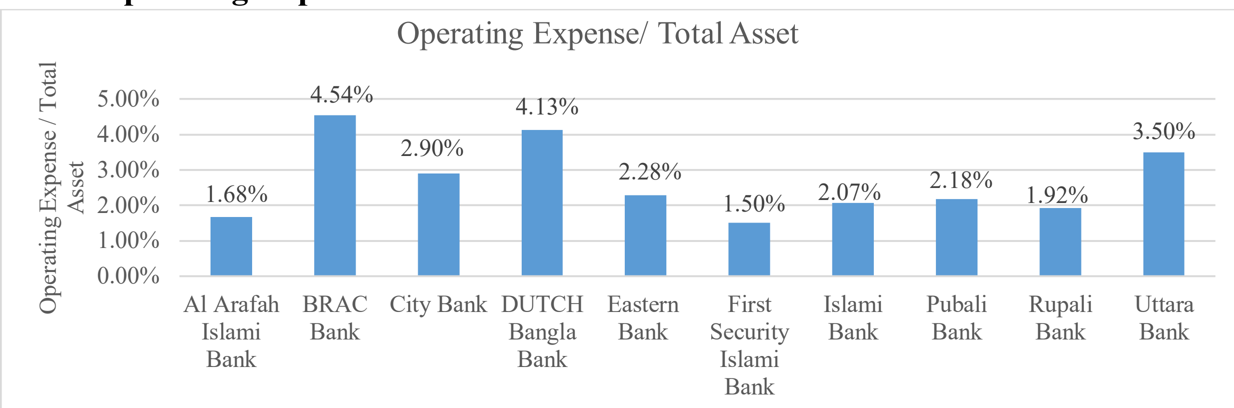

Figure 8: Operating Expense/ Total Asset of 10 selected Banks

This ratio enables to evaluate whether optimum levels of operating expenses are incurred relative to assets used. Management can make decision to take control over assets or minimize expenses relying on this ratio. From the selected banks, BRAC bank has the highest (4.54%) operating expense as proportion to total assets whereas First Security Islami Bank incurred lowest (1.5%) of operating expenses compared to total assets. Shrinking down operating expenses is necessary for the management in order to boost up operating income.

2.3.3 Interest Expense/ Deposit

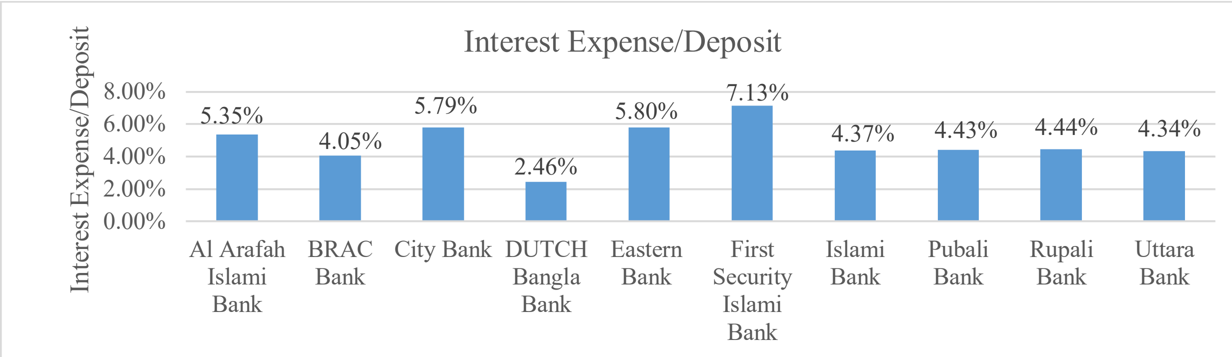

Figure 9: Interest Expense / Deposit of 10 selected Banks

Interest expense is the prime expense of a bank since banks need to pay interests to customers on their deposited money. Net operating income decreases with increase in interest expense. However, narrowing down interest expense will also mean discouraging deposits that might result in shortage of fund hence, management tries to lower deposit rate in order to boost up the spread. Among the selected banks, First Security Islami Bank portrayed highest (7.13%) interest expense relative to deposits whereas Dutch Bangla Bank incurred the lowest (2.46%) interest expense. Since management's try is reducing expenses, lowered proportion of expense to deposit mean greater efficiency.

2.3.4 Income per Employee

Table 14: Income per Employee of 10 selected Banks

Selected Banks	Income per employee
Al Arafah Islami Bank	154%
BRAC Bank	118%
City Bank	153%
DUTCH Bangla Bank	106%
Eastern Bank	226%
First Security Islami Bank	112%
Islami Bank	121%
Pubali Bank	102%
Rupali Bank	98%
Uttara Bank	109%

Income per employee represents how much of total profit has been earned by each employee. In other words, this ratio evaluates the competency of employees in a bank. Management's role is to increase effectiveness of each employee since performance of overall operation highly depend on them. From the above mentioned banks, Eastern Bank seemed to have highest (226%) income per employee whereas Rupali Bank earned lowest (98%) of income per employee. Since management is concerned of maintaining quality workforce, higher of this ratio mean better performance.

2.3.5 Expenses per Employee

Table 15: Expenses per Employee of 10 selected Banks

Selected Banks	Expenses per employee
Al Arafah Islami Bank	153%
BRAC Bank	209%
City Bank	249%
DUTCH Bangla Bank	183%
Eastern Bank	288%
First Security Islami Bank	141%
Islami Bank	133%
Pubali Bank	107%
Rupali Bank	146%
Uttara Bank	173%

Banks incur expenses in order to continue operations. Expenses include employee remuneration & benefit, consulting help, director's fees, legal fees and expenses related to maintenance of fixed assets. While employees of a bank work to generate income by ensuring proper utilization of resources, contributing in reduction of expenses is part of their work responsibility too. Hence, managerial capacity can be evaluated by deducing expenses incurred behind each employee. Among the selected banks, expenses per employee is highest (288%) for Eastern Bank while it is lowest (107%) for Pubali Bank. Since lesser expenses is better, proportion of expenses per employee presents better performance when low.

2.3.6 Corporate Governance

It is the system by which a company is monitored and controlled. It is essential because banks have different nature of business, there are complex policies and regulations to be abide by, the pressure of ensuring safety of depositors' savings and systemic risks that might trigger bank's failure.

- Al-Arafah Islami Bank

In order to achieve organizational objectives, internal control has been maintained by the board of directors and senior management. The Internal Control & Compliance Wing (ICCW) is a collaboration of Board of Directors, Audit Committee, Shariah Supervisory Committee, Whistle Blowing System and many more. ICWW includes 3 divisions namely Audit & Inspection division, Compliance division and Monitoring Division. The Audit committee has completed 100% audit through surprise and scheduled visits to branches, rectified 30% of the lapses and realized BDT 1.2 million of income leakage. The compliance division had followed up 67% of total lapses, sent Inspection Compliance Report to Bangladesh Bank and completed memo submission. The monitoring division evaluated performance of concurrent auditor at the branches, followed up reports of zonal heads, assessed Anti-Fraud controls and monitored quarterly operation report.

The Risk Management Division includes 6 committees. Investment Risk Management Committee supervises investment concentration, corporate client rating, asset quality etc.; Asset Liability Risk Management Committee looks after liquidity risk, investment deposit ratio, Gap Analysis etc.; Foreign Exchange Risk Committee is concerned of treasury, import & export business etc.; Internal control & risk management committee's objective is to ensure resources are utilized properly; Central Compliance Committee monitors money laundering risk, cash transaction report etc. and Information Technology Risk Management Committee supervises software failure, natural disasters etc.

- ❖ BRAC Bank

The business model of this bank emphasizes on corporate governance greatly and includes ethics, transparency and compliance. Internal control system is supervised by Board of Directors who focus on maintaining a standard loan/investment portfolio. Internal Audit is allowed to work independently. Corporate governance standards are based on few principles. Board is expected to retain appropriate composure, transparency and integrity. Risk management and internal control is ensured to be sufficient and shareholder's rights and investors' relations are well maintained.

The Risk management process of the bank make the staffs and management to identify potential risks and predict the impacts beforehand. Risk assessment is done by the Risk Grading Matrix. The risks evaluation is passed to risk committee such as ERAF, BRMC etc. Decisions on how to encounter such risk are taken by higher officials and Board of Directors to mid-level employees depending on intensity of risk. Risk is undergone follow-up and monitoring until it is resolved.

- ❖ City Bank

Corporate governance at City Bank include principle, policies and guidelines that help effective managerial operations and preserve long-term value creation. Transparency and Accountability are two pillars of corporate governance structure that are supported by internal control. The Board has 3 committees namely Risk Management Committee, Audit Committee and Executive Committee. Risk committee in responsible for identifying risk and develop mitigating strategy, free flow of information and reports and supervision. Audit committee monitors proper implementation of internal control strategies. Executive committee evaluate bank's credit and lending policies and retain uniformity of credit standards.

- Dutch Bangla Bank

Corporate governance at Dutch Bangla Bank ensures the responsibilities of the Board and Management are properly distributed and carried along with flexible checks and balances for smooth business operation. The Board also ensures adequate internal control and quality of financial reports are maintained. The management takes part in approving strategic decisions and proper implementation through establishing leadership and direction.

The Risk management committee addresses the core risks and monitors whether adequate level of risk recovering and mitigating policies are implemented. Required provisions and capital are kept tracked of by this committee. Money laundering risk, liquidity risk, interest rate risks are few prime risks this committee is concerned of.

- Eastern Bank Limited

Corporate governance at Eastern Bank includes Audit Committee that operates in line with Bangladesh Bank and BSEC. The committee ensures maintenance of suitable Management Information System (MIS), monitor internal controls are duly implemented by the operations, develop strategies to increase efficiency of loan portfolio etc. It also supervises whether corrective measures are taken against forgery, fraud and lacking in internal control.

The Risk Management Committee is responsible to assess risk and help the management develop strategies to control and recover from it. Suitable risk governance is developed which monitors liquidity risk, credit risk, foreign exchange risk etc. for the bank. The committee also reviews the existing guidelines once a year and propose any amendments if required.

- First Security Islami Bank Limited

Corporate governance in this bank is designed in order to retain transparency and accountability. The Board suggests leadership guidance to the management and approves major decisions and policies. It also ensures whether internal control system is vigilant on the operations. The financial reports are developed under the Board's supervision and approval.

Chief Risk Officer supervises the Risk Management Committee which is entitles as a separate division. It works to establish the bank as stable financial institution by incorporating holistic risk management approaches. In addition, it ensures policies are well communicated, implemented and rectified when deviations occur. There are a total of 8 different desks each concerned of a core functional area.

- ❖ Islami Bank Bangladesh Limited

The Director's Board is responsible for developing and portraying an assessment of bank's overall performance in which Auditor's committee helps to examine the information and ensure reliability and accuracy. In addition, the Board also pay heed to maintain transparency and adequacy of the disclosed information. The Risk Management Committee participates by formulating strategies to assess risk and then developing guidelines to implement the strategies. A suitable organizational structure is maintained that enable the committee address potential risks and take safety measures beforehand. Preservation of information and creating proper reports are reviewed by this committee. Compliance is regulated which are given by different directives and guidelines.

- ❖ Rupali Bank Limited

Corporate Governance of Rupali Bank Limited prioritizes on restoring interests of stakeholders. In order to earn the strategic goals, the Directors set yearly business plan that includes all the necessary policies, internal control over the organization and measuring and reviewing the key performances of the bank. Hence, the Director body is responsible for achievement of financial goals, meeting business targets and administrative management. The Audit committee reviews the quarterly and yearly financial statements to evaluate whether they meet required standard and supervises internal control. In addition, the Risk Management Committee is concerned with the risks that can create adverse effects on achieving the financial targets. It develops strategies to mitigate the risks incorporating a number of steps. The core values and implementing strategies are supervised by the Board of Directors.

- Uttara Bank Limited

Corporate Governance seeks to establish transparency, fairness and accountability which has been consistently maintained by Uttara Bank Limited. The Board of Directors develop policies regarding service, procurement, rescheduling loan etc. along with concerning about long term plans and audited information of the bank. Transparent policy is incorporated in decision making process and all financial facts are disclosed in financial report.

The Risk Management division evaluates all risk related aspects, monitors the impacts, provide insights to develop strategies and supervises whether the plans are implemented properly. Although risk management does not mean minimizing risk, rather it indicates how chances of expanding business arenas and introduce new financial products can be maximized. Appropriate Management Information System and thorough internal control are part of the Risk Management Committee.

Composite rating of Management Capacity:

Table 16: Composite rating of Management Capacity of 10 selected Banks

Selected Banks	Operating expense/ Total asset	Interest expense/ Deposit	Income per employee	Expenses per employee	Corporate governance	Average
Al Arafah Islami Bank	1	2	2	2	2	1.8
BRAC Bank	4	1	2	3	1	2.2
City Bank	2	4	2	3	2	2.6
DUTCH Bangla Bank	4	3	3	2	2	2.8
Eastern Bank	2	4	1	4	1	2.4
First Security Islami Bank	1	4	3	2	2	2.4
Islami Bank	2	2	3	2	2	2.2
Pubali Bank	2	2	4	1	2	2.2
Rupali Bank	2	2	5	2	2	2.6
Uttara Bank	3	2	3	2	2	2.4

2.4 E - Earnings ability

It is important to evaluate because bank depends on the earnings to meet certain operations such as paying dividends, maintaining safe capital levels, diversifying investment portfolio and preserving suitable corporate environment. As such, bank needs to measure whether it has a stable source of earning, what is its quality of earning, from what sources are the earnings generated and how much backup is kept as provisions to overcome loan losses. Hence, considering the dimensions of earnings ability, net profit margin, diversification ratio, EPS, ROE and ROA are the ratios that will determine how efficiently a bank is earning.

2.4.1 Net Interest Income

Table 17: Net Interest Income of 10 selected Banks

Selected Banks	Net Interest Income (million BDT)
Al Arafah Islami Bank	8,759.82
BRAC Bank	13,685.96
City Bank	7,760.20
DUTCH Bangla Bank	12,113.76
Eastern Bank	6,365.63
First Security Islami Bank	8,372.15
Islami Bank	26,002.05
Pubali Bank	8,031.44
Rupali Bank	1,486.47
Uttara Bank	4,517.34

Net interest income measures the difference between revenues earned from interest bearing assets and expenses paid on account of interest bearing liabilities. Interest bearing assets include mortgage, securities and commercial loans while interest bearing liabilities are mainly the deposits of customers. In the above mentioned banks, Islami Bank Bangladesh Limited had earned maximum amount of interest on an average (nearly BDT 26,000 million) for past 3 years. It was possible because this bank used to disburse the greatest amount of loans. However, Rupali Bank earned the lowest (about BDT 1,000 million) interest income since it had owned the least amount of interest bearing assets.

2.4.2 Net Profit Margin

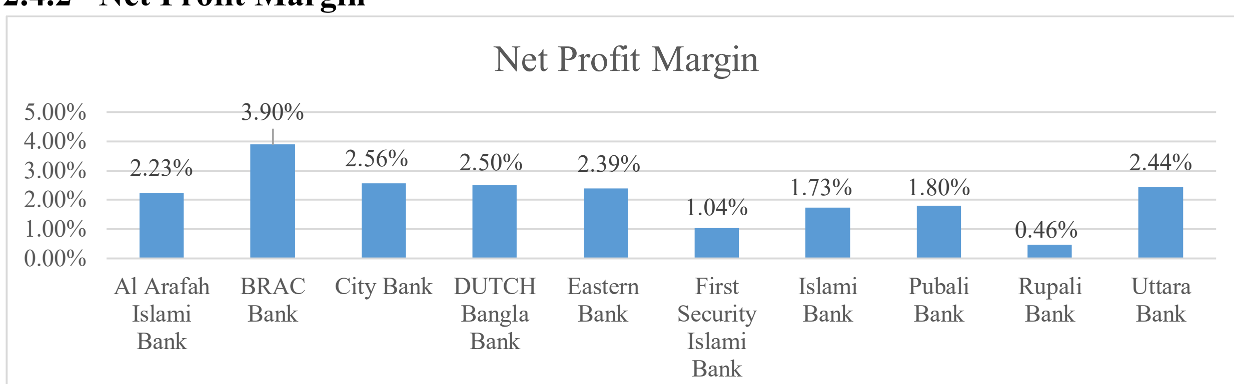

Figure 10: Net Profit Margin of 10 selected Banks

Net profit margin is the proportion of net income to revenue earned. It indicates how much of each Taka value in revenue earned results into profit. BRAC bank has shown highest (3.9%) net profit margin which means it had well controlled the operating expenses which lowered the difference between total revenue and net income. On the other hand, Rupali Bank showed lowest (0.46%) net profit margin which meant operating expenses were quite high that decreased net income. Although Islami Bank Bangladesh Limited earned the highest net interest income, in contrast to total revenue, net profit margin was comparatively low.

2.4.3 EPS

Table 18: EPS of 10 selected Banks

Selected Banks	EPS
Al Arafah Islami Bank	2.63
BRAC Bank	5.015
City Bank	3.1
DUTCH Bangla Bank	16.645
Eastern Bank	3.715
First Security Islami Bank	1.875
Islami Bank	3.49
Pubali Bank	1.575
Rupali Bank	1.17
Uttara Bank	4.095

EPS serves as an indicator of bank's profitability. It plays an important role to determine a share's price. It shows how much a bank earns relative to each stock issued. Among the 10 selected banks, Dutch Bangla Bank had the highest (BDT 16.5) in 2018 while the other banks resulted much lower EPS values. Dutch Bangla Bank had earned quite a higher net profit after tax while it had issued lesser number of stocks that increases EPS. Rupali Bank's EPS for the last year was lowest (BDT 1.17) because it could earn smaller profit comparatively. Investors are likely to choose banks that have high EPS.

2.4.4 ROA-ROE

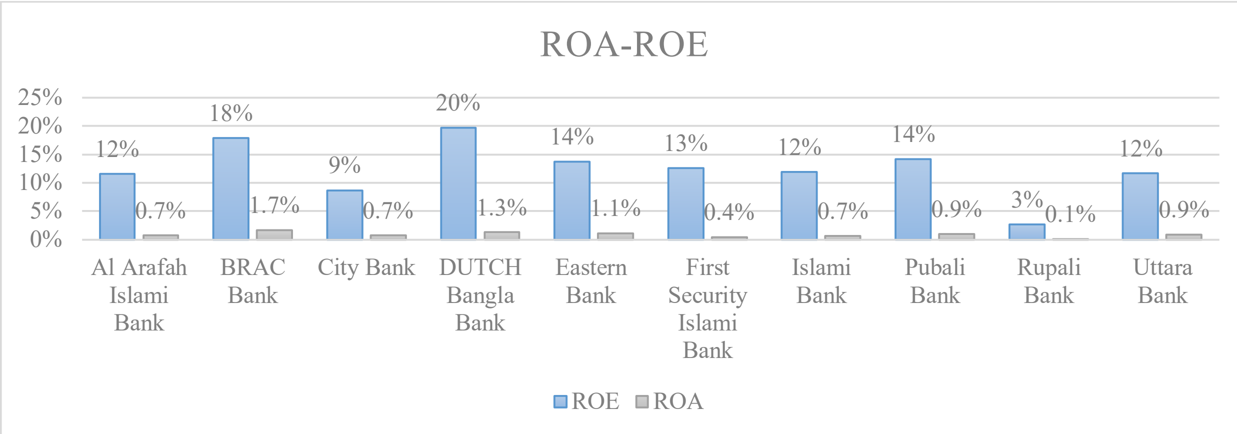

Figure 11: ROA-ROE of 10 selected Banks

ROA & ROE indicate how efficiently the management team is utilizing the capital available. Financial leverage or debt is the key differentiator among these ratios. If the bank seeks for debt in order to increase income generating assets, ROE will rise since shareholder's equity is lessened but ROA will fall as total assets has been boosted. From the mentioned banks, Dutch Bangla Bank presented the highest (20%) ROE and BRAC Bank presented the maximum (1.7%) ROA whereas Rupali Bank presented the lowest ROE (3%) and ROA (0.1%) as well. Although ROE varied to a large extent, ROE of the banks are quite close.

2.4.5 Diversification Ratio

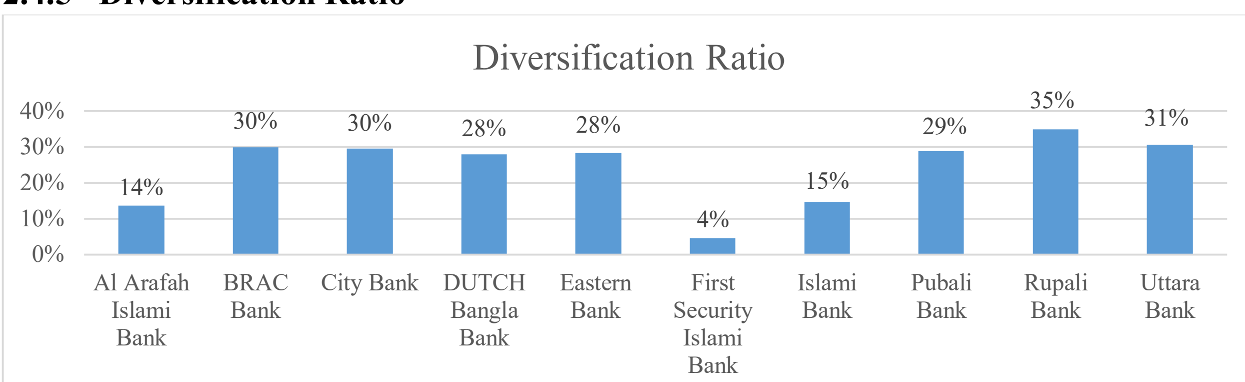

Figure 12: Diversification Ratio of 10 selected Banks

Banks usually diversify to reduce risk from the total portfolio since diversifying means investing in different sectors and every sector's behaviour varies when exposed to same crisis. Diversification also allows a bank to expand its market share and hence downturn of a single market causes lesser harm compared to prioritizing a single market. Moreover, diversification brings higher return since chances of gains outweigh that of losses. Diversification ratio is a bank's non-interest income as a percentage of total income. In the following banks, Rupali Bank is the most (35%) diversified which means it earns the highest non-interest income from assets other than loans, mortgage, securities etc. whereas, First Security Islami Bank is the least diversified one with 4% diversification ratio. This insight might help risk assessment for these banks.

2.4.6 Service fee, trading income etc.

Table 19: Service fee & Trading Income of 10 selected Banks

Selected Banks	Service & Trading income (million BDT)
Al Arafah Islami Bank	2,494
BRAC Bank	6,283
City Bank	3,461
DUTCH Bangla Bank	1,732
Eastern Bank	3,497
First Security Islami Bank	787
Islami Bank	5,870
Pubali Bank	1,815
Rupali Bank	1,381
Uttara Bank	923

Banks earn a significant portion of total operating income by providing services or facilitating business deals. They might earn service fees, commissions, trade related income etc. BRAC bank had earned the highest (about BDT 6,000 million) as other income while First Security Islami Bank earned the lowest (about BDT 800 million). This income impacts net profit although it is not part of main operations of the bank.

Composite Rating of Earnings Ability:

Table 20: Composite rating of Earnings Ability of 10 selected Banks

Selected Banks	Net Interest Income	Net Profit Margin	EPS	ROA-ROE	Diversification ratio	Service	Average
Al Arafah Islami Bank	3	2	3	3	3	2	2.7
BRAC Bank	2	1	2	2	1	1	1.5
City Bank	3	2	3	4	1	2	2.5
DUTCH Bangla Bank	2	2	1	1	2	3	1.8
Eastern Bank	3	2	3	3	2	2	2.5
First Security Islami Bank	3	3	4	3	5	5	3.8
Islami Bank	1	3	3	3	3	1	2.3
Pubali Bank	3	3	4	3	2	3	3
Rupali Bank	5	4	4	5	1	3	3.7
Uttara Bank	4	2	2	3	1	4	2.7

2.5 L - Liquidity management

It is prioritized considering the competitive pressure and easy inflow of foreign capital. Emerging liquidity crisis can develop adverse effects for the bank and the bank may struggle to maintain financial stability. Bank's failure to hold short term liquidity and meet loan commitments might result in increased cost of fund for the bank. Moreover, cash flow and interest paid might vary according to the types of loan that can impact performance as well. To deduce the effectiveness of the bank in handling liquidity, loan to deposit and liquid asset to deposit ratios are calculated.

2.5.1 Loan to Deposit Ratio

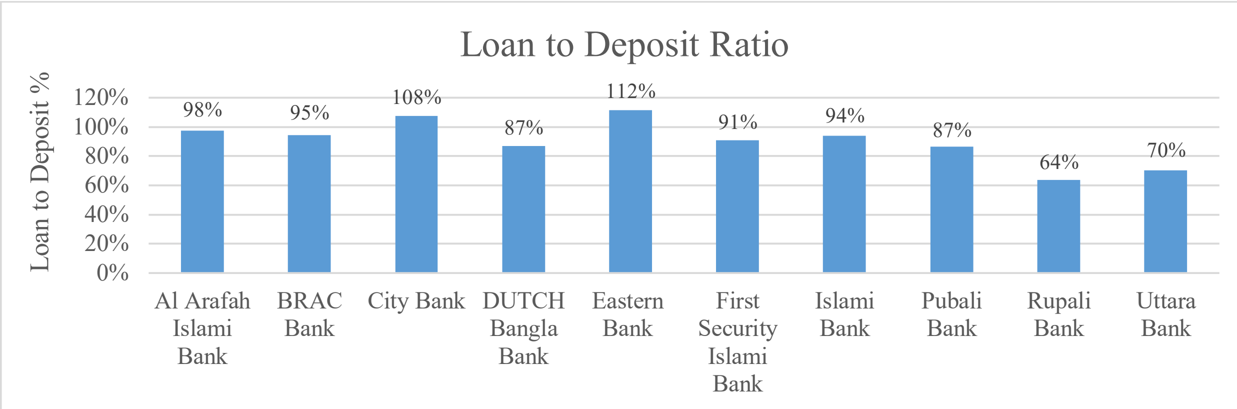

Figure 13: Loan to Deposit Ratio of 10 selected Banks

Banks disburse loans keeping in mind that adequate deposits are coming in. Hence, liquidity of banks greatly depends on the consistent and sufficient collection of deposits relative to the rate and amount at which loans are given. Loan to deposit ratio is highest (112%) for Eastern bank and lowest (64%) for Rupali Bank. However, higher ratio might seem to mean greater liquisbursing loans more than collecting deposits might be risky. However, all other banks other than Rupali Bank could be seen to have quite higher ratios meaning loans and deposits have little differences.

2.5.2 Liquid Asset to Deposit Ratio

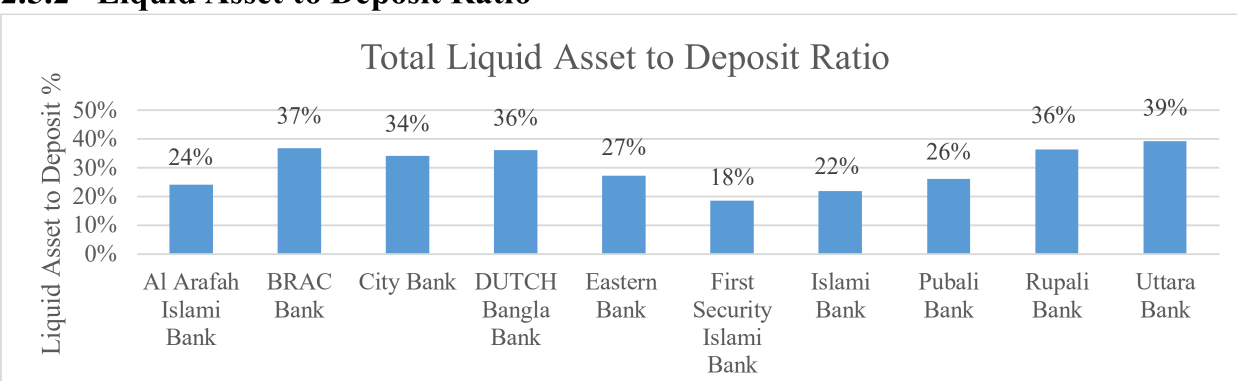

Figure 14: Liquid Asset to Deposit Ratio of 10 selected Banks

This ratio indicates how much liquid asset is stored relative to deposits which is a major portion of liabilities. Since liquid assets are kept to meet short term obligations when required, significant amount of liquid assets are needed to be maintained. Out of the 10 selected banks, First Security Islami Bank had the lowest (18%) liquid asset to deposit ratio whereas Uttara Bank maintained the highest (39%). Other banks have quite high proportion of liquid assets as well that eventually help the banks to stay solvent.

2.5.3 Liquidity Coverage Ratio & Net Stable Funding Ratio

Table 21: LCR & NSFR of 10 selected Banks

Selected Banks	Liquidity Coverage Ratio	Net Stable Funding Ratio
Al Arafah Islami Bank	101.88%	118.89%
BRAC Bank	143.54%	123.54%
City Bank	115.33%	107.35%
DUTCH Bangla Bank	144.30%	111.20%
Eastern Bank	127.67%	104.07%
First Security Islami Bank	125.46%	105.46%
Islami Bank	148.94%	121.38%
Pubali Bank	264.48%	106.85%
Rupali Bank	423.22%	102.24%
Uttara Bank	559.33%	104.09%

Liquidity coverage ratio evaluates whether a bank owns enough liquid assets to meet short term liabilities. It is actually a generic stress test to understand chances of any sudden market ambiguities and ensure a bank has sufficient capital reservation. It is expressed as proportion of highly liquid assets to net cash flow for a 30-day period. Among the following banks, Uttara Bank has the highest (600%) liquidity coverage ratio whereas Al-Arafah Islami Bank has the lowest (101%). LCR has been introduced by BASEL III.

In addition, Net Stable Funding ratio was also proposed by BASEL III which indicates proportion of available stable funding to required stable funding. Available stable funding includes deposits of customers, equity etc. while required stable funding comprises long term liabilities. Out of the selected banks, BRAC Bank maintained highest (123%) NSFR and Rupali Bank had maintained the least (102%) of available to required stable funds.

Composite Rating of Liquidity Management:

Table 22: Composite Rating of Liquidity Management of 10 selected Banks

Selected Banks	Loan to Deposit Ratio	Liquid Asset to Deposit Ratio	Liquidity Coverage Ratio	Net Stable Funding Ratio	Average
Al Arafah Islami Bank	1	2	4	1	2
BRAC Bank	1	3	3	1	2
City Bank	3	3	3	2	2.75
DUTCH Bangla Bank	2	3	3	3	2.75
Eastern Bank	3	2	3	2	2.5
First Security Islami Bank	1	3	3	3	2.5
Islami Bank	1	2	2	1	1.5
Pubali Bank	2	2	1	3	2
Rupali Bank	4	4	1	3	3
Uttara Bank	3	4	1	3	2.75

2.6 S - Sensitivity

It defines how do the overall operation and financial stability react when exposed to certain risks. It explains the vulnerability of the bank towards risks. It is usually done by examining credit concentrations of the bank so that lending to which sector impacts the highest can be tracked. It is represented by VAR which is a statistical procedure that calculates the possibility of potential loss that might happen to a certain investment over a period of time. It is expressed in percentage that indicates the extent of risk for a specific portfolio due to the market. It can be applied for all types of assets of a bank such as shares, loans, bonds etc. It includes incorporating assumptions and developed on the basis of assigned confidence interval. The lower the VAR value, the safer is the bank to be invested in and lesser chance of investors to lose their portfolio value.

Table 23: VAR at 95% confidence level of 10 selected Banks

Selected Banks	VAR at 95% Confidence Level
Al Arafah Islami Bank	5% chance to lose 2% of portfolio value on a particular day
BRAC Bank	5% chance to lose 2% of portfolio value on a particular day
City Bank	5% chance to lose 3% of portfolio value on a particular day
DUTCH Bangla Bank	5% chance to lose 2% of portfolio value on a particular day
Eastern Bank	5% chance to lose 3% of portfolio value on a particular day
First Security Islami Bank	5% chance to lose 3% of portfolio value on a particular day
Islami Bank	5% chance to lose 3% of portfolio value on a particular day
Pubali Bank	5% chance to lose 3% of portfolio value on a particular day
Rupali Bank	5% chance to lose 4% of portfolio value on a particular day
Uttara Bank	5% chance to lose 3% of portfolio value on a particular day

In this case, VAR had been calculated by taking into account the returns of each of the bank for the last 3-year period. The closing prices were taken and returns were calculated by considering the growth in prices from the previous ones. Through computerized methods, VAR was deliberated at 95% confidence level which meant there is a 5% chance to lose how much if invested in a particular bank. From the calculation, it could be deduced that Rupali Bank was riskiest as there was 5% chance to lose 4% of a certain portfolio value. On the other hand, Dutch-Bangla Bank, Al-Arafah Islami Bank and BRAC Bank presented to be the safer ones since there was 5% chance to lose only 2% of portfolio value developed with these banks.

Composite Rating of Sensitivity:

Table 24: Composite Rating of Sensitivity of 10 selected Banks

Selected Banks	VAR at 95% confidence level	Average
Al Arafah Islami Bank	1	1
BRAC Bank	1	1
City Bank	2	2
DUTCH Bangla Bank	1	1
Eastern Bank	2	2
First Security Islami Bank	2	2
Islami Bank	2	2
Pubali Bank	2	2
Rupali Bank	4	4
Uttara Bank	2	2

CHAPTER 3

3.1 Overall CAMELS Rating

Table 25: Overall CAMELS Rating of 10 selected Banks

Selected Banks	Capital Adequacy (30%)	Asset Quality (10%)	Management Capacity (10%)	Earnings Ability (20%)	Liquidity Management (20%)	Sensitivity (10%)	Total	Rank
Al Arafah Islami Bank	1.75	2.5	1.8	2.7	2	1	1.995	2
BRAC Bank	1.25	2.5	2.2	1.5	2	1	1.645	1
City Bank	2.5	2.75	2.6	2.5	2.75	2	2.535	8
Dutch-Bangla Bank	2	3	2.8	1.8	2.75	1	2.19	5
Eastern Bank	1.75	1.25	2.4	2.5	2.5	2	2.09	3
First Security Islami Bank	3.5	1.75	2.4	3.8	2.5	2	2.925	9
Islami Bank	2.75	1.5	2.2	2.3	1.5	2	2.155	4
Pubali Bank	2.75	2.75	2.2	3	2	2	2.52	7
Rupali Bank	4.25	4.25	2.6	3.7	3	4	3.7	10
Uttara Bank	1.75	3.5	2.4	2.7	2.75	2	2.405	6

3.2 Insights on the Rating

- BRAC Bank (1st rank)

BRAC bank stands way ahead in terms of Capital Adequacy and Earnings Ability since it has scored remarkably in these aspects at large difference from the rest of the banks. It was seen that although BRAC Bank's risk-weighted assets are quite low, still it has maintained the highest capital & reserves that boosted the capital adequacy ratio. As a result, the bank's common equity tier-1 and total tier-1 were the highest among the other banks. Nevertheless, BRAC Bank lagged slightly on net-worth protection due to higher amount of non-performing loan which was later overshadowed by greater earning's ability. BRAC Bank had the highest net profit margin and stood as the most diversified one since it accumulated highest non-interest income. The bank has maintained sophisticating corporate governance as well.

- Al-Arafah Islami Bank (2nd rank)

Al-Arafah Islami Bank stood remarkably in terms of management capacity than the others. Income per employee and extraordinary corporate governance are the prime reasons. Moreover, VAR of this bank had been the lowest that proved it to be approvable by investors & customers. Liquidity is another aspect this bank performed best. Higher liquidity coverage ratio and moderate loans against deposit helped the bank stand second.

- Eastern Bank (3rd rank)

This Bank maintained best asset quality in terms of least classified loans, highest amount of total loans relative to assets and keeping maximum provision aside for least amount of non-performing loans. However, this bank lagged behind in asset quality and earnings ability because of lowered loans resulting less interest income. The bank also proved to be sensitive to market risks with high VAR.

- Islami Bank Bangladesh Limited (4th rank)

Asset quality and Liquidity Management are two areas where this Bank performed outstandingly. The bank had disbursed maximum amount of loans which in turn enriched its total assets. Moreover, this bank has preserved highest amount of provision relative to classified loans. Furthermore, in terms of asset composition, the bank stands out because of owning greater amount of liquid assets. As per liquidity is concerned, this bank had the highest net stable funding ratio which meant it accumulates highest amount of stable funds relative to how much is required.

- Dutch-Bangla Bank Limited (5th rank)

Beyond average earnings ability and capital adequacy but poor management capacity and liquidity management have positioned this bank at 5th. This bank has maintained highest ROA-ROE since it had the maximum net profit margin as well. Moreover, possessing the least risk weighted asset, this bank stores huge capital that boosted CAR. However, lack of strong corporate governance and liquidity management have pulled down its overall performance.

- Uttara Bank Limited (6th rank)

Asset quality and Sensitivity are two aspects that this bank failed to perform as per standard. As per asset quality, this bank had maintained very low provision against classified loans. Moreover, it had disbursed lowest amount of loans than the other banks that decreased total assets. This bank had also proved to be moderately sensitive as per VAR.

- Pubali Bank Limited (7th rank)

Although this bank is lagged behind in capital adequacy and asset quality, it has majorly failed to retain optimum earnings ability the most compared to others. Net profit margin had been very low due to lowered interest income. For quite the same reason, EPS of this Bank is second to lowest which also degraded performance.

- City Bank (8th rank)

Performing below average in majority of the factors, this bank falls behind the most in maintaining asset quality. Classified loans had been very high but the bank did not maintain enough provision that ultimately increased NPL-PLL ratio. Moreover, other assets than loans such as investments were maintained at lower levels.

- First Security Islami Bank (9th rank)

This bank failed to meet average earnings ability and capital adequacy in contrast to the other selected banks. It is the least diversified among the others which also questions its risk management policies. Net profit margin had also been low that came from second to lowest amount of average interest income. This in turn decreased EPS. Moreover, common equity tier-1 was the lowest which ultimately reduced total capital hence CAR. Net worth protection was also minimum due to low retention of total equity.

- Rupali Bank Limited (10th rank)

Although this bank has performed the least in most of the aspects, asset quality, capital adequacy and sensitivity are the prime areas where it stood behind with high difference. Least CAR resulted from lowest maintenance of capital & reserves against risk weighted assets. Lowered capital ultimately meant common equity tier-1 to be below average. Moreover, this bank's non-performing loan had been highest among others then reduced net worth protection to an alarming level. In term of asset quality, despite having highest percentage of classified loan, maintained least provision. Since earnings were also low, both ROE an ROA came out the least. EPS had been lowest as well. In addition, this bank portrayed to be the riskiest with VAR of 4%.

CHAPTER 4

4.1 Conclusion

Over the years, Bangladesh has witnessed remarkable growth in the banking sector. Reasons of such growth are the introduction of new financial institutions, implementation of various financing instruments and maintaining huge capital assets. However, the sector has been facing challenges as well due to fast credit growth, malpractices, state directed loan restructuring and economic instability. As per Bangladesh Bank, seven state-owned banks and three private banks were on the verge of appearing as capital-deficits that needed state-funded recapitalisation or bailouts to regain public's confidence on them (Mahmood, 2019). Present situation of banking sector shows severe adversity as non-performing loans is rising exceptionally, some banks are making losses alarmingly, unable to manage liquidity resulting fluctuating ADR hence liquidity crisis.

This paper aimed to analyse the performances of ten most prominent banks of Bangladesh. These banks have the highest reach in the banking sector with maximum number of branches across the country. Performance analysis had been done following the CAMELS approach. The research included both qualitative and quantitative information obtained from various sources. Through this research, a rating of the ten banks could be developed; also key factors that impacted the rating of each bank were tried to be identified. In order to increase reliability, average historical data of last 3 years were taken. Some of the key reasons that hamper bank's performance could be identified such as lack of proper documentation hence poor corporate governance, insufficient collateral hence increasing risk, rise of defaulters hence triggering non-performing loans and bank losses. As a result, emphasizing on scrutinizing these prime reasons and develop proper strategies might improve the banking condition of the lowered ranked banks and overall banking sector at large.

4.2 Learnings

My entire internship period has given me enormous chance to gain utmost knowledge on various aspects of financial activities that take place in an economy. Being an intern of the most prominent NBFI of Bangladesh, I had doors open to encounter the operations of both investments and securities divisions. My major course of work included ratio analysis of the enlisted banks in Bangladesh hence I could get an overall scenario of the banking sector. In addition, I gained knowledge on the challenges and prospects of this sector and also comprehended the current risks held at the banking industry. Furthermore, I learned to collect and understand the information from the stock exchange website while completing tasks because I was required to create stock related databases. In addition, I could achieve insights of many other sectors such as Pharmaceuticals, Textiles, Fuel & Power etc. in the process of assisting my team. My additional learnings included understanding the concept of portfolio management and share market. I have also earned knowledge on how to evaluate the performance of a bank thoroughly while developing this paper. Although I knew the concept from my academia, however, after gaining a working experience at the relevant organization, I could add more value to the workings done. Lastly, it cannot be denied that the most important learning I attained came from my first time exposure to a professional career where I was included in a perfectly maintained organization that had taught me hugely about corporate governance and professionalism.

4.3 Bibliography

4.3.1 References

- Andhya. Ch. V. L Sandhya. Ch. V. L. (2011). Camel Framework in Banks - Indian Scenario. Indian Journal of Applied Research, 4(6), 1-3. doi:10.15373/2249555x/june2014/194

  Retrieved from:

  http://leadershipcorp.com/2009/4/15/why-camel-failed-recognize-weakness-banks

- Babu, M. R., & Dr.m., A. K. (2017). Adequacy of CAMELS Rating System in Measuring the Efficiency of Banking Industry: A Retrospect. International Journal of Research in Arts and Science, 3(Special Issue, 2017), 03-06. doi:10.9756/ijras.8147

  Retrieved from:

  https://www.researchgate.net/profile/Mohammad_Bagheri_Mazrae/publication/326654535_Dynamics_of_banking_soundness_based_on_CAMELS_rating_system/links/5b5b1231aca272a2d66e2a1f/Dynamics-of-banking-soundness-based-on-CAMELS-rating-system.pdf

- Cole, R. A., & Gunther, J. W. (1998). Journal of Financial Services Research, 13(2), 103-117. doi:10.1023/a:1007954718966

  Retrieved from:

  https://link.springer.com/article/10.1023/A:1007954718966

- Derviz, A., & Podpiera, J. (2008). Predicting Bank CAMELS and S&P Ratings: The Case of the Czech Republic. Emerging Markets Finance and Trade, 44(1), 117–130. doi: 10.2753/ree1540-496x440107

  Retrieved from:

https://www.tandfonline.com/doi/abs/10.2753/REE1540-496X440107

- Ghazai, M., & Bayraktar, S. (2018). Performance Analysis of Banks In Turkey Using Camels Approach Case Study: Six Turkish Banks During 2005 To 2016. Journal of Business Research - Turk, 10(2), 847-874. doi:10.20491/isarder.2018.458
  Retrieved from:
  https://www.researchgate.net/publication/326118876_Performance_Analysis_Of_Banks_In_Turkey_Using_Camels_Approach_Case_Study_Six_Turkish_Banks_During_2005_To_2016
- Masood, O., Ghauri, S. M. K., Aktan, B., , & . (2016). Predicting Islamic banks performance through CAMELS rating model. Banks and Bank Systems, 11(3), 37–43. doi: 10.21511/bbs.11(3).2016.04
  Retrieved from:
  https://www.researchgate.net/profile/Bora_Aktan/publication/309140665_Predicting_Islamic_banks_performance_through_CAMELS_rating_model/links/5a79868aaca2722e4df38022/Predicting-Islamic-banks-performance-through-CAMELS-rating-model.pdf
- Rozzani, N., & Rahman, R. A. (2013). Determinants of Bank Performance: Conventional versus Islamic. Jurnal Pengurusan, 39, 129-139. doi:10.17576/pengurusan-2013-39-12
  Retrieved from:
  https://www.researchgate.net/profile/Nabilah_Rozzani/publication/263967524_Camels_and_Performance_Evaluation_of_Banks_in_Malaysia_Conventional_Versus_Islamic/links/0deec53c760191ab2a000000.pdf
- The Financial Express. (n.d.). The current state of the banking industry in Bangladesh. Retrieved from:

https://thefinancialexpress.com.bd/views/views/the-current-state-of-the-banking-industry-in-bangladesh-1556380055