Research Study

on

Banks' Profitability and the Effects of Risk and Competition in Bangladesh

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Letter of Transmittal

8th November, 2022
Dr. AKM Mohsin
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Subject: Submission of thesis report on **"Banks' Profitability and the Effects of Risk and Competition in Bangladesh."**

Respected Sir,

With profound respect, it is my pleasure to submit my research paper on **"Banks' Profitability and the Effects of Risk and Competition in Bangladesh."** Preparing this assignment provided me with the opportunity to come up with the people of various discipline. I have tried my best to bring up the profitability and risk associated in the banking sector of Bangladesh. The report would not be complete without your vigilant guidance, for which I want to express my heartiest gratitude to you. I have tried to give my highest effort for making the report accurate as well as informative.

I hope that my endeavor will be able to meet your expectation. So, I would like to submit my assignment report on **"Banks' Profitability and the Effects of Risk and Competition in Bangladesh."** Your kind acceptance will be highly appreciated.

Sincerely,

K M Fardinul Islam
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Approval Certificate

This is to certify that the thesis paper entitled **"Banks' Profitability and the Effects of Risk and Competition in Bangladesh."** is prepared by K M Fardinul Islam who is bearing the student of 191-11-6185, as a requirement of BBA Program under the Department of Business Administration and the Faculty of Business and Entrepreneurship at Daffodil Internal University.

The report is recommended for submission.

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Acknowledgement

Firstly, I pay my gratitude to the almighty Allah for giving me the tenacity and composure to complete this thesis paper on "**"Banks' Profitability and the Effects of Risk and Competition in Bangladesh."**

I would like to express my indebtedness appreciation to my Supervisor **Dr. AKM Mohsin.** His consistent guidance and encouragement have helped me in all ways to complete this paper. I have no hesitation to say that without his constant support and valuable advice from time to time, I would probably fail to complete the work in an appropriate manner.

A study on Banks' Profitability and the Effects of Risk and Competition in Bangladesh

Abstract: After the independence of Bangladesh, it has seen a phenomenal expansion of its banking sector since the liberalization policy was implemented in the 1980s. Only four domestic banks (Sonali Bank, Pubali Bank, Rupali Bank, and Janata Bank) existed in Bangladesh prior to the liberalization policy, and they were all nationalized. Only three foreign banks were present. There was no private bank, though. As a result, Bangladesh's banking sector was completely void of competition. Four nationalized banks controlled a large portion of the banking market. Bank profitability was very inadequate as a result of risk and competition. The risk and competition for making a profit are still present in the banking industries. We are making every effort to learn as much as we can about the risk and competition facing Bangladeshi banks. Bank lending rates were used as a stand-in for interest rates, and return on assets and return on equity were used to gauge how profitable the banks were. In the study, the failure model was employed to observe how interest rates affected profitability. According to the findings, private banks, as opposed to public sector banks, are more impacted by interest rates on ROA and ROE. In order to systematically start investigating the cause-and-effect relationships between competition, innovation, taking risks, and profitability in the Bangladesh banking industry, we introduce a new perspective. Structural equation modeling (SEM) is used to test our hypothesis, and the empirical findings demonstrate that i. taking risks is highly associated with profitability; (ii) digitization strongly affect both risk-taking and profitability, with both direct and indirect effects on profitability; (iii) While competition has a negative impact on risk taking, it has a positive impact on both advancement and profitability, and its effects on risk-taking and profitability are both direct and indirect; (iv) Market competition, bank innovation, risk-taking, and profitability are all correlated with one another.

Keywords: Banks, risk evaluation, rivalry, cash flow, and research hypotheses

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Chapter 1: INTRODUCTION

1.1. INTRODUCTION

This research paper uses data from Bangladesh's banking system and individual banks to empirically evaluate bank performance, competition, and their relationship. That's why we take some on the Bangladeshi bank to ascertain the As metrics of bank performance, return on assets and data envelopment assessment are used, while eight structural measures are used to measure competition, followed by the use of regression analysis to determine its impact. The results show that bank performance has improved, albeit with some fluctuations between the study's sample periods. On the other hand, as shown by all structural measures, the concurrence level has been rising steadily in the banking system, and profitability varies year over year. The regression's findings support the idea that competition has a detrimental effect on bank performance. The banking industry's structural changes must be reviewed. The government regulators must in particular make sure that banks, especially private banks, have the necessary incentives to enhance their effectiveness in terms of profitability and efficiency. The government of Bangladesh has implemented a variety of policies to de-regulate the banking sector, including the introduction of private sector banks in 1982, the beginning of the process of nationalizing state-owned banks in 1983, and the declaration of the Financial Sector Reform Program (FSRP) for de-regulating the banking sector in 1989 by introducing relaxation of reserve requirements, withdrawal of st (Debnath, 2004). The policy initiative the government undertook in 2000 to integrate or close down poorly performing state-owned banking institutions significantly contributed to leveling the playing field for private and foreign banks that entered the market during the liberalization framework.

1.2. PROBLEM STATEMENTS

Finding the effects of risk and competition on the profitability and effectiveness of three Bangladeshi banks listed on the banking fiscal year.

- The study's goal is to assess a bank's profitability by examining the impact of risk and competition among Bangladeshi banks.
- Finding and analyzing how risk is impacted by competition among banks as well as assessing the profitability of those banks in Bangladesh are the priorities of the research.
- Individual objective

  To identify the risk of Banks

  To find out the impact of risk of the banks

  To execute the competition among the banks

  To find out the bank‟s profitability among the bank in Bangladesh.

1.3. TERM CONCEPT

Impact of risk: After determining the uncertainties to your financial institution, you must evaluate their potential effects. You must make a distinction between minor risks that might be tolerable and major risks that need to be managed right away.

Bank competition: The worldwide financial crisis reawakened academics' and legislators' interest in bank competition and the state's role in competition policies (i.e., laws and policies that influence how fiercely banks compete). Some people think that the financial chaos was triggered by increased financial creativity and competition in markets like subprime lending. Others are concerned that the crisis and government support of the largest banks increased banking concentration, reducing competition and access to finance and possibly causing future instability due to issues including too institutions' perverse incentives.

Bank's Cash flow: Like all enterprises, banks make money when they generate more revenue than they incur in costs. A bank makes the majority of its money from the involvement it makes on its assets as well as the fees it charges for its services. Interest on its liabilities is its biggest expense. A bank's main assets are the securities it owns and the loans it makes to people, companies, and other organizations. In contrast, its main obligations are its deposits and the money it borrows from those other banks or by purchasing new paper in the money market.

Chapter 2: LITERATURE REVIEW

2.1. LITERATURE REVIEW

The conflicts between the ES paradigm and the SCP paradigm, also known as the structure performance paradigm, continue to divide the banking literature. The oldest and most established hypothesis is the SCP hypothesis, which, according to Park (2009, p. 654) and Seelanatha (2010, p. 21), dates back to Mason (1939). It claims that the market's structure, including the number of banks and their market shares, has a significant impact on how well banks perform, and that as competition rises, banks' profitability falls. In other words, banks will be more profitable the higher the concentration ratio, reflecting a strong correlation between market share and performance.

Many academics in Bangladesh make the opposite case in favor of the competitive market structure. According to Calem and Carlino (1991), a market with more concentration is less competent and equitable because it is more susceptible to crises. According to Berger et al. (2004), the government's intention to limit competition through regulations governing foreign bank entry and state ownership of banks results in negative effects and, in the end, poor economic efficiency

in a nation. Additionally, it is very likely that banks in a concentrated environment will engage in anticompetitive actions to increase profits at the expense of consumer benefits (Abbasogluet al., 2007; Wong et al., 2008); this will result in monopolies and the associated inefficiencies (Suzuki et al., 2008). It's significant to note that arguments for the potential advantages of a competitive market come from the application of standard industrial organization economics to the financial sector, especially the banking sector. Furthermore, these arguments demonstrate a tendency toward the ES, the alternative hypothesis to the SCP that contends that improved bank performance results in increased market share, which in turn produces market concentration and higher efficiency. In other words, a market's uneven distribution of market size and a correspondingly high intensity of concentration are caused by bank-specific efficiency differences. In actuality, this hypothesis views market concentration as a result of the more effective dominant banks rather than a random event (Smirlock, 1985). This is possible because, in a market where there is competition, a bank with superior management or production technology can reduce costs to boost profit and increase market share (Berger, 1995). However, a bank that performs more efficiently than its rivals can also increase profits by either maintaining the current market size and pricing policies or by accommodating size expansion and price reduction strategies (Lloyd-Williams et al., 1994, p.437). The highest amount of credit will be apportioned because, under such a market system, banks work to achieve the dual goals of maximizing profits and minimizing costs and prices (Northcott, 2004). Therefore, the ES hypothesis contends that efficiency rather than market structure in the banking industry is what determines how profitable banks are. In this way, the emergence of the ES both challenges the conventional SCP hypothesis and proposes a different approach to understanding the various dynamics of the banking industry. The ES hypothesis is supported by research by Demsetz (1973), Brozen (1982), Samad (2008), and Seelanatha (2010).

Therefore, it can be argued that the nature of the relationship between competition and bank performance is somewhat ambiguous based on the literature reviewed above. Wanniarachchige and Suzuki (2010) contend that the relationship is nation-specific and advise further research at the national level. According to earlier research that focused on Bangladesh's banking industry, such as Samad's (2008) study, the results from pool and annual data yield different results, making it impossible to generalize about how competition affects bank performance in terms of profitability and efficiency. He calls for additional research to examine the effects of shifting market structure on bank performance in light of this anomaly.

Prior studies focusing on developing nations have used bank-specific, industry-/country-specific, or a combination of both types of variables in models for assessing the impact of competition. For instance, while Ataullah and Le (2006) and Samad (2008) used both variables for their studies, Wanniarachchige and Suzuki (2010) only used industry- and country-specific variables. Similar methods are used in this study to choose the crucial variables for the regression.

2.2 EFFICIENCY AND COMPETITIVE FORCES

According to the traditional industrial organization theory's structure-conduct-performance (SCP) hypothesis, an organization's performance is based on its business strategy, which is influenced by

the structure of the industry [3]. In addition, the SCP hypothesis suggests that firms profit more in a market that is more concentrated than in a market that is more operate efficiently to collusion and domination. In other words, market concentration and firm profitability are positively correlated [4]. The SCP hypothesis is well supported by existing literature with regard to the banking sector. The SCP hypothesis was tested in the context of Pakistan's banking sector by Bhatti and Hussain, and their findings are consistent with the SCP hypothesis [5]. When Kamau and Were look into the factors that influenced bank performance in Kenya between 1997 and 2011, they discover that structure and collusive power are the root causes of the superior performance [6]. Using data from Bangladesh's banking sector, Uddin and Suzuki empirically evaluate a negative correlation between competition and profitability [7]. In their investigation of the connections between market concentration, profitability, and risk-taking in the Chinese banking sector from 2003 to 2009, Tan and Floors attest to a detrimental link between competition and profitability [8].

2.3 COMPETITION AND ACKNOWLEDGEING RISK

The competition is harmful to bank stability, according to a general perspective on banking supervision. On the one hand, competition reduces a bank's affecting commerce, which is akin to the cost of bankruptcy, and tempts banks to adopt risky policies like lowering capital ratios and loosening loan terms, which raise the risk of nonaccrual assets [9]. On the other hand, when market pressures is subdued, a bank will choose safe policies that support the stability of the entire banking system to safeguard its franchise value [10]. According to a different theory, bank policies have an impact on credit history' actions, which in turn alter banks' willingness to take risks [11]. In particular, limited competition leads to high lending rates (i.e., bond yields on loans), which may increase borrowers' credit risk due to moral hazard problems [12]. For instance, borrowers can hide their credit status and repayment capacity due to information imbalances in the credit card industry, while banks are always at a disadvantage when it comes to gathering enough borrower information. MartinezMiera and Repullo propose a model to show how competition affects bank risk-taking, and they find that the intensity of these two effects tends to vary with the degree of competition [13] and that two effects acting in different directions produce an undefined net effect on risk-taking.

2.4 RISK-TAKING AND FINANCING

According to Chen, a bank's innovation initiatives increase the effectiveness of screening and monitoring borrowers, which ultimately results in a decrease in the volume of nonperforming loans and the bank's credit risk [23]. Great effectiveness, according to Schaeck and Cihák's hypothesis, will lead to improved stabilisation and a reduced likelihood of financial institution default [24]. Norden et al. assert, however, that the motivations behind and methods employed by banks will ascertain whether invention is beneficial or not [25]. The stability of the bank is enhanced when innovation is used to enhance risk monitoring and control, such as the assessment and monitoring

of borrowers. However, if the innovation that banks support is primarily intended to start generating high profits, it power and economic to take more risks and ultimately results in bank failure. Technical proficiency and the risk-taking tendencies of Chinese commercial banks are found to be positively correlated by Hou et al. [26].

2.5 ACCEPTANCE OF RISK AND PROFITABILITY

The capital asset pricing model (CAPM), which shows that the expected return is determined by adding the risk-free interest rate to the product of the investment's beta and the expected risk premium, offers the first clear and concise framework for comprehending how the risk of a portfolio affects it's own expected return [27]. Since the investment's beta is always positive, market risk and expected return are positively correlated. A commercial bank is viewed as an investor in this sense because it must manage its assets through investments. Given that bank managers' level of risk-taking is determined by their appetite for risk, if the majority of a bank's managers are risk seekers, they will be willing to take on big risks in order to reap big rewards. In other words, there is a link between bank profitability and risk-taking [28].

3. METHODOLGY

3.1 Research Approach:

The methodology used involved creating and administering questionnaires, as well as conducting interviews. The study employed a mix of quantitative and qualitative data collection techniques. Because it is based on a scientifically holistic approach and is explicated in terms of variables and units of analysis, qualitative research. The goals of the study have been attained and use both descriptive and explanation research. To gain understanding of the relationship between risk and profitability in Bangladesh's banking sector, the explanatory research was once more used.

3.2 Data Sources:

The author used both primary and secondary sources of data to start preparing a comprehensive and detailed and genuine research.

• The only primary source of data for these studies, regardless of the fact that the project is based primarily on them, is the bank.

• Secondary Source of data Materials like various publications, reports, and articles that were provided to the author to understand various banks in Bangladesh are examples of secondary sources of information.

The term "secondary data" collection of information that has already gathered and is easily accessible from other sources. When primary information is unavailable at all, such data may nevertheless be available because they are simpler to obtain and less expensive than the actual information. This information refers to information that was previously gathered by researchers for use in other studies. Evaluation of secondary data focuses more on critically assessing previously completed work and identifying potential areas for future research. To guarantee the accuracy and dependability of the data a thorough investigation has been carried out over time. Through analysis of peer-reviewed articles from various sources, a critical review of the literature in chapter two has indeed been performed. All the analysis presented previously includes secondary data that was accessed through data bases and other websites. Secondary data may be more suitable for any research project if trying to collect your own data would require too much time or effort or if it has already done. Typically, studies conducted by other institutions or organizations provide this kind of data. Secondary sources were used in the above research report to collect the necessary data, including journal articles, webpages, as well as other research reports.

3.3 Scope of the Study:

This study focuses on a few issues, such as money, choice, demand, and other issues. That is brought about by the lack of firms offering design, models, etc. The purpose of this study is to analyze and pinpoint the needs, demands, and trying to purchase capabilities of the consumer. Additionally, the study's scope is too narrow for the further investigation. Chapter three of this research study discusses the study's constraints.

### 4. OVERVIEW OF THE BANKING SECTOR OF BANGLADESH

The banking industry tends to dominate the procedure of providing funding in Bangladesh, despite the existence of various types of financial institutions and intermediation. In contrast to the stock market's market capitalization, which was 32.79% of GDP in 2010 and the non-banking sector's assets, which have been 5.98% of GDP, the size of the banking sector's assets was 69.76% of GDP in 2010 (Bangladesh Bank, 2011; Uddin and Gupta, 2012). By the end of 2011, there were 47 scheduled banks, of which 4 were state-owned, 4 were advancement financial institutions controlled by the state, 30 were private, and 9 were foreign banks (Bangladesh Bank, 2011). There were two denationalized banks, seven fully-fledged Islamic banks, and 21 non-Islamic banks. Private banks are further divided into denationalized banks, Islamic banks, and non-Islamic banks. Nevertheless, 16 of the 21 non-Islamic banks kept separate Islamic banking windows for their

clients, making a total of 23 banks that participated in Islamic banking activities either fully or partially. The market share of state-owned scheduled banks is shifted to private and foreign banks as a result of the introduction of financial liberalization policies for speeding up the number of institutions as well as branches under private and international ownership. For instance, state-owned scheduled banks had 94.5% of the market share of deposit accounts in 1976, but by the end of 2011, that share had dropped to 32.1%. 1 In comparison, the percentage of foreign and private banks has been rising. To be more accurate, between 1976 and 2011, the share of foreign banking institutions by 14.5%, and the percentage of private banks increased from 3.6% to 61.6%. The debt market has also undertaken similar changes. The Bangladesh Bank's authorization of the establishment of nine new private lenders in 2012 accelerated the proportion of private banks going forward.

Chapter 5: RISK ANALYSIS PART

5.1 Risk Assessment of United Commercial Bank Limited:

CREDIT RISK:
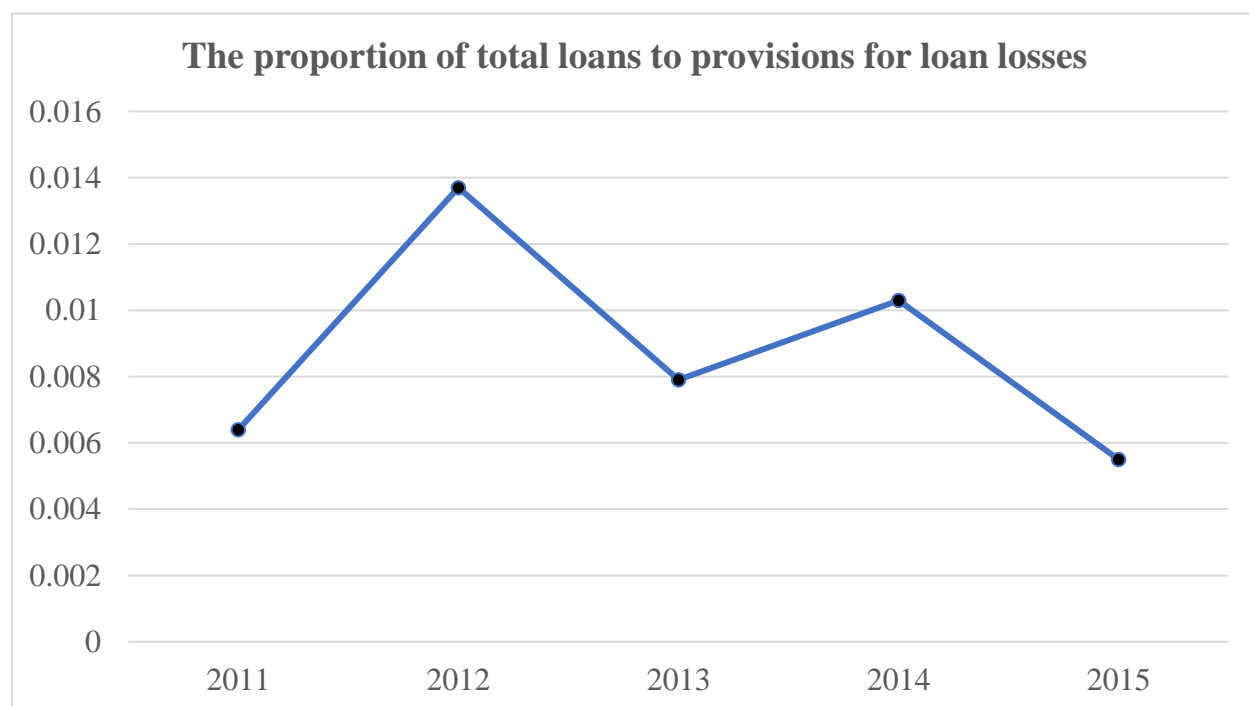
Interpretation: The possibility of a borrower will default on a debt due to missed payments is known as a credit risk. A charge set aside for unpaid loans and loan payments is known as a loan-loss provision. The ratio of provision for loan losses to total loans decreased in 2011 by 0.0074 and slightly increased in 2012 by 0.0147. Again, the decrease is 0.0077 in 2013 and the increase

is 0.0113 in 2014. And since we last checked, it has decreased by 0.0045 in 2015. Consequently, we learn that the credit risk in 2012 was very significant.

LIQUIDITY RISK

Cash and Government Securities as a Percentage of Total Assets
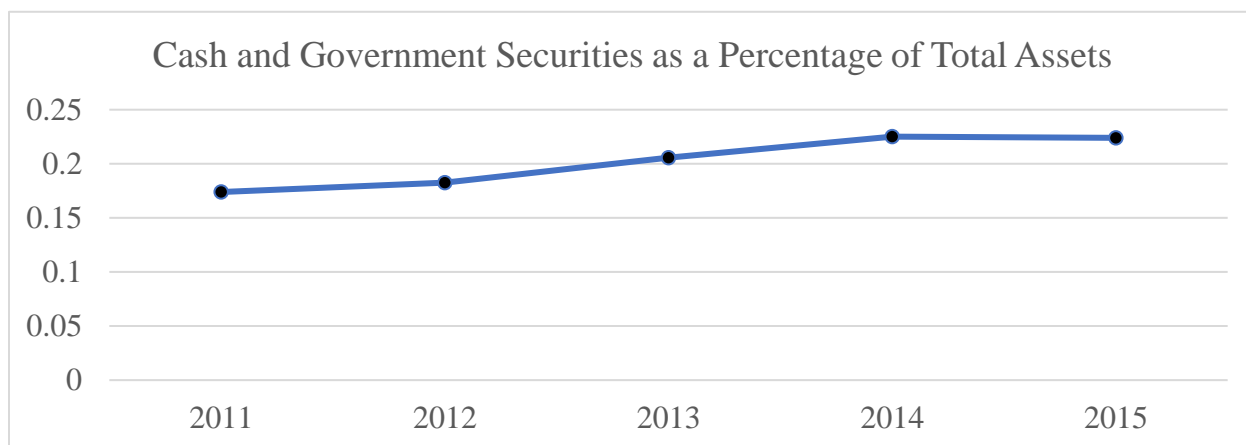
Interpretation: Investment securities for short-term investing with high credit quality and high liquidity are known as cash equivalents. It will be 0.1738 and 0.1834 in 2011 and 2012. However, it saw a tiny rise of 0.2047 and 0.2211 in 2013 and 2014. It decreased once more in 2015, though. Therefore, in this instance, 2014 resulted in the highest liquidity risk.

MARKET RISK

The proportion of an asset's market value to its book value
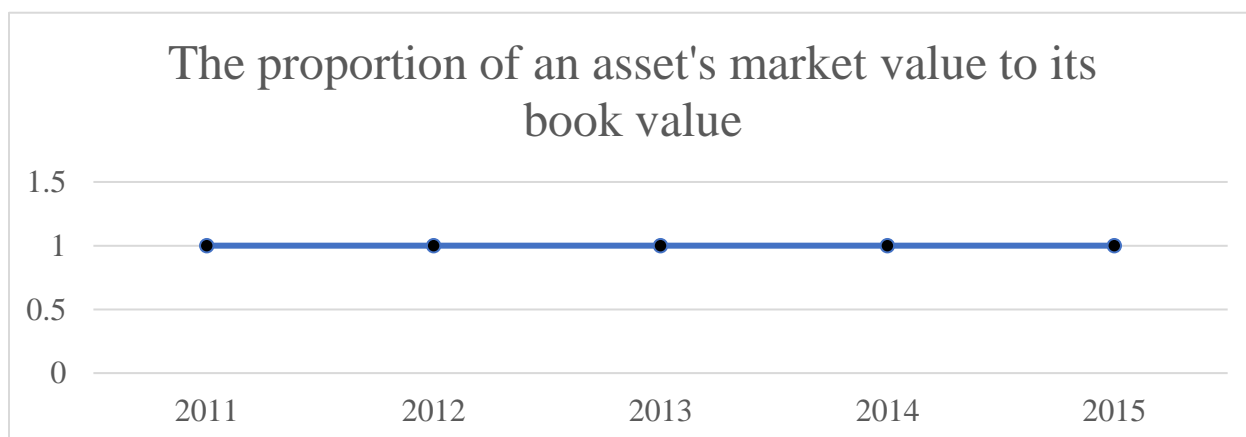
Interpretation: Market risk is the chance that an investor will end up losing funds as a result of events that have an impact on the overall health of the financial markets in which he participates.

The book value to market value ratio for assets was 1.00 in 2011. And the remaining months of 2012, 2013, 2014, and 2015 are the same.

INTEREST RISK

A measure of the relationship between interest-bearing assets and liabilities
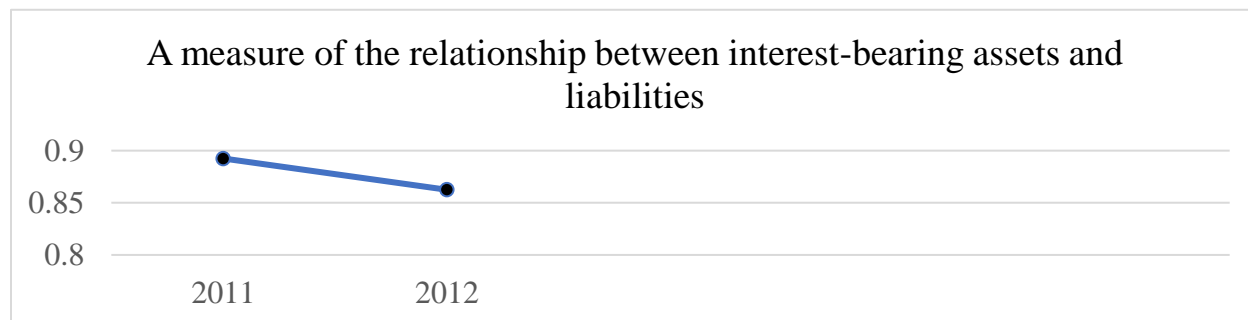
Interpretation: Assets held by a bank that are susceptible to changes in interest rates are known as interest sensitive assets. Most banks' assets are largely made up of interest-sensitive liabilities. Interest-sensitive assets to liabilities are divided by each other in 2011 at a ratio of 0.8924. However, it has decreased by 0.8635 in 2012. Consequently, UCB bank's interest risk is rapidly declining.
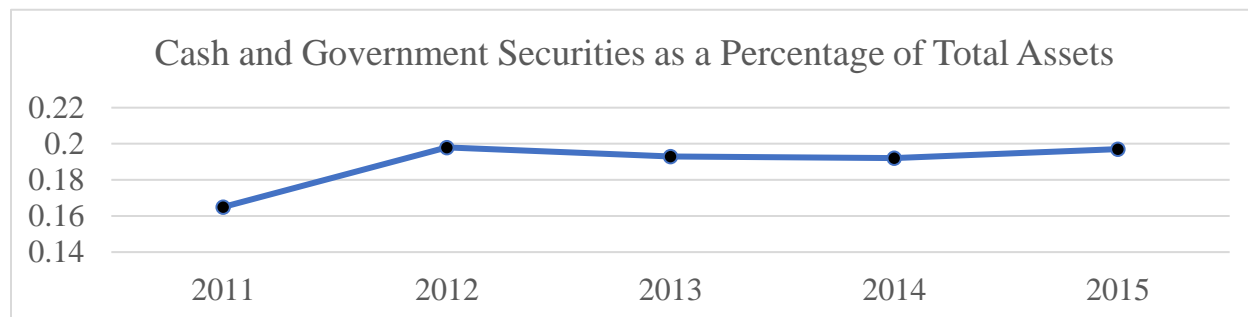
5.2 RISK ASSESSMENT OF AB BANK LTD.

CREDIT RISK

The proportion of total loans to provisions for loan losses
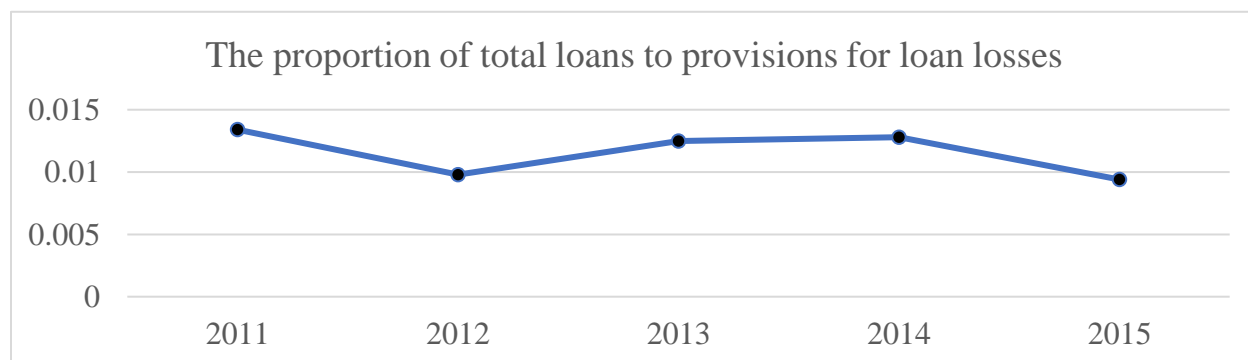
Interpretation: A charge reserved for unpaid loans and loan payments is known as a loan loss. Provision for Loan Losses as a percentage of total loans in 2011 was 0.0123, or 1.23%. then it is

lowered to 0.0088 in 2012. Following a two-year increase, it is once more decreased to the final year. So, it is evident that the AB capital adequacy risk is the finest in 2014.
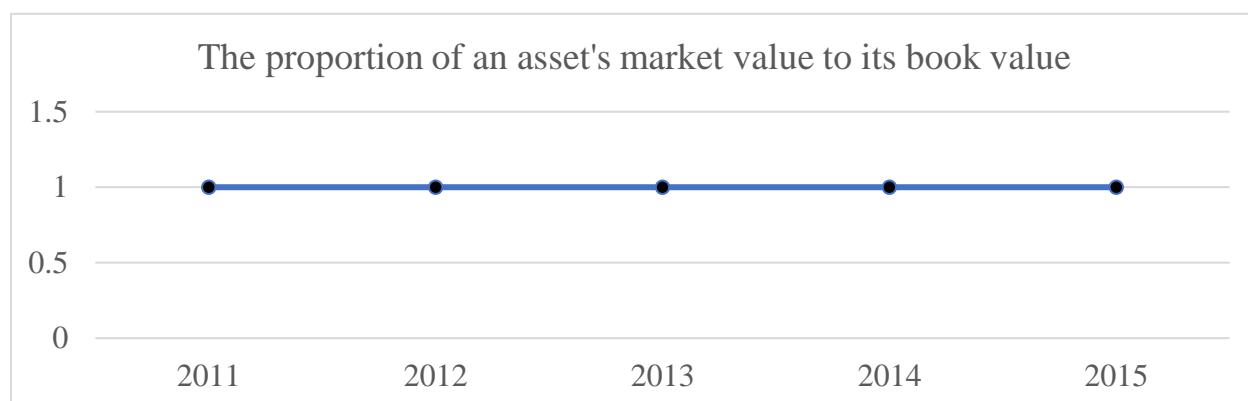
LIQUIDITY RISK

Cash and Government Securities as a Percentage of Total Assets

	2011	2012	2013	2014	2015

(y-axis: 0.14, 0.16, 0.18, 0.2, 0.22)

Interpretation: Investment financial assets for short-term investing with high credit quality and excellent liquidity are known as cash equivalents. 2011 saw 0.1640 or 16.40% growth, but 2012 saw an increase to 0.1970 or 19.70%, and in 2013 and 2014, there was a slight decline. But in 2015, it was raised once more.

So, in this instance, we can see that AB bank's liquidity risk was at its highest in 2012.

MARKET RISK

The proportion of an asset's market value to its book value

	2011	2012	2013	2014	2015

(y-axis: 0, 0.5, 1, 1.5)

Interpretation: Market risk is the chance that an investor will lose money as a result of events that have an impact on the overall health of the financial markets in which he participates. The ratio of book value to market value of assets was 1.00 in 2011; it remained the same in 2012, 2013, 2014, and 2015.

INTEREST RISK

A measure of the relationship between interest-bearing assets and liabilities
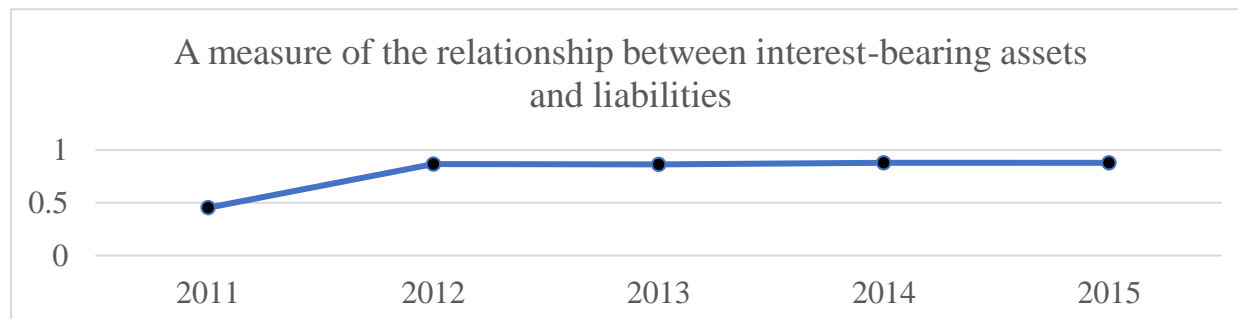
Interpretation: Assets held by a bank that are likely to be exposed to changes in interest rates are known as interest sensitive assets. Most banks' assets are primarily composed of interest-sensitive liabilities. Interest-sensitive assets to liabilities have been divided by one another in 2011 at a ratio of 0.4541, or 45.11%. It is gradually increased to 2012, which is 0.8669 or 86.69%, and to 2014 and 2015.

5.3. AVERAGE CALCULATION:

CREDIT RISK

The proportion of total loans to provisions for loan losses

The ratio of Provision for Loan Losses to Total Loans
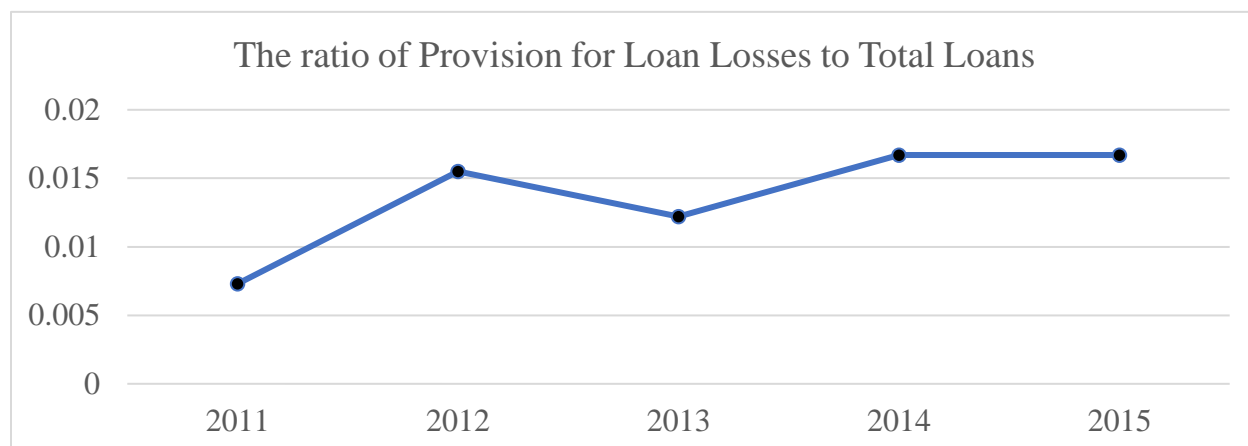
Interpretation: The possibility that financial institutions may not receive the full amount of the promised cash flows from their loans and securities. Credit risk was 0.0074 percent or.74 percent in 2011, increased to.0154 percent or 1.54 percent in 2012, slightly decreased to.0125 percent or 1.25 percent in 2013, significantly increased to.0163 percent or 1.63 percent in 2014, and remained constant in 2015. Thus, we have learned that Bangladesh's banking industry faced a high degree of credit risk in 2014 and 2015. Consequently, the risk is gradually rising every day and it may have a significant negative impact on Bangladeshi banks, so in this instance, banks will not if it is not possible to reduce the credit risk, approve the loan.

LIQUIDITY RISK:

Cash and Government Securities as a Percentage of Total Assets

The Ratio of Cash and Government Securities to Total Assets
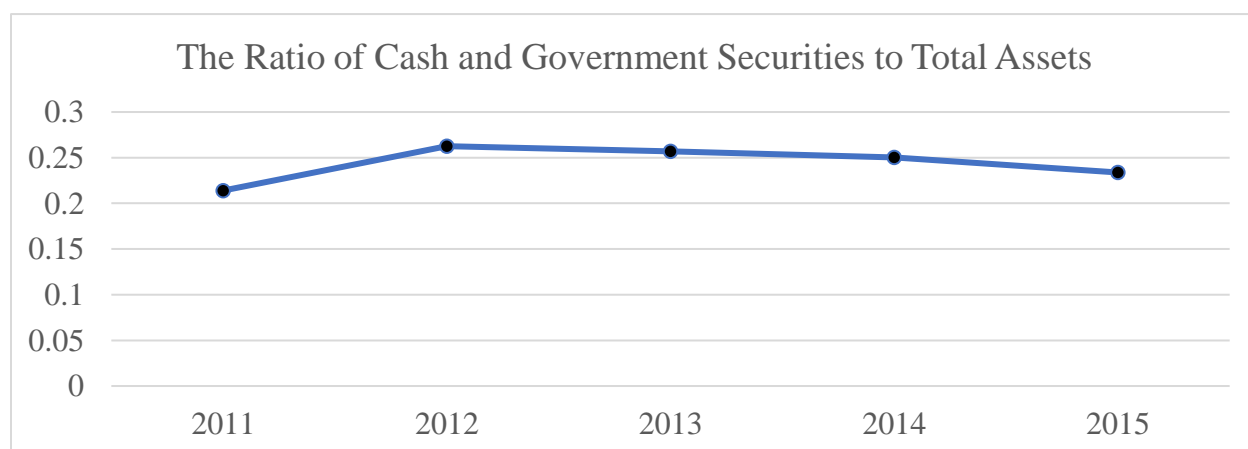
Interpretation: The chance that a sudden increase in liability withdrawals might force a financial institution to quickly and at below-market prices liquidate its assets. Liquidity risk was 0.2134 percent or 21.34 percent in 2011, increased to 0.25 percent or 25 percent in 2012, slightly decreased to 0.24 percent or 24.89 percent in 2013, slightly decreased to 0.24 percent or 24.01 percent in 2014, and decreased to 0.23 percent or 23.36 percent in 2015. Thus, we have managed to learn that Bangladesh's banking industry faced a high level of liquidity risk in 2012. The risk that the banks face is that they may not adhere to the policy initiatives of the central bank.

MARKET RISK:

The proportion of an asset's market value to its book value

The ratio of Book-Value of Assets to Market Value of Assets
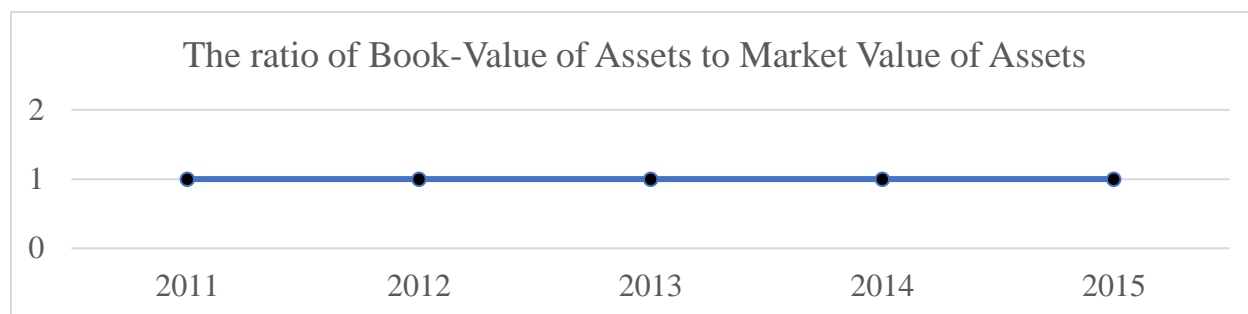
Interpretation: The risk associated with the assets and liabilities in a financial institution's trading book that are subject to fluctuations in interest rates, currency exchange rates, and other prices.

INTEREST RATE RISKS:

A measure of the relationship between interest-bearing assets and liabilities

The ratio of Interest Sensitive Assets to Interest Sensitive Liabilities
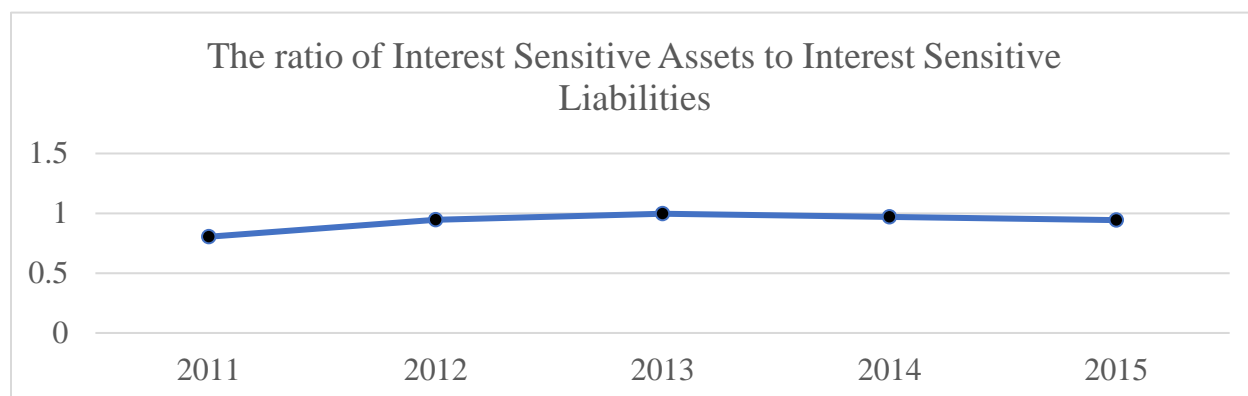
Interpretation: Risk that a financial institution faces as a result of the maturities of its assets and Liabilities are not in line. Interest rate risk in 2011 was 0.8042 percent; in 2012, it was.80.42 percent. In 2013, the risk of interest rate increases increased to 0.9445 percent, or 94.45 percent. In 2014, the risk of an interest rate increase was slightly reduced to 0.9707 or 99.7%. 94.17 percent, and in 2015 the risk dropped to 0.9417 percent. Accordingly, we have discovered that the Bangladeshi banking industry faced a high level of interest rate risk in 2013.

Chapter 6: PROFITABILITY ANALYSIS

6.1 PROFITABILITY ANALYSIS OF UCB BANK:

Return on Asset$_{2011}$ $= \dfrac{\text{Net income}}{\text{Total Asset}}$

Return on Asset$_{2011}$ $= \dfrac{2,945,202,204}{168,688,543,506}$

Return on Asset$_{2011}$ $=$ .017 or 1.7%

Return on Asset$_{2012}$ $= \dfrac{\text{Net income}}{\text{Total Asset}}$

Return on Asset$_{2012}$ $= \dfrac{1,585,233,380}{207,244,365,339}$

Return on Asset$_{2012}$ $=$ 0076 or .76%

Return on Asset$_{2013}$ $= \dfrac{\text{Net income}}{\text{Total Asset}}$

Return on Asset$_{2013}$ $= \dfrac{3,069,357,562}{225,620,285,172}$

Return on Asset$_{2013}$ $=$ .014 or 1.4%

Return on Asset$_{2014}$ $= \dfrac{\text{Net income}}{\text{Total Asset}}$

Return on Asset$_{2014}$ $= \dfrac{3,700,332,233}{265,912,772,548}$

Return on Asset$_{2014}$ $=$ .014 or 1.4%

Return on Asset$_{2015}$ $= \dfrac{\text{Net income}}{\text{Total Asset}}$

Return on Asset$_{2015}$ $= \dfrac{4,016,037,872}{293,739,350,324}$

Return on Asset$_{2015}$ $=$ .014 or 1.4%

Return on Equity

Return on Equity$_{2011}$ $= \dfrac{\text{Net income}}{\text{Total Equity}}$

Return on Equity$_{2011}$ $= \dfrac{2,945,202,204}{15,963,171,945}$

Return on Equity$_{2011}$ $=$ 0.1844 or 18.44%

Return on Equity$_{2012}$ $= \dfrac{\text{Net income}}{\text{Total Equity}}$

Return on Equity$_{2012}$ $= \dfrac{1,585,233,380}{18,166,882,999}$

Return on Equity$_{2012}$ $=$ 0.087 or 8.7%

Return on Equity₂₀₁₃= $\dfrac{\text{Net income}}{\text{Total Equity}}$

Return on Equity₂₀₁₃= $\dfrac{3{,}069{,}357{,}562}{20{,}504{,}781{,}695}$

Return on Equity₂₀₁₃= 0.149 or 14.9%

Return on Equity₂₀₁₄= $\dfrac{\text{Net income}}{\text{Total Equity}}$

Return on Equity₂₀₁₄= $\dfrac{3{,}700{,}332{,}233}{22{,}526{,}684{,}859}$

Return on Equity₂₀₁₄= 0.164 or 16.4%

Return on Equity₂₀₁₅= $\dfrac{\text{Net income}}{\text{Total Equity}}$

Return on Equity₂₀₁₅= $\dfrac{4{,}016{,}037{,}872}{25{,}662{,}659{,}327}$

Return on Equity₂₀₁₅= 0.1565 or 15.65%

Profit Margin

Profit Margin₂₀₁₁= $\dfrac{\text{Net income}}{\text{Net Sales}}$

Profit Margin₂₀₁₁= $\dfrac{2{,}945{,}202{,}204}{9{,}294{,}372{,}286}$

Profit Margin₂₀₁₁= 0.371 or 37.1%

Profit Margin₂₀₁₂= $\dfrac{\text{Net income}}{\text{Net Sales}}$

Profit Margin₂₀₁₂= $\dfrac{1{,}585{,}233{,}380}{10{,}177{,}656{,}171}$

Profit Margin₂₀₁₂= = .153 or 15.3%

Profit Margin$_{2013}$ = $\dfrac{\text{Net income}}{\text{Net Sales}}$

Profit Margin$_{2013}$ = $\dfrac{3,069,357,562}{12,412,091,923}$

Profit Margin$_{2013}$ = = .247 or 24.7%

Profit Margin$_{2014}$ = $\dfrac{\text{Net income}}{\text{Net Sales}}$

Profit Margin$_{2014}$ = $\dfrac{3,700,332,233}{15,269,470,979}$

Profit Margin$_{2014}$ = = .242 or 24.2%

Profit Margin$_{2015}$ = $\dfrac{\text{Net income}}{\text{Net Sales}}$

Profit Margin$_{2015}$ = $\dfrac{4,016,037,872}{15,627,863,370}$

Profit Margin$_{2015}$ = = .256 or 25.6%

6.2 PROFITABILITY ANALYSIS OF AB BANK:

Return on Asset

Return on Asset$_{2011}$ = $\dfrac{\text{Net income}}{\text{Total Asset}}$

Return on Asset$_{2011}$ = $\dfrac{1,390,385,050}{154,404,751,243}$

Return on Asset$_{2011}$ = .0091 or .91%

Return on Asset₂₀₁₂₌ $\dfrac{\text{Net income}}{\text{Total Asset}}$

Return on Asset₂₀₁₂₌ $\dfrac{1,461,809,025}{175,517,312,012}$

Return on Asset₂₀₁₂₌ .0083 or .83%

Return on Asset₂₀₁₃₌ $\dfrac{\text{Net income}}{\text{Total Asset}}$

Return on Asset₂₀₁₃₌ $\dfrac{1,098,442,107}{209,748,770,670}$

Return on Asset₂₀₁₃₌ .0052 or .52%

Return on Asset₂₀₁₄₌ $\dfrac{\text{Net income}}{\text{Total Asset}}$

Return on Asset₂₀₁₄₌ $\dfrac{1,501,582,377}{256,814,537,089}$

Return on Asset₂₀₁₄₌ .0058 or .58%

Return on Asset₂₀₁₅₌ $\dfrac{\text{Net income}}{\text{Total Asset}}$

Return on Asset₂₀₁₅₌ $\dfrac{1,457,312,361}{256,814,537,089}$

Return on Asset₂₀₁₅₌ .0056 or .56%

Return on Equity

Return on Equity₂₀₁₁₌ $\dfrac{\text{Net income}}{\text{Total Equity}}$

Return on Equity₂₀₁₁₌ $\dfrac{1,390,385,050}{15,015,433,185}$

Return on Equity₂₀₁₁₌ .092 or 9.2%

Return on Equity$_{2012}$= $\dfrac{\text{Net income}}{\text{Total Equity}}$

Return on Equity$_{2012}$= $\dfrac{1,461,809,025}{16,222,502,086}$

Return on Equity$_{2012}$= .09 or 9%

Return on Equity$_{2013}$= $\dfrac{\text{Net income}}{\text{Total Equity}}$

Return on Equity$_{2013}$= $\dfrac{1,098,442,107}{17,308,687,827}$

Return on Equity$_{2013}$= .063 or 6.3%

Return on Equity$_{2014}$= $\dfrac{\text{Net income}}{\text{Total Equity}}$

Return on Equity$_{2014}$= $\dfrac{1,501,582,377}{18,759,103,870}$

Return on Equity$_{2014}$= .08 or 8%

Return on Equity$_{2015}$= $\dfrac{\text{Net income}}{\text{Total Equity}}$

Return on Equity$_{2015}$= $\dfrac{1,457,312,361}{23,575,987,130}$

Return on Equity$_{2015}$= .062 or 6.2%

Profit Margin

Profit Margin$_{2011}$= $\dfrac{\text{Net income}}{\text{Net Sales}}$

Profit Margin$_{2011}$= $\dfrac{1,390,385,050}{8,665,997,427}$

Profit Margin$_{2011}$= .16 or 16%

Profit Margin₂₀₁₂= $\dfrac{\text{Net income}}{\text{Net Sales}}$

Profit Margin₂₀₁₂= $\dfrac{1,461,809,025}{9,018,446,528}$

Profit Margin₂₀₁₂= = .1620 or 16.2%

Profit Margin₂₀₁₃= $\dfrac{\text{Net income}}{\text{Net Sales}}$

Profit Margin₂₀₁₃= $\dfrac{1,098,442,107}{10,121,791,365}$

Profit Margin₂₀₁₃= = .1085 or 10.85%

Profit Margin₂₀₁₄= $\dfrac{\text{Net income}}{\text{Net Sales}}$

Profit Margin₂₀₁₄= $\dfrac{1,501,582,377}{12,778,337,269}$

Profit Margin₂₀₁₄= = .1175 or 11.75%

Profit Margin₂₀₁₅= $\dfrac{\text{Net income}}{\text{Net Sales}}$

Profit Margin₂₀₁₅= $\dfrac{1,457,312,361}{11,094,155,221}$

Profit Margin₂₀₁₅= = .1313 or 13.13%

6.3 AVERAGE PROFITABILITY ANALYSIS OF BANKING SECTOR IN BANGLADESH

3.4.1 Return on Assets =the return of (AB Bank + UCB bank)/ 2
 2011= (.0091 + .0170) /2
2011= .0130 or 1.30%

2012= (.0083 +.0076) / 2
= 0.0079 or .79%

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2013= (.0052 + .0140) / 2
= 0.0096 or .96%

2014= (.0058 + .0140) / 2
= 0.0099 or .99%

2015= (.0056 + .0140) / 2
 = 0.0098 or .98%
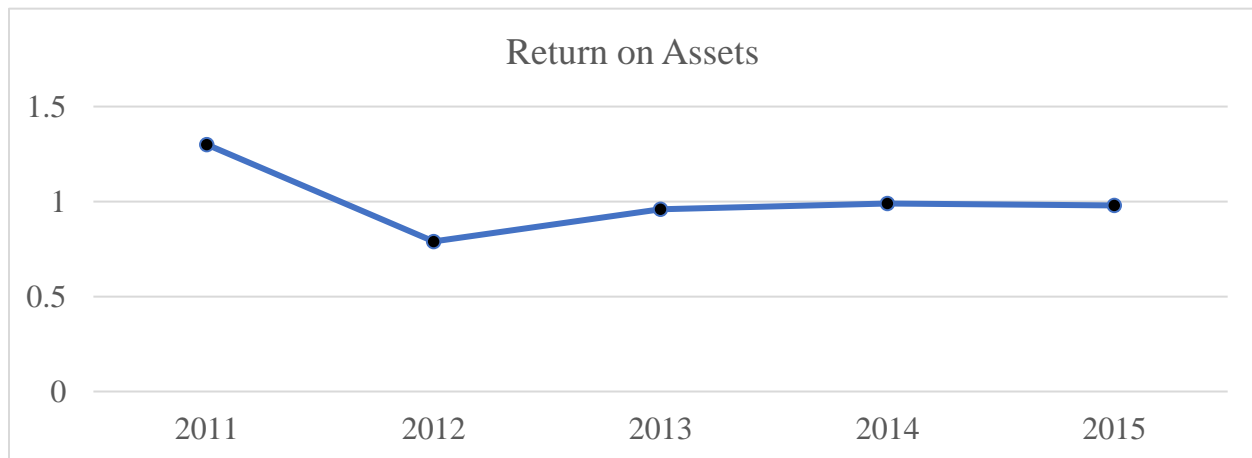
Return on Assets

Interpretation: Return on assets measures a company's profitability in relation to its total resources. Return on assets provides insight into how effectively management uses its resources. assets to produce income calculated by dividing an organization's yearly profits by its overall assets. Return on assets in 2011 was 0.0130, or 1.30 percent; in 2012, it was reduced to.0079, or.79 percent; in 2013, it was slightly increased to.0097, or.97 percent; in 2014, it was slightly increased to.0099, or 99 percent; and in 2015, it remained constant. We discovered that Bangladesh's banking sector experienced a high return on assets in 2011. Therefore, in our opinion, 2011 was the best year for the banking industry in Bangladesh in terms of return on assets.

Return on Equity =the return of (AB Bank + UCB Bank)/ 2

2011= (0.0920 + .1844) / 2

=0.1382 or 13.82%

2012= (0.0900 + .0870) / 2

= 0.172 or 17.2%

2013= (.0630 + .1490) / 2

= 0.212 or 21.2%

2014= (.0800 + .1640) / 2

= 0.122 or 12.2%

2015= (.0620+ .1565) / 2

= 0.1092 or 10.92%
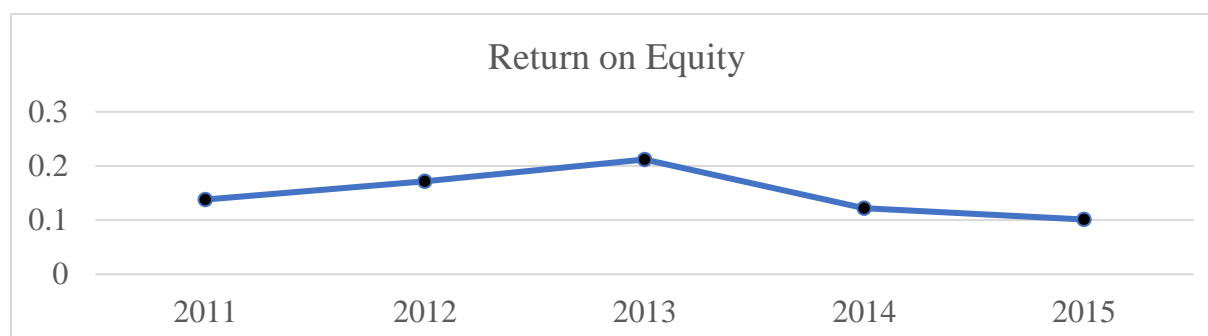
Interpretation: Return on equity (ROE) is a metric of profitability that determines how much profit a business makes for every dollar of shareholder equity. Return on equity in 2011 was 0.1382 or 13.82%. In 2012, it decreased to 0.172 or 17.2%. In 2013, it slightly increased to 0.212 or 21.2%. In 2014, it slightly increased to 0.122 or 12.2%. In 2015, it slightly decreased to 0.1092 or 10.92%. Therefore, we have learned that Bangladesh's banking industry had a high significant return on equity in 2011. Therefore, in our opinion, 2011 was the best year for Bangladesh's banking sector's return on equity. As a result, Bangladesh's banking sector's return on equity reached a high significance in 2011.

Profit Margin = the profit of (AB bank + UCB bank)/ 2

2011= (0.1600 + .3170) / 2

= 0.2385 or 23.85%

2012= (0.1620 + .1530) / 2
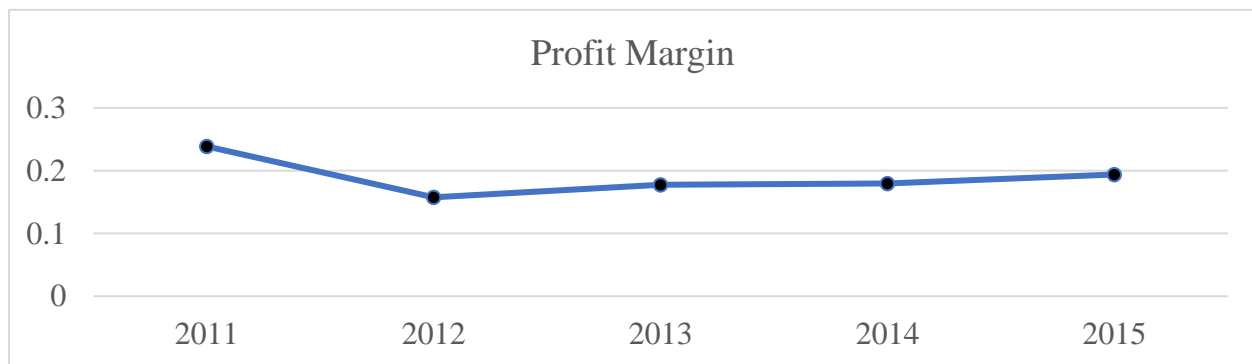
= 0.1575 or 15.75%

2013= (.1085 + .2470) / 2

= 0.1777 or 17.77%

2014= (.1175 + .2420) / 2

= 0.1797 or 17.97%

2015= (.1313 + .2560) / 2

= 0.1936 or 19.36%

Profit Margin

Interpretation: One set of profitability ratios includes profit margin, which is calculated as net income divided by revenue or net profits divided by sales. A company's net income or net profit can be calculated by deducting all of its costs from its total revenue, including operating costs, material costs, and tax costs. In 2011, the profit margin was 0.2385 or 23.85%; in 2012, it was reduced to 0.1575 or 15.75%; in 2013, it was slightly increased to 0.1777 or 17.77%; in 2014, it was slightly decreased to 0.1797 or 17.97%; and in 2015, it was raised to 0.1936 or 19.36%. We discovered that Bangladesh's banking industry had a high significant profit margin in 2011 by analyzing the country's entire banking sector. Therefore, we believe that the Bangladeshi banking sector's profit margin peaked in 2011

Chapter 7: CONCLUSION

The purpose of this study was to examine how risk and competition affect bank performance. Close the knowledge gap in Bangladesh's current banking literature. According to the empirical data, it can be concluded that competition has a detrimental effect on banks' performance in terms of monetary gain and effectiveness. the ongoing decrease in bank spread margin at a high rate of Such a negative impact on is a result of inflation and the level of accelerated competition. As most of Bangladesh's banks are private, it is also very likely that branch expansion and advertising, two forms of non-price competition, exist there as well. Private banks are currently in an expansion phase. Such non-price rivalry may positively influence a working to develop nation's financial development, where financial the large percentage of the sector is underdeveloped. However, because deposit rate controls aren't in place. Under liberalization, non-price competition's inefficiencies could outperform the gains from deepening by providing customers with inferior replacements and by eroding the value of the bank franchise value, especially for private banks. Therefore, it can be argued that the regulatory authority needs to ensure that the banking sector has the necessary incentives for banks, especially for private banks, to increase their profitability and efficiency based on the empirical evidence. Without a doubt, various modifications made as a result of financial deregulation have been successful in raising the bar of competition. The question is whether the performance of the banking sector in a developing nation like Bangladesh can be improved by the shifting level of competition. It is also clear that Bangladesh Bank will further liberalize the banking industry by allowing the entry of nine new private banks. Such a choice raises the bar of competition going forward, which could hurt performance. Additionally, the publication of the BRPD circular letter serves as a reminder of the significance of encouraging private and foreign banks to support the country's agriculture and SME sectors. How is it accomplished? According to the results, banks are currently not given any incentives. To prevent the occurrence of the banking sector instability suggested by the existing literature, it is critical that the regulatory authorities review the structural changes in these circumstances.

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