An Internship Report Presented for Partial fulfillment of the Requirement of Degree of Bachelor of Business Administration

A Study on the Implementation of Basel II & III in Bangladesh

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INTERNSHIP REPORT

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Finally, I would like to thank all the people of Bangladesh Bank including my academic supervisor, who have helped me from time to time in preparing this report. I thank them for his valuable time and co-operation. I believe that the knowledge and experience I have gathered during my internship program will immensely help me in my professional life. I will be obliged and grateful to receive the suggestions and comments regarding this.

EXECUTIVE SUMMARY

This internship report is based on the three months long internship program that I have successfully completed at Bangladesh Bank (BB). It is a requirement for the BBA program of BRAC Business School, BRAC University. My faculty advisor and the on-site supervisor helped me to choose the topic. It is a complex yet very important requirement for banks. The value of the knowledge attracted me the most. Bangladesh Bank (BB) is the governing body of all the commercial banks in this country. To be in line with the international standard for regulation of banking industry (Basel Accord), BB has introduced Risk Based Capital Adequacy guideline relating to Basel II. All banks have to follow this guideline and report to BB effective from 1st January, 2010. Recently, BB has introduced Basel III. Consequently, Basel III capital regulations would be fully implemented as on January 1, 2019. The guidelines are structured in three aspects or pillars: (1) banks should have minimum capital to guard against different kinds of risks (credit, market and operation risk); (2) assessing capital adequacy with risk profile of the bank and capital growth plan and (3) public disclosure of bank's position on risk, capital and management. This study examines the impacts of Basel II and III in Bangladesh. Banks have to follow the regulatory rules, have to follow the minimum capital requirements. This study examines the implementation of Basel II and III in Bangladesh.

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Chapter 1

INTRODUCTION

History:

After the Liberation War and the eventual independence of Bangladesh, the Government of Bangladesh reorganized the Dhaka branch of the State Bank of Pakistan as the central bank of the country, naming it Bangladesh Bank. This reorganization was done pursuant to Bangladesh Bank Order, 1972, and the Bangladesh Bank came into existence retroactively from 16 December 1971. At present it has ten offices located at Motijheel, Sadarghat, Chittagong, Khulna, Bogra, Rajshahi, Sylhet, Barisal, Rangpur and Mymensingh in Bangladesh; total manpower stood at 5807 (officials 3981, subordinate staff 1826) as on March 31, 2015.

Functions of Bangladesh Bank:

The major functional areas include:

- Formulation and implementation of monetary and credit policies.
- Regulation and supervision of banks and non-bank financial institutions, promotion and development of domestic financial markets.
- Management of the country's international reserves.
- Issuance of currency notes.
- Regulation and supervision of the payment system.
- Acting as banker to the government.
- Money Laundering Prevention.
- Collection and furnishing of credit information.
- Implementation of the Foreign exchange regulation Act.
- Managing a Deposit Insurance Scheme.

Chapter 2

INTERNSHIP OUTCOME

My department:

I have worked mainly at the "Department of Financial Institutions and Markets" (DFIM) of Bangladesh Bank. Other than the department I have got two other departments to work with. These departments are Banking Regulation and Policy Department (BRPD) and Financial Institution Inspection Department (FIID). There are six sections of DFIM department named Policy section, License section, statement section, general section, insurance section, bond and securities section.

My job responsibilities:

At the very first day when I came to the department I was given a paper containing a schedule with different employees of different desks. As an intern, my main task has been to discuss the individuals' desk jobs of the department.

- ***Non-practical tasks*:** Everyone has his/her own responsibilities. My task was to visit a particular employee per day and to get to know what tasks are done by him/ her and how he/ she works. Employees including my supervisor used to give me phoenix, banks' and non-banking financial institutions' law books, applications and many more files on different policies, rules and regulations, complications to study. They used to explain me the things as easily as possible. There are different files containing risk management tools, stress testing, CAMELS rating, loan classifications, capital adequacy assessment process, techniques for managing concentration risks which I used to study on.
- ***Practical tasks:*** Since maximum of their data is confidential and they do not want us to know about the health of particular financial institutions, we, the interns used to be given mainly some data entry and file maintaining tasks. Our supervisor used to ask me to enter the data of insurance, quarterly loan amounts from different organizations, director's loan from the particular companies and so on. With simple data entries there was only some plus minus calculations which I was supposed to do.

Learning from internship:

Doing internship at the central bank was an amazing experience for me. I had that opportunity to talk with different individuals as I was supposed to meet different persons on different days. Some of them also gave me some important career tips. Some were used to suggest books for reading, some showed me their actual work, and very few gave me some practical tasks except my on-site supervisor. One thing I have observed that the employees were so helpful to each other and so to me. I have also experienced some tough times at the workplace. These situations will always give me inspirations as I have faced the problems rather than fleeing out of there. This was truly a remarkable journey of mine. I have gained practical knowledge about job environment along with my works.

Chapter 3

OVERVIEW OF BASEL

Basel Accord (origin):

There are thousands of commercial banks in the world. These banks face a lot of risks every day in many forms. Strong and well-functioning banking industry is undoubtedly one of the main ingredients of a country's growth. With this perspective, in 1975, Basel Committee on Banking Supervision (BCBS) was formed. Its secretariat office is at the Bank for International Settlements in Basel, Switzerland. Its main objectives were to understand the supervisory issues related to banks and improve the supervisory quality globally. BCBS committee members come from 27 countries and help come up with standard guidelines for banks to follow. It is not a body which can issue binding regulations; it is rather a forum where global best practice standards regarding risk management in banks are developed. Most countries are implementing the committee's policies and they are enforced through national laws and regulations in line with the recommended guidelines by BCBS. The committee issued recommendations on banking laws and regulations known as Basel Accord (Basel I of 1988) which addressed minimum capital requirement for commercial. The second installment of the accord came out in 2004 and is best known as Basel II (revised in 2006) which better addresses the issue of how banks and other depository institutions should handle their capital to guard against risks they face.

Objectives:

The main objectives of Basel II are:

"Ensuring that capital allocation is more risk sensitive;

Enhance disclosure requirements which will allow market participants to assess the Capital adequacy of an institution;

Ensuring that credit risk, operational risk and market risk are quantified based on data and formal techniques;

Attempting to align economic and regulatory capital more closely to reduce the scope for regulatory arbitrage.

Basel II & III in Bangladesh:

Bangladesh Bank (BB) is the governing body of all the commercial banks in this country. To cope up with the international best practices and to make the bank's capital shock absorbent „Guidelines on Risk Based Capital Adequacy (RBCA) for banks" (Revised Regulatory Capital Framework in line with Basel II) was introduced from January 01, 2009 as a parallel run with BRPD Circular No. 10, dated November 25, 2002 (Basel I). At the end of parallel run, Basel II regime started from January 01, 2010 and the guidelines on RBCA came fully into force with its subsequent supplements/revisions. Instructions regarding Minimum Capital Requirement (MCR), Adequate Capital and Disclosure requirement as stated in the guidelines had to be followed by all scheduled banks for the purpose of statutory compliance. One of the main reasons the economic and financial crisis, which began in 2007, became so severe was that the banking sectors of many countries had built up excessive on and off-balance sheet leverage. This was accompanied by a gradual erosion of the level and quality of the capital base. At the same time, many banks were holding insufficient liquidity buffers. The banking system therefore was not able to absorb the resulting systemic trading and credit losses nor could it cope with the re intermediation of large off-balance sheet exposures that had built up in the shadow banking system. The crisis was further amplified by a procyclical deleveraging process and by the interconnectedness of systemic institutions through an array of complex transactions. During the most severe episode of the crisis, the market lost confidence in the solvency and liquidity of many banking institutions. The weaknesses in the banking sector were rapidly transmitted to the rest of the financial system and the real economy, resulting in a massive contraction of liquidity and credit availability. Ultimately the public sector had to step in with unprecedented injections of liquidity, capital support and guarantees, exposing taxpayers to large losses.

Basel III reforms are the response of Basel Committee on Banking Supervision (BCBS) to improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source, thus reducing the risk of spillover from the financial sector to the real economy. "Basel III: A global regulatory framework for more resilient banks and banking systems" (known as Basel III capital regulations) in December 2010. Basel III capital regulations would be fully implemented as on January 1, 2019.

Chapter 4

STRUCTURE OF BASEL II & III

<u>Guard against Three Risks:</u>

BCBS identified three basic risks that banks face and they think adequate capital should be there to guard the bank against these risks.

Credit Risk:

Credit risk is the risk bank faces when its borrowers and/or counterparty do not fulfill their obligation towards the bank. Bank's claim will include loans and advances to and deposits in local and foreign currency to other banks, central bank and other local and international institution which include International Monetary Fund (IMF), World Bank, Asian Development Bank (ADB), European Central Bank (ECB) and etc. Assets in non-bank financial institutions (NBFIs), corporate, retail and SME will also have to be counted. The maximum exposure to single borrower (person or institute) can be BDT 1 crore (BB, 2010, pp.9)11.

Market Risk:

Market risk arises from on and off balance sheet exposure to debt securities, equity securities and foreign currency. The main concern is that the variables will move adversely and the bank will incur losses due to the loss of value of the securities. BB requires banks to maintain capital for interest rate movements, adverse price movements of equity securities, foreign exchange, repo-reverse repo transactions, interest rate derivatives, Forward Rate Agreements (FRA) and SWAPs (BB, 2010, pp.32-34)12.

Operational Risk:

This risk is the risk of loss due to failed internal process, people and system or from external events. It also includes legal risk.

Pillar 1: *Minimum Capital Requirement*

Basel Committee and BB agree that some minimum capital must be maintained to make banks and depository institutions more risk sensitive and shock resilient. BB laid out guidelines about the capital that can be and should be counted in calculating Capital Adequacy Ratio (CAR). To measure capital base, regulators divided qualifying capital in three tiers. The tiers with their constituents (BB, 2010, pp.1-2)15 are shown:

Tier Constituents (BASEL II):

Tier 1: Core Capital

1. Paid up capital
2. Non-repayable share premium account
3. Statutory reserve
4. General reserve
5. Retained earnings
6. Minority interest in subsidiaries
7. Non-cumulative irredeemable preference shares
8. Dividend equalization account

Tier 2: Supplementary Capital

1. General provision (Unclassified loans, Special Mention Account loans and off Balance Sheet exposures)
2. Revaluation reserves for fixed assets, securities and equity instruments
3. All other preference shares
4. Subordinated debt

Tier 3: Additional Supplementary Capital (for Market Risk only)

1. Short term subordinated debt (2 years<= maturity<= 5 years)

Tier Constituents (BASEL III):

Tier 1 Capital (going-concern capital)

1) Common Equity Tier 1

2) Additional Tier 1

Tier 2 Capital (gone-concern capital6)

1. Common Equity Tier 1 Capital: For the local banks, Common Equity Tier 1 (CET1) capital shall consist of sum of the following items:

a) Paid up capital

b) Non-repayable share premium account

c) Statutory reserve

d) General reserve

e) Retained earnings

f) Dividend equalization reserve

g) Minority interest in subsidiaries7

Less: Regulatory adjustments applicable on CET1 as mentioned in paragraph 3.4.
For the foreign banks operating in Bangladesh, Common Equity Tier 1 (CET1) capital shall consist of sum of the following items:

i. Funds from Head Office for the purpose of meeting the capital adequacy

ii. Statutory reserves kept in books in Bangladesh

iii. Retained earnings

iv. Actuarial gain/loss kept in books in Bangladesh

v. Non-repairable interest-free funds from Head Office for the purpose of acquisition of property and held in a separate account and have the ability to absorb losses regardless of their source

Less: Regulatory adjustments applicable on CET1
Eligibility criteria for the inclusion in CET1 capital for local and foreign banks have been specified.

2. Additional Tier-1 capital: For the local banks, Additional Tier 1 (AT1) capital shall consist of the following items:

a) Instruments issued by the banks that meet the qualifying criteria for AT1 as specified.

b) Minority Interest i.e. AT1 issued by consolidated subsidiaries to third parties (for consolidated reporting only).
Less: Regulatory adjustments applicable on AT1 Capital as mentioned in paragraph 3.4.
For the foreign banks operating in Bangladesh, Additional Tier 1 (AT1) capital shall consist of the following items:

i. Head Office borrowings in foreign currency by foreign banks operating in Bangladesh for inclusion in Additional Tier 1 capital which comply with the regulatory requirements as specified.

ii. Any other item specifically allowed by BB from time to time for inclusion in Additional Tier 1 capital

Less: Regulatory adjustments regulatory adjustments applicable on AT1 Capital.

Tier 2 Capital
a) General Provisions

b) Subordinated debt / Instruments issued by the banks that meet the qualifying criteria for Tier 2 capital as specified.

c) Minority Interest i.e. Tier 2 issued by consolidated subsidiaries to third parties as specified.

Less: Regulatory adjustments applicable on Tier 2 capital as mentioned.
For the foreign banks operating in Bangladesh, Tier 2 capital shall consist of the following items:
i. General Provisions

ii. Head Office (HO) borrowings in foreign currency received that meet the criteria of Tier 2 debt capital

Less: Regulatory adjustments applicable on Tier 2 capital as mentioned at paragraph

Capital conservation Buffer: Banks are required to maintain a capital conservation buffer of 2.5%, comprised of Common Equity Tier 1 capital, above the regulatory minimum capital requirement of 10%. Banks should not distribute capital (i.e. pay dividends or bonuses in any form) in case capital level falls within this range. However, they will be able to conduct business as normal when their capital levels fall into the conservation range as they experience losses. Therefore, the constraints imposed are related to the distributions only and are not related to the operations of banks. The distribution constraints imposed on banks when their capital levels fall into the range increase as the banks‟ capital levels approach the minimum requirements. As, Basel III is new in Bangladesh, the capital conservation buffer is not implemented yet on most of the banks.

Risk weighted asset:

There are conditions to maintain the capital for the purpose of protecting against risks. Risk must be taken into consideration while calculating the capital needed to meet BB requirements. BB provides a list of assets and necessary weights based on their respective risk. The basic RWA calculation (BBL, 2011)17 is as below:

Risk Weighted Asset amount:

A Credit Risk XXXX
On- Balance sheet XXXX
Off- Balance sheet XXXX

B Market Risk (Capital charge for Market Risk * 10)** XXXX

C Operational Risk (Capital charge for Operational Risk * 10).. XXXX

Total Risk Weighted Asset (A+B+C) …XXXXX

Pillar 2: ***Supervisory Review Process (SRP)***

The main theme of Pillar 2 is that (1) banks have to have a process to assess their own risk profile and calculate adequate capital and (2) they must have a strategy to maintain the level of adequate capital required in the future. Banks should also have SRP team which will manage all the risks a bank faces, develop and implement better risk management techniques.

Effective Oversight by Management

The supervisory process is a tool for the regulators to ensure adequate capital of banks to guard against risks. It also delegates responsibility to top management of the institutions to make certain of the implementation of the laws. The management must analyze their risks internally, make plan on capital and maintain proper internal control process. Supervisory review process will address:

1. Risk that are not covered by Pillar 1 (risks other than credit, market and operation)
2. External risk factors to the bank that are not captured by Pillar 1.

Residual risk: Risk Based Capital Adequacy (RBCA) framework and other supervisory regulations on credit risk management allow banks to offset credit or counterparty risk with collateral along with the legal and financial documents. While banks use different techniques to reduce their credit risk, improper application of these techniques give rise to additional risks that may render the overall risk management less effective. Accordingly, these additional risks (e.g. documentation risk, valuation risk) are termed as Residual Risks.
Capital Requirement against Residual Risk = Base for Capital Charge × Factor weight for documentation error and/or valuation error.
Factor weight for documentation error can vary depending on the materiality of the document. However, it has to be mentioned in the board approved ICAAP document.
Capital requirement for each loan account will have to be summed up for determining total capital charge against residual risk that will be reported during ICAAP reporting.

Concentration risk: Concentration risk arises when any bank invests its most or all of the assets to single or few individuals or entities or sectors or instruments. That means when any bank fails to diversify its loan and investment portfolios, concentration risk emerges. Downturn in concentrated activities and/or areas may cause huge losses to a bank relative to its capital and can threaten the bank‟s health or ability to maintain its core operations.

Interest rate risk in the banking book (IRRBB) :IRRBB is the current or potential risk to the interest rate sensitive assets and liabilities of a bank's balance sheet as well as the off-balance sheet items arising out of adverse or volatile movements in market21interest rate. Volatile

movements of market interest rate adversely affect the value of interest rate sensitive assets and liabilities that consequentially results in the loss of equity value.
The capital charge will be calculated by netting off the capital charge for interest rate related instrument under Market Risk of Pillar-1. Yet, BB will keenly analyze the result of Simple Sensitivity Analysis and Duration Gap Analysis of banks. If any adverse output would be observed even from hypothetical scenarios, prudent measures will be taken by the Bangladesh Bank.

Liquidity risk: Liquidity risk is the risk that a given security or asset cannot be traded quickly enough in the market to prevent a loss (or make the required profit) or when a bank is unable to fulfill its commitments in time when payment falls due. Computation of Capital Charge against Liquidity Risk: If annual average of any of RLIs of any bank falls below Bangladesh Bank's requirement the bank will be required to maintain additional capital for that RLI (or those RLIs).

Reputation risk: Reputation risk is a subset of operational risk which can adversely affect the capital base if the driving forces of the risk turn worse. Consequentially, ICAAP of bank must include rigorous process to measure and manage the risk.

Strategic risk: Strategic risk means the current or prospective risk to earnings and capital arising from imperfection in business strategy formulation, inefficiencies in implementing business strategy, non-adaptability/less adaptability with the changes in the business environment and adverse business decisions. Strategic risk induces operational loss that consequentially hampers the capital base.

Banks must prepare these for at least 3 years' time span which will be based on sufficient justification.

Settlement risk: Settlement risk arises when an executed transaction is not settled as the standard settlement system suggests or within predetermined method. The banks pose to the risk when it fulfills its contractual obligations (payment or delivery), but the counterparty fails or defaults to do the same. Non-receiving or delayed receiving of receivable bills (foreign & domestic) will be evaluated to assess settlement risk. Number of such cases and the total value in taka will be examined. If total value in taka from such cases in a year (reporting year) is more than certain percentage of the total loans and advances, bank should maintain additional capital for that.

Appraisal of core risk management practice: Bangladesh Bank introduced core risk management system for assessing the risk management environment and practices in banks in

2003. In that respect, BB identified 6 (six) risk areas which are termed as core risks through issuing industry best practices framework. Those frameworks provided benchmark to be followed by the banks and suggested the banks to develop own assessment methodology for each core risks as well as to calculate own risk rating at least once a year. Thus, rigorous risk management framework of banks would require own assessment methodology and annual review. To ensure the stability of the business model and the soundness of the operational structural, appraisal of risk management structure of a bank is necessary. In this respect, banks must develop their own methodology for assessing each core risk separately which will be approved by Board of Directors

Environmental and climate change risk: Environmental and climate change risk refers to the uncertainty or probability of losses that originates from any adverse environmental or climate change events (natural or manmade) and/or the non-compliance of the prevailing national environmental regulations. This is a facilitating element of credit risk arising from environmental issues. These can be due to environmental impacts caused by and / or due to the prevailing environmental conditions. These increase risk as they bring an element of uncertainty or possibility of loss in the context of a financing transaction. Environmental and climate change risk can hamper the business stability of the borrowers in respect of both- i) profitability and ii) reputation. Consequentially, the extent of risk for the banks will be higher.

Other material risk: SRP requires that the bank's internal capital allocation process should cover all risks which have not been identified earlier but are material for the institution. The institution needs to consider all risks not specified above but it can be captured in the institution's operation and can be regarded as material. Risks may be appeared which are specific to the institution and derived from its non-standard activities or clientele but fall outside the scope of specified risk definitions under Pillar 1 and 2. The institution is free to use its own terminology and methodology to identify and charging capital for other material risks, although it should be able to explain these to BB in detail, along with the related risk measurement and management procedures. The responsibility of bank is to map out other relevant risk factors to elaborate an adequate risk identification mechanism. The institution needs to examine the materiality of the identified risk and the result of the assessment. In the context of an institution's activities, all risks which affect the achievement of business objectives should be considered material. Other risks (such as Accounting Risk, Human Resources Risk, Natural Disaster Risk) are usually difficult or impossible to quantify, thus their measurement and management typically call for qualitative methods. Therefore, institutions are advised to elaborate detailed methodologies for their evaluation and management which enable the revealing of risks and help to keep them under

Monitoring and reporting: The bank should establish an adequate system for monitoring and reporting risk exposures and assessing how the bank's changing risk profile affects the need for capital. The bank's senior management or board of directors should, on a regular basis, receive reports from the responsible unit regarding the bank's branch wise risk profile and capital needs.

Internal control review: The bank's internal control structure is essential to the capital assessment process. Effective control of the capital assessment process includes an independent review and, where appropriate, the involvement of internal or external audits. The bank's board of directors has a responsibility to ensure that management establishes a system for assessing the various risks, develops a system to relate risk to the bank's capital level, and establishes a method for monitoring compliance with internal policies. The board should regularly verify whether its system of internal controls is adequate to ensure well-ordered and prudent conduct of business.

Stress testing: Stress testing is an important risk management tool that provides an indication of how much capital might be needed to absorb losses in different stressed situations. It will measure the vulnerability or exposure to the impacts of exceptional, rare but potentially occurring events like - interest rate changes, exchange rate fluctuations, changes in credit rating, events which influence liquidity, etc.
The results of the stress test will contribute directly to the expectation that a bank will operate above the Pillar 1 minimum regulatory capital ratios. These results should also be portrayed in the capital plan of the bank.

Capital planning : Capital planning is a dynamic and ongoing process that, in order to be effective, is forward-looking in incorporating changes in a bank's strategic focus, risk tolerance levels, business plans, operating environment, or other factors that materially affect capital adequacy. Capital planning assists the bank‟s .The capital planning process should be tailored to the overall risk, complexity, and corporate structure of the bank. The bank's range of business activities, overall risks and operating environment have a significant impact on the level of detail needed in a bank's capital planning.

Pillar 3: *Market Discipline*

This pillar is present in Basel II framework to complement the other two pillars. This pillar requires the bank to disclose information to public and be more transparent to the financial market and the participants. Current and potential stockholders, depositors and borrowers will want to know the bank‟s strengths and potential loss of assets.

The aim of Market Discipline is to establish more transparent and more disciplined financial market so that stakeholders can assess the position of a bank regarding holding of assets and to identify the risks relating to the assets and capital adequacy to meet probable loss of assets. For the said purpose, banks have been instructed to develop a set of disclosure containing the key pieces of information on the assets, risk exposures, risk assessment processes, and hence the capital adequacy to meet the risks. Banks should have a formal disclosure framework approved by the Board of Directors/Chief Executive Officer. The process of their disclosures will include validation and frequency. Banks provide all required disclosures in both qualitative and quantitative form, as at end March of each year along with the annual financial statements. Banks have to submit a copy of their disclosures to BB. Banks also make their annual disclosures both in their annual reports as well as their respective web sites. Qualitative disclosures will provide a general summary of a bank's risk management objectives and policies, reporting system and definitions. The disclosure on the websites is made in the web page of respective banks titled "Disclosures on Risk Based Capital (Basel II)" and the link to this page should be prominently provided on the home page of the bank's website. Each of these disclosures pertaining to a financial year should be available on the websites until disclosure of the 4th subsequent annual (as on March 31) disclosure is made. Disclosure requirements are:

a) Scope of application, b) Capital structure, c) Capital adequacy, d) Credit Risk, e) Equities: disclosures for banking book positions, f) Interest rate risk in the banking book (IRRBB), g) Market risk, h) Operational risk.

Chapter 5

RESEARCH ANALYSIS

Introduction:

The aim of this research is to reflect the practical knowledge that is gained during internship period and to relate the theoretical learning.

Objective of the report:

The topic of the research is the implementation of Basel II & III in Bangladesh. The main objectives are given below:

- To study about the actual implementation of Basel II & III in Bangladesh comparing to the guidelines.
- To gain knowledge about the implementation achievement of Basel II & III in Bangladesh.

Scope of the research:

This report talks about Basel II & III implementation of banks in Bangladesh. The report can be a primary reading for anyone who is new to banking industry or wants to know about regulatory requirement. Here, I got a chance to know about our central bank's rules and regulations on the whole banking sector in Bangladesh.

Literature review:

Basel II was envisioned to align regulatory capital requirements with the existent risk associated with banks‟ asset, computed with latest risk management techniques. Basel II was proposed to increase regulatory capital for lower rating classes and, as a result, several observers expressed their concern that bank lending to emerging markets would decline. (Reisen 2001and Griffith-Jones 2003).

It is argued that attaching a risk weight of 100% to all commercial loans irrespective of the counterparty, let the banks to pursue higher-risk (in order to attain higher return) lending as this requires no more capital than less-risky lending but has greater upside income potential (Hogan & Sharpe 1997a and 1997b and Gup, 2003:74).

In the words of Greenspan, A (2002), "It is evident that regulatory rules can add to ongoing macro-economic and asset quality cyclicality. Rules are constraints or limits that require responses as limits are approached. Sometimes those limits, say capital constraints, may induce tighter lending standards or shrinking balance sheets for a number of institutions at the same time, engendering significant real business-cycle effects. We must, therefore, be aware of the implications beyond the original intend of a rule and consider it‟s associated trade offs".

Imposing standardized, risk-based capital requirements limits financial institutions‟ ability to independently define their risk aversion. Banks, therefore have greater difficulty in selling their risk assets when prices begin to fall because other firms are unable to accept their higher level of risk. (Jon Danielsson et al 2001).

Measuring the minimum capital requirements based on evaluations by credit rating agencies and internal rating systems may exacerbate a crisis. (Pozen R.C, 2010).

Banks‟ internal risk models are complex and based on assumptions that proved untrue during the crisis. (Jon Danielsson et al 2001).

Enhancing the quality and quantity for Tier 1capital (particularly the common equity held) will improve the banks‟ ability to absorb losses during difficult periods. During the crisis, banks with more Tier 1 capital and greater reliance on deposits could receive higher returns. (Andrea Beltratti and Rene M. Stulz (2009).

It is estimated that global capital may be insufficient for banks to effectively recapitalize according to the new accord (Canadian Bankers Association, 2010).

The leverage ratio increases transparency by supplementing the risk-based models with a broader model that does not distinguish between low-risk and high-risk assets. The ratio could to identify banks that are operating radically different from their peers. (Richard Barnes et al, 2010)

It is obvious that many accept greater risk during the favorable times and pursue the less risk during the uncertain periods. Market participants are known, generally, to act in a procyclical manner. Periods of credit expansion often precede liquidity crisis. (Graciela Kaminsky and Carmen M. Reihart, 1999)

The proposed capital buffer is felt as an alternative to a global tax on banks. The International Monetary Fund proposed two global bank taxes in April 2010 (Staff of the Internation Monetary Fund, 2012).

Methodology

Data Collection:

Data collection is very important in preparing a report. In order to make the report meaningful I mainly use secondary data. Because they are already audited data and no one can change these data. They are-

- Banks' annual report
- Departments of Bangladesh Bank
- Website of Bangladesh Bank.
- Relevant magazines, journals etc
- Published documents

The Time Dimension:

As we are working with secondary or already published data so we will follow the "Longitudinal studies". It has an advantage too that we can able to identify the changes over the time.

Sample size:

According to my supervisor's advice, I have chosen data from 2010 to 2015 years of commercial banks.

Sample Unit:

UCBL
Shahjalal Bank
Mercantile Bank
One Bank
IFIC Bank
Sonali Bank
Janata Bank

Findings

UCBL:

Table 1

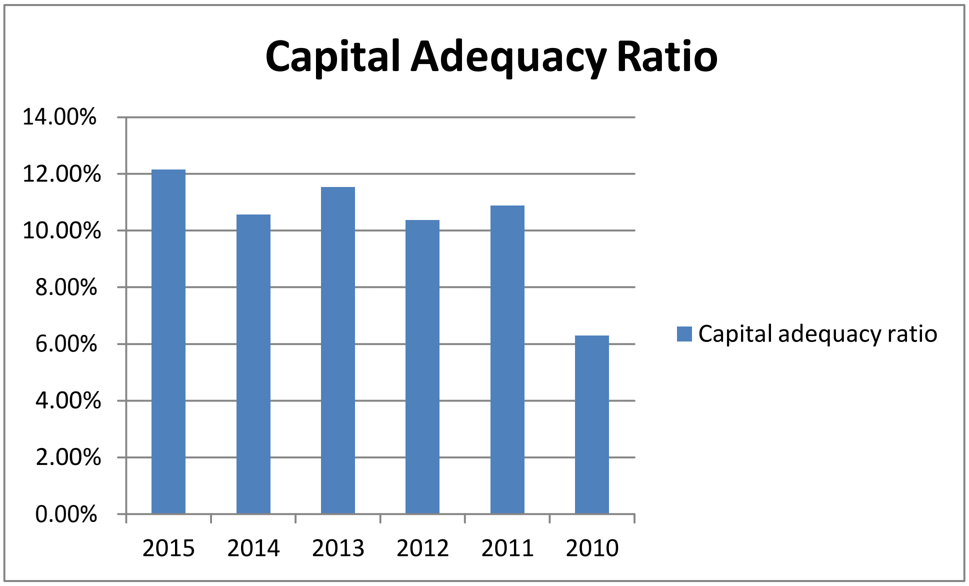
	2015	2014	2013	2012	2011	2010
Particulars						
Tier-1 (going concern capital)						
Common equity Tier-1						
paid-up capital	1,003.93	836.61	836.61	836.61	727.49	291.00
Non repayable share premium account	145.49	145.498	145.50	145.50	145.50	0
Statutory reserve	833.716	688.669	551.96	434.21	359.43	256.76
General reserve	2.658	2.658	2.658	2.658	2.658	9.158
Retained earnings	254.815	253.112	190.275	851.41	197.73	143.61
Dividend Equalization Reserve	0	0	0	0	0	0
Minority interest in subsidiaries	0	0	0	0	0	0
Sub Total	224.062	1926.548	697.45	579.70	504.93	700.53
Additional Tier-1	0	0	0	0	0	0
Non-cumulative irredeemable Preference shares	0	0	0	0	0	0
instruments (perpetual in nature)	0	0	0	0	0	0
Minority interest	0	0	0	0	0	0
Sub Total	0	0	0	0	0	0
Allowable deduction					5	
Total Tier-1 Capital	224.0621	1926.548	697.45	579.70	499.93	700.53
Tier-2 (gone concern)						
General Provision	292.508	280.675	187.129	184.96	182.01	155.11
Subordinated Debt	660	200	200	0	0	0
Revaluation Reserves						
Revaluation reserve for asset up to 50%		126.705	126.71	126.71	74.162	22.824
Revaluation reserve for securities up to 50%		34.598	35.045	29.787	76.19	17.075
Revaluation reserve for equity instruments up to 10%		5.92	0	0	11.12	11.757
Total Revaluation Reserves	129.516	161.895	161.75	156.49	161.472	51.656
Total Tier-2 Capital	1082.024	642.57	548.88	341.46	343.48	206.76
Regulatory Adjustment/Deductions from capital	0	0	0	0	5	0
Total Eligible Capital	3322.645	2569.118	1,246.33	921.16	838.41	907.29

Table 2:

		united commercial bank						
Parameter	Required	2015	Required	2014	2013	2012	2011	2010
Credit risk weighted asset (CRWA)		19741.36		9346.037	19530.67	1589.42	15346.98	14313.74
Market risk weighted asset (MRWA)		74.552		79.53	44.498	50.368	63.157	7.953
Operational risk weighted asset (ORWA)		22.763		86.361	162.884	139.212	113.054	86.361
Total risk weighted asset (TRWA)		19838.68		253.24	19738.06	1779	15523.19	14408.06
Common equity tier-1 capital (CET-1)		224.062		1926.548	1726.998	1504.12	1432.804	700.527
Additional tier-1 (AT-1)		0		0	0	0	0	0
Tier-1 (T-1)		2240.621		1926.548	1726.998	1504.12	1427.804	700.527
Tier-2 (T-2)		1082.024		2099.625	548.879	341.456	264.902	206.764
Total capital (T 1+T 2-deductions from capital)		3322.645		2569.118	2275.877	1845.57	1687.706	907.291
CET-1/TRWA	4.50%	8%		8%	9%	8%	9%	5%
AT-1/TRWA	1.50%	0%		0%	0%	0%	0%	0%
T-1/TRWA	5.50%	8%		8%	9%	8%	9%	5%
T-2/TRWA	4.00%	4%		3%	3%	2%	2%	1%
Capital to risk weighted asset	10.00%	12%	10.0%	11%	12%	10%	11%	6%

Here we can see that UCBL maintained Capital to Risk Weighted Asset ratio (CRAR) from 2011 to 2014 but could not maintain it in 2010. It maintained CRAR also in 2015. According to Basel III, all the elements of tier 1 (CET-1, AT-1), and tier 2 was maintained individually in 2015.

Implementation Achievement:



UCBL has been successfully achieving the desired Capital Adequacy Ratio (CAR) since 2011. As it was new in 2010, they could not maintain it then. The management was fully aware about the guidelines of Bangladesh Bank. The capital is increasing day by day. In 2010, the capital was around 6%, and then was increasing.

One Bank:

Table 1:

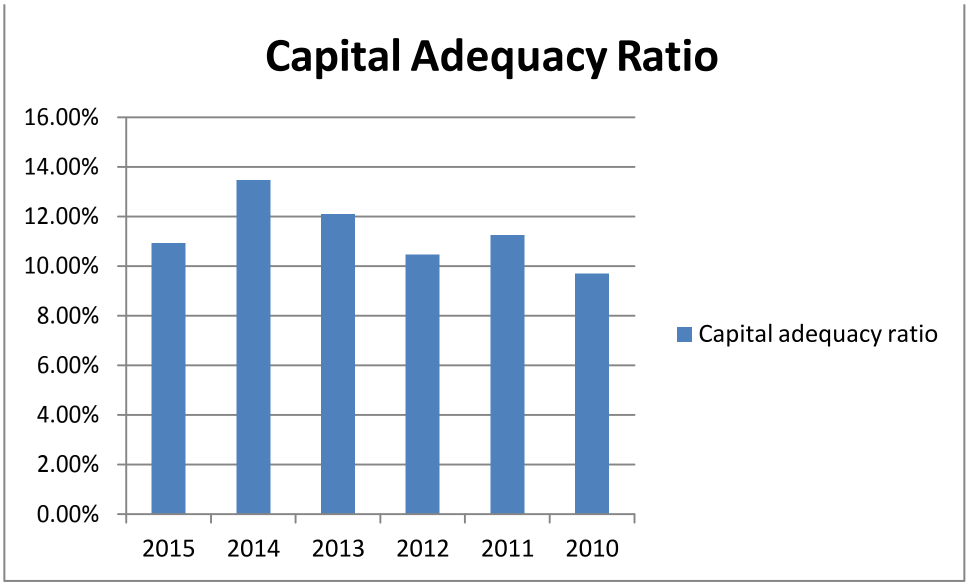
	2015	2014	2013	2012	2011	2010
Particulars	solo					
Tier-1 (going concern capital)						
Common equity Tier-1						
paid-up capital	589.92	524.38	476.71	414.53	318.87	206
Non repayable share premium account	0	0	0	0	0	13.1465555
Statutory reserve	384.57	330.6	266.55	231	189.8	145
General reserve	0		0	0	0	0
Retained earnings	169.89	162.69	107.72	912.9	122.62	226
Dividend Equalization Reserve	0	0	0	0	0	0
Minority interest in subsidiaries	0	0	0	0	0	0
Sub Total	1,144.38	1017.67	850.98	1558.43	631.29	589
Additional Tier-1	0	0	0	0	0	
Non-cumulative irredeemable Preference shares	0	0	0	0	0	100
instruments (perpetual in nature)	0	0	0	0	0	
Minority interest	0	0	0	0	0	
Sub Total	0	0	0	0	0	100
Allowable deductions	1.88					
Total Tier-1 Capital	1,142.50	1017.67	850.98	1558.43	631.29	486
Tier-2 (gone concern)						
General Provision (maximum 1.25 percentage of credit RWA)	152.27	207.02	127.63	101.62	131.71	55
Subordinated Debt	176		220	0	0	0
Revaluation Reserves						
Revaluation reserve for asset up to 50%		2.2				22
Revaluation reserve for securities up to 50%		4.22	5.74	4.81	1.67	0
Revaluation reserve for equity instruments up to 10%		220	2.64	5.4	5.36	32
Total Revaluation Reserves	5.14	226.42	8.38	10.21	7.03	54
Total Tier-2 Capital	333.41	433.44	220	106.97	138.74	109
Regulatory Adjustment/Deductions from capital	1475.91	0	0	0	0	0
Total Eligible Capital	0.00	1017.67	1070.98	1665.4	770.03	486

Table 2:

		One Bank						
Parameter	Required	2015	Required	2014	2013	2012	2011	2010
Credit risk weighted asset (CRWA)		12181.3		9538.94	8905.8	7015.07	593.14	5250.9
Market risk weighted asset (MRWA)		298.51		40.42	32.58	42.46	48.73	48.73
Operational risk weighted asset (ORWA)		1017.49		82.82	74.91	63.09	31.99	31.99
Total risk weighted asset (TRWA)		13497.3		9662.18	9980.74	8070.61	673.86	5331.62
Common equity tier-1 capital (CET-1)		1142.5		1017.67	850.98	736.82	631.29	386.4285
Additional tier-1 (AT-1)		0		0	0	0	0	100
Tier-1 (T-1)		1144.38		1017.67	850.98	736.82	631.29	486.4285
Tier-2 (T-2)		333.41		433.44	356.01	106.97	138.74	109.1646
Total capital (T 1+T 2-deductions from capital)		1.88		1451.11	1206.99	843.79	770.03	595.5931
CET-1/TRWA	4.50%	8%		11%	9%	9%	9%	7%
AT-1/TRWA	1.50%	0%		0%	0%	0%	0%	2%
T-1/TRWA	5.50%	8.46%		11%	9%	9%	9%	9%
T-2/TRWA	4.00%	2.47%		4%	4%	1%	2%	2%
Capital to risk weighted asset	10.00%	11%	10.00%	15%	12%	10%	11%	11%

We can see that One Bank maintained (CRAR) from 2010 to 2014 according to Basel II. The bank maintained CRAR also in 2015 according to Basel III. All the other elements were also maintained.

Implementation Achievement:



One bank has been successfully achieving the desired Capital Adequacy Ratio (CAR) since 2010. For implementing Basel, capital was increased significantly.

Mercantile Bank:

Table 1:

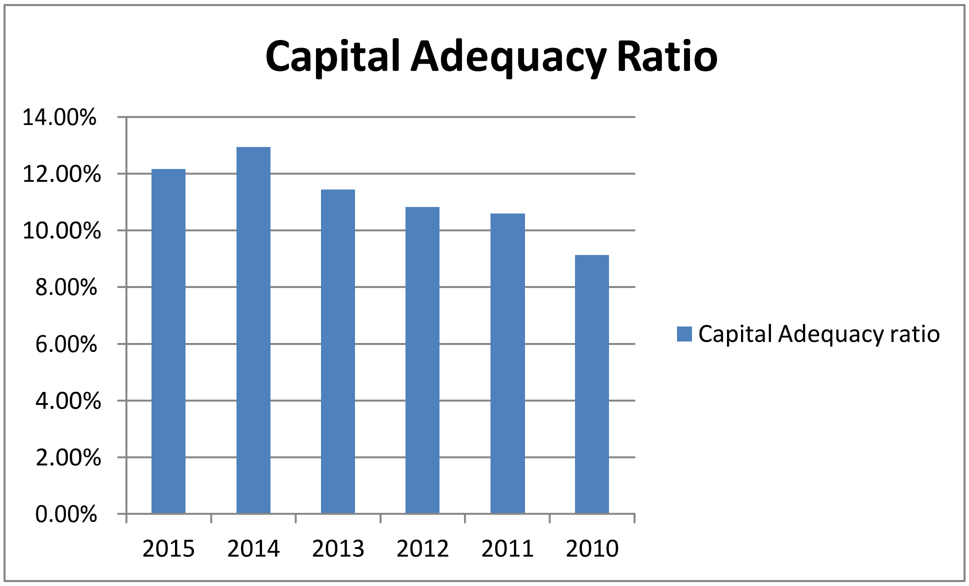
	2015	2014	2013	2012	2011	2010
Particulars	solo					
Tier-1 (going concern capital)						
Common equity Tier-1						
paid-up capital	739.16	739.15	659.96	611.08	496.81	407
Non repayable share premium account	0	0	0	0	0	0
Statutory reserve	475.18	422.31	376.54	311.97	264.34	204
General reserve	0	0	0		0	0
Retained earnings	89.25	76.74	135.69	94.08	119.76	94
Dividend Equalization Reserve	4.57	4.57	4.57	4.57	4.57	46
Minority interest in subsidiaries	173	0		0	5.17	0
Sub Total	1,135.16	1242.77	1176.76	1021.7	890.65	751
Additional Tier-1	0	0	0	0	0	0
Non-cumulative irredeemable Preference shares	0	0	0	0	0	0
instruments (perpetual in nature)	0	0	0	0	0	0
Minority interest	0	0	0	0	0	0
Sub Total	0	0	0	0	0	0
Total Tier-1 Capital	1,290.86	1242.77	1176.76	1021.7	890.65	710.0802037
Tier-2 (gone concern)						
General Provision (maximum 1.25 percentage of credit RWA)	162.68	212.2	99.5		130	112
Subordinated Debt	300	0	0			
Revaluation Reserves						
Revaluation reserve for asset up to 50%	0	0	0		32	
Revaluation reserve for securities up to 50%	0	0	0		9	27
Revaluation reserve for equity instruments up to 10%	0	0	0		8	20
Total Revaluation Reserves	54.57	0	94.71		49	47
Total Tier-2 Capital	517.25	667.62	194.21	186.2	179	158
Regulatory Adjustment/Deductions from capital	10.91	0	0	0	0	0
Total Eligible Capital	1,797.20	1910.39	1370.97	1207.9	1,070	868

Table 2:

		Mercantile Bank						
Parameter	Required	2015	Required	2014	2013	2012	2011	2010
Credit risk weighted asset (CRWA)		1301.45		14556.93	11142.29	11004.6	9973.88	6637.76
Market risk weighted asset (MRWA)		73.89		66.97	48.35	56.35	61.33	68.04
Operational risk weighted asset (ORWA)		139.05		124.53	808.87	91.52	73.32	58.28
Total risk weighted asset (TRWA)		1514.39		14748.43	11999.51	11152.47	10108.53	9515.85
Common equity tier-1 capital (CET-1)		1290.86		1242.77	1176.76	1021.7	890.65	710.08
Additional tier-1 (AT-1)		0		0	0	0	0	0
Tier-1 (T-1)		1290.86		1242.77	1176.76	1021.7	890.65	710.08
Tier-2 (T-2)		517.25		667.62	194.21	186.2	179.44	158.352
Total capital (T 1+T 2-deductions from capital)		1797.2		1910.39	1370.97	1207.9	1070.09	868.432
CET-1/TRWA	4.50%	9%		8%	10%	9%	9%	7%
AT-1/TRWA	1.50%	0%		0%	0%	0%	0%	0%
T-1/TRWA	5.5%	9%		8%	10%	9%	9%	7%
T-2/TRWA	4.00%	3%		5%	2%	2%	2%	2%
Capital to risk weighted asset	10.00%	12%	10.00%	13%	11%	11%	11%	9%

Here we can see that Mercantile Bank maintained Capital to Risk Weighted Asset Ratio (CRAR) from 2011 to 2014 but could not maintain CRAR in 2010. In the year 2015, Tier-2/TRWA was not maintained properly.

Implementation Achievement:



Mercantile has been successfully achieving the desired Capital Adequacy Ratio (CAR) since 2011. As it was new in 2010, they could not maintain it then. The management was fully aware about the guidelines of Bangladesh Bank and prepared for implementing Basel II &III accord. For implementing Basel, the capital was increased year by year.

Shahjalal Bank:

Table 1:

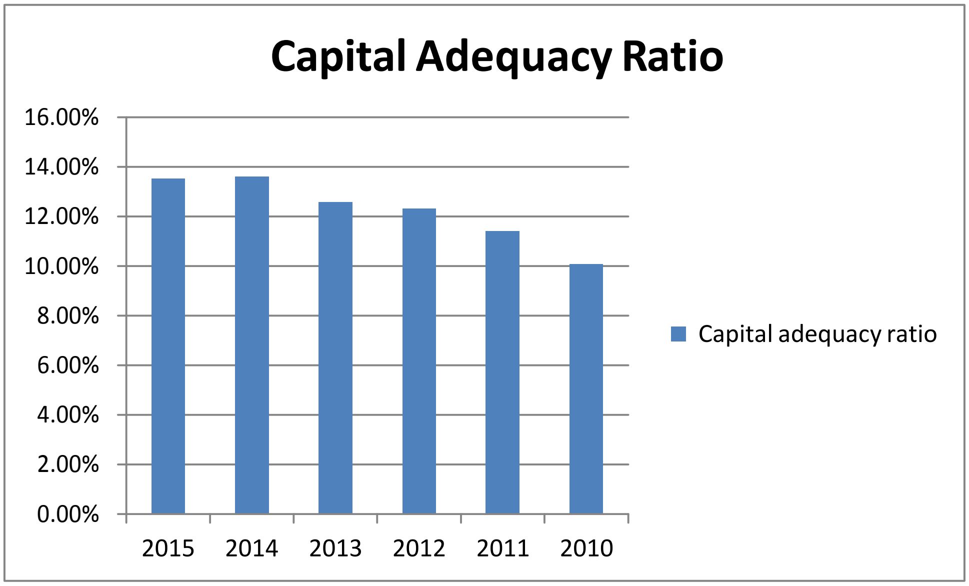
	2015	2014	2013	2012	2011	2010
particulars	solo					
Tier-1 (going concern capital)						
Common equity Tier-1						
paid-up capital	734.69	734.69	667.90	556.58	445.27	342.51
Non repayable share premium account	0	0	0.00	0		0
Statutory reserve	394.74	359.08	343.559	295.902	225.21	177.462689
General reserve	0	0		0	0	
Retained earnings	968.27	760.83	836.71	112.149	121.20	154.860294
Dividend Equalization Reserve	0	0	0	0	0	0
Minority interest in subsidiaries	0	0	0	0	0.00	0
Sub Total	2,097.70	1,854.60	1,848.17	964.63	791.68	674.83
Additional Tier-1	0	0	0	0	0.00	0
Non-cumulative irredeemable Preference shares	0	0	0	0	0.00	0
instruments (perpetual in nature)	0	0	0	0	0.00	0
Minority interest	0	0	0	0	0.00	0
Sub Total	0	0	0.00	0	0.00	0
Allowable deductions			100.00			
Total Tier-1 Capital	2,097.70	1,854.60	1,748.17	964.63	791.68	674.83
Tier-2 (gone concern)						
General Provision (maximum 1.25 percentage of credit RWA)						998479000
Subordinated Debt	0	0	0		0	0
Revaluation Reserves						
Revaluation reserve for asset up to 50%	0	0	0		0	0
Revaluation reserve for securities up to 50%	0	0	0		0	0
Revaluation reserve for equity instruments up to 10%	0	0	0		0	0
Total Revaluation Reserves	0	0	0			0
Total Tier-2 Capital	110.22	107.48	118.88	140.90	126.65	99.8479
Regulatory Adjustment/Deductions from capital	0	0	0	0	0	0
Total Eligible Capital	1,336.48	1,962.08	1,867.05	1,105.53	918.33	774.68

Table 2:

		Shahjalal Bank						
Parameter	Required	2015	Required	2014	2013	2012	2011	2010
Credit risk weighted asset (CRWA)		881.719		9272.49	8757.6	8864.57	79669.59	7004.23
Market risk weighted asset (MRWA)		29.25		26.15	31.7	36.71	233.06	119.69
Operational risk weighted asset (ORWA)		77.909		83.4	80.85	79.86	624.15	564.96
Total risk weighted asset (TRWA)		988.878		9382.04	8870.15	8981.14	80526.8	7688.88
Common equity tier-1 capital (CET-1)		1226.255		1169.85	1095.128	964.632	791.679	674.83493
Additional tier-1 (AT-1)		0		0	0	0	0	0
Tier-1 (T-1)		1226.255		1169.85	995.128	964.632	791.679	674.83493
Tier-2 (T-2)		110.22		107.48	118.882	140.898	126.648	99.8479
Total capital (T 1+T 2-deductions from capital)		1336.475		1277.33	1114.01	1105.53	918.327	774.68283
CET-1/TRWA	4.50%	12%		12%	12%	11%	10%	9%
AT-1/TRWA	1.50%	0%		0%	0%	0%	0%	0%
T-1/TRWA	5.50%	12%		12%	11%	11%	10%	9%
T-2/TRWA	4.00%	1%		1%	1%	2%	2%	1%
Capital to risk weighted asset	10.00%	13%	10.00%	14%	13%	12%	12%	10%

Here we can see that Shahjalal Bank maintained Capital to Risk Weighted Asset Ratio (CRAR) from 2010 to 2015. According to Basel III, CET-1/TRWA, AT-1/TRWA, TT-1/TRWA was also maintained except TT-2/TRWA.

Implementation Achievement:



Shahjalal has been successfully achieving the desired Capital Adequacy Ratio (CAR) since 2010. The management prepared it for implementing Basel II &III accord. For the implementation of Basel II & III, actually their weight of capital was increased.

Sonali Bank:

Table 1:

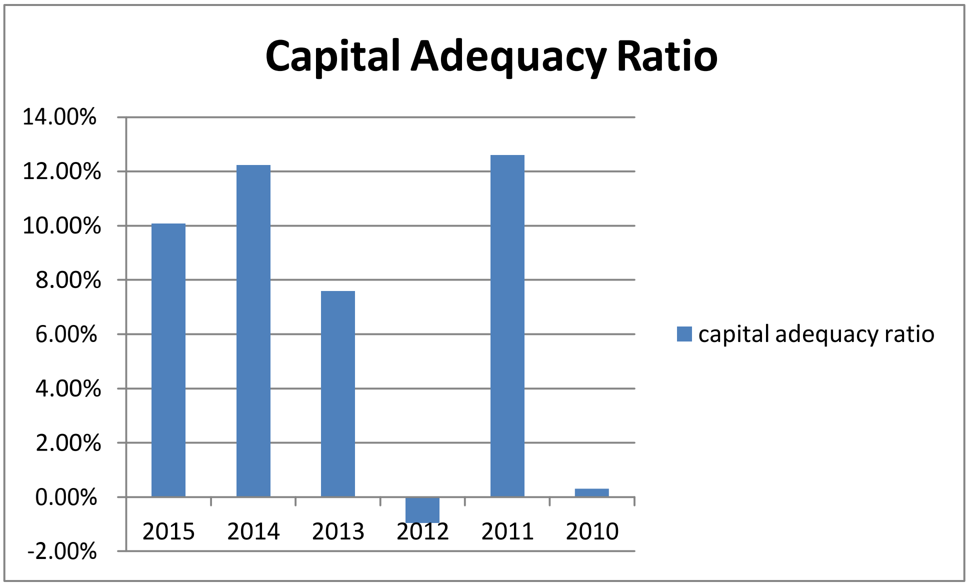
	2015	2014	2013	2012	2011	2010
particulars	solo					
Tier-1 (going concern capital)						
Common equity Tier-1						
paid-up capital	383.00	312	112.5	112.5	112.5	900
Non repayable share premium account	0	0				
Statutory reserve	760	760.15	643.32	592.49	592.49	356.6476533
General reserve	11	10.7	4.7	4.7	4.7	4.7
Retained earnings	-2,065	-1459.8	-2168.38	-1873.85	1279.5	1082.160779
Dividend Equalization Reserve	0	0	0	0	0	0
Minority interest in subsidiaries	0	0	0	0	0	0
Sub Total	-911	-376.95	-395.36	-1164.16	3001.69	2343.508432
Additional Tier-1						
Non-cumulative irredeemable Preference shares	0	710	1995	0	0	0
instruments (perpetual in nature)	0	0	0			
Minority interest	0	0	0			
Sub Total	0	710	1995			
Allowable deductions			1855.5			
Total Tier-1 Capital	2535.7	333.05	1414.09	-1516.6	3001.69	2343.508432
Tier-2 (gone concern)						
General Provision (maximum 1.25 percentage of credit RWA)	398		0			0
Subordinated Debt	0	0	0			0
Revaluation Reserves						
Revaluation reserve for asset		0	0			883.3824291
Revaluation reserve for securities		0	0			0
Revaluation reserve for equity instruments		0	0			499.3072592
Total Revaluation Reserves	1,301	0	0			1382.689688
Total Tier-2 Capital	1,699	1837.46	1954.58	1473.93	1697.57	1382.689688
Regulatory Adjustment/Deductions from capital	260	0	0	182.85	278.38	0
Total Eligible Capital	3,974	2170.51	282.818	-1699.45	4420.88	3726.19812

Table 2:

		Sonali Bank						
Parameter	Required	2015	Required	2014	2013	2012	2011	2010
Credit risk weighted asset (CRWA)		59829.92		81992.89	2898.5	2823.11	2579.85	
Market risk weighted asset (MRWA)		365.47		433.35	426.87	287.02	545.96	
Operational risk weighted asset (ORWA)		400.39		387.47	398.54	430.53	382.93	
Total risk weighted asset (TRWA)		60595.78		82813.71	3723.91	3540.66	3508.74	39218.33
Common equity tier-1 capital (CET-1)		2535.7		2431.05	-395.36	-151.66	3001.69	-1305.17
Additional tier-1 (AT-1)		0		710	1995	0	0	0
Tier-1 (T-1)		2535.7		3141.05	1414.09	-151.66	3001.69	-1305.17
Tier-2 (T-2)		1698.87		1837.46	2140.12	1473.93	1697.57	1426.38
Total capital (T 1+T 2-deductions from capital)		3974.4		4978.51	2828.18	-334.51	4420.88	121.21
CET-1/TRWA	4.50%	7%		8%	4%	-1%	8%	-3.33%
AT-1/TRWA	1.50%	0%		1%	0%	0%	0%	0.00%
T-1/TRWA	6%	7%		8%	4%	-1%	8%	-3.33%
T-2/TRWA	4.00%	3%		4%	4%		5%	3.64%
Capital to risk weighted asset	10.00%	10%	10%	12%	8%	-1%	13%	0.31%

We have found that Sonali Bank could not maintain CRAR in 2010, 2012, 2013. The bank could maintain CRAR in the year 2011, 2014 and 2015. According to Basel III minimum requirement of T-2/TRWA was not maintained.

Implementation Achievement:



The management was fully aware about the guidelines of BB and prepared for implementing Basel II &III accord. But For the implementation of Basel II & III, actually their weight of capital is enough now. It was not enough in 2010, because it Basel II was new then but in 2012, the capital was under the requirement level.

Janata Bank:

Table 1:

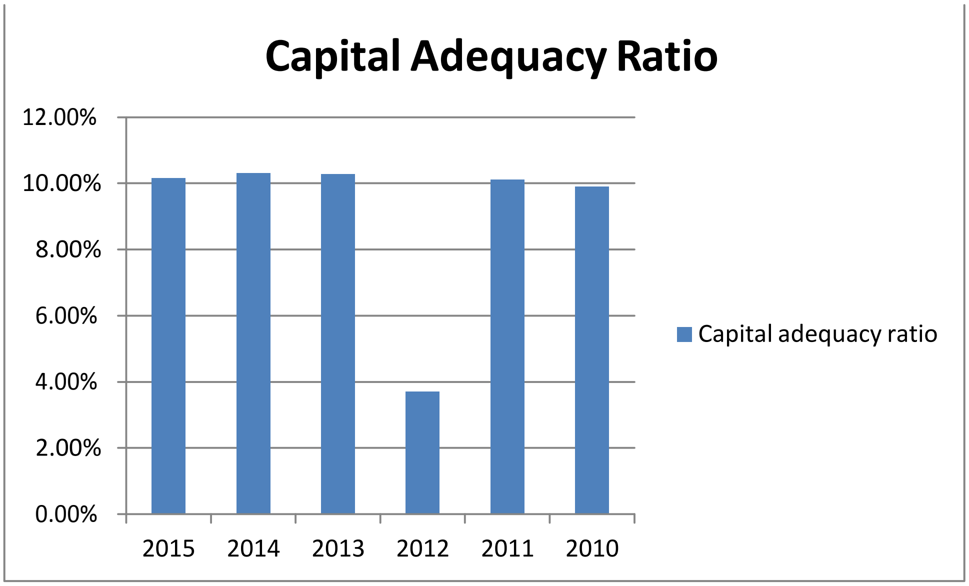
	2015	2014	2013	2012	2011	2010
particulars	solo					
Tier-1 (going concern capital)						
Common equity Tier-1						
paid-up capital	1,914.00	1914	1914	1100	813	500
Non repayable share premium account	0	0		0	0	0
Statutory reserve	997	896.919	791.918	596.82	597	425.03
General reserve	14	11.698	99.9	8.981	7.53	0
Retained earnings	72	35.338	-93.341	-111.6783	790	516.72
Dividend Equalization Reserve	0	0	0	0	0	0
Minority interest in subsidiaries	0	0	0	0	0	0
Sub Total	2,997	2857.955	2712.477	1594.1227	2,207	1441.75
Additional Tier-1	0	0	0	0	0	0
Non-cumulative irredeemable Preference shares	0	0	0	0	0	0
instruments (perpetual in nature)	0	0	0	0	0	0
Minority interest	0	0	0	0	0	0
Sub Total	0	0	0	0	0	0
Allowable deductions						
Total Tier-1 Capital	2,997	2857.955	2622.567	5890.18	4,414	1441.75
Tier-2 (gone concern)						
General Provision (maximum 1.25 percentage of credit RWA)					4,580	
Subordinated Debt	0	0	0	0	0	0
Revaluation Reserves						
Revaluation reserve for asset	0	0	0	0	357.545	0
Revaluation reserve for securities	0	0		0	35.038	0
Revaluation reserve for equity instruments	0	0		0	43.514	0
Total Revaluation Reserves	0	0		0	436.097	0
Total Tier-2 Capital	716	788.882	807.536	753.235	5,016	903.66
Regulatory Adjustment/Deductions from capital	0	0	0	-164.217	23.348	0
Total Eligible Capital	3,713	3646.837	3430.103	6479.198	9,453	2345.41

Table 2:

		Janata Bank						
Parameter	Required	2015	Required	2014	2013	2012	2011	2010
Credit risk weighted asset (CRWA)		34986.129		31977.32	46092.74	45358.497	26016.203	8508.52
Market risk weighted asset (MRWA)		229.06		370.55	38.726	25.203	2428.123	8505.52
Operational risk weighted asset (ORWA)		340.69		337.1	325.77	276	2198.314	8505.52
Total risk weighted asset (TRWA)		35555.879		32684.97	46457.24	45659.7	30642.64	25525.57
Common equity tier-1 capital (CET-1)		2997.161		2857.955	2622.567	589.018	2206.776	1441.75
Additional tier-1 (AT-1)		0		0	0	0	0	0
Tier-1 (T-1)		2997.161		2857.955	2622.567	589.018	4413.552	1441.75
Tier-2 (T-2)		715.672		788.882	807.536	753.235	894.076	903.66
Total capital (T 1+T 2-deductions from capital)		3712.833		3646.837	3430.103	1178.036	5330.976	2345.41
CET-1/TRWA	4.50%	8%		9%	8%	1%	7%	6%
AT-1/TRWA	1.50%	0%		0%	0%	0%	0%	0%
T-1/TRWA	5.50%	8%		9%	7.85%	1%	7%	6%
T-2/TRWA	4.00%	2%		2%	2.42%	2%	3%	4%
Capital to risk weighted asset	10.00%	10%	10.00%	11%	10.27%	3%	10%	9%

Here we can see that Janata Bank could maintain CRAR in 2015, 2014, 2013, 2011but could not maintain the ratio in 2012 and 2010. According to Basel III, the bank could maintain CET-1/TRWA, AT-1/TRWA, T1/TRW and could not maintain T-2/TRWA.

Implementation Achievement:



The management was fully aware about the guidelines of BB and prepared for implementing Basel II &III accord. For the implementation of Basel II & III, actually their weight of capital is enough now. But in 2012, the capital was under the requirement level.

IFIC Bank:

Table1:

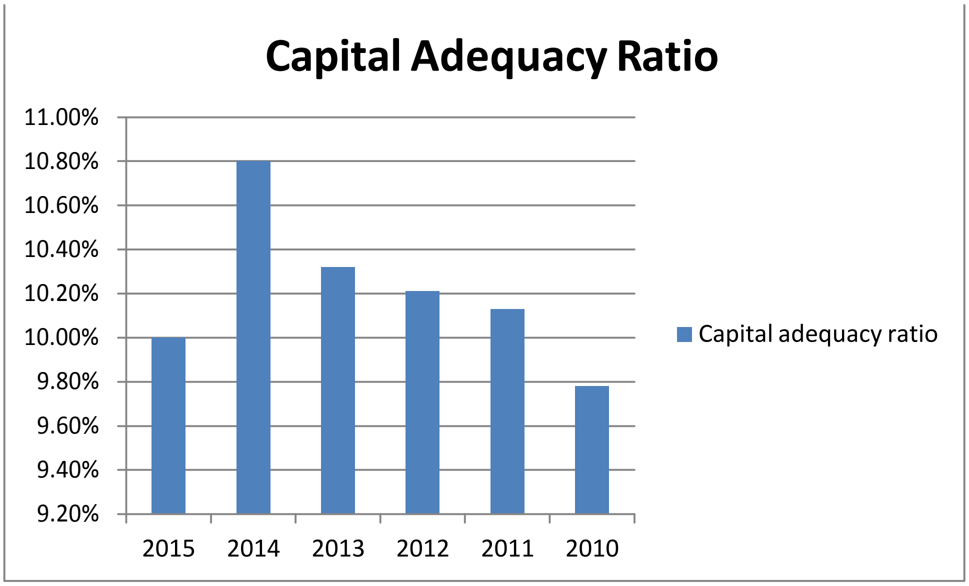
	2015	2014	2013	2012	2011	2010
particulars	solo					
Tier-1 (going concern capital)						
Common equity Tier-1						
paid-up capital	438	437.75	380.65	346.05	276.84	217.98
Non repayable share premium account	7,445	0	0			0
Statutory reserve	391	390.95	337.41	283.25	255.45	218.22
General reserve	6	5.58	5.58	5.58	5.58	5.58
Retained earnings	274	343.61	186.81	498.7	119.05	131.96
Dividend Equalization Reserve	0	0	0	0	0	0
Minority interest in subsidiaries	0	0	0	0	0	0
Sub Total	8,553	1177.89	910.45	1133.58	656.92	573.74
Additional Tier-1	0	0	0	0	0	0
Non-cumulative Preference shares	0	0	0	0	0	0
instruments (perpetual in nature)	0	0	0	0	0	0
Minority interest	0	0	0	0	0	0
Sub Total	0	0	0	0	0	0
Allowable deductions						
Total Tier-1 Capital	1108.25837	1177.89	910.45	684.75	656.92	573.74
Tier-2 (gone concern)						
General Provision	21	26	5.58	75.33	79.28	6.143
Subordinated Debt	0	0	0	0	0	0
Revaluation Reserves						
Revaluation reserve for asset	6	12		5.77	5.75	8.7
Revaluation reserve for securities	16	16	0	8.5	7	1.93
Revaluation reserve for equity instruments	1	0	0		3.64	88.687
Total Revaluation Reserves	17	27	7.487	36.55	16.39	99.317
Total Tier-2 Capital	38	81	13.067	118.5	95.67	97.63
Regulatory Adjustment/Deductions from capital	0	82	64.23	0	0	0
Total Eligible Capital	1,146	1,146	-64.23	803.25	752.59	671.37

Table 2:

		International Finance Investment and Commerce Bank						
Parameter	Required	2015	Required	2014	2013	2012	2011	2010
Credit risk weighted asset (CRWA)		10069.81		9508.07	7786.02	6328.18	6197.69	5274.89
Market risk weighted asset (MRWA)		540.408		632.878	653.397	730.25	69.74	780.82
Operational risk weighted asset (ORWA)		1121.225		1016.43	852.116	794.99	79.04	807.03
Total risk weighted asset (TRWA)		11731.44		11157.4	9291.54	7779.88	6346.47	6862.74
Common equity tier-1 capital (CET-1)		1108.258		1177.89	910.45	684.75	656.92	573.74
Additional tier-1 (AT-1)		0		0	0	0	0	0
Tier-1 (T-1)		1108.258		1177.89	910.45	684.75	656.92	573.74
Tier-2 (T-2)		37.76616		49.378	130.67	118.5	121.5	97.63
Total capital (T 1+T 2-deductions from capital)		1146.025		1145.65	976.89	803.25	778.42	671.37
CET-1/TRWA	4.50%	9%		11%	10%	9%	10%	8%
AT-1/TRWA	1.5%	0%		0%	0%	0%	0%	0%
T-1/TRWA	5.5%	9%		11%	10%	9%	10%	8%
T-2/TRWA	4.0%	0%		0%	1%	2%	2%	1%
Capital to risk weighted asset	10.0%	10%	10.0%	10%	11%	10%	12%	9%

IFIC Bank has maintained minimum CRAR 10% from 2011-2014 and in 2015 but could not maintain it in the year 2010. According to Basel III, the bank could maintain CET-1/TRWA, AT-1/TRWA, T-1/TRW and could not maintain T-2/TRWA.

Implementation Achievement:



IFIC bank has been successfully achieving the desired Capital Adequacy Ratio (CAR) since 2011. As it was new in 2010, they could not maintain it then. The management was fully aware about the guidelines of BB and prepared for implementing Basel II &III accord. For implementing Basel, the capital was increased.

Limitations:

The limitations are as follows:

- The collection of data was time consuming.
- There were difficulties in understanding the disclosures of banks.
- Time Limitation was one of the most barriers.

Recommendation

As Basel III is newly released on 2015 in Bangladesh, banks are not maintaining it properly. Capital conservation buffer is an important element which is avoided by the banks I have studied on. This element should be implemented as it is included in Basel III.

Conclusion

The international community is now recognizing the importance of effective supervision of banking industry because if this industry is left to act on its own, it can take down the global economy. As Basel III is in the making, it will be fully implemented in 2019. Basel II in our country is being followed with enthusiasm and teams are gracefully taking every effort to implement Basel II in banks. Theoretically the 10% CAR should be enough for banks to be shock resilient and fend off adverse business environment in Bangladesh. It remains to be seen in real world whether the adequate capital can save a bank or not. Still there is no harm in maintaining the eligible capital as per BB guidelines and be prepared for any economic disaster.

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