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# Disclosures on Risk Based Capital (Basel-III): A Comparative Analysis of Commercial Banks in Bangladesh

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Abstract: As part of a consistent journey to enhance the loss absorption capacity and resilience of the banks through increasing the capital and improving the quality thereof, Bangladesh Bank has given directions to banks to implement Basel III from January 01, 2015 in phases and fully by January 01, 2019. 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. The aim of this study is to find out market disclosure on risk based capital with comparison among stateowned banks, private banks & foreign banks from 2015-2017. Secondary data have been used to conduct the study. These disclosures requirements should be more applicable and Bangladesh bank will also assist the commercial banks to follow the instructions more efficiently for smooth implementation of Basel III framework in the banking sector of Bangladesh.

**Keywords**: Capital Adequacy, Market risk, Liquidity, CRAR, RWA ratio.

#### 1 Introduction

Basel III framework was basically the response of the global banking regulators to deal with the factors, more specifically those relating to the banking system that led to the global economic crisis or the great recession, Basel III provides improved risk management systems in banks. By practicing these risk management systems, banks therefore are expected to be more shock absorbent in future((BIS,2010)

As per the guidelines of Bangladesh Bank, banks maintained 10 percent of risk-weighted asset in 2015, but gradually it will go up and finally banks will maintain 12.50 percent in 2019 when full implementation of capital ratios will be executed. Besides, banks need to maintain leverage ratio of 3 percent based on amount of Tier-I capital as percentage to total exposure of banks. Seemingly, private commercial banks (PCBs) are capable of increasing these percentages comfortably. However, the recent deterioration of asset quality of state-owned commercial banks (SCBS) and some PCBs has created uncertainty about their capacity to generate capital internally. In this perspective, banks can initiate to amplify their internal ability for generating capital through reducing costs, ensuring quality of loans and forming loan portfolio contemplating the risk weights fixed by Bangladesh Bank. In case of necessity of adding capital from external sources, the government may follow traditional trajectory through injecting new capital to SCBs for ensuring sufficient amount of capital. PCBs may also go for issuing seasoned issues for extra amount of capital from external sources. Additionally, banks can raise the amount of capital by offloading a certain percentage of shares, inviting organizations like International Finance Corporation (IFC), and Islamic Corporation for the Development of the Private Sector (ICD) for participation in banks' capital and issuing different debt securities.

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Fiscal and monetary authority can motivate banks for utilizing these innovative options for the enhancement of capital through giving necessary policy supports. It is well accepted that the government may not inject capital to SCBs for unlimited period from the taxpayers' money. Banks, therefore, need to enhance their internal capacity to increase necessary amount of capital for covering risk exposure they undertake.

In case of liquidity framework, Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) are actually framed as liquidity performance parameters. Through these ratios, banks can visualize well ahead of incurring liquidity problems and take necessary steps to address this problem without the help of the central bank. It is anticipated that banks of Bangladesh will not face major challenges in maintaining both ratios. Bangladesh Bank has already observed ability of banks in maintaining ratios on a trial basis almost for one year and found all banks with a few exceptions are capable to maintain these parameters.

A few other factors like technology, skills development and governance are being considered as challenges in implementing Basel III. The revised approaches for using risk-weighted assets will be dependent on a number of computational requirements. Banks may need to upgrade their systems and processes to be able to compute an amount of risk-weighted assets as well as capital requirements based on revised guidelines. Apart from technological up gradation, higher specialized skills development in the supervised banks and within Bangladesh Bank is a challenge to ensure proper implementation of Basel III. Top management and human resource development policy of banks, thus, need to get tuned with this requirement. The central bank also needs to hone skills in regulating and supervising under the new system (Bangladesh Bank (February 2011) The Basel Committee on Banking Supervision added a separate principle on corporate governance in its core principles in 2012. It is welcomed in Bangladesh in the sense that while strong capital gives financial strength, it cannot assure good performance unless good corporate governance exists. We need to fix and ensure this issue for the interest of having a strong financial sector like global community. We believe that banks of Bangladesh have the capacity to address these challenges for the full implementation of Basel III. If any lacking does exist, it is expected that banks will take required initiatives to bridge the gap.

#### 2 Evolution of Basel Accord (Risk based capital approach) in the Banking Industry:

Before 1988, many countries applied national capital standards to banks operating within their jurisdiction. These standards varied from country to country so that a similar exposure could receive different treatments depending on where it was booked. In addition, national standards did not always relate capital requirements to risk levels and, in most cases, did not account for off-balance sheet exposures.

#### 2.1 Basel-I:

In July, 1988 Basel Committee for Banking Supervision (BCBS)4 of Bank for International Settlement (BIS)5 published a paper titled "International Convergence of Capital Measurement and Capital Standards(ICCMCS)" in order to secure global uniformity of regulatory directions modulating the capital adequacy of banks. This is popularly known as Basel accord (Basel-I) which spelled out the details of the agreed framework for measuring capital adequacy and the minimum standard to be achieved which the national supervisory authorities were to implement in their respective countries.

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#### 2.2 Basel-II:

In June 2004, BCBS issued a revised framework6 of ICCMS, introduced the famous "Three Pillar Concept" of Capital Adequacy for strengthening the risk management practices of the banking industry. Later, in June 2006, a comprehensive revision of ICCMCS was in public by incorporating Basel II Framework, June 2004, the elements of the 1988 Accord that were not revised during the Basel II process, the 1996 Amendment to the Capital Accord to Incorporate Market Risks, and the paper on the Application of Basel II to Trading Activities and the Treatment of Double Default Effects, 2005. The paper has been invariably termed as Basel-II framework. This was also supposed to be applied on a fully consolidated basis to any holding company that is the parent entity within a banking group to ensure that it captures the risk of the whole banking group. Basel-II incorporated the treatment for the activities of banking entities, securities entities, financial entities, insurance entities and commercial entities when they are subsidiaries or minority owner of any bank holding company. Another groundbreaking addition in this version of this capital accord was the incorporation of the treatment of securitization exposure for credit risk. Both traditional and synthetic securitization exposures have been accounted for consideration.

#### 2.3 Basel-III:

In the consequence of global financial turmoil and lessons learned from that to promote a more resilient banking sector, BCBS undertook the reform initiatives for enhancing capital and liquidity rules. The goal was to develop a durable banking sector that can sustain and absorb shocks arising from financial and economic stress. The outcome of the initiatives was released on December 2010 that was comprised of three core documents and known as Basel-III.

The Basel-III propositions have been formulated by incorporating the following themes:
☐ To strengthen the capital framework of banks:
☐ Uplifting the quality, constancy & transparency of the capital base,
☐ Widening risk coverage,
☐ Supplementing the RBC requirement with a leverage ratio,
☐ Shrinking pro-cyclicality and supporting countercyclical buffers cyclicality of the minimum requirement,
☐ Addressing systemic risk and interconnectedness,
☐ To commence a global liquidity standard
☐ Liquidity Coverage Ratio (LCR),
☐ Net Stable Funding Ratio (NSFR),
☐ Monitoring tools.
The capital structure has been faced bit alteration in Basel-II. The capital components have been divided in
following shape:
☐ Tier-1 Capital (going-concern capital):
□ Common Equity Tier-1,
☐ Additional Tier-1
☐ Tier 2 Capital (gone-concern capital)
☐ Supervisory reconciliation elements:
☐ Goodwill and other intangibles,
☐ Deferred tax assets,
☐ Hedge reserve for cash flow,

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☐ Shortfall of the stock of provisions to expected losses,
☐ Gain on sale related to securitization transactions,
☐ Investments in own shares such as treasury stock,
☐ Reciprocal cross holdings in the capital of banking, financial and insurance entities,
☐ Investments that are outside the scope of regulatory consolidation such as investment in Financia
Institution's capita and where bank does not own more than 10% of the issued common share capital of the
entity.

#### 3 Theoretical discussion:

Banks encounter various types of risks while carrying the business of financial intermediation as it is the highly leveraged sector of an economy. Risk and uncertainties, therefore, form an integral part and parcel of banking. Thus, risk management is the core to any banking service andhence the need for sufficient Capital to Risk-weighted Asset Ratio (CRAR) is felt. Regulation of capital assumes significant importance so as to reduce bank failures, to promote stability, safety and soundness of the banking system, to prevent systemic disaster and to ultimately reduce losses to the bank depositors (Basel Committee on Banking Supervision, December 2010)

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 notrelated 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. The Table below shows the minimum capital conservation ratios a bank must meet at various levels of the Common Equity Tier 1 capital ratios.

Table 1: Individual bank's minimum capital conservation standards

CET1 Ratio	Minimum Capital Conservation Ratio
	(expressed as percentage of earnings)
4.5% - 5.125%	100%
>5.125% - 5.75%	80%
>5.75% - 6.375%	60%
>6.375% - 7.0%	40%
>7.0%	0%

Source: Bangladesh Bank (February 2011)

For example, a bank with a Common Equity Tier 1 capital ratio in the range of 5.125% to 5.75% is required to conserve 80% of its earnings in the subsequent financial year (i.e. payout no more than 20% in terms of dividends, share buybacks and discretionary bonus payments is allowed).

The following represents other key aspects of the capital conservation buffer requirements:

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The Common Equity Tier 1 ratio includes amounts used to meet the minimum Common Equity Tier 1 capital requirement of 4.5%, but excludes any additional Common Equity Tier 1 needed to meet the 7% Tier 1 and 10% Total Capital requirements. For example, a bank maintains Common Equity Tier 1 capital of 8%, Additional Tier 1 of 1% and Tier 2 capital of 1%. Therefore, the bank would meet all minimum capital requirements, but would have a zero conservation buffer and therefore, the bank would be subjected to 100% constraint on distributions of capital by way of dividends, share-buybacks and discretionary bonuses. If a bank does not have positive earnings and has a Common Equity Tier 1 ratio less than 7%, it should not make positive net distributions.

Capital conservation buffer is applicable both at the solo level as well as at the consolidated level, i.e. restrictions would be imposed on distributions at the level of both the solo bank and the consolidated group. In all cases where the bank is the parent of the group, it would mean that distributions by the bank can be made only in accordance with the lower of its Common Equity Tier 1 Ratio at solo level or consolidated level. For example, if a bank's Common Equity Tier 1 ratio at solo level is 5.8% and that at consolidated level is 6.4%. It will be subject to a capital conservation requirement of 60% consistent with the Common Equity Tier 1 range of >5.75% - 6.375% as per Table 3 above. Suppose, a bank's Common Equity Tier 1 ratio at solo level is 5.6% and that at consolidated level is 5%. It will be subject to a capital conservation requirement of 100% consistent with the Common Equity Tier I range of >4.5% - 5.125% as per Table on minimum capital conservation standards for individual bank (Bangladesh Bank (February 2011)

The general qualitative disclosure requirement including the nature of IRRBB and key assumptions, including assumptions regarding loan prepayments and behavior of non-maturity deposits, and frequency of IRRBB measurement. The increase (decline) in earnings or economic value (or relevant measure used by management) for upward and downward rate shocks according to management's method for measuring IRRBB, broken down by currency (as relevant). According to liquidity contingency plan we have incorporated all the strategic decision to tackle any sort of liquidity crisis. The Asset Liability Committee (ALCO), which meets at least once in a month, is responsible for managing and controlling liquidity of the bank. Treasury front office closely monitors and controls liquidity requirements on a daily basis by appropriate coordination of funding activities and they are primarily responsible for management of liquidity in the bank. A monthly projection of fund flows is reviewed in ALCO meeting regularly. The leverage ratio is calibrated to act as a credible supplementary measure to the risk based capital requirements. Banks are highly leveraged organizations which facilitate leverage for others.

## 4 Objectives of the Study:

Bangladesh bank adopted Basel-III in 2010 by replacing the Liability-to-capital approach with the Risk based capital approach (Linking the capital with the risk weighted assets). The objective of the study is to market disclosures of capital adequacy of commercial banks. The following aspects also have been addressed in pursuing the report:

- 1. A comparative analysis regarding the level of compliance of scheduled banks in respect of the Capital to Risk Weighted Assets Ratio requirement set by BB.
- 2. To ensure possible portions of the master guidelines on Risk Based Capital Adequacy in commercial banks in Bangladesh.

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## **5 Transitional Arrangements:**

The Committee introduced transitional arrangements to implement the new standards that help ensure that the banking sector can meet the higher capital standards through reasonable earnings retention and capital rising, while still supporting lending to the economy. In line with the Basel framework, Bangladesh Bank issued transitional arrangements for Basel III implementation in Bangladesh. The phase-in arrangements for Basel III implementation in Bangladesh will be as follows:

Table 2: Phase-in arrangements for Basel III implementation in Bangladesh

9		-	_		
	2015	2016	2017	2018	2019
Minimum Common Equity Tier 1	4.50%	4.50%	4.50%	4.50%	4.50%
(CET1) Capital Ratio					
Capital Conservation Buffer		0.63%	1.25%	1.88%	2.50%
Minimum CET1 plus Capital	4. 50%	5.13%	5.75%	6.38%	7.00%
Conservation Buffer					
Minimum T-1 Capital Ratio	5.50%	5.50%	6.00%	6.00%	6.00%
Minimum Total Capital Ratio	10.00%	10.00%	10.00%	10.00%	10.00%
Minimum Total Capital plus Capital	10.00%	10.63%	11.25%	11.88%	12.50%
Conservation Buffer					
Phase-in of deductions from CET1					
Phase-in of deductions from Tier 2					
Revaluation Reserves (RR)3					
RR for Fixed Assets, Securities and	20%	40%	60%	80%	100%
Equity Securities					
Leverage Ratio	3%	3%	3%	Migratio	n to Pillar
			Readjustment	1	
Liquidity Coverage Ratio	≥100%	≥100%	≥100%	≥100%	≥100%
	(From				
	Sep.)				
Net Stable Funding Ratio	> 100%	≥100%	≥100%	≥100%	≥100%

The parallel run period for leverage ratio will commence from January, 2015 and run until December 31, 2016. During this period, the leverage ratio and its components will be tracked to assess whether the design and calibration of the minimum Tier 1 leverage ratio of 3% is appropriate over a credit cycle and for different types of business models, including its behavior relative to the risk based requirements.

Bank level disclosure of the leverage ratio and its components will start from January 1, 2015. However, banks should report their Tier 1 leverage ratio to the BB (Department of Off-Site Supervision) along with CRAR report from the quarter ending March, 2015. Based on the results of the parallel run period, any final adjustments to the definition and calibration of the leverage ratio will be made by BB in 2017, with a view to setting the leverage ratio requirements as a separate capital standard from January 1, 2018.

Limits (Minima and Maxima)

These instructions will be adopted in a phased manner starting from the January 2015, with full implementation of capital ratios from the beginning of 2019, as per Table 2 below. All banks will be required to maintain the following ratios on an ongoing basis:

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- i. Common Equity Tier 1 of at least 4.5% of the total RWA
- ii. Tier 1 capital will be at least 6.0% of the total RWA
- iii. Minimum CRAR of 10% of the total RWA
- iv. Additional Tier 1 capital can be admitted maximum up to 1.5% of the total RWA or 33.33% of CET1, whichever is higher.
- v. Tier 2 capital can be admitted maximum up to 4.0% of the total RWA or 88.89% of CET1, whichever is higher
- vi. In addition to minimum CRAR, Capital Conservation Buffer (CCB) of 2.5% of the total RWA is being introduced which will be maintained in the form of CET1.

## 6 Data Analysis & Findings:

Table 3: Comparative Capital Adequacy Ratio in Different Banks

	Capital To Risk	CET-1 to	Tier-1	Tier -2	Available
	Weighted Assets	RWA Ratio	capital to	capital to	Capital under
	Ratio (CRAR) %		RWA ratio	RWA Ratio	Pillar2
					Requirement
Rupali bank	8.52%	6.25%	6.25%	2.27%	465.73
Pubali bank	9.77%	8.55%	9.85%	3.57%	24,073.60
Premier bank	9.01%	5.71%	5.71%	-	330.34
One bank	10.47%	8.00%	8.00%	2.47%	1,405.53
NRB bank	16.04%	15.19%	15.19%	-	2,668.71
Marcantile bank	11.88%	8.54%	8.54%	3.34%	285.28
Janata bank	10.02%	8.09%	8.09%	1.93%	36,930.39
IFIC bank	10.24%	9.16%	9.16%	1.08%	296.37
Exim bank	12.15%	9.75%	9.75%	2.29%	477.8
First security	10.42%	7.62%	7.62%	2.80%	1,290.11
bank					
Trust bank	10.81%	7.53%	7.53%	3.28%	1045.31
Union bank	13.27%	12.10%	12.10%	1.17%	422.48
Islami bank	11.72%	8.75%	9.48%	2.24%	-
DBBL					
Brac bank	12.29%	10.40%	10.40%	1.89%	1,767
City bank	14.03%	10.08%	10.08%	-	-
Farmers bank	12.09%	11.40%	11.40%	0.69%	50.75
Bank asia	12.34%	8.82%	8.82%	-	18,27
Al-arafah bank	16.65%	13.17%	13.17%	3.48%	9215.25

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If the intra-industry situation is observed (Figure-1), it is found that foreign banks are operating well above the regulatory requirement, though they faced slight fall in the middle of the period which has been recovered later on. Private Banks move around the regulatory compulsion. Although the SCBs stood significantly below the requirement, they recovered their position at later phase.

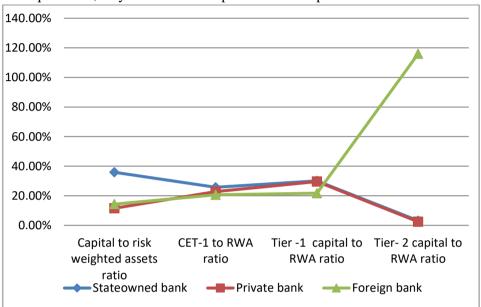


Figure 1: Comparative CRAR in Different Banks

## Table4:Risk Weighted Asset for Credit Risk (CR) as % of Total Risk Weighted Asset

	Types of loops and advances	Provision				
	Types of loans and advances	STD	SMA	SS	DF	BL
	House building and professional	2%	2%	20%	50%	100%
Rupa	Provision for loan	2%	2%	20%	50%	100%
li bank	Short-term agri-credit & micro credit	2.50%	ı	5%	5%	100%
	Small and medium enterprise finance	0.25%	0.25 %	20%	50%	100%
	House building and professional	2%	2%	20%	50%	100%
Pubal	Provision for loan	2%	2%	20%	50%	100%
i bank	Short-term agri-credit & micro credit	2.50%	ı	5%	5%	100%
	Small and medium enterprise finance	0.25%	0.25 %	20%	50%	100%
	House building and professional	2%	2%	20%	50%	100%

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	Provision for loan	2%	2%	20%	50%	100%
Prem ier	Short-term agri-credit & micro credit	2.50%	-	5%	5%	100%
bank	Small and medium enterprise finance	0.25%	0.25	20%	50%	100%
	House building and professional	2%	2.24	20%	50%	100%
One	Provision for loan	2%	2%	20%	50%	100%
bank	Short-term agri-credit µ credit	2%	2%	2%	2%	100%
	Small and medium enterprise finance	0.25%	0.25 %	20%	40%	100%
	House building and professional	2%	2%	20%	50%	100%
NRB	Provision for loan	2%	2%	20%	50%	100%
bank	Short-term agri-credit & micro credit	2.50%	-	5%	5%	100%
	Small and medium enterprise finance	0.25%	0.25 %	20%	50%	100%
	House building and professional	2%	2%	20%	50%	100%
Marc	Provision for loan	1%	5%	20%	50%	100%
antile bank	Short-term agri-credit µ credit	5%	2%	5%	5%	100%
	Small and medium enterprise finance	0.25%	0.25	20%	50%	100%
	House building and professional	2%	2%	20%	50%	100%
Janat	Provision for loan	2%	2%	20%	50%	100%
a bank	Short-term agri-credit µ credit	2.50%	-	5%	5%	100%
	Small and medium enterprise finance	0.25%	0.25 %	20%	50%	100%
	House building and professional	2%	2%	20%	50%	100%
IEIC	Provision for loan	2%	2%	20%	50%	100%
IFIC bank	Short-term agri-credit µ credit	2%	2%	2%	2%	100%
	Small and medium enterprise finance	0.25%	0.25 %	20%	50%	100%

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	House building and professional	2%	2%	20%	50%	100%
Exim	Provision for loan	2%	2%	20%	50%	100%
bank	Short-term agri-credit µ credit	2.50%	N/A	5%	5%	100%
	Small and medium enterprise finance	0.25%	0.25 %	20%	50%	100%
P	House building and professional	2%	2%	20%	50%	100%
First secur	Provision for loan	2%	2%	20%	50%	100%
ity bank	Short-term agri-credit & micro credit	2.50%	0	5%	5%	100%
	Small and medium enterprise finance	0.25%	25%	20%	50%	100%
	House building and professional	2.50%	5%	20%	50%	100%
Trust	Provision for loan	2%	2%	20%	50%	100%
bank	Short-term agri-credit & micro credit	2.50%	2.50 %	20%	50%	100%
	Small and medium enterprise finance	0.25%	0.25 %	5%	5%	100%
	House building and professional	2%	2%	20%	50%	100%
Unio	Provision for loan	1%	1%	20%	50%	100%
n bank	Short-term agri-credit & micro credit	2.50%	2.50 %	5%	5%	100%
	Small and medium enterprise finance	0.25%	0.25 %	20%	50%	100%
	House building and professional	2%	5%	20%	50%	100%
Islam	Provision for loan	2%	2%	20%	50%	100%
i bank	Short-term agri-credit & micro credit	2.50%	2.50 %	5%	5%	100%
	Small and medium enterprise finance	0.25%	1%	20%	50%	100%
DDD	House building and professional	2%	5%	20%	50%	100%
BDB L	Provision for loan	1%	5%	20%	50%	100%
	Short-term agri-credit & micro credit	5%	5%	20%	50%	100%

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	Small and medium enterprise finance	1%	5%	20%	50%	100%
	House building and professional	2%	2%	20%	50%	100%
Brac	Provision for loan	2%	2%	20%	50%	100%
bank	Short-term agri-credit & micro credit	2.50%	0	5%	5%	100%
	Small and medium enterprise finance	0.25%	25%	20%	50%	100%
	House building and professional	2.50%	5%	20%	50%	100%
City	Provision for loan	5%	7.58 %	20%	50%	100%
bank	Short-term agri-credit & micro credit	2.50%	2.50 %	5%	5%	100%
	Small and medium enterprise finance	0.25%	25%	20%	50%	100%
	House building and professional	5%	5%	20%	50%	100%
Farm	Provision for loan	1%	2%	20%	50%	100%
ers bank	Short-term agri-credit & micro credit	2%	2%	20%	50%	100%
	Small and medium enterprise finance	0.25%	1%	5%	5%	100%
	House building and professional	2%	2%	2.5	0.25	100%
Bank	Provision for loan	2%	2%	20%	50%	100%
asia	Short-term agri-credit & micro credit	2.50%	2.50 %	5%	5%	100%
	Small and medium enterprise finance	0.25%	0.25 %	20%	50%	100%
Al- arafa	House building and professional	2%	2%	20%	50%	100%
h	Provision for loan	2%	1%	20%	50%	100%
bank	Short-term agri-credit & micro credit	2.50%	-	20%	50%	100%

## Table 5:Risk Weighted Asset for Market Risk as % of Total Risk Weighted Asset

	8	
	Market Risk	

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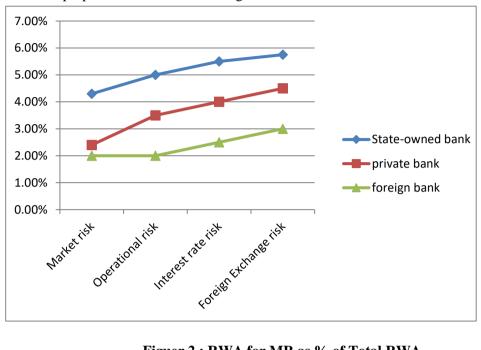
	Interest rate	Equity	Foreign	Commodity	Operational
	risk	position risk	Exchange risk	risk	Risk
Rupali bank	22.23	35.47	4.62	Nil	130.14
Pubali bank	9.8	1,818.58	82.43	Nil	2,020.70
Premier bank	10.65	49.56	12.66	0	553.54
One bank	2.1	32.69	7.18	Nil	101.15
NRB bank	0	7.49	0.06	0	124.82
Marcantile	30.45	29.52	13.91	0	139.65
bank					
Janata bank	852.5	1,698.20	180.4	0	3,447.50
IFIC bank	Nil	540.04	1.86	0	1,139.18
Exim bank	Nil	80	22.86	0	151.14
FISB	Nil	19.37	3.77	0	64.57
Trust bank	27.83	312.93	175.03	0	984.54
Union bank	0	7.18	1.33	0	17.23
Islami bank	0	13.3	518.91	0	40,182.06
BDBL	118.28	15.544	Nil	0	398.36
Brac bank	257.01	243.4	101.20	0	18,482
City bank	9.23	111.93	8.85	0	164.27
Farmers bank	4.62	2.08	3.26	0	11.84
Bank asia	140.7	168.14	158.82	0	1,444.47
Al-arafah bank	0	98.7	410.3	0	9,216.80

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RWA for Market Risk as overall are much higher (4.30%-5.75 %%) for the state-owned banks in comparison to others and the proportion has been increasing over time.



Figuer 2: RWA for MR as % of Total RWA

Table 6:Risk Weighted Asset for Liquidity & leverage as % of Total Risk Weighted Asset

	Liquidity Coverage	Net Stable Funding Ratio	Leverage Ratio
	Ratio	(NSFR)	
Rupali bank	233.22%	100.38%	3.14%
Pubali bank	109.02%	104.50%	6.97%
Premier bank	118.36%	120.46%	3.98%
One bank	127.33%	114.77%	6.36%
NRB bank	532.47%	115.59%	12.91%
Marcantile bank	166.57%	109.18%	6.36%
Janata bank	187.60%	103.04%	4.30%
IFIC bank	101.17%	104.80%	5.80%
Exim bank	132.09%	114.93%	7.82%
First security bank	1498.45%	102.42%	3.66%
Trust bank	111.50%	124.64%	4.81%
Union bank	280.93%	150.77%	7.97%
Islami bank	188.56%	127.37%	5.13%
DBBL	0.61%	1.19%	19.25%

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Brac bank	112.45%	110.56%	7.42%
City bank	163.34%	100.99%	6.64%
Farmers bank	114.20%	118.41%	10.04%
Bank asia	122.03%	111.53%	5.84%
Al-arafah bank	104.85%	114.60%	7.83%

RWA for leverage are much for the foreign banks in comparison to others and the proportion has been increasing over time. Whereas liquidity ratio higher for state-owned banks rather than private & foreign banks.

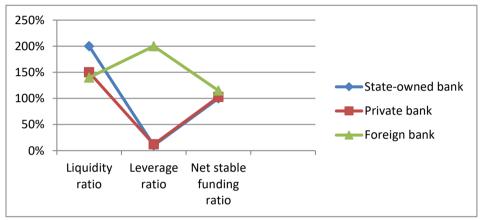


Figure 3: RWAfor Liquidity & leverage as % of Total RWA.

#### 7 Recommendation & Conclusion

The Basel norms, at some level, aim to create a global banking system that is fairly homogenous. While this very aim purports to build a more robust financial system, it may actually be its undoing. In other words, such a homogeneous banking system could potentially be morevulnerable to a mass failure or collapse. Simply speaking, a diverse group is an advantage since an attack only affects a certain percentage of its constituents. A banking system that is too homogenous is, in fact, dangerous for the future of countries the world over. In order solve above problems the following recommendation authority should consider the recommendation:

- o Every bank should ensure training facilities for their employees about Basel.
- Bangladesh Bank should take responsibility to develop perfect software for calculation of RWA and CRAR.
- Every bank should open their new department that wills only deals with Basel requirement.
- o Finally, Basel committee should develop new and effective process for RWA calculation.

Any change, big or small, of whatever nature brings some challenges. So it is expected that Bangladeshi banks will face several challenges to implement Basel III. But we are convinced that challenges are not onerous and these are worth facing up to. The first and foremost challenge is to maintain the increased amount of capital.

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