



Bangladesh Bank

Financial Stability Department

Financial Stability Report 2014

Issue 5
June 2015



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- *This edition is published in June, 2015 and is based on data and information available as of December 2014, unless stated otherwise. Feedback on this report may be given to **gm.fsd@bb.org.bd***
 - *This publication can be accessed through internet at <http://www.bangladesh-bank.org/pub/>*

FINANCIAL STABILITY REPORT 2014



Financial Stability Department
Bangladesh Bank

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The coordinators and editors would like to thank Mr. Glenn Tasky, Resident Macroprudential Advisor for his valuable suggestions and comments on the draft report.

GOVERNOR'S MESSAGE



Since the global financial crisis emerged in mid-2007, the regulators in different jurisdictions have been working diligently to make the global financial system more robust, resilient, and stable. Financial sector regulations that focused on individual institutions are now being given a macroprudential perspective also. In the context of Bangladesh this year, we reached two crucial milestones towards developing a more robust prudential framework: one is developing a 'contingency planning framework' and the other is setting up an 'arrangement of coordinated supervision'.

Though the growth and profitability of the financial system has been showing resilience since 2012, the operational failures in a few banks have highlighted that rebuilding and maintaining confidence in the banking system is an utmost necessity. In addition, it is expected that over the next few years the management capacity of the banks will be challenged by rapidly changing business models. In this environment, strong, effective and well-informed governance and management of banks will be essential.

The economy of Bangladesh is gradually recovering from temporary disruptions, aided by political and macroeconomic stability. The challenge now is to consolidate this recovery by accelerating economic growth in an inclusive and sustainable manner. The Bangladeshi economy has been undergoing real GDP growth of more than six percent on average for more than 12 years now, despite the ups-and-downs in the global economy, with inflation being contained within single digit levels. This stable growth trend has been maintained because of the inclusive development strategy of the Bangladesh Government, supported by Bangladesh Bank's (BB's) initiative of giving emphasis to socially responsible financing in banks' business plans. BB's inclusive financing promotion exists within its monetary growth programme, designed to maintain price and macro-financial stability. All banks and financial institutions, whether state-owned, private, local or foreign, have enthusiastically engaged themselves in nationwide financial inclusion and green banking initiatives which have boosted agriculture, with SMEs and environmentally-friendly projects generating both domestic output and demand. This development will help to cover external demand weakness from a possible slowdown in advanced Western economies. Bangladesh has already attained a number of Millennium Development Goals (MDGs), including the halving of poverty well ahead of its 2015 timeline. Last month, Moody's Investor Service projected Bangladesh's outlook as stable for the year 2015. In its analysis, Moody's had justified its projection, saying the country's growth volatility is lower than almost all other countries they rated. Bangladesh has again been rated Ba3 with a stable outlook by Moody's.

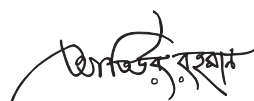
No notable vulnerability is visible in the stability indicators of our economy in recent years. The advancement of our financial health brings stability concerns into brighter light. Preemptive measures can strengthen the financial base and enhance the resilience of the system to absorb any shock. To guard against any prominent stability shock, a regular review of the stability indicators is the most important. Like most of the countries, we have been publishing a financial stability report (FSR) for quite a while, and this is our fifth issue. The report aims to assess the stability condition of the country with a view to articulating a clear picture about the movement of the economy as well as developments, positive and negative, in the financial sector.

The report shows a relatively stable situation for the financial system in 2014. Looking ahead to 2015 and beyond, the financial sector is moderately resilient to absorb any shock. Some new initiatives have been undertaken in the stated year by the regulators of the financial system to make it more stable. Implementation of Basel-II is a remarkable achievement in strengthening the capital base of the banking sector and confirming that capital is adequate to support risk-taking. BB also issued guidelines to retain customer confidence in the system and to ensure smooth functioning of the payment system. Some new inclusionary measures, such as enabling street children and physically disabled persons to open bank accounts, depositing as little as BDT 10 and introducing agent banking will enhance the financial literacy and access among the common people and play a crucial role in maintaining financial stability. In addition, implementation of coordinated supervision will help to achieve a stable financial system through a combined effort of all regulators. More concentration is required, however, to make the capital market more vibrant, develop a financial inclusionary platform for all the entities of the financial system, increase the integrity and corporate governance of the financial system to reduce fraud, and build up a fully automated financial system for greater efficiency.

Finally, Bangladesh Bank, together with its regulated institutions, needs to look over the horizon and identify market practices and processes that could make the financial system more vulnerable to shocks or that could amplify such shocks. As an example from the advanced economies, a tougher response to the poor mortgage underwriting practices evident during the U.S. housing bubble would have been appropriate in my opinion. Or, more attention to bank compensation practices could have mitigated the incentives for excessive risk-taking.

This FSR also summarizes recent work by BB officials on specific financial sector policies and on aspects of the financial system's structure and functioning. More generally, the FSR aims to promote an informed public discussion on all aspects of the financial system. In that way, we will promote strong, sustainable and balanced growth for the betterment of the people of Bangladesh.

I commend the effort of the Financial Stability Department for preparing this report in a timely manner. I hope the report will contribute to enhancing risk awareness among the stakeholders of the financial system and help them build the mechanisms to withstand any endogenous or exogenous shock well ahead of when they materialise.



Atiur Rahman, PhD
Governor

DEPUTY GOVERNOR'S MESSAGE



To respond to changing economic developments, effective communication is needed among the many stakeholders since interactions among fiscal, monetary and supervisory agencies, and between these agencies and financial services firms, influence financial stability. Though Bangladesh did not experience any adverse impact of the global financial crisis of 2007-08, there is no scope to be complacent about any future threat of crisis. Bangladesh Bank has closely observed the global crisis and its aftermath, and the policy responses and post-crisis recovery to determine its own strategy to maintain stability in the system. Recently BB prepared a comprehensive framework of contingency planning and lender of last resort policies for crises preparedness and managing risks during times of unusual stresses. This framework covers explicit criteria and conditions for providing emergency liquidity assistance to a distressed bank both in normal times and in periods of generalized stresses to conquer unexpected and temporary distortions in normal market functions. Moreover, a wide variety of resolution tools are being designed under current legislation, including forced/directed merger and acquisition, purchase and assumption, bridge bank, bail-in within resolution, etc., to ensure an orderly resolution of any distressed banks that may appear on the horizon. To enhance the depositors' protection, transformation of the existing deposit insurance department into a full-fledged deposit insurer gains special attention under the contingency framework. The Recovery and Resolution Plan for banks and a proactive public information and education campaign, in addition, are being set up as a forward-looking monitoring program for individual banks and an awareness-building program for the general public respectively.

Bangladesh Bank is always concerned with all kinds of uncertainties that may create financial instability through putting unanticipated stresses on large segments of the financial services industry. BB, as the regulator over the dominant banking sector, has adopted a number of supervisory approaches to assess the banks' condition, performance, risk, and vulnerabilities. However, these microprudential supervisory stances scrutinize the responses of an individual bank to exogenous risks, but do not necessarily address endogenous risks that those systems and the systemic institutions themselves inherit. Microprudential policies, indeed, are not enough to address the systemic risks, and thus the quest continues for robust macroprudential policies to protect the financial system from both endogenous and exogenous shocks.

Macroprudential policy, indeed, is concerned with the interconnectedness among financial institutions and markets, risky exposures that are common to all or most economic units in the financial sector, and pro-cyclical behaviors that can create systemic risk. Sound macroprudential policy enhances the resilience of the whole system and helps to smoothes out financial cycles,

i.e., the joint fluctuations of credit, leverage, and asset prices that may lead to boom-bust periods. Thus, it is worthwhile to pursue financial stability by formulation and implementation of a robust and effective macroprudential supervisory regime.

From the beginning of 2014, Bangladesh Bank has introduced a number of macroprudential supervisory tools, e.g., the Interbank Transaction Matrix (ITM) and the Financial Projection Model (FPM) to capture buildups of system wide risks that could cause costly financial distress in the banking sector and perhaps even a full-blown systemic crisis. The ITM is used as an assessment of the downside risk of interconnectedness, as any overwhelming interbank linkages that are detected may act as a channel to propagate shocks over the whole system. FPM, for its part, is used to forecast the banks' health and performance in the coming days, in order to detect any sort of distress ex-ante. Bangladesh Bank also developed the framework for identifying and dealing with the Domestic Systemically Important Banks (D-SIBs) in Bangladesh, recognizing that the impact of failure of these institutions would be greater than that of a non-systemic one. In addition, Bangladesh Bank is going to implement an early warning tool, the HEAT map (Health Assessment Tool) to assess banks' health on a standalone basis and for the system as a whole.

To have a more intensive and effective supervision over the system, Bangladesh Bank is adopting a coordinated supervision mechanism among the financial sector regulators, namely Bangladesh Bank (BB), Bangladesh Securities and Exchange Commission (BSEC), Insurance Development and Regulatory Authority (IDRA), Microcredit Regulatory Authority (MRA) and Registrar of Joint Stock Companies (RJSC). The mechanism is framed as 'Coordinated Supervision Framework', with the aim to ensure proper synchronization of the various regulators, each having its individual role on different policy issues. A concept paper has been prepared and implementation of it may promote better coordinated regulations and supervision, while avoiding policy redundancy with synergic individual objectivity.

The fifth issue of the Financial Stability Report by Bangladesh Bank is published at such a watershed moment, while a number of major macroeconomic and financial developments have cropped up around the world. Accommodative monetary policies and fiscal consolidations that have been adopted by advanced economies to support demand, encourage corporate investment and repair balance sheet health, along with lower oil and commodity prices and also interest rates, have changed the economic landscape. Such actions contributed to accelerating the growth in the advanced economies, while slowing down the growth in emerging market and developing economies. At this moment the central banks of emerging markets and developing economies aim to cushion the impact of global headwinds and safeguard the resilience of their financial systems through enhanced surveillance and policy adjustment.

The fifth issue of Financial Stability Report includes additional new insights and developments in the financial sector of Bangladesh; hopefully it will be able to meet the stakeholders' expectations.

Finally, I would like to thank all of my colleagues working with the Financial Stability Department for their wholehearted contribution in preparing the report.



Shitangshu Kumar Sur Chowdhury
Deputy Governor

Table of Contents

	Page
Acronyms	xx
Executive Summary	xxiii
Chapter 1 Overview	1
Chapter 2 Macroeconomic Developments	11
2.1 GDP Growth	11
2.2 Inflation	11
2.3 Exports and Imports	12
2.4 Balance of Payments	12
2.5 Terms of Trade	13
2.6 Foreign Exchange Reserve	13
2.7 Foreign Aid and External Debt Repayment	13
2.8 Money and Credit Growth	14
2.9 Monetary Policy	14
2.10 Credit to Government (gross) by the Banking System	15
Chapter 3 Banking Sector	17
3.1 Financial system of Bangladesh	17
3.2 Asset structure of the banking sector	18
3.3 Nonperforming loans, provisions, and written-off Loans and Advances in the Banking Sector	20
3.4 Stressed Advances in Banking Sector:	27
3.4.1 Bank wise distribution of stressed advances ratio	27
3.4.2 Industry-wise stressed advances ratio	28
3.5 Concentration of Loans and advances in the Banking sector	31
3.6 Liability structure of the banking sector	32
3.7 Banking sector deposit safety net	34
3.8 Banking sector profitability	37
3.9 Capital adequacy	42
3.10 Capital regulation issued by BB in CY14	43
3.11 Free capital	44
3.12 Leverage ratio	45
3.13 Internal Capital Adequacy Assessment Process (ICAAP)	45
3.14 Solvency ratio	46
3.15 Banking sector liquidity	47
3.16 Performance of Branches of Local Banks Operating Abroad	49
3.16.1 Assets Structure of Overseas Branches	50
3.16.2 Liabilities Structure of Overseas Branches	50
3.16.3 Profitability of Overseas Branches	51
3.17 Islamic Banking	51
3.17.1 Growth of Islamic banking	51
3.17.2 Market share of Islamic Banks	52

	Page
3.17.3 Profitability of Islamic banks	52
3.17.4 Islamic banks' liquidity	53
3.17.5 Capital Position of Islamic banks	55
3.17.6 Classified investments of Islamic banks	56
3.18. Performance of New Banks	57
Chapter 4 Banking Sector Risks	61
4.1 Credit Risk Structure in Bangladesh	62
4.2 Market Risk Structure under Basel II	64
4.2.1 Interest Rate Risk	65
4.2.2 Exchange Rate Risk	65
4.2.3 Equity Price Risk	66
4.3 Operational Risk	67
4.4 Risk Mitigants	69
4.5 The Credit Rating Transition Matrix	72
Chapter 5 Stress Testing	75
5.1 Banking sector resilience	75
5.2 Credit risk	75
5.3 Liquidity risk	78
5.4 Market risk	78
5.5 NBFI sector resilience	79
Chapter 6 Non-Bank Financial Institutions	81
6.1 Introduction	81
6.2 Funding Sources	81
6.3 Deposit Safety Net	81
6.4 Assets Composition	82
6.5 Asset Quality	83
6.6 Capital Adequacy	83
6.7 Profitability	84
6.8 Liquidity	84
Chapter 7 Financial Markets	85
7.1 Money Market	85
7.1.1 Repo Market (with Bangladesh Bank)	85
7.1.2 Interbank Repo Market	85
7.1.3 Interbank Call Money and Interbank Deposit Market	86
7.2 Bond Market	88
7.2.1 Primary Treasury Auction Market	88
7.2.2 Secondary Treasury Securities Market	90
7.3 Stock Market	91
7.3.1 Major Index and Market Capitalization	92
7.3.2 Price Earnings (P/E) Ratio	95

	Page
7.4	Issues regarding financial market stability 95
7.4.1	Money and Bond Market Stability 95
7.4.2	Capital Market Stability 97
Chapter 8	Financial Infrastructure 99
8.1	National Payment Switch Bangladesh (NPSB) 99
8.2	Automated Cheque Clearing 99
8.2.1	Bangladesh Automated Cheque Processing System (BACPS) 100
8.2.2	Bangladesh Electronic Funds Transfer Network (BEFTN): 100
8.3	Mobile Financial Services (MFS) 101
8.4	e-Commerce and m-Commerce 102
8.5	Electronic Banking Operations 102
8.6	Central Depository System 103
8.7	Online Payment Gateway Service 104
8.8	Upcoming Developments 104
8.8.1	Real Time Gross Settlement (RTGS) 104
8.8.2	Central Counterparty (CCP) 106
Chapter 9	Foreign Exchange Market 109
9.1	Introduction 109
9.2	Foreign Exchange Assets and Liabilities 109
9.3	Foreign Exchange Contingent Liabilities 111
9.4	Foreign Exchange Turnover 111
9.5	Foreign Exchange Reserve Position 112
9.6	Exchange Rate Movement and Its Volatility 113
9.7	Movement of REER and Its Volatility 114
9.8	LC Opening and LC Settlement 114
9.9	Trade Balance and Wage Earners' Remittance 115
Chapter 10	Financial Inclusion initiatives and Other Developments in the Financial System 117
10.1	Financial Inclusion 117
10.1.1	Banking Services for Street Urchin (Street Children) and Working Children 117
10.1.2	Ensuring Banking services for physically challenged persons 118
10.1.3	Guidance notes for approval and operation of agent banking activities of banks 118
10.1.4	School banking as move of youngsters towards financial inclusion 118
10.1.5	Mobile Banking Services 119
10.2	Guideline on Early Warning System for Financial Institutions 119
10.3	Bangladesh Payment and Settlement Systems Regulations, 2014 121
10.4	Regulation on Electronic Fund Transfer 2014 121

	Page
10.5 New policy for covering risks with money in banks	121
10.6 Master Circular regarding prevention of Money Laundering and Terrorist Financing	122
10.7 Consolidated capital market investment limit for the Scheduled Banks and Financial Institutions	122
10.8 Differential Supervision Regime for Domestic Systemically Important Banks	122
10.9 Contingency Planning	123
10.9.1 Contingency Planning and Bank Intervention/Resolution Framework	123
10.9.2 Lender of Last Resort Framework	124
10.10 Coordinated Supervision Framework	124
Chapter 11 Microfinance Institutions (MFIs)	125
Appendices	131

List of Charts

	Page
Chart 2.1 : Bangladesh Real GDP Growth	11
Chart 2.2 : National CPI Inflation	11
Chart 2.3 : Export and Import Growth	12
Chart 2.4 : Current account balance to GDP ratio	12
Chart 2.5 : Trends of Trade, Current account and overall balance	12
Chart 2.6 : Terms of Trade of Bangladesh	13
Chart 2.7 : Import covered by reserves	13
Chart 2.8 : External Debt/ GDP ratio	14
Chart 2.9 : M2 and private credit (PC) to GDP	14
Chart 2.10 : Growth of credit to Government (Gross)	15
Chart 3.1 : Banking sector asset structure: end-December	19
Chart 3.2 : Top 5 and Top 10 banks based on asset size	19
Chart 3.3 : Distribution of NPL as percentage of outstanding loans	20
Chart 3.4 : Distribution of banks by classified loans to total loans ratio: end-December	21
Chart 3.5 : Gross and Net NPL as percentage of outstanding loans at end December, 2014	21
Chart 3.6 : Banking sector loan loss provisions: end December	22
Chart 3.7 : NPL and Rescheduled Loans	23
Chart 3.8 : Required Provision, Cash repayment and Outstanding Loans	24
Chart 3.9 : Top 5 and Top 10 banks based on NPL Size	25
Chart 3.10 : Year-wise classified loans ratios of the banking sector: end-December	26
Chart 3.11 : NPL Compositions	26
Chart 3.12 : NPL and NPL ratio during 2011-2014	26
Chart 3.13 : Bank-wise stressed advances ratio	27
Chart 3.14 : Industry-wise stressed advances ratio	28
Chart 3.15 : Banks' Share in three major Segments	28
Chart 3.16 : Composition of Stressed Advances	29
Chart 3.17 : Top 5 and Top 10 Banks based on Stressed Advances	29
Chart 3.18 : Stressed Assets as a percentage of total assets	30
Chart 3.19 : Banking sector liability structure: end-December 2014	33
Chart 3.20 : Banking sector deposit structure by types of account: CY 2014	33
Chart 3.21 : Top 5 and Top 10 banks on size of deposit	33
Chart 3.22 : Safety net on banking sector deposits	34
Chart 3.23 : Protection of more depositors on enhancement of insured deposit coverage level	34
Chart 3.24 : Usage of fund from DITF to liquidate two private commercial problem banks at current insured level.	35
Chart 3.25 : Usage of fund from DITF to liquidate two private commercial problem banks at proposed enhanced level.	35

Chart	3.26 :	Optimum number of small banks can be liquidated using fund from DITF.	36
Chart	3.27 :	Forecasted Depositors' Safety Net in next 5 years	36
Chart	3.28 :	Sector return on assets (ROA): CY 2014	38
Chart	3.29 :	Banking sector return on equity (ROE): CY 14	38
Chart	3.30 :	Bank Type wise Net-Interest Margin in CY 14	38
Chart	3.31 :	Banking sector non-interest expenses to total income	39
Chart	3.32 :	Banking sector income by sources	40
Chart	3.33 :	Banking sector monthly weighted average interest rate spread for CY14	40
Chart	B3.4.1 :	Lending Interest Rate, Deposit Interest Rate, Spread and Inflation	41
Chart	3.34 :	Capital adequacy ratio of the banking sector	42
Chart	3.35 :	Asset Share of Banks based on CAR in CY14	42
Chart	3.36 :	Tier-1 ratio and overall CAR of the banking industry	43
Chart	3.37 :	Distribution of risk weighted assets (RWA) in CY13	43
Chart	3.38 :	Equity and free capital of the banking industry(Billion BDT)	45
Chart	3.39 :	Leverage ratio of banks	45
Chart	3.40 :	Median Solvency ratio of banks, December, 2014	46
Chart	3.41 :	ADR of different types of banks. December 2014	47
Chart	3.42 :	Banking sector ADR: end-December 2014	47
Chart	3.43 :	Monthly Advance Deposit Ratio	48
Chart	3.44 :	Banking sector call money borrowings rate	49
Chart	3.45 :	Assets Composition of Bangladeshi Banks in abroad as on 31-12-2014	50
Chart	3.46 :	Liabilities Composition of Bangladeshi Banks in Abroad as on 31-12-2014	50
Chart	3.47 :	Growth of Islamic banking: end-December	51
Chart	3.48 :	Growth of Islamic banking: end-December	51
Chart	3.49 :	Market share of Islamic banks and the banking sector in CY 14	52
Chart	3.50 :	Selected income ratios for Islamic bank and banking industry	53
Chart	3.51 :	CRR and SLR maintained by Islamic banks in CY 14.	54
Chart	3.52 :	IDR (ADR) of Islamic banking and the overall banking sector as in CY 13 and CY 14	54
Chart	3.53 :	Capital Adequacy Ratio (CAR) of Islamic banks in CY 14	55
Chart	3.54 :	Classified investments (loans and advances) of Islamic banks and the banking industry in CY 14	56
Chart	3.55 :	ROA and ROE Comparison in 2014	58
Chart	3.56 :	Comparison by source of income in 2014	58
Chart	3.57 :	CAR of new banks.	58
Chart	3.58 :	Advance Deposit Ratio (ADR)	59
Chart	3.59 :	Deposit Rate	59
Chart	4.1 :	Credit Risk Structure	63
Chart	4.2 :	Market Risk Structure	65
Chart	4.3 :	Exposure rating status in Bangladesh	71

	Page
Chart 5.1 : Probable NPL ratio after minor shock	76
Chart 5.2 : Stress tests: minor shock on different credit risk factors	77
Chart 5.3 : Stress tests: minor shock on different risk factors	77
Chart 5.4 : Combined WAR-WIR Matrix-based Zonal Position (CY14)	80
Chart 6.1 : NBFIs' borrowings, deposits & capital trend	81
Chart 6.2 : NBFIs' financing trend	82
Chart 6.3 : NBFIs' classified loans and leases	83
Chart 6.4 : NBFIs' loan loss provisioning	83
Chart 6.5 : NBFIs' Capital Adequacy Ratio (CAR)	83
Chart 6.6 : NBFIs' profitability trend	84
Chart 6.7 : NBFIs' CRR & SLR	84
Chart 7.1 : Average Daily Turnover of Special Repo, LSF and Reverse Repo (January, 2014- December, 2014)	85
Chart 7.2 : Interbank Repo Turnover and Price (December, 2010- December, 2014)	86
Chart 7.3 : Call borrowing volume and monthly wt. avg. call money rate (January, 2014- December, 2014)	87
Chart 7.4 : Volume of T- Bills Auction Sales (January, 2014- December, 2014)	88
Chart 7.5 : Volume of T- Bonds Auction Sales, 2014	89
Chart 7.6 : Volume of Treasury Securities Auction Sales - Mandatory Devolvement (January, 2014- December, 2014)	89
Chart 7.7 : Monthly Volume of OTC Trade (2013- 2014)	91
Chart 7.8 : Buy side decomposition of the OTC trade in 2014	91
Chart 7.9 : Sell side decomposition of the OTC trade in 2014	91
Chart 7.10 : DSEX Index and Market Capitalization trend in 2014	92
Chart B7.4 : DSES Index trend in 2014	93
Chart 7.11 : Market Capitalization Ratio (FY 2011- FY 2014)	93
Chart 7.12 : Market Capitalization & GDP Growth (FY 2012-14)	93
Chart 7.13 : Turnover to market capitalization ratio. First figure shows long term TO to MCAP ratio (CY 2008- CY 2014). Second figure focuses on the 2014 trend only.	94
Chart 7.14 (a) : Decomposition of MCAP (Dec- 2014)	94
Chart 7.14 (b) : Decomposition of MCAP (Dec- 2013)	94
Chart 7.15 : Market Price Earnings Ratio (January, 2012- December, 2014)	95
Chart 7.16 : Short term rate volatility. Left figure shows volatility trend from December, 2012 to December, 2014. Right figure focuses on volatility characteristics of 2014 only. All figures in percent (%).	95
Chart 7.17 : Daily net investment in treasury instruments by banks- 2014	96
Chart 7.18 : Excess reserve maintained with BB by the banking industry- January, 2012- December, 2014	96
Chart 7.19 : Daily return distribution of DSEX in 2014 and 2013	97
Chart B7.5 : EPS growth of non- financial corporations listed at DSE- 2014	98

	Page
Chart 8.1 : Automated Cheque Clearing Operations	100
Chart 8.2 : Rate of Growth of MFS in CY 13 and CY 14	101
Chart 8.3 : Number of banks providing electronic banking facilities in CY 12, CY 13 and CY 14	102
Chart 8.4 : Total volume of electronic banking transactions in CY 12, CY 13 and CY 14	102
Chart 9.1 : Components of Foreign Exchange Assets- 2014	109
Chart 9.2 : Components of Foreign Exchange Liabilities- 2014	109
Chart 9.3 : Components of Foreign Exchange Contingent Liabilities	111
Chart 9.4 : Annual Foreign Exchange Turnover	112
Chart 9.5 : Monthly Foreign Exchange Turnover, 2014	112
Chart 9.6 : Foreign Exchange Open Position, 2014	112
Chart 9.7 : Gross Foreign Exchange Reserve Position	113
Chart 9.8 : Exchange Rate Movement	113
Chart 9.9 : Volatility of nominal exchange rate movement	113
Chart 9.10 : REER Movement	114
Chart 9.11 : LC opening	114
Chart 9.12 : LC settlement	114
Chart 9.13 : Month wise worker remittance (2012-14)	115
Chart 9.14 : Wage Earners' Remittance (2012-14)	115
Chart 9.15 : Coverage of trade deficit (2012-14)	115
Chart B10.1: HEAT Map	120
Chart 11.1 : Loans, Savings and Licensed Institutions	125
Chart 11.2 : Borrowers and members of MFI	126
Chart 11.3 : Average loan per participant	126
Chart 11.4 : MFI as percentage of banking industry in terms of loan disbursement	126
Chart 11.5 : NPL to Outstanding loan	126
Chart 11.6 : Outstanding Loan Disbursed by Top 20 MFIs as % of Total Loan disbursed by MFIs	127
Chart 11.7 : Sources of Funds	127
Chart 11.8 : MFI loan recipient 2012-13	128
Chart 11.9 : MFI loan recipient 2013-14	128

List of Tables

	Page
Table 3.1 : Changes in stressed advances ratio in CY14	28
Table 3.2 : Sector-wise Non Performing Asset Distribution (CY2014) at a glance	31
Table 3B.1 : Deposit Insurance Trust Fund and its composition(Amount in billion BDT)	35
Table 3.3 : International comparison of capital adequacy indicators	43
Table 3.4 : CRR and SLR for Banking Industry (End December, 2014)	48
Table 4.1 : Credit Risk in the Banking System	63
Table 4.2 : Group wise dissection of credit risk in the banking system	64
Table 4.2.1 : Interest Rate Risk in the Banking System	65
Table 4.2.2 : Exchange Rate Risk in the Banking System	66
Table 4.2.3 : Equity Price Risk in the Banking System	67
Table 4.3 : Operational Risk (OR) under Basel II basic indicator approach	67
Table 4.4 : Group wise dissection of operational risk in the banking system	68
Table 4.5.1 : One year Transition Matrix (2013-2014)	72
Table 4.5.2 : One year Transition Matrix (2012-2013)	73
Table 5.1 : Stress tests for credit risk: CAR and NPL ratio after shocks	75
Table 5.2 : Stress tests for credit risk: default by largest borrowers	76
Table 5.3 : Stress tests for credit risk: increase in NPLs in particular sector	76
Table 5.4 : Stress tests: banking sector liquidity risk	78
Table 5.5 : Stress tests: interest rate risk	78
Table 5.6 : Stress tests: exchange rate risk	79
Table 5.7 : Stress tests-equity price risk	79
Table 6.1 : NBFIs' sector-wise loans & leases as of end-December 2014	82
Table 8.1 : A holistic view of the Mobile Financial Service (MFS) status	101
Table 11.1 : Activities and initiatives taken by MRA	129

List of boxes

		Page
Box	1.1 : Bangladesh Financial System 2014: Stability Highlights	6
Box	3.1 : Impact of Rescheduled Loans in Banking Sector Asset Quality	23
Box	3.2 : Sector-wise loans concentration (CY14)	32
Box	3.3 : Depositor safety net in banking system	35
Box No	3.4 : Declining Lending Interest Rate Contributes to Economic Growth and Stability	41
Box	3.5 : Distance to Default Analysis	44
Box	4.1 : Basel III & the Internal ratings-based approach	69
Box	7.1 : Lender dominated call money market	87
Box	7.2 : Flattening Yield Curve?	90
Box	7.3 : DSEX Shariah Index (DSES)	93
Box	7.4 : Earnings growth of non- financial corporations' listed on DSE	98
Box	8.1 : Different Aspects of RTGS relevant to Financial Stability	105
Box	9.1 : Offshore Banking Unit (OBU)	110
Box	10.1 : Bank Health Index and HEAT Map	120

Appendices

	Page
Table i : Banking Sector Aggregate Balance Sheet	131
Table ii : Banking Sector Aggregate Share of Assets	132
Table iii : Banking Sector Aggregate Share of Liabilities	132
Table iv : Banking Sector Aggregate Income Statement	133
Table v : Banking Sector Assets, Deposits & NPL Concentration (CY14)	133
Table vi : Banking Sector Loan Loss Provisions	133
Table vii : Banking Sector Year-wise Classified Loans Ratios	134
Table viii : Classified Loan Composition (CY14)	134
Table ix : Banking Sector Deposits Breakdown excluding Interbank Deposit (CY14)	134
Table x : Banking Sector Call Money Investment & Borrowing	134
Table xi : Banking Sector Selected Ratios	135
Table xii : Banking Sector ROA & ROE (CY14)	135
Table xiii : Banking Sector Year-wise ADR at end December	135
Table xiv : Banking Sector ADR in CY14	135
Table xv : Banking Sector Month-wise Deposit & Advance Rate (CY 14)	136
Table xvi : Islamic Banks Aggregate Balance Sheet	136
Table xvii : Islamic Banks Aggregate Income Statement	137
Table xviii : Share of Islamic Banks in the Banking Sector (CY 14)	137
Table xix : Selected Ratios of Islamic Banks and the Banking Sector (CY14)	138
Table xx : Islamic Banks' Capital Adequacy Ratio (CY14)	138
Table xxi : Islamic Banking Sector Investment (Credit)-Deposit Ratio (as of 31.12.2014)	138
Table xxii : Stressed Advances Ratio in Different Segments	138
Table xxiii : Overseas Branches Aggregate Share of Assets & Liabilities	139
Table xxiv : Stressed Assets in Banking Sector	139
Table xxv : Stressed Concentration in Banking Sector (CY14)	139
Table xxvi : NBFIs' Aggregate Balance Sheet and Income Statement	140
Table xxvii : NBFIs' Other Information	141
Table xxviii : NBFIs' Liquidity Position	141
Table xxix : NBFIs' Summary Performance Indicators	141
Table xxx : NBFIs' Sector-wise Distribution of Loans and Leases	142
Table xxxi : Interbank Repo Volume and Prices	142
Table xxxii : Treasury and BB Bill Yield	142
Table xxxiii : Equity Market Development	143
Table xxxiv : Automated Cheque Clearing Operations	143
Table xxxv : Volume of Electronic Banking Transactions	143
Table xxxvi : Number of Banks Providing Electronic Banking Services	143
Table xxxvii : Comparative picture of Mobile Financial Services (MFS) in last 3 years	144
Table xxxviii : External Credit Assessment Institutions (ECAIs)	144
Table xxxix : Microcredit Regulatory Authority	145

Acronyms

AD	Authorized Dealer Bank Branches
BACH	Bangladesh Automated Clearing House
BB	Bangladesh Bank
BBS	Bangladesh Bureau of Statistics
BCBS	Basel Committee on Banking Supervision
BDT	Bangladeshi Taka
BOP	Balance of Payment
CAR	Capital Adequacy Ratio
CBS	Core Banking Solution
CDBL	Central Depository Bangladesh Limited
CDR	Credit Deposit Ratio
CPI	Consumer Price Index
CR	Credit Risk
CRC	Credit Rating Company
CRR	Cash Reserve Requirement
CSE	Chittagong Stock Exchange
CY	Calendar Year
DFID	Department for International Development (UK)
DSE	Dhaka Stock Exchange
ECAI	External Credit Assessment Institutions
EDW	Enterprise Data Warehouse
FC	Foreign Currency
FDD	Foreign Demand Draft
FI	Financial Institution
FX	Foreign Exchange
FY	Fiscal Year
GDP	Gross Domestic Product
HBFC	House Building Finance Corporation
HHI	Herfindal-Hirschman Index
HV	High Value
ICB	Investment Corporation of Bangladesh
IDR	Investment Deposit Ratio (for Islamic banks)
IMF	International Monetary Fund
IRR	Interest Rate Risk
IT	Information Technology
L/C	Letter of Credit
M2	Broad Money
MCR	Minimum Capital Requirement
MR	Market Risk
MT	Mail Transfer
NBFI	Non-Bank Financial Institutions

NDA	Net Domestic Assets
NFA	Net Foreign Assets
NFCD	Non-Resident Foreign Currency Deposit Accounts
NII	Net Interest Income
NIM	Net Interest Margin
NPA	Non-Performing Assets
NPL	Non-Performing Loan
NPM	Net Profit Margin (for Islamic banks)
NSD	National Savings Directorate
OD	Over Draft
OR	Operational Risk
OTC	Over the Counter
P/E	Price Earnings
RBCA	Risk Based Capital Adequacy
RBI	Reserve Bank of India
REER	Real Effective Exchange Rate
RFCD	Resident Foreign Currency Deposit Accounts
RMU	Risk Management Unit
ROA	Return on Assets
ROE	Return on Equity
RV	Regular Value
RWA	Risk Weighted Assets
SB	Sonali Bank
SBP	State Bank of Pakistan
SEC	Securities & Exchange Commission
SME	Small and Medium Enterprise
T-bill	Treasury Bill
TT	Telegraphic Transfer
USD	United States Dollar

EXECUTIVE SUMMARY

Bangladesh Bank (BB) has been publishing the Financial Stability Report (FSR) since 2010. The report includes assessments of key risks to the financial sector, a summary of important policy developments, and a description of vital institutions including the payment systems infrastructure of Bangladesh that are important for financial stability.

BB seeks to contribute to the longer-term resilience of the country's financial system through the FSR, which brings together the Bank's ongoing policy developments in monitoring the growth in scale and scope of the system with a view to identifying potential risks to its overall soundness. The report also highlights the efforts of Bangladesh Bank in responding to emerging challenges.

The current issue of the Report (FSR 2014) contains an assessment of the stability and resilience of the domestic financial system using available economic and financial data up to end-December 2014. The report reviews macroeconomic developments, analyses the financial performance of the banks and non-bank financial institutions, sets out the domestic payment systems infrastructure, reveals the performance of the money and capital markets, and assesses the key risks to the financial sector and resilience to those as well as highlights some recent developments.

The year 2014 showed a moderate level of stability in the Bangladesh financial system, which along with global developments has influenced the economic landscape of Bangladesh. Despite only a moderate recovery in the global economic situation, the Bangladesh economy was successful in maintaining a growth momentum in financial year 2014 (FY14). The growth engine showed a slight progress, with a growth in gross domestic product (GDP) ticking up to 6.1 percent in FY14 from 6.0 percent in FY13.

Due to some macroeconomic volatilities during the last part of the calendar year 2013(CY13), private investment declined while public investment rose. CPI inflation started to decrease from February 2014 and came down to 7.0 percent in December 2014. Export earnings increased at a higher rate than imports; the export-GDP ratio increased while the import-GDP ratio declined compared with the respective positions in FY13. Foreign exchange reserves were adequate to meet more than six months' import payments. Bangladesh Bank's monetary stance in CY14 was intended to maintain the precise balance between keeping inflation restrained and supporting economic growth in the context of the global and domestic macro-economic situation.

Banks in Bangladesh are adequately capitalized and have increased their loan loss provisions, but face risks stemming from the concentration of corporate credit. In CY14, banking sector assets have increased and newly established banks started to consolidate their operations. Besides, banks took a cautious approach in loan disbursement and temporarily switched to safe liquid investments, a move attributable to the volatile business and macroeconomic environment. Low pickup of investments might have contributed to low credit

growth in the banking sector. Profitability recorded a minor decline and asset quality slightly deteriorated compared with those in CY13.

Concentration of assets within a few banks declined somewhat in CY14, which is a positive indicator of financial stability. However, the stressed advances ratios of last three consecutive years indicate a stagnant situation in loan recovery and lower cash inflow. State-owned Commercial Banks (SCBs) and Specialized Development Banks (SDBs) possessed higher stressed advances ratios in comparison with Private Commercial Banks (PCBs) and Foreign Commercial Banks (FCBs). Besides, the non-performing loans (NPLs) were distributed across the sectors roughly in the same manner as total loans were distributed, signifying that all sectors had been more or less affected by the problem associated with NPLs.

Lower growth in credit coupled with an increasing trend of NPLs worsened the performance of the banking sector. During CY14, the predominance of classified loans was the major worry of the SCBs.

With the objective to improve their capital base, in addition to recapitalization of SCBs by injecting BDT 50 billion in FY14, the government has also made a budgetary allocation of BDT 55 billion to be disbursed in FY15. In CY14, BB decided to commence implementation of Basel III framework in the banking sector of Bangladesh. With a view to assessing the preparedness of the banks for implementing the framework, BB has conducted a quantitative impact study. A stable credit rating and very little downward migration of rating of the rated entities in 2013-2014 confirm the resiliency of the financial system.

Risks stemming from non-bank financial institutions (NBFIs) remain broadly contained. The NBFIs remain well capitalized and their balance sheets are relatively small compared with the scheduled banks.

In CY14, an increasing trend of capital adequacy provides a moderately sound financial base and risk-taking capacity of the NBFIs, and the asset quality of the NBFIs recorded an improvement which also contributed to a slight progress in profitability.

The sensitivity analysis on the banking sectors' credit portfolio reveals that default of the largest borrowers would have the highest impact on the banks' soundness. In contrast, stress testing results for the NBFIs sector indicates that most of the NBFIs are resilient to adverse events.

Payment systems infrastructures are being upgraded and continue to operate with high levels of availability. Potential risks arising from failures in the payment systems infrastructures have not yet materialized. Along with the existing regulatory framework for payment and settlement systems, Bangladesh Bank adopted the Bangladesh Payment and Settlement System Regulation, 2014 and Regulations on Electronic Fund Transfer Network, 2014, in order to provide legal and regulatory support for bringing further progress in the electronic fund transfer system.

The money and capital markets were more stable. The highest index return was observed during the month of September while the lowest was recorded during the month of November. Market capitalization increased notably over the last year. In CY14, the turnover to market capitalization ratio improved and became more consistent than that of CY13. Major money market indicators such as the call money, interbank repo and short-term Treasury bill rates were found to be rising. This was due to liquidity shortages faced by some banks for a short span of time. However, treasury operations with BB and interbank market operations smoothly offset those liquidity needs. A number of regulatory measures have been taken by the policy makers, including proposed amendments to the Securities and Exchange Commission (SEC) Act. Besides, the Asian Development Bank has been implementing a capital market development programme during 2011-14.

Moreover, in CY14, some other important developments also took place in the financial system of Bangladesh, e.g., broadening of financial inclusion initiatives, identification of Domestic Systemically Important Banks (D-SIBs), Emergency Liquidity Assistance and Bank Resolution, issuing roadmap and guidelines for implementation of Basel III framework.

Chapter 1

Overview

Macroeconomic conditions of Bangladesh, influencing the financial system, were mostly favorable in calendar year 2014. The positive development for financial stability was underpinned by cautious monetary policy and responsive fiscal policy, despite some upward pressure on prices caused by fairly optimistic expectations of the market. Despite only a moderate recovery in the global economic situation, the Bangladesh economy was successful in maintaining a growth momentum in financial year FY14¹. The real GDP growth rate recorded a minor increase in FY14 from that of FY13. The expansion of the economy during FY14 was broad-based, registering a positive growth by all sectors and sub-sectors of the economy.

Monetary policies of Bangladesh Bank remain successful in cutting inflation. BB has been adopting monetary policy stance of keeping the inflation level low in order to maintain stability in real growth of GDP. In recent times, inflation has been sliding down because of the decrease in global oil prices, falling import prices of goods, and no supply disruptions. In Bangladesh inflation is generally more related to increases in the cost of production than to monetary variables. CPI inflation did, in fact, start to decrease from February 2014 and came down to 7.0 percent by December 2014.

Current account surplus declined. Though a higher financial inflow led the overall balance of payments to record a surplus of BDT 426.1 billion in FY14, the current account balance as a percentage of GDP recorded a moderate decline from that of FY13.

Foreign exchange reserves were adequate to meet more than six months' import payments. With the intention to strengthen the long-term diversified horizons of the external asset portfolios, BB endowed the foreign exchange reserves with sovereign/supranational/highly reputed corporate bonds, U.S. Treasury Bills, and short term deposits with highly reputed commercial banks.

Broad money growth slightly declined. Broad money growth was slightly lower in FY14 compared to that of the previous year, due to the lower growth of net foreign assets and public sector credit. The money multiplier increased compared with that of the last financial year attributable to net changes in the reserve-deposit ratio and currency-deposit ratio. The reserve-deposit ratio increased to 0.085 in FY14 from 0.084 in FY13 while the currency-deposit ratio declined to 0.123 during the period from 0.126 in FY13.

Growth supportive monetary policy continued. Bangladesh's monetary policy stance in CY14 was intended to maintain the precise balance between keeping inflation restrained and supporting economic growth in the context of the global and domestic macroeconomic

¹ GDP in Bangladesh is calculated on a yearly (financial year) basis.

situation. **In the first-half of CY14**, monetary policy aimed to downsize average inflation to 7.0 percent while allowing enough credit growth to stimulate inclusive growth. **However, in the second half**, the monetary policy stance aimed to defend the country's external sector stability. BB decided to raise the Cash Reserve Requirement by 50 basis points in mid-2014, with effect from 24 June 2014. Besides, BB aimed to contain annual reserve money growth to 15.5 percent and broad money growth to 16.0 percent by December 2014. Reserve money recorded an increase of 14.79 percent (y-o-y) at the end of December 2014 compared to the increase of 13.30 percent at the end of December 2013. Broad money recorded an increase of BDT 87281.70 crore or 13.4 percent (y-o-y) at the end of December 2014 against the increase of BDT 88060.60 crore or 15.6 percent at the end of December 2013.

Deceleration in the growth of credit (gross) to the government. The growth of credit to the government (gross) significantly declined in FY14 from that recorded in FY13 with a view to further limiting any crowding out of private sector borrowings. The track record of containing government borrowings well within budgetary limits was expected to continue in future.

BB continued to support a market based exchange rate while seeking to avoid excessive foreign exchange rate volatility. BB has relaxed restrictions on foreign investors' borrowing from the local market and their ability to access working capital financing from their parent companies with an aim to attract foreign investments.

The banking system demonstrated resilience in CY14. Banks took a cautious approach in loan disbursement and moved to safe liquid investments, a stance attributable to the volatile business and macroeconomic environment. Government bills and bonds now constitute a sizable portion of the total interest-earning asset portfolio of the banks. Banking sector assets have increased, and newly established banks started to consolidate their operation. The asset structure of the banking sector evolved steadily despite an uncertain macroeconomic scenario in 2014. Banks focused more on safer liquid investments in government securities rather than relying on growth in private loans and advances. Unstable macroeconomic conditions and the withdrawal of relaxation in the loan rescheduling standard might have contributed to accumulation of higher reported Non-Performing Loans (NPLs) in CY14, affecting reported asset quality and profitability. However, maintenance of higher provisions, together with an impressive "maintained-to-required" provision ratio indicates the presence of a higher loss absorption capacity in the banking system. Moreover, capital injections from the government to the State owned commercial banks as well as from parent offices of some foreign banks have strengthened the capital adequacy of banks and resiliency of the banking system.

Profitability recorded a minimum decline and liquidity pressure was manageable. The net profit of banking sector decreased by 17.3 percent in CY14. The growth in operating performance combined with a decrease in net profit could be attributed to the extensive growth in bad debt provisions maintained by the banks. Both the factors substantially increased the provision maintenance requirement and decreased net income. Accordingly, banking sector return on equity (ROE) had decreased, parallel to the decrease in net profit in CY14. Liquidity pressure was manageable, as call money rates were low and the Advance to Deposit ratio (ADR) of the industry was within an admissible level.

Asset concentration recorded a decline while most of the income-earning assets registered positive growth. Concentration of assets within a few banks has reduced in CY14, which is a positive indicator of financial stability. There exists a moderate level of sectoral loan concentration in the banking industry. Concentration increased slightly compared with CY13, but it still remains at a moderate level, not posing that much threat to instability in the system. Besides, income-generating assets such as loans, advances, and investments showed positive growth compared with end-December 2013 indicating business confidence in the financial system.

Asset quality slightly deteriorated in CY14 compared with that of CY13. Stringent identification of problem loans could be the reason for the increase in nonperforming loans (NPL). The overall NPL scenario is quite similar to that of earlier years. The temporary relaxation in loan rescheduling standards allowed in 2013 may have helped the banks to withstand an immediate negative impact on their profitability and may have helped the borrowers in servicing their debts as well. The rescheduled loans under the relaxation might not have had a substantial negative impact on the overall asset quality of the bank's investment portfolio.

It is noted that foreign banks usually maintain relatively higher provisions against NPLs compared with other categories of banks. Due to this fact, they have the lowest net NPL ratios despite having higher gross NPL ratios than PCBs.

Higher NPLs required the banks to maintain higher loan loss provisions in CY14. The aggregate provisions maintained in CY14 increased by BDT 32 billion. Though there has been observed a slight provision shortfall due to the higher provision requirement, the overall banking industry appears to have maintained provisions in line with current BB policies.

Aggregate loans written off in CY14 remained almost similar to that of CY13. A total of BDT 62.6 billion of adversely classified loans were written off from the books in CY14, compared with BDT 63.0 billion in CY13. Despite the loan write-off, the legal procedure against the defaulted borrowers will continue and initiatives will be continued by the banks for the recovery of the written-off loans.

Improvement took place in NPL concentration. The concentration of NPLs among banks has decreased marginally in the review year indicating a positive sign for the banking industry. Pertinently, the ratio of bad loans to total classified loans remains at a very high level. However, a marginal improvement was achieved in the ratio in CY14. There is little subsequent risk to profitability and capital adequacy for the presence of these loans as banks are required to maintain provisions of 100 percent of the value of bad loans.

A stagnant situation prevailed in loan recovery. The stressed advance ratios of the last three consecutive years indicate a stagnant situation in loan recovery and lower cash inflow. Though the stressed advances ratio in CY14 remained almost the same as compared with that of CY13, minor changes observed in the distribution of banks' stressed advances in CY14; 27 banks with

nearly 28 percent of the total advances of the industry successfully managed to reduce their stressed advances ratio, and 17 banks with almost 10 percent of total advances of the industry experienced no change in CY14. State-owned Commercial Banks (SCBs) and Specialized Development Banks (SDBs) possessed higher stressed advances ratios in comparison with Private Commercial Banks (PCBs) and Foreign Commercial Banks (FCBs). Higher stressed advances ratios are also observed in the Medium and Large loans categories for both SDBs and SCBs. It is to be noted that the high volume of NPL is taking the toll on capital adequacy and profitability of the banks, reducing net interest income and demanding the expensive creation of ever-higher provisions. Rescheduled advances have received a great deal of attention but have declined as a percentage of total gross advances over the year. Pertinently, the NPLs are distributed across the sectors roughly in the same manner as total loans are distributed, signifying that all sectors have been more or less affected by the problem of NPLs (with the exception of agriculture, which is still over-represented).

Deposit growth rate slowed down a little in CY14. Deposits account for the major part of the liabilities of the banks. The growth rate of deposits slowed down a little in CY14, probably due to higher rates offered by government bonds which increased the opportunity cost of bank deposits. Stable term deposits are the major portion of the total deposits, which is desirable from a financial stability point of view. Deposit concentration among the banks was reduced in CY14, which is also an encouraging sign towards ensuring financial stability.

The banking sector showed an impressive operating performance. Core banking sector performance was satisfactory primarily due to its efficiency in generating non- interest and investment income, but the higher provision requirements for NPLs caused net income to drop below the level of CY13. Banking sector profitability, measured by Return on Assets (ROA) and Return on Equity (ROE), recorded a minor decline in CY14 with respect to the same of CY13. Net interest margin (NIM) decreased and banks relied more on non- interest and investment income to generate profit. A higher portion of investment portfolio allocated to treasury instruments also helped to generate investment income. The decrease in NIM may be attributed to higher classified loans. The interest spread has widened in CY14 compared with that of CY13. The weighted average spreads of all banks have remained close to the directed benchmark following BB's instruction over the years. However, spreads continue to remain high for FCBs, whose average spread is almost double than that of SCBs and SDBs.

The capital adequacy of the banking industry recorded a minor decline in the review year. Compared with end-December 2013, the proportion of banks compliant with the minimum capital adequacy ratio (CAR) remained mostly unchanged as of end-December 2014; 91 percent of the scheduled banks were able to maintain their capital adequacy ratio at 10.0 percent or higher in line with Pillar 1 of the Basel II capital framework.

In CY14, BB decided to commence implementation of Basel III framework in the banking sector of Bangladesh. With a view to assessing the preparedness of the banks for implementing the framework, BB has conducted a quantitative impact study.

Banks continued to maintain a rise in free capital and an acceptable leverage ratio. A steady and continuous rise in free capital indicates higher resilience of the banking system. Apart from capital adequacy, the free capital of banks, defined as equity minus fixed assets, could also serve as a financial soundness indicator, especially in the event of any shock. Banks continue to maintain an adequate leverage ratio (Equity/Total Assets) which also strengthens the loss absorbing capability of the banking system. In CY14, the majority of the banks maintained a leverage ratio (equity/total assets, not risk-weighted) higher than 5 percent.

Liquidity stress of the banking sector remained at a manageable level in CY14. The banking industry did not face liquidity pressure in CY14, as evidenced from the trend of call money rates and the Advance to Deposit Ratio (ADR) due to various prudential stances of BB. In CY14, both call money rates and the ADR remained stable without showing any abrupt volatility, suggesting that the banking system was quite stable with sound liquidity management.

Total assets of the overseas branches recorded a stable increase. In CY14 the total assets of the overseas branches grew more than 42 percent from 2013 figures due to the increase in customer credit. However, the share of assets and liabilities of overseas banks are still insignificant, and do not possess any threats to the system yet. Correspondingly, the total liabilities of the overseas branches grew almost 50 percent in comparison with CY13. In CY14, the total aggregate net profit of the overseas branches grew by more than 48 percent from CY13.

Islamic banks showed a higher growth. In CY 14, compared to the previous year in terms of assets, deposits, investments and loans and advances and also in terms of shareholders' equity, Islamic bank showed higher growth. The aggregate NPL ratio of Islamic Shari'ah banks was 4.8 percentage points lower than the banking industry's NPL ratio. Although the growth of Islamic banks was higher than that of the conventional banks in CY14, the market share of Islamic banks increased only slightly due to the incorporation of nine new banks in the industry, only one of which being an Islamic bank. The total market share of the Islamic banks is less than one-fifth of the total banking sector. The oldest and largest Islamic bank possesses 40.0 percent of total Islamic banks' assets and liabilities, and 7.0 percent of total banking sector assets and liabilities.

Profitability ratios of Islamic banks remained steady in CY14 compared with those of CY 13. The key profitability indicators, ROA and ROE show that Islamic banks' profitability was higher than the same of overall banking industry. Despite the presence of a problem bank in the Islamic banking group, the ROE of the Islamic banking industry was moderately higher than that of the overall banking industry.

The Investment-Deposit Ratio (IDR) of all Islamic banks recorded a minor decline in CY14 with respect to CY13. Most of the Islamic Shari'ah banks were compliant in regulatory capital. Under the Basel-II accord, given the minimum Capital Adequacy Ratio (CAR) of 10 percent, a total of 7 out of 8 Islamic banks have complied well with the regulatory requirement in CY 14. The stronger capital base ensures that most of the Islamic banks are well equipped to meet various kinds of shocks they are exposed to. Encouragingly, the NPL ratio of the Islamic banking industry was almost half of the NPL ratio of the overall banking industry.

Box 1.1 : Bangladesh Financial System 2014: Stability Highlights

Factors that contribute to improving the stability situation

- Diversified lending and deposit base for financial institutions ;
- External openness of the financial sector;
- Emphasis on sound risk governance in banks;
- Ample liquidity at individual institutions and in the system as a whole;
- Broad-based financial inclusion programs;
- Improvement in the inflation situation;
- Satisfactory international reserves.

Necessary measures for market participants

- Complete preparatory works for effective implementation of Basel III framework;
- Banks to strengthen their internal control framework;
- Financial intermediaries to improve corporate governance.

Necessary measures for policy makers

- Effective 'resolution regimes' and 'lender-of-last-resort' framework for banks;
- Introduce coordinated supervision framework in the financial system.

Risk-Weighted Assets for credit Risk increased whereas Market risk decreased. The share of Risk Weighted Assets (RWA) attributed to credit risk was 85.7 percent of the total RWA of the banking system, whereas the RWA associated with market risk and operational risk were 5.3 and 9.0 percent respectively in CY14. Under market risk management, interest rate risk, equity price risk and foreign exchange risks are monitored. The share of RWA assigned to interest rate risk (IRR) was only 1.6 percent of total RWA in the banking system, while IRR contributes 32.2 percent of the RWA related to market risk. The share of RWA assigned to operational risk was 9.0 percent of the total RWA of the banking system, which is 1.7 times higher than that of the RWA against market risk in the same time period.

The overall financial system is not exposed to any pressing stability threat. A stable credit rating and very little downward migration of rating of the rated entities in 2013-2014 confirm the resiliency of the financial system. No apparent major instability was visible in our economy in CY14 from the standpoint of the rating of the transition matrix; the transition matrix shows no sign of immediate credit risk shock in the financial sector and major vulnerability in the system.

Banking sector shows mixed resilience. A number of single-factor sensitivity stress tests covering credit risk, market risk and liquidity risk are conducted to assess the resilience of the banks. The sensitivity analysis on the banking sectors' credit portfolio reveals that default of the largest borrowers would have the highest impact on the banks' soundness.

The results of liquidity stress tests reveal that the individual banks and the banking system as a whole are resilient against specified liquidity stress scenarios. Furthermore, the banking industry is found to be fairly resilient in the face of various market risk shocks (interest rate, exchange rate and equity price movements).

The NBFIs' stress test technique is primarily based on a simple sensitivity analysis, using four risk factors, namely interest rate, credit, equity price and liquidity. The overall financial strength and resilience of an NBFI is identified by plotting its achieved ratings in a weighted average resilience-weighted insolvency ratio matrix (in short WAR-WIR Matrix). The result reveals that 23 NBFIs out of 31 were mostly resilient while 8 NBFIs necessitate supervisory attention.

In CY14, balance sheet of the NBFIs grew considerably. NBFIs' total assets increased by 19.3 percent in CY14 compared with that of CY13. The major portion of NBFIs' funds was deployed in loans and leases, accounting for 71.3 percent of total assets in CY14. The borrowings, deposits and capital of NBFIs increased by 18.3 percent, 24.3 percent and 41.9 percent respectively, in CY14, compared with those of the previous year.

Asset quality of the NBFIs recorded an improvement. The ratio of classified loans and leases to total loans and leases was 5.3 percent, in CY14, 30 basis points lower from the level recorded in CY13, attributable to the proportionately higher increase in the total loans and leases in CY14. During CY14, an amount of BDT 11.0 billion in loan loss provisions was maintained against a requirement of BDT 10.0 billion, representing a provision maintenance ratio of 110 percent and a coverage ratio of 55.5 percent of classified loans and leases.

NBFIs capital adequacy ratio (CAR) recorded a notable increase in CY14. The capital adequacy ratio (CAR) for the NBFIs stood at 21.2 percent at end-December 2014, an improvement from the 18.3 percent recorded at end-December 2013. This position was well in excess of the regulatory minimum requirement of 10.0 percent, although 1 NBFI out of 31 failed to maintain the regulatory minimum requirement.

NBFIs profitability slightly increased. ROA and ROE were 1.8 percent and 9.9 percent respectively at end-December 2014, a slightly increasing trend compared with the previous year.

NBFIs sector continued to remain compliant in CRR and SLR. As of end-December 2014, NBFI sector maintained a 5.7 percent CRR and 27.0 percent SLR. However, 3 NBFIs failed once to maintain minimum CRR during CY14.

A spike in volume of interbank repo was observed in the last quarter of 2014. The interbank repo rate (monthly weighted average) increased by 203 basis points from June 2014 to October 2014, accompanied by increased volatility in the second half of 2014. An increasing volume of interbank repo, over the year, suggests that market players are becoming more interested in collateralized transactions than in unsecured ones. Pressure on liquidity seemed to be eminent in the last quarter of 2014, attributable to a rise in the liquidity support facility (LSF) with a high interbank repo rate from October 2014.

The call money market was dominated by few banks. Like the interbank repo rate, a call money rate hike was also observed from June 2014, and the rate showed high volatility in the latter part of 2014. Participation of NBFIs in both the call money and the interbank deposit market was significant. Though government borrowing from banking system decreased in the later part of 2014, mandatory devolvement to primary dealers (PDs), Non-PDs, and BB increased. BB slowed down issuance of 30-day BB bills from July 2014 and eventually stopped issuing the instrument in December 2014.

Private commercial banks were the major participants in the OTC market. They nearly held 42 percent and 60 percent of the market share of the buy and sell volume respectively. Bangladesh Bank held nearly 12 percent of the sell volume, showing that the central bank is using this platform to maintain monetary discipline. In 2014, the volume of Over-the-Counter (OTC) transactions of treasury securities increased by 19.5 percent compared with that of 2013. BB used this market to sell off treasury securities and over 2014, private commercial banks were the most active participants. Although BB generally withdrew liquidity by its security sales in 2014, the OTC market remains another source of liquidity to the private commercial banks. Monthly average yield to remaining maturity stayed within the band of 8.6 percent to 10.6 percent.

The capital market was more stable. In 2014, the P/E ratio increased by 17.9 percent due to the lower earnings per share (EPS) growth rate reported by the listed companies at Dhaka Stock Exchange (DSE). In 2014, DSE improved both in terms of index value and trade volume (in BDT). The number of listed companies and issued securities grew at a reasonable pace.

The DSEX (major index) increased by 14.0 percent while market capitalization grew by 23.1 percent. The market was volatile in the second half of 2014. The market capitalization ratio improved slightly; however, market liquidity declined in the last quarter of 2014. The movements tended to be trendy; meaning any upward or downward impact upon the market showed persistence over the subsequent months.

Market volatility was more prominent in the second half of CY14. The highest index return observed during the month of September while the lowest was recorded during the month of November. In CY14, the turnover to market capitalization ratio improved and became more consistent than that of CY13. Major money market indicators such as the call money rate, interbank repo, and short-term Treasury bill rates were found to be rising. This was due to liquidity shortages faced by some banks for a short span of time. Treasury operations with BB and interbank market operations smoothly offset those liquidity needs.

Notable progress took place in the area of electronic banking. Along with the existing regulatory framework for payment and settlement systems, in April 2014 Bangladesh Bank adopted the Bangladesh Payment and Settlement System Regulation (BPSSR), 2014 and Regulations on Electronic Fund Transfer Network, 2014, in order to provide legal and regulatory support for the growing process of electronic transfer of funds. Bangladesh Bank has taken an initiative to implement a project named "Institutional Support for Migrant Workers' Remittances; Real Time Gross Settlement (RTGS)" jointly funded by the ADB and Government of Bangladesh (GoB). The project is expected to go live in September 2015.

The foreign exchange (FX) market demonstrated notable stability and resilience. There was a considerable fluctuation in the overall net FX liquidity position during 2014. The Bangladesh Taka demonstrated a mixed movement against the US dollar during CY14. The BDT appreciated during January-September 2014 and depreciated during October-December, 2014. As of end December 2014, the total amount of foreign exchange-denominated assets and liabilities were only USD 4.2 billion and USD 4.0 billion respectively, representing only about 3.6 percent of banking sector aggregate assets and about 3.4 percent of liabilities. Foreign exchange-denominated assets are held by banks in six major accounts; namely BB clearing account, cash holding, debit balance in nostro account in local banks, foreign currency bills purchased off-shore banking units (OBUs) and others.

Contingent liabilities constitute an important part of FX liabilities. Banks are participating in this lucrative market to earn more profit without the burden of carrying additional on-balance-sheet liabilities. About 67.0 percent of foreign exchange-denominated contingent liabilities are held as letter of credit, 27.0 percent of the contingent liabilities are due to acceptances, while 6.0 percent are for letter of guarantee purposes.

The FX market was more active in Bangladesh during the CY14 than in the previous year. On an average, almost 91.9 percent of inter-bank FX transactions were done in USD. The monthly average trade volume decreased in CY13, but rose upward significantly by 12.9 percent in CY14.

The foreign exchange market displayed a significant resilience with low volatility in terms of the movement of nominal exchange rate in the review year. The dispersion between the minimum and the maximum USD-BDT rate was 0.46, compared with the same of the three preceding calendar years. It is observed that the real effective exchange rate (REER) was more volatile than the nominal exchange rate in CY14.

The microfinance sector does not pose any immediate threat to the stability of the financial system. The lower incidence of nonperforming loans compared with that of the banking industry suggests that effective check and balance mechanisms are maintained in the microfinance sector. The aggregate size of the microfinance institutions (MFIs) has increased over the years, although it remains very insignificant compared with that of the banking industry. The experience of loan defaults in the microfinance sector is consistently lower than the banking industry which is a very encouraging sign.

Loan disbursement was relatively concentrated among a few institutions and intensity of supervision is stricter for those institutions. Despite the initiatives of the Microcredit Regulatory Authority (MRA), the top 20 institutions still account for a substantial amount of loan disbursement in this sector. To counter risk from the large MFIs, MRA has enhanced its supervision on the large MFIs, and the top 20 MFIs are being inspected more frequently and intensively. Besides, Loan disbursement was relatively more concentrated among the large and ultra-large borrowers both in terms of distributed amounts and number of recipients.

The Microcredit Regulatory Authority (MRA) is playing a commendable role in supervising and monitoring the MFIs in Bangladesh to ensure stable and sustainable growth in the MFI sector.

In CY14, a number of developments took place in the area of financial inclusion, identification of the Domestic Systemically Important Banks (D-SIBs), Emergency Liquidity Assistance and bank resolution.

- (i) BB issued BRPD Circular No.05 in CY14, to ensure the "Banking Services for Street Urchin (Street Children) and Working Children." Under this circular, all the scheduled banks are to allow street urchins and working children to open savings bank accounts for as little as Tk.10 through an NGO (listed by BB).
- (ii) Ensuring banking services for physically challenged persons. The actual benefits of financial inclusion will be elusive unless physically challenged persons are brought under the umbrella of financial access. BB instructed banks to give preference to disabled persons as entrepreneurs.

- (iii) BB issued guidance notes for approval and operation of agent banking activities of banks. Agent banking aims at serving the underserved population through engaged agents under valid agency agreements in limited scale banking and financial services. Banks have been instructed to give most emphasis to the rural areas to cover the lion's share of the target group, but not to ignore the rest of the target group by concentrating on the urban area in a limited scope.
- (iv) Movement of school banking as move of youngsters towards financial inclusion. Making the youngsters financially literate could result in a strong future financial base for the nation.
- (v) In 2014, the national parliament of Bangladesh passed the "Regulation on Electronic Fund Transfer 2014" through which Bangladesh Bank has been empowered to look after the EFT system. The regulation will help the related stakeholders to get the best outcomes from EFTs.
- (vi) The Insurance Development and Regulatory Authority (IDRA) of Bangladesh have initiated a new non-life insurance policy aimed at covering risks from the unfortunately frequent incidents of money burglary and robbery in the financial system.
- (vii) Bangladesh Bank issued a Master Circular in 2014 containing instructions to scheduled banks for the prevention of money laundering and terrorist financing (BFIU Circular No-10 dated 28/12/2014), being empowered by the acts 'The Money Laundering Prevention Act, 2012' and 'The Anti-Terrorism (Amendment) Act, 2012'.
- (viii) Bangladesh Bank has also finalized the methodology of identifying the Domestic Systemically Important Banks (D-SIBs). In the event of failure of a D-SIB, the impact on the banking sector or even on the real economy could be significantly greater than the failure of a non-systemic bank.
- (ix) Since 2013, Bangladesh Bank has been working on "Contingency Planning and Bank Intervention/Resolution Framework" and "Lender of Last Resort Framework", considering international best practices with reference to the Bangladesh local context.
- (x) With a view to improving the depositors' protection, transformation of the existing deposit insurance department into a full-fledged deposit insurer is also under active consideration within this framework.
- (xi) Bangladesh Bank has commenced the process of establishing a clear framework of procedures for allowing banks to access Emergency Liquidity Assistance (ELA). Access criteria will be explicit and available to all conventional banks, because when faced with a bank failure or the threat of a systemic crisis, the market needs to know that Bangladesh Bank will ensure adequate liquidity under its role as Lender of Last Resort.

With the aim of ensuring and maintaining financial stability through strengthening policy coordination among financial regulators and to avoid contradictions and unnecessary duplications, Bangladesh Bank has taken an initiative to develop a 'Coordinated Supervision Framework' for the financial system.

Chapter 2

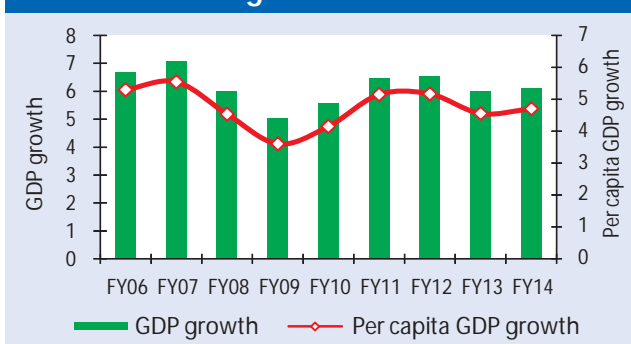
Macroeconomic Developments

Macroeconomic conditions, influencing the financial system, were mostly favorable in CY14. The positive development for financial stability was underpinned by cautious monetary policy and responsive fiscal policy, despite some upward pressure on prices caused by fairly optimistic expectations of the market.

2.1 GDP Growth

Despite only a moderate recovery in the global economic situation, the Bangladesh economy was successful in maintaining a growth momentum in FY14³. The real GDP growth increased by 0.1 percentage point; from 6.0 percent in FY13 to 6.1 percent in FY14.

Chart 2.1 : Bangladesh Real GDP Growth



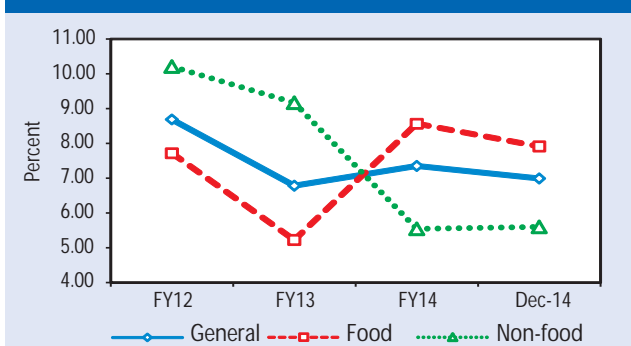
Source: Research Department, Bangladesh Bank

According to the BBS's⁴ provisional estimate, the nominal GDP of the country was BDT 13,509.2 billion in FY14, which was about 12.7 percent higher than that of FY13. In FY14, the country's per capita real GDP increased by 4.7 percent and per capita nominal GDP by 11.2 percent compared with those of FY13 (Chart 2.1). The expansion of the economy

during FY14 was broad-based, registering positive growth by all sectors and sub-sectors of the economy.

2.2 Inflation

Chart 2.2 : National CPI Inflation



Source: Research Department, Bangladesh Bank

In Bangladesh, the annual average CPI inflation (base: 2005-06=100) showed a diverse trend in FY14. The inflation stood at 7.4 percent in June 2014 against the target of 7.0 percent set in the monetary policy statement (January-June 2014) whereas it was 6.8 percent in FY13. CPI inflation started to decrease from February 2014 and came down to 7.4 percent in June 2014.

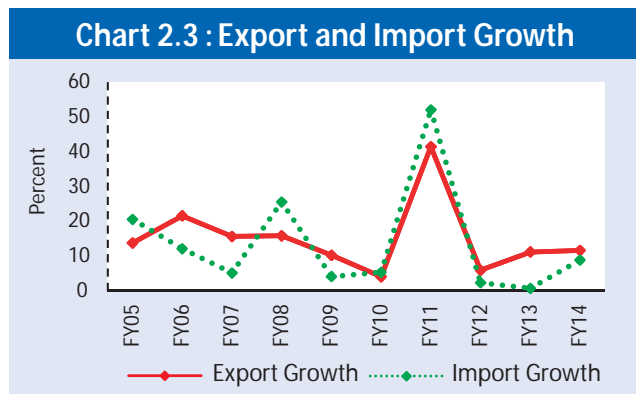
³ GDP in Bangladesh is calculated on a yearly basis.

⁴ Bangladesh Bureau of Statistics.

Pertinently, in June 2014, the annual average food inflation increased to 8.6 percent and non-food declined to 5.5 percent, displaying movements in the opposite direction from the 5.2 and 9.1 percent respectively in June 2013. Importantly, when calendar years are considered, at end-December 2014, annual average CPI inflation stood at 7.0 percent, food inflation at 7.9 percent and non-food inflation at 5.6 percent, displaying an improvement over the inflation situation recorded at end-December 2013.

2.3 Exports and Imports

Export growth in FY14 was 11.7 percent over the same period of FY13. Though export of petroleum by-products, raw jute, jute goods, and specialized textiles recorded a negative



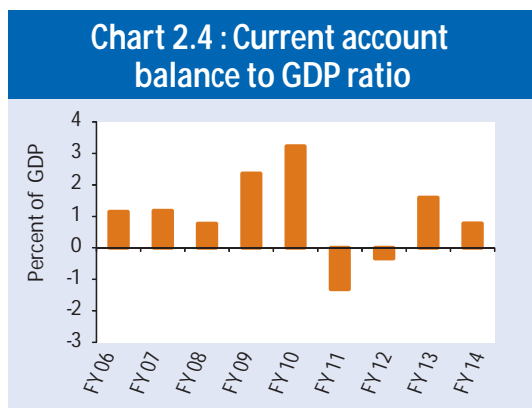
Source: Research Department, Bangladesh Bank

growth, all other major exportable items increased. On the other hand, import growth in FY14 was 8.9 percent. Except negative import growth for fertilizer, all other importable items increased significantly and contributed to the growth of overall import payments in FY14.

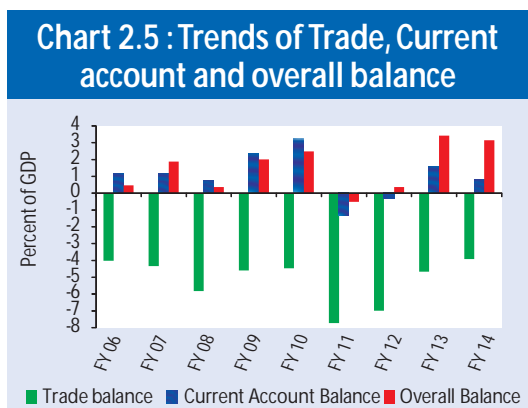
Export (fob), as a percentage of GDP, decreased by 0.6 percentage points from 17.7 percent in FY13 to 17.1 percent in FY14. At the same time, import (fob), as a percentage of GDP, decreased by 1.4 percentage points from 22.4 percent in FY13 to 21.0 percent in FY14.

2.4 Balance of Payments

The current account balance of the country's BoP dwindled significantly from a surplus of BDT 190.9 billion in FY13 to BDT 104.6 billion in FY14. The current account balance, as a percentage of GDP, stood at 0.8 in FY14 against 1.6 in FY13. Although the current account surplus declined, the higher financial inflow led the overall balance to record a surplus of BDT 426.1 billion in FY14. Chart 2.4 shows the current account balance to GDP ratio.



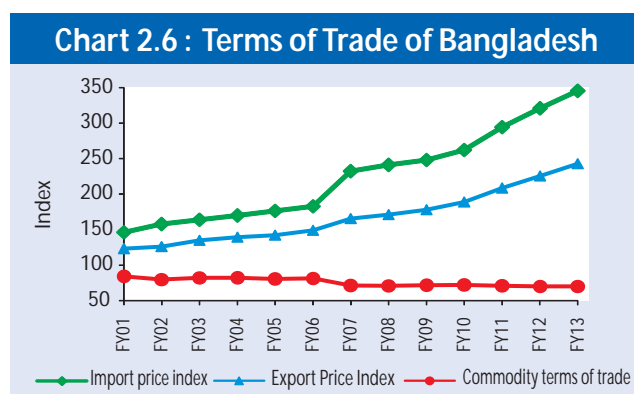
Source: Research Department, Bangladesh Bank



In FY14, the trade deficit decreased by BDT 31.4 billion or 5.6 percent from BDT 560.3 billion of FY13, mainly due to the relatively larger expansion in export earnings compared with the

increase in import payments. The result was that the higher increase in exports than imports lessened the trade deficit to BDT 528.9 billion in FY14.

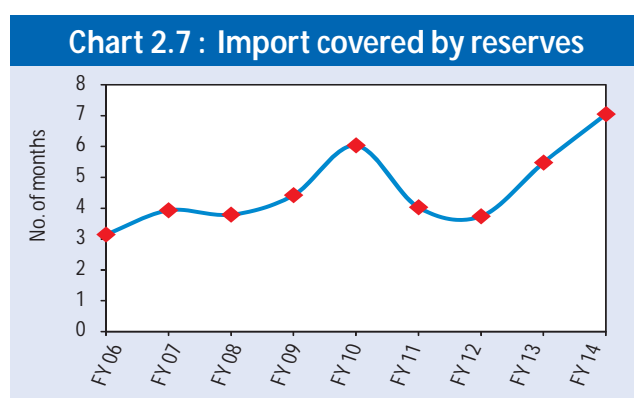
2.5 Terms of Trade



The terms of trade stood at 86.0 in FY14, as it was recorded in FY13 (base year 2005-06). Both the export price index and import price index increased by 7.2 percent during the FY14. Chart 2.6 depicts the scenario of the terms of trade.

2.6 Foreign Exchange Reserve

The gross foreign exchange reserves held by Bangladesh Bank encompasses the holdings of gold and foreign exchange, the reserve position with the IMF and holding of Special Drawing Rights (SDR).



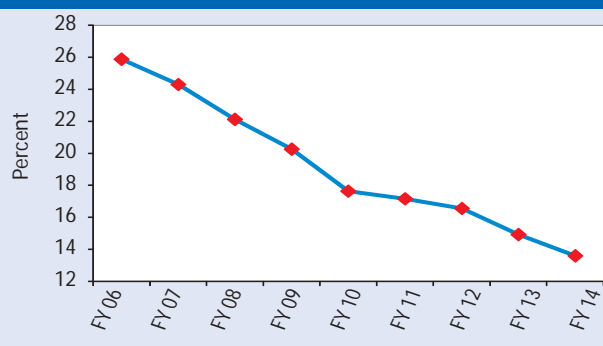
The gross foreign exchange reserves of Bangladesh Bank stood at USD 21.5 billion at the end of FY14, which is 40.4 percent higher than USD 15.3 billion recorded at the end of FY13. Pertinently, at end-December 2014, foreign exchange reserves stood at USD 22.3 billion, which is adequate to meet more than six months' import payments of the country. With the intention to strengthen the long term stability of the country's reserves and

broaden horizons of the external asset portfolios, BB endowed the foreign exchange reserves with sovereign / supranational / highly reputed corporate bonds, U.S. Treasury Bills, and short term deposits with highly reputed commercial banks.

2.7 Foreign AID and External Debt Repayment

Total official foreign aid disbursement increased by 6.7 percent to USD 3000.0 million in FY14 from USD 2811.0 million received in FY13. Food aid disbursements stood at USD 31.0 million, a drop from USD 50.0 million in FY13. The disbursement of project assistance stood at USD 2970.0 million, a boost from USD 2761.0 million in FY13. It is mentionable that no commodity aid was received in FY14, just as in the preceding year.

Chart 2.8 : External Debt/ GDP ratio



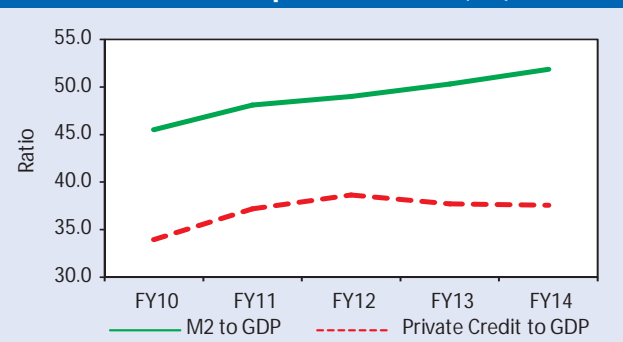
Source: Research Department, Bangladesh Bank

Total outstanding official external debt as of 30 June 2014 stood at USD 23.6 billion (13.6 percent of GDP in FY14) against USD 22.4 billion as of 30 June 2013 (14.9 percent of GDP in FY13). Repayment of official external debt stood at USD 1234 million (excluding repurchases from the IMF) in FY14, which was USD 128 million or 11.6 percent higher than the repayment of USD 1106.0 million in FY13.

Out of the total repayments, principal payments amounted to USD 1032 million, while interest payments stood at USD 202 million in FY14, against USD 908 million and USD 198 million respectively during FY13. The debt-service ratio as percentage of exports was 4.1 percent in FY14.

2.8 Money and Credit Growth

Chart 2.9 : M2 and private credit (PC) to GDP



Source: Research Department, Bangladesh Bank

Broad money (M2) growth stood at 16.1 percent in FY14, which is slightly lower than the 16.7 percent growth recorded in FY13. In FY14, the declined growth in broad money was mainly driven by lower growth of net foreign assets (NFA) and public sector credit. In FY14, the growth in domestic credit was 11.6 percent, slightly higher than the 10.9 percent actual growth recorded in FY13.

Growth of private sector credit stood at 12.3 percent in FY14, which is higher than 10.8 percent of actual growth in FY13. The money multiplier increased to 5.41 in FY14 compared with 5.38 in FY13. The reserve-deposit ratio increased to 0.085 in FY14 from 0.084 in FY13. On the other hand, the currency-deposit ratio declined to 0.123 during the period from 0.126 in FY13. Net changes in these two behavioral ratios led to an increase in the money multiplier.

2.9 Monetary Policy

The monetary policy of BB in 2014, as in previous years, was reflected in half-yearly monetary policy statements for January-June 2014 (HY1CY14) and July-December 2014 (HY2CY14). Bangladesh's monetary stance in CY14 was intended to maintain the precise balance between keeping inflation restrained and supporting economic growth in the context of the global and domestic macro-economic situation.

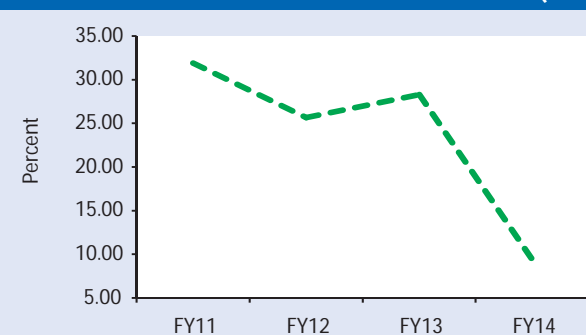
In January-June 2014, monetary policy aimed to downsize average inflation to 7.0 percent with ensuring credit growth to stimulate inclusive growth. There are a number of key policy measures underlying this program: first, in order to spur secondary market activity, BB continued to embark on secondary trading of Treasury Bonds in HY1CY14; secondly, a new Islamic Bond of 3 months' tenure (introduced in HY1CY14) expected to contribute to better liquidity management of the Islamic banks. Importantly, BB encouraged larger borrowers to access the capital market given single borrower exposure limits for banks.

In July-December 2014, the monetary policy stance aimed to defend the country's external sector stability. The monetary stance targeted a monetary growth path aiming to bring average inflation down to 6.5 percent by end-June 2015, while ensuring that credit growth is sufficient to stimulate inclusive economic growth. BB decided to raise the Cash Reserve Requirement (CRR) by 50 basis points in June 2014 with effect from June 24, 2014. Besides, BB aimed to contain reserve money growth to 15.5 percent and broad money growth to 16.0 percent by December 2014. The space for private sector credit growth of 16.5 percent (including foreign borrowing by local corporate) has been kept well in line with output growth targets. The track record of containing government borrowings well within budgetary limits was expected to continue, further limiting any crowding out of private sector borrowings.

BB continued to support a market based exchange rate while seeking to avoid excessive foreign exchange rate volatility. With a view to attracting foreign investment, BB has relaxed restrictions on foreign investors' borrowing from the local market and their ability to access working capital financing from their parent companies. Strengthening credit and debt markets was set as a key focus for BB for effective transmission of the monetary policy requirements.

2.10 Credit to Government (Gross) by the Banking System

Chart 2.10 : Growth of credit to Government (Gross)



Source: Economic Trends, Bangladesh Bank

Total credit to Government (gross) increased by BDT 147.6 billion to BDT 1722.3 billion in FY14 from BDT 1574.7 billion in FY13. In percentage terms, the annual credit growth to the Government increased by 9.4 percent in FY14. It is mentionable that credit to the Government (gross) rose by 28.3 percent in FY13 with respect to the same of the FY12, making the FY14 figures a sharp deceleration and reversal of a previous trend.

Chapter 3

BANKING SECTOR

Against the backdrop of macroeconomic volatilities, considerable progress has been achieved in reinforcing the resilience of the banking system in CY14. Banking sector assets have increased, and newly established banks started to consolidate their operations. Domestic private banks are usually holding the majority of banking sector assets. Due to the volatile business and macroeconomic environment, during CY14, banks took a cautious approach in loan distribution and moved to safe liquid investments. As a result, government bills and bonds now constitute a sizable portion of the total interest-earning asset portfolio of the banks. Unstable macroeconomic conditions and the withdrawal of relaxation in the loan rescheduling standard might have contributed to accumulation of higher NPL in CY14, affecting reported asset quality and profitability of the banks. However, maintenance of higher provisions, together with an impressive "maintained-to-required" provision ratio suggests higher loss absorption capacity of the banking system. Capital injections from the government to the SCBs as well as from parent offices of some foreign banks, in particular, have strengthened the capital adequacy of banks and resiliency of the banking system. Concentration of assets and NPL among few banks have also reduced in CY14, due to effective measures taken by Bangladesh Bank (BB), further indicating an improvement in financial stability. The operating performance of the banking sector was less impressive compared with CY13, primarily due to a higher provisioning requirement, but overall profitability remained quite stable due to noninterest income generation by the banks. Liquidity pressure was manageable, as call money rates were low and the Advance Deposit ratio (ADR) of the industry was within an admissible limit. Maintaining quality of loans and advances and generating cash flows from these assets are likely to be crucial, for the banking sector, in the upcoming years.

3.1 Financial System of Bangladesh

The financial system of Bangladesh consists of scheduled and non-scheduled banks, non-bank financial institutions, microfinance institutions, insurance companies, co-operative banks, merchant banks, brokerage houses, stock exchanges and credit rating companies. Different regulators are engaged to supervise those institutions. To ensure financial stability, which is a joint responsibility, data and information sharing among the regulators is taking place primarily through the coordination council chaired by the Governor of BB.

The financial system includes 5 state-owned commercial banks⁵ (SCBs), 3 specialized development banks (SDBs), 39 domestic private commercial banks (PCBs), 9 foreign commercial banks (FCBs), 4 Non-scheduled banks and 31 non-bank financial institutions (NBFIs). The financial system also embraces Investment Corporation of Bangladesh (ICB), Bangladesh House Building Finance Corporation (BHBFC), 2 stock exchanges [Dhaka Stock Exchange (DSE) and Chittagong

⁵ In CY2014, Basic Bank Ltd. is included in the SCB category that was reported earlier in the category of SDB.

Stock Exchange (CSE)], 77 insurance companies, 697 registered⁶ micro-credit organizations, 55 merchant banks (investment banks), 8 credit rating companies⁷, various depository participants (stock dealers, brokers, 17 asset management companies⁸ etc.) and registered co-operative banks.

The regulatory and supervisory arrangements for these entities are entry focused and well defined, with strong legal underpinnings. Bangladesh Bank (BB) regulates scheduled banks, Non-bank Financial Institutions (NBFIs), some operations of cooperative banks, merchant banking wings of commercial banks, etc. Bangladesh Securities and Exchange Commission (BSEC) mainly supervises the capital market. Merchant banks, brokerage houses, and asset management companies are also regulated by BSEC. Insurance companies and microfinance institutions are supervised by the Insurance Development and Regulatory Authority (IDRA) and the Micro-credit Regulatory Authority (MRA) respectively. Cooperatives and credit unions are governed by the Registrar of Cooperatives. There are some overlapping responsibilities in the supervision on institutions, as overlapping responsibilities sometimes arise due to functional regulations co-existing with legal-entity regulations. Beside the list of regulators mentioned earlier, the Ministry of Finance regulates the Bangladesh House Building Finance Corporation (BHBFC), Investment Corporation of Bangladesh (ICB), and has a supervisory network with other regulators.

A coordination council of the major financial sector regulators (BB, BSEC, IDRA, RJSC and MRA) meets regularly to share information and ideas with a view to better understand the financial system and to ensure early detection of systemic risk. As systemic risk may arise in any particular sector and spread to other sectors, it is very crucial to adopt a coordinated approach to supervision. Coordinated supervision allows avoidance of unnecessary duplication of work; decreases the risk of conflicting supervisory directives by the regulators; and increases the potential for synergies and alignment of related supervisory activities of the regulators. Taking these views into consideration, Bangladesh Bank has taken the initiative for coordinated supervision. It is expected that the financial sector will continuously evolve towards a more contemporary and efficient system with supportive investments, a friendly environment, and inclusive economic growth.

3.2 Asset Structure of the Banking Sector

The asset structure of banking sector evolved steadily despite an uncertain macroeconomic scenario in 2014. Banks focused more on safer liquid investments in government securities rather than relying on growth in private loans and advances.

Despite an uncertain macroeconomic scenario, the banking sector balance sheet size grew by 14.3 percent compared with end-December 2013 and reached BDT 9143 billion at end-December 2014. This rate of growth was slightly higher compared with the growth rate in the previous year of 13.8 percent. The growth of the newly established banks, capital injections from government to the SCBs and capital injections in some foreign banks by their parent offices helped to achieve this growth.

⁶ Source: Micro Finance Institutions (MFIs) write-up provided to FSD.

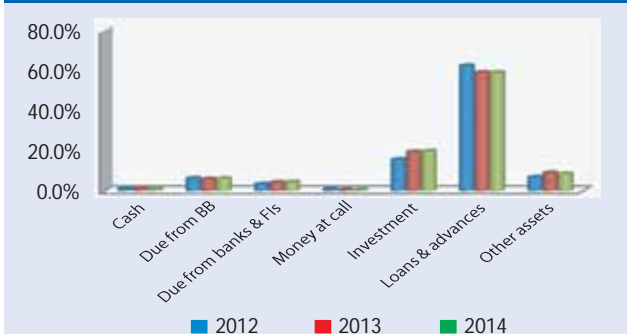
⁷ Source: web page of Bangladesh Securities and Exchange Commission (BSEC) (last retrieval: <http://www.secbd.org/Company.html>)

⁸ Source: [http://www.secbd.org/CR TRUSTY ASSETManager MF.htm](http://www.secbd.org/CR%20TRUSTY%20ASSETManager%20MF.htm)

Most of the income-earning assets such as loans and advances, investments etc., registered a positive growth compared with end-December 2013, which might indicate that the business confidence has increased despite discomfort in the macroeconomic environment. Only bills purchased and discounted showed a substantial decrease (11.2 percent decline compared with end-December 2013) which might be due to the cautionary approach taken by the banks after some financial irregularities identified by BB in earlier years regarding discounting of inland bills.

The share of loans and advances is the largest among asset items, and it remained unchanged at 59 percent of total assets from CY13. There has been a marginal increase in loans disbursement which is offset by the reduction of bills discounted and kept the overall share of loans unchanged.

Chart 3.1 : Banking sector asset structure: end-December



Source: Compilation (Aggregate balance sheet of banking industry): FSD, BB.

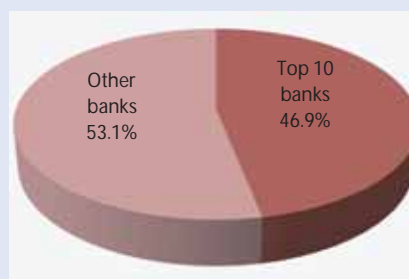
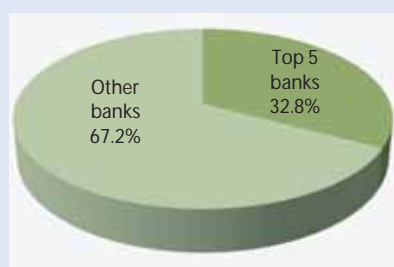
The second highest item of asset share is investment in government and other securities, which increased by 0.4 percentage points over end-December 2013 and reached at 20 percent level of the industry assets. This substantial liquid investment might indicate the tendency of banks to rely more on safer liquid investments due to the inconclusive macroeconomic situation that existed throughout CY14.

At end-December 2014 compared with end-December 2013, the share of banks' assets with BB and SB increased by 0.3 percentage points and with other banks and FIs increased by 0.2 percentage points respectively. Banks' money at call remained unchanged as percentage of total assets. The cash balance of banks reduced by 0.3 percentage point and other assets remain almost unchanged as percentages of total assets.

Concentration of assets within a few banks has reduced in CY14, which could be a positive indicator of financial stability.

The concentration of assets of the top 5 and top 10 banks, among all banks, were 32.8 percent (33.6 at end-December 2013) and 46.9 (47.9 at end-December 2013) percent respectively at end-December 2014. During CY14, concentration of assets within a few banks has reduced marginally, which seems to be beneficial for financial stability.

Chart 3.2 : Top 5 and Top 10 banks based on asset size



Source: Department of Off Site Supervision; Calculation: Financial Stability Department

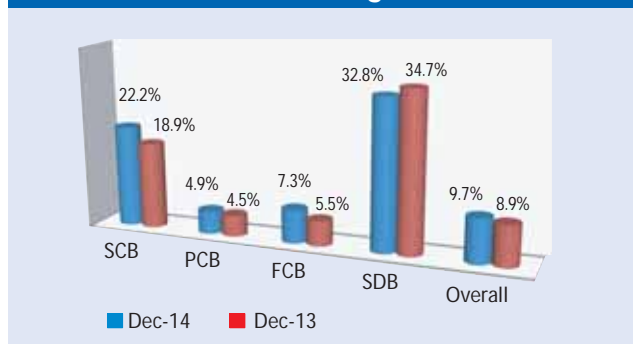
Among the top 10 (ten) banks, 4 (four) are state-owned commercial banks and 6 (six) are private commercial banks.

3.3 Nonperforming Loans, Provisions, and Written-off Loans and Advances in the Banking Sector

Nonperforming loans slightly increased in CY14. Strengthening supervision in banks and the withdrawal of relaxation in loan rescheduling⁹ may be the reason for the increase in nonperforming loans. The overall NPL scenario, however, is quite similar to earlier years.

Nonperforming loans (NPLs) have risen, in recent years, due to a combination of factors, such as, a deterioration in intrinsic asset quality and stringent problem loan identification. The NPL of the banking sector actually rose to 9.7 percent at end-December 2014 from 8.9 percent at end-December 2013. The reasons for the increase in reported NPL were, mainly, due to the withdrawal of a one-time relaxation of the loan rescheduling procedure, which was given in 2013, and detection of substantial nonperforming loans in a particular bank that has been re-categorized as an SCB this year from its earlier status.

Chart 3.3 : Distribution of NPL as percentage of outstanding loans



Source: BRPD, Compilation: FSD, BB. Ratios of SCB and SDBs in CY13 are restated according to the new bank categorization.

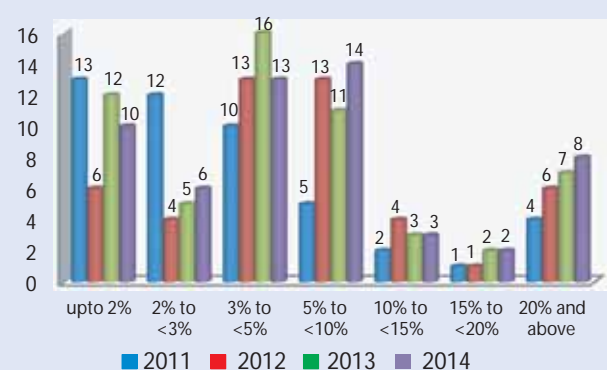
The NPL percentages of different categories of banks are shown in chart 3.3. The performances of the SDBs have improved at end-December 2014 compared with their performances at end-December 2013. The NPL ratio of these banks came down to 32.8 percent from 34.7 percent at the end of December 2013. Apart from the SDBs, NPL has increased in all other bank's category.

The highest increase took place in SCBs, primarily due to the existence of very high NPLs in a bank, newly categorized as SCB.

The NPLs of SCBs seem worse compared with end-December 2013. However, the NPLs of SCBs at end-December 2014 might show some improvement over end-December 2013 (19.8 percent) if the NPL ratio could have been recalculated (18.2 percent) by excluding the bank that is newly included as SCB. Foreign banks have a higher NPL percentage than local PCBs for the second consecutive year.

⁹ That was allowed to contain the macroeconomic volatility experienced in Bangladesh in early 2013.

Chart 3.4 : Distribution of banks by classified loans to total loans ratio: end-December



Source: Data: BRPD, BB; Computation: FSD, BB.

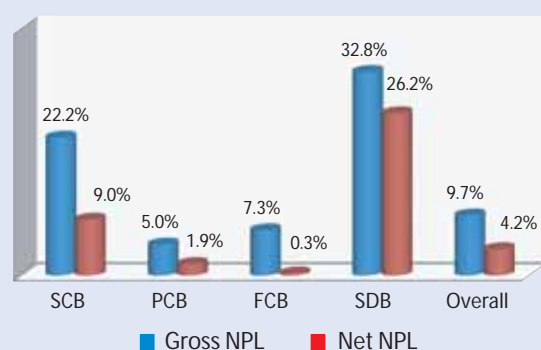
Bank-wise information indicates that the nonperforming loans were widely distributed among the banks. The distribution of banks based on their NPL to total loans ratio indicates that the number of banks with double-digit values increased from 12 (CY13) to 13 (CY14).

Moreover, 8 banks have NPL ratios over 20 percent. Among those banks, there are 2 SCBs, 3 SDBs, 2 foreign banks and one private commercial bank.

Notably, the NPL to total loans ratios of 5 state-owned commercial banks ranged between 10.31 percent and 53.32 percent, whereas it was between 10 percent and 32 percent in CY13. The re-categorization of one SDB to SCB may be the reason behind increasing this dispersion. Out of 9 foreign banks, 4 are below 5 percent, 2 are between 5 to 10 percent and 3 are above 10 percent at end of CY14. All PCBs have single-digit NPL ratios except two problem banks. The relatively low non-performing loans in the newly established banks also helped the PCBs to show a lower NPL ratio, as these banks helped in increasing the amount of unclassified loans without increasing NPL.

The net nonperforming loans scenario at end December 14 depicts that banking industry has safeguarded itself against possible threat to capital erosion arising from increased NPLs. It ensures higher loss absorbent capacity of the banking system.

Chart 3.5 : Gross and Net NPL as percentage of outstanding loans at end December, 2014



Source: BRPD, Compilation: FSD, BB.

The graph suggests that the banking system is not that exposed to capital erosion due to poor asset quality. The overall net NPL ratio (net of specific provision) of the industry drops down to 4.2 percent from a gross NPL ratio of 9.7 percent after taking into account the specific provisions maintained. Other than the SDBs, all other types of banks have single-digit net NPL ratio.

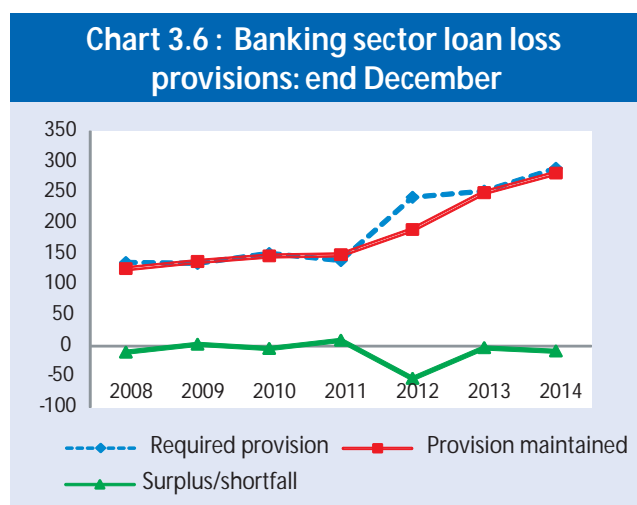
Net non-performing loans are measured after subtracting the actual specific provision maintained against the nonperforming loans. The lower

the net NPL to outstanding loans ratio of the banks, the more resilient they are thought to be to withstand stability threats as additional losses on these loans already identified as NPL.

Foreign banks, usually, maintain relatively higher provisions against NPLs compared with other categories of banks. Due to this fact, they have the lowest net NPL ratios despite having higher gross NPL ratios than PCBs. If maintained provision is considered, the higher gross NPL ratio came down below 5 percent (as suggested by net NPL ratio). In summary, since the NPL ratios of the banks were considerably lower than their gross NPL ratios, they are better positioned in this regard to withstand stability threats.

Higher NPLs required the banks to maintain higher loan loss provisions in CY14. The provision maintained in CY14 increased by BDT 32 billion. Though there has been observed a slight provision shortfall due to the higher provision requirement, the overall banking industry appears to have maintained provisions in line with current BB policies.

The non-performing loans have required banks to create cumulative provisions amounting to BDT 281.7 billion as at end of CY14, which is around BDT 32 billion higher than that of CY13. Though the increase in absolute value of maintained provisions has helped banks to cushion earnings and capital against some embedded credit losses, the gap between required and maintained provision has increased to BDT 7.96 billion in CY14 from BDT 2.58 billion in CY13. The following graph shows that the shortfall in maintained provision increased slightly in CY14. At end-December 2014, banks maintained 97.3 percent of required provisions. This deterioration in performance was primarily attributed to the provision maintained in SCBs. In CY13, SCBs maintained a surplus provision of BDT 14.54 billion, which declined to 6.7 billion in CY14. At the same time, ratio of the maintained provisions to classified loans shifted down to 56.15 percent by the end of CY14, compared with 61.56 percent at the end of CY13.



Source: Data: BRPD, BB; Computation: FSD, BB.

The overall provision shortfall in the banking sector increased from BDT 2.6 billion (as at end December 2013) to BDT 7.96 billion (as at end December 2014). Two specialized development banks and two private commercial banks are still having a provision shortfall. The remaining banks were able to maintain a surplus in provisions.

The shortfall in provisions maintained by the specialized development banks amounts to BDT 22.33 billion, which is 2.8 times higher than the total

shortfall (BDT 7.96 billion). It is noteworthy that almost all the banks other than two specialized development banks and two private commercial banks (one of the PCBs is currently under restructuring arrangements of BB) are showing a sign of resilience to the early headwinds of credit risk.

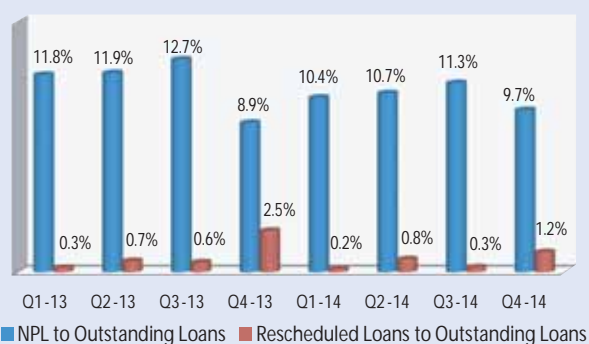
Box 3.1 : Impact of Rescheduled Loans in Banking Sector Asset Quality

The temporary relaxation in loan rescheduling standards allowed in 2013 has helped the banks to withstand immediate negative impact on their profitability and might have helped the borrowers in servicing their debts as well. However, higher cash repayment from loans in 2014 suggests that the rescheduled loans under the relaxation might not have substantial negative impact on the asset quality of the bank's investment portfolio.

BB relaxed the standard for loan rescheduling in 2013 under the backdrop of macroeconomic volatility experienced in Bangladesh. The relaxation was applicable for a temporary time period (until 30 June 2014). Under the fragile macroeconomic scenario prevailing during that time period, a onetime relaxation in the loan rescheduling standard may have made economic sense as it allowed banks to give easier repayment terms to their borrowers without showing temporary reductions in profitability. However, as a result of the relaxation, a large portion of nonperforming loans were rescheduled as performing loans, which improved reported (but not necessarily intrinsic) asset quality of the banking sector and also enhanced the profitability indicators primarily due to the resulting reduction in loan loss provision requirements.

As the rescheduled amount was substantial, the impact analysis of previously rescheduled loans over banking sector performance in 2014 needs special attention. Especially, the subsequent performance of earlier rescheduled loans needs to be evaluated. There exists a concern that due to relaxation in standards, few loans had been regularized which would have been nonperforming loans, even if the macroeconomic situation had remained stable in 2013. If a substantial portion of the rescheduled loans failed to continue as performing loans in 2014, their adverse performance might have negatively affected the overall asset quality of the banking system in 2014.

Chart 3.7 : NPL and Rescheduled Loans



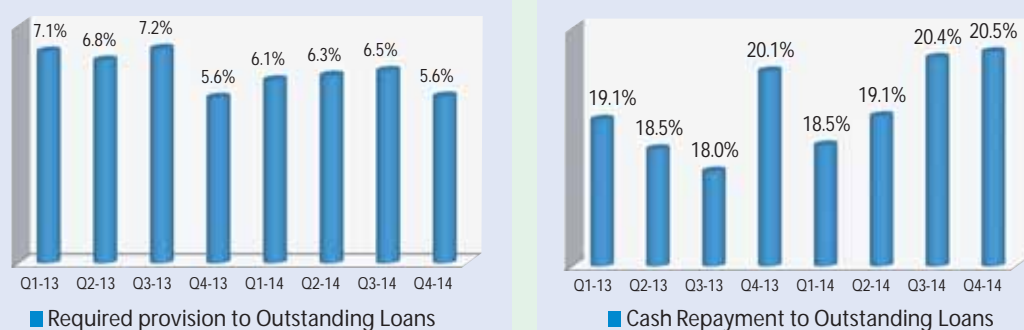
Source: Data: BRPD (Through EDW System), BB; Computation: FSD, BB. The NPLs and Rescheduled loans are for each quarter only and are not accumulated.

The graph shows that rescheduled loans increased mainly in quarter 4 of 2013 and since then it maintained a usual trend indicating that the temporary relaxation is not applicable after the deadline. The large drop between Q4 of 2013 and Q1 of 2014, a time period during which the relaxation was still in effect might be attributed to the tendency of banks to take advantage of the relaxation in their financial statements. To achieve this, most loans were rescheduled in Q4 of 2013 just before the year ending. The increased NPL ratios in 2014 might be partially attributed to the deteriorating loan quality of the freshly rescheduled loans. However, there is not enough conclusive evidence supporting the argument about adverse classification of the rescheduled loans. A rise in new NPLs of a SCB in 2014 might also have caused the NPL ratio to rise.

(Continued)

The performance of the rescheduled loans can be scrutinized in two different aspects using some proxy parameters. First, if the rescheduled loans become NPLs afresh, then this should increase the required provision of the banking industry which can be assessed by analyzing the required provision to outstanding loans ratio of the banking industry. A substantial rise in the provision requirement to outstanding loans ratio might signal transformation of earlier rescheduled loans to NPLs. However, there is a counter argument which contends that the provision requirement might be affected by other factors such as an increase in the fresh NPL in a particular bank or banks. Moreover, the ratio of required provisions to outstanding loans may also signal a migration within the category of NPLs from more to less favorable classification categories. Second, if the rescheduled loans become NPLs, then the cash generation from these loans in the form of interest and principal repayment should be low as NPLs usually fail to generate cash. This fact can be analyzed by scrutinizing the quarterly cash repayment to outstanding loans ratio of the banking industry. A decrease in the cash recovery to outstanding loans ratio after the stipulated time allowed for loan rescheduling might signal that rescheduled loans failed to generate cash recovery.

Chart 3.8 : Required Provision, Cash repayment and Outstanding Loans



Source: Data: BRPD (CL & Through EDW), BB; Computation: FSD, BB

In the upper left graph, the required provision to outstanding loan ratio increased slightly after Q4 of 2013. However, the rise is not strong enough to suggest that excess rescheduling in quarter 4 of 2013 solely caused this rise. Even after the rise the ratios remained within the range observed in earlier quarters. So, as per this requirement, it can be concluded that some portion of the earlier rescheduled loans might have become NPLs again, but a substantial portion of the rescheduled loans are still performing as regular loans.

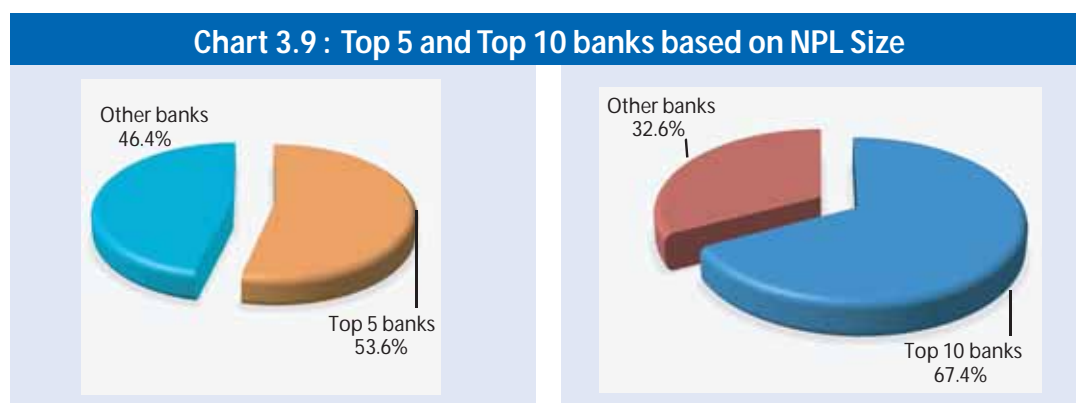
As shown in the right graph, the cash recovery to outstanding loans ratio has increased throughout 2014. The higher cash repayment may contradict the idea that a substantial portion of the previously rescheduled loans has turned into NPLs. As the overall recovery remained steady, it can be deduced that a large portion of the rescheduled loans were to borrowers who have later been able to service their debts.

In summary, the increases in cash recovery from loans and stable required provisions to outstanding loan ratio suggest that the rescheduled loans might not have had substantial negative impact on the asset quality of banking system.

The total loans written off in CY14 remained almost similar as that of CY13.

The amount of loans written off in CY14 is quite similar to that of CY13. A total of BDT 62.61 billion of adversely classified loans were written off from the books in CY14, compared with BDT 62.97 billion in CY13. Despite the loan write-off the legal procedure against the defaulted borrowers will continue and initiatives will be continued by the banks for the recovery of the written-off loans.

The concentration among banks of nonperforming loans (in terms of NPL amount) has decreased marginally in CY14. Due to the size of their loan portfolios, SCBs and SDBs are often found in the top 5 or top 10 lists of banks accumulating the highest NPLs. The presence of SCBs and SDBs among the top 10 list in terms of NPL ratio is a matter of concern for the stability of financial system.



Source: Data: BRPD, BB; Computation: FSD, BB

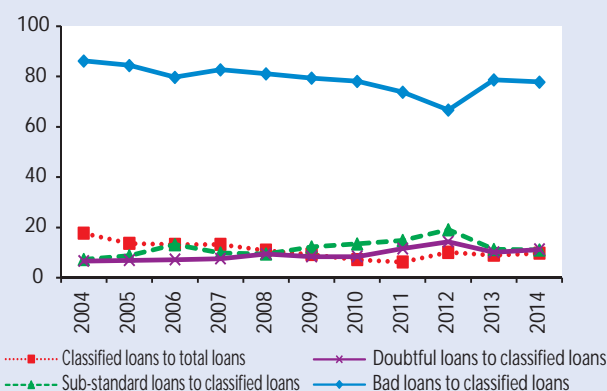
Nonperforming loan concentration ratios¹⁰ (based on NPL amount) of the worst 5 banks and worst 10 banks were 53.6 percent and 67.4 percent respectively at end-December 2014. Though NPL concentration ratios in top 5 banks decreased marginally compared to CY13, it remained unchanged for top 10 banks. These ratios were 54.5 percent and 67.4 percent respectively in CY13. It is to mention that the nonperforming loans in the state-owned commercial banks are higher than that of other banks. Among the top 10 banks, based on NPL amount, 5 are state-owned commercial banks, 3 are domestic private commercial banks, and 2 are specialized development banks. Because of the large size of the SCBs' and SDBs' portfolios, often these banks secure the top positions in the list of NPL accumulating banks in terms of size. This bias can be adjusted if a bank-wise NPL ratio (NPL amount divided by total loan portfolio) is used for comparison.

As per the NPL ratio, among the worst 10 banks, 3 are state-owned commercial banks (the number has increased by 1 over CY13 as one SDB is now being categorized as SCB), 2 are private commercial banks, 3 are specialized development banks and 2 are foreign banks. The presence of SCBs and SDBs among the top 10 list (both in size and in ratio) is a matter of concern for the stability of financial system in Bangladesh. However, the marginal improvement (NPL concentration of top 5 banks has decreased) over CY13 also suggests that the various initiatives taken by BB to improve the NPL scenario has started to generate positive results.

¹⁰ See Table: V in Appendix for details

The ratio of bad loans to total classified loans remains at a very high level. However, a marginal improvement was achieved in the ratio in CY14. The recovery of classified loans remains a prime concern for the banking industry.

Chart 3.10 : Year-wise classified loans ratios of the banking sector: end-December



Source: Data: BRPD, BB; Computation: FSD, BB.

The non-performing loans to total loans ratio has increased to 9.7 percent in CY14 from 8.9 percent in CY13. More than three-fourths of total non-performing loans (NPL) i.e., 77.8 percent of NPL amounting to BDT 390 billion are Bad/Loss. It is a matter of concern that the bulk of classified loans is in the category of Bad/Loss loans. However, there has been a little improvement in CY14 since the ratio dropped by 0.9 percentage point from CY13.

It is noteworthy that the ratio of bad loans to total classified loans ratio was 78.7 percent in CY13 which rose from 66.7 percent in CY12, mainly due to the unearthing of some large financial irregularities. A slight improvement in NPL categorization does not mean any significant improvement. However, most of the banks are maintaining required provisions against bad loans. The NPLs under Sub-standard and Doubtful categories, on the other hand, constituted respectively 11.0 percent and 11.2 percent of total NPLs.

Chart 3.11 : NPL Compositions

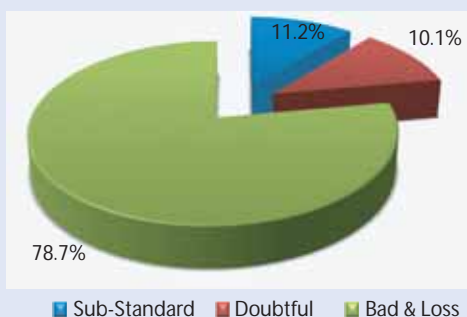
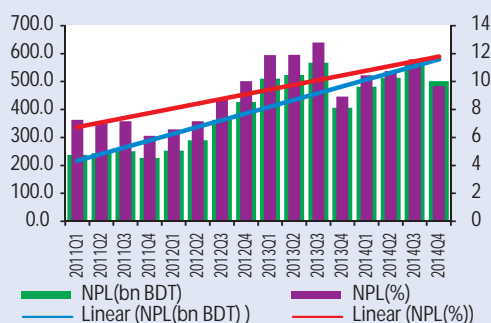


Chart 3.12 NPL and NPL ratio during 2011-2014



Source: Data: BRPD, BB; Computation: FSD, BB.

BB has taken few steps to improve the NPL scenario of the banking industry. It has initiated several steps to monitor the NPLs of large groups and non-financial corporations and is expected to come up with new prudential directions regarding these initiatives.

The adverse effect on banks' balance sheets arising from high amounts of nonperforming loans is a major concern for the banking system. Bangladesh Bank's directives to the banks to take precautions while extending loans to high-risk sectors and prioritize loans to productive sectors, in conjunction with the existing laws prohibiting loan defaulters to take part in elections and

similar other measures, should help towards further improvement in the nonperforming loans situation in the country¹¹. BB has started initiatives to monitor the NPL scenarios of large groups and non financial corporations and is expected to come up with new prudential directives regarding the issue.

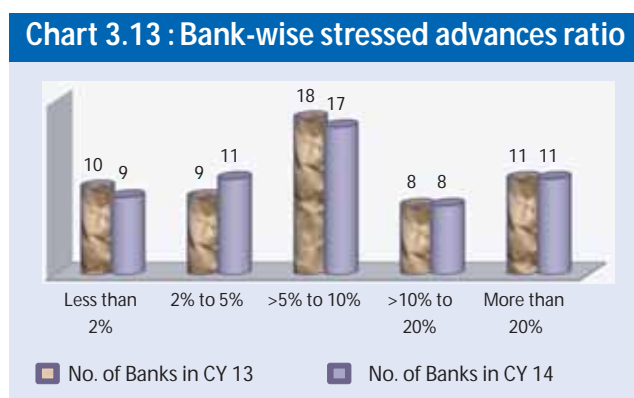
3.4 Stressed Advances in Banking Sector¹²:

The stressed advance ratios of last three consecutive years are 13.7 in CY12, 13.5 in CY13 and 13.1 in CY14 indicating a stagnant situation in loan recovery and lower cash inflow.

As at end-December 2014, the total stressed advance ratio of 13.1 percent included the 9.7 percent gross NPL ratio. The stressed advance ratios of the last three years remain at the same level and indicate no sign of improvement in any way. Banks should improve their efficiency and effectiveness in managing stressed advances, complying with the regulatory instructions and also setting up recovery units for strengthening the collection of such loans and advances. Indeed, it is imperative for the banks to convert such assets into performing assets in an orderly manner or recover them at the earliest as stressed advances are putting an adverse burden on banks' balance sheets and profitability in particular. It decreases the return on assets and invested capital (ROA and ROE) and the capital adequacy ratio (CAR) of banks. It also increases the cost of capital, widens the interest-earning asset/ interest-bearing liability mismatch and upsets the economic value additions (EVA)¹³ by banks.

3.4.1 Bank Wise Distribution of Stressed Advances Ratio

Though the stressed advances ratio in CY14 remained almost the same as compared with CY13, there were minor changes observed in the distribution of banks' stressed advances in CY14.



Source: Data: Scheduled Banks; Computation: FSD

In the year 2014, out of 56 banks, 17 banks had their stressed advances ratio between more than 5 to 10 percent, compared with 18 in CY 13. Stressed advances ratios of 11 banks that were higher than 20 percent reveal that these banks are more vulnerable to credit risk.

¹¹ BB made its loan classification/provisioning policy stricter through BRPD Circular No. 7 of 2012 and subsequently revised it through BRPD Circular No. 14 of 2012.

¹² Gross non-performing loans and advances plus restructured/rescheduled loans and advances.

¹³ EVA is equal to the net operating profit minus cost of capital

Stressed advances ratios of 9 banks were less than 2 per cent, compared with 10 in CY14. However, the number of banks with stressed advances ratio of more than 10 but less than 20 percent remained unchanged. It is, indeed, a latent threat to the system that one-third of its banks contained double digit stressed advances ratios.

Table 3.1 : Changes in stressed advances ratio in CY14

Particulars	No. of Banks	Share in total advances
Increase in Stressed Advances Ratio	12	61.9%
Decline in Stressed Advances Ratio	27	28.3%
No Change in Stressed Advances Ratio	17	9.8%
Total	56	100%

Moreover, it is observed that the stressed advances ratios of the 12 banks sharing 61.9 percent of total advances of the banking industry increased in CY14 as compared with CY13. In contrast, 27 banks with 28.3 percent of the total advances of the industry successfully managed to reduce their stressed advances ratio, and 17 banks with 9.8 percent of total advances of the industry experienced no change in CY14.

3.4.2 Industry-Wise Stressed Advances Ratio

State owned Commercial Banks (SCBs) and Specialized Development Banks (SDBs) possess higher stressed advances ratios in comparison with Private Commercial Banks (PCBs) and Foreign Commercial Banks (FCBs). Higher stressed advances ratios are observed in the Medium and Large loans categories for both SDBs and SCBs.

The following chart shows the distribution of stressed advances ratios across three major borrower segments¹⁴ incorporating both industry and service sectors, namely Micro & Small Industries, Medium & Large Industries, and Retail & Others.

Chart 3.14 : Industry-wise stressed advances ratio

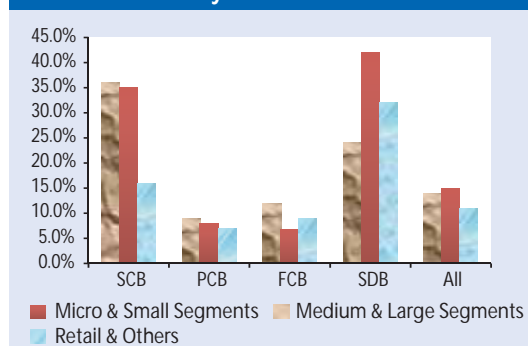
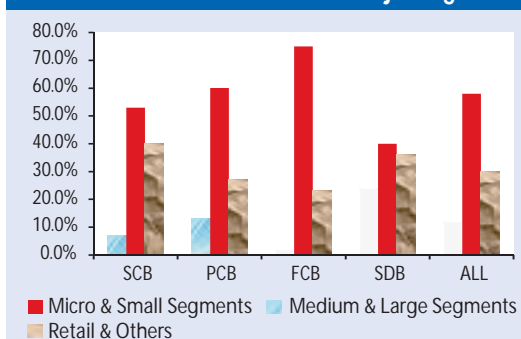


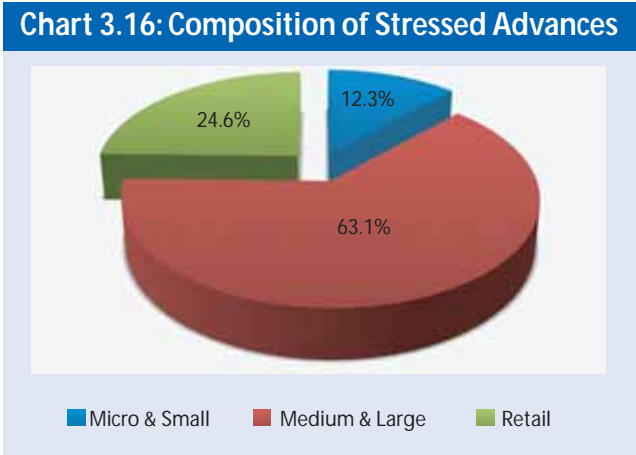
Chart 3.15 : Banks' Share in three major Segments



Source: Data: Scheduled Banks; Computation: FSD, BB

¹⁴ Micro and Small segments, Medium and Large segments: Definition based on SMESPD circular No-01, dated 19 June, 2011. Retail and other segments: Loans to individuals and other than MSME and Large segment.

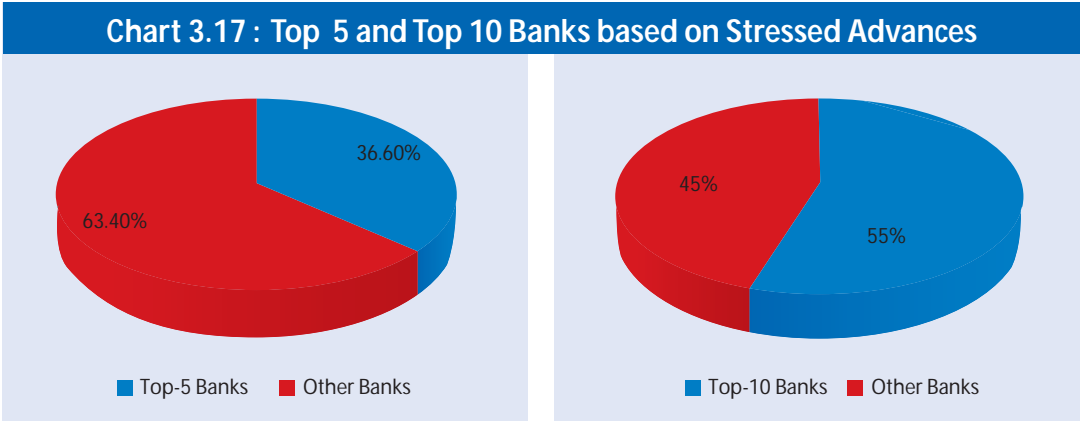
The stressed advances ratio of 13.1 percent in the banking system, as of end-December 2014, has slightly decreased from the end-December 2013 figure of 13.5 percent. At end-December 2014, SDBs recorded the highest percentage of stressed advances to medium and large industries, and SCBs held the highest percentage of stressed advances to micro and small industries. The reasons behind the current overabundance of stressed loans and advances reported in SCBs and SDBs are lapses in due diligence at the time of granting loans, poor recovery drives, and adverse selection of borrowers. A major segment-wise breakdown confirms that the medium and large industry segment, while having 58 percent of total loans of all banks, registered 15 percent of stressed advances. The micro and small industry segment having 12 percent of total loans contained 14 percent of the stressed advances. Having 30 percent of total loans, the retail and other segment represented 11 percent of stressed advances. Stressed assets of SCBs and SDBs continued to rise mainly due to their higher gross non-performing loans and resultant growth in restructured loans and advances.



Source: Data: Scheduled Banks; Computation: FSD, BB

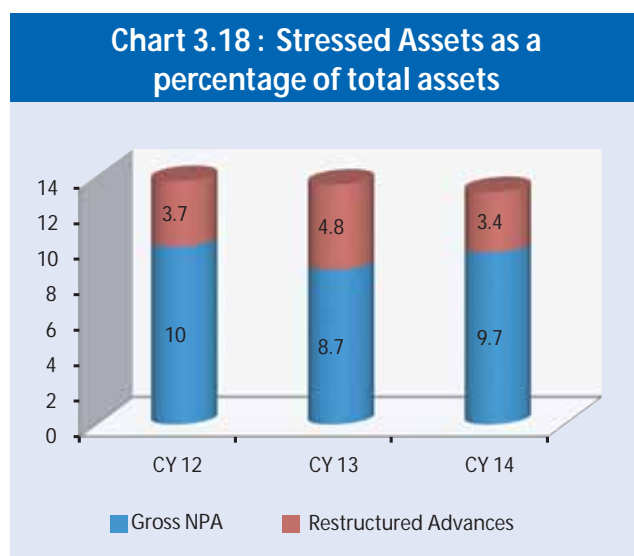
In comparison of each segment, highest stressed advances ratios are observed in medium and large industry segment as a percentage of total stressed advances across all segments. However, the stressed advances ratio of micro and small industry segment was 12.3%. As in many aspects of condition and performance, the state owned banks remain in a worse position than their private sector counterparts.

An analysis of stressed asset concentration ratios shows that, out of 56 banks, the top 5 banks and top 10 banks held 36.6 percent and 55.0 percent of system-wide stressed assets respectively at end-December 2014. Among the top 10 banks, 4 are state owned commercial banks, 3 are specialized development banks, 1 is a private commercial bank and 2 are foreign banks.



Source: Data: Scheduled Banks; Computation: FSD, BB

In sum, the analysis of stressed advances of banking sector reveals that the high volume of NPL is taking a toll on capital adequacy and profitability of the banks; as the gross NPA to gross advances is higher, while the rescheduled advances to gross advances is lower in CY14 compared to CY13.



Source: Data: Scheduled Banks; Computation: FSD, BB

It is observed from the chart, and has been mentioned earlier, that the gross NPA ratio rose to 9.7 percent in CY14, from 8.7 percent in CY13. However, the restructured advances ratio decreased to 3.4 percent in CY14 from 4.8 percent in CY13. Likely, there has been some transformation of rescheduled advances into non-performing assets. Evidently, there may be a lack of due diligence at the time of restructuring of non-performing loans and follow-up of those rescheduled loans and advances.

Though the amount of rescheduled loan decreased from CY13 to CY14, the overall stressed advances scenario has been deteriorated due to the increase of gross non performing loans as compared with CY13.

To reduce the higher stressed advances ratio of state-owned banks requires an improved system to ensure efficiency and transparency in their credit approval process, sound credit administration, and an effective credit monitoring system. Enhancing the recovery drive, ensuring credit appraisal prior to sanctioning, using early signals of deterioration in asset quality, and exercising detailed evaluation of restructuring with proper follow-up may help the state owned banks to improve their frustrating scenarios of stressed advances. Though there has been a significant increase in indebtedness of large business groups, the credit growth has remained concentrated in a few segments with higher levels of stressed assets. There should have some urgency for the banking system to recognize the early warning signals for non-performance of loans and to take prompt measures towards restructuring of loans and recovery of stressed assets, strengthening good governance of banks, improving the oversight functions, and removing political and external influences.

Data of sector-wise non-performing asset distribution reveals that the NPLs are distributed across the sectors roughly in the same manner as total loans are distributed, signifying that all sectors have been more or less affected by the problem of NPLs. Besides, with the exception of agriculture, no sector of loan seems significantly over-represented in the total NPL.

Table 3.2 : Sector-wise Non Performing Asset Distribution (CY2014) at a glance

(Amount in billion BDT)

SI No.	Name of the Sector	Total Outstanding	Total Classified	Gross NPL ratio	% share of industry loans extended to a particular sector	% share of industry NPLs of a particular sector
1	Agriculture	270.62	63.38	23.42%	5.23%	12.64%
2	Industrial (Other than Working Capital): (a) Large & Medium Scale Ind.	572.93	62.26	10.87%	11.06%	12.41%
	(b) Small & Cottage Ind.	52.38	7.18	13.71%	1.01%	1.43%
3	Working Capital:(a) Large & Medium Scale Ind.	670.45	47.83	7.13%	12.95%	9.54%
	(b) Small & Cottage Ind.	162.50	12.54	7.72%	3.14%	2.50%
4	Export Credit	155.08	16.40	10.58%	2.99%	3.27%
5	Import Credit	196.93	20.61	10.47%	3.80%	4.11%
	LTR	332.61	20.60	6.19%	6.42%	4.11%
6	Commercial Loans	895.14	85.95	9.60%	17.29%	17.14%
7	RMG & Textile	711.10	78.44	11.03%	13.73%	15.64%
8	Ship building & Ship breaking	76.86	7.73	10.05%	1.48%	1.54%
9	Construction : (a) Housing	266.95	15.55	5.82%	5.16%	3.10%
	(b) Other than Housing	119.32	7.22	6.05%	2.30%	1.44%
10	Transport & Communication	100.08	10.01	10.01%	1.93%	2.00%
11	Consumer Credit	176.63	15.04	8.52%	3.41%	3.00%
12	Other Loans	418.80	30.81	7.36%	8.09%	6.14%
	Total	5178.38	501.56	9.69%	100.00%	100.00%

Source: Data: DOS, BB; Compilation: FSD, BB

3.5 Concentration of Loans and Advances in the Banking Sector

There exists a moderate level of loan concentration in the banking industry. Concentration increased slightly compared with CY13, but it still remains at a moderate level, not posing much of a threat of instability in the system.

The calculated Herfindahl-Hirschman Index (HHI) of 1324 points evidences a sign of a moderate sectoral concentration of loans in the banking system. Though there are some changes observed in loans by sectoral categories, the data still reveal that the banking sector loans are concentrated within a few sectors in CY14. In particular, wholesale and retail trade shows a 20.88 percent concentration in the total loan portfolio, followed by large industries and import financing with a share of 20.31 and 12.93 percent respectively. The index value calculated below in Table 3.1 has increased compared with CY13 (1269) indicating that the loans have been relatively more concentrated in this year. However, the level of HHI indicates only a moderate concentration for the Bangladesh banking system, as it is still maintaining a considerable distance from the upper limit of high concentration, an HHI of 1800.

Box 3.2 : Sector-wise loans concentration (CY14)

SI	Sector	Amount (In Billion Taka)	% of Total	HHI*
1	Sanitary Services	0.04	0	0
2	Forestry	0.15	0	0
3	Water Works	0.47	0.01	0
4	Procurement by Government	4.69	0.09	0.01
5	Air Transport	6.64	0.13	0.02
6	Housing (Residential) in Rural Area for Individual Person	8.19	0.16	0.03
7	Cottage Industries	14.49	0.28	0.08
8	House Renovation/Repairing/Extension	16.42	0.32	0.1
9	Road Transport	22.34	0.44	0.19
10	Water Transport	25.86	0.51	0.26
11	Fishing	28.81	0.57	0.32
12	Lease Financing/Leasing	34.3	0.67	0.45
13	Infrastructure Development (Road, Culvert, Bridge, Tower etc.)	36.92	0.73	0.53
14	Other Constructions	83.08	1.63	2.66
15	Housing (Residential) in Urban Area for Individual Person	131.41	2.58	6.66
16	Housing (Commercial) :-For Developer/Contractor	178.28	3.5	12.25
17	Export Financing	199.75	3.92	15.37
18	Service Industries	214.29	4.21	17.72
19	Agriculture	245.38	4.82	23.23
20	Small and Medium Industries	502.42	9.87	97.42
21	Miscellaneous	581.98	11.43	130.64
22	Import Financing	658.43	12.93	167.18
23	Large Industries	1033.77	20.31	412.5
24	Wholesale and Retail Trade	1062.93	20.88	435.97
Total Loans and Advances**		5091.05	100	1323.60

* HHI = Herfindahl-Hirschman Index; ** Total loans and advances excluding bills payable

* Some change in name of the classification category in this year

Source: Data: Statistics Department, BB; Computation: FSD, BB.

3.6 Liability Structure of the Banking Sector

Deposits account for the major part of the liabilities of the banks. The growth rate of deposits slowed down a little in CY14, probably due to higher rates offered by government bonds which increased the opportunity cost of bank deposits. Stable term deposits are the major portion of the total deposits, which is desirable from a financial stability point of view. Deposit concentration among the banks was reduced in CY14, which is also an encouraging sign toward ensuring financial stability.

Deposits are the largest source of external funds in the banking sector. The share of total deposits was 85.0 percent of the total liabilities as of end-December 2014.

Chart 3.19 : Banking sector liability structure: end-December 2014

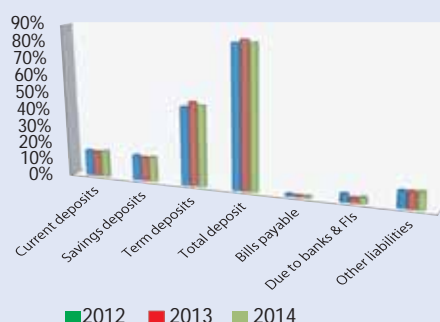
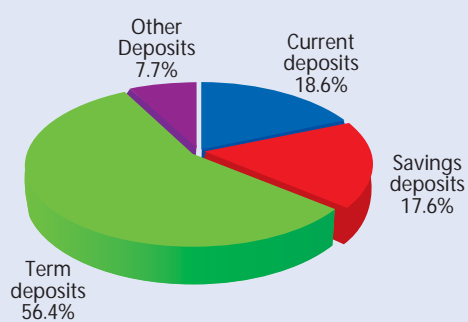


Chart 3.20 : Banking sector deposit structure by types of account: CY 2014

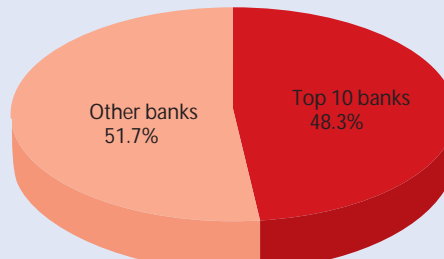
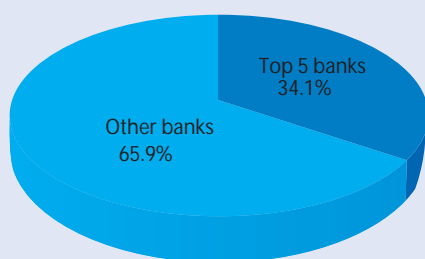


Source: Data: DOS, BB; Compilation (Aggregate balance sheet of banking industry): FSD, BB.

As of end-December 2014, deposits increased by 13.4 percent (16.08 percent in CY13) and borrowings from other banks and FIs increased by 41.3 percent (contrasted with a decrease of 29.87 percent in CY13 from CY12), while other liabilities increased by 16.7 percent compared with end-December 2013. The slowdown in deposit growth rate may indicate that liquidity pressure from new lending is less in the banking system, leading to a reluctance of banks in collecting new deposits. The higher rates of government savings certificates might be another reason for the modest deposit growth.

The share of term deposits was 56.4 percent of total deposits, whereas the shares of savings deposits, current deposits, and other deposits were 17.6 percent, 18.6 percent, and 7.4 percent respectively of total deposits at end-December 2014. The relative proportions of deposits remained similar as in CY13. The deposit structure shows a greater reliance on term deposits, regarded as more stable, which is desirable from financial stability perspective.

Chart 3.21 : Top 5 and Top 10 banks on size of deposit



Source: Data: DOS, BB; Compilation (Aggregate balance sheet of banking industry): FSD, BB.

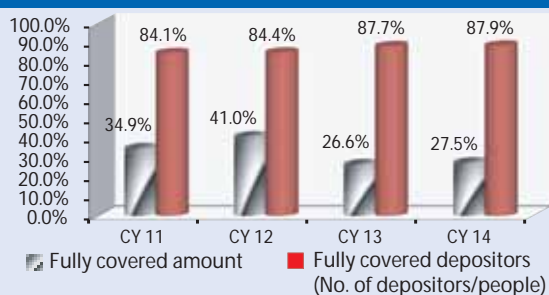
The concentration ratio of deposits of the top 5 and top 10 banks within total deposits are 34.1(34.2 in CY13) percent and 48.3 (48.5 in CY13) percent respectively at end-December 2014. The concentration of deposits remained almost the same, despite the inclusion of 9 new banks in

the banking system, which is expected to enhance the deposit base. Among the top 10 banks, 4 are state-owned commercial banks and 6 are private commercial banks. Among the top 5 banks, 4 are state-owned commercial banks and the remaining one bank is a private commercial bank. No foreign banks and specialized development banks are included in the top 5 or top 10 banks, indicating that concentration of deposits in these banks is gradually decreasing and high domestic sentiment prevails with the SCBs and PCBs.

3.7 Banking Sector Deposit Safety net

In Bangladesh, the Deposit Insurance System (DIS) was first introduced in August 1984 as a scheme under "The Bank Deposit Insurance Ordinance, 1984". In July 2000 the Ordinance was repealed by an Act called "Bank Amanat Bima Ain 2000 (The Bank Deposit Insurance Act, 2000)". The DIS aims at minimizing the risk of losses of depositors' funds with banks. It is one of the most important elements of the depositor safety net, which promotes depositors' confidence in the banking system.

Chart 3.22 : Safety net on banking sector deposits



Source: Data: Scheduled Banks; Computation: FSD, BB

The present coverage of deposits is BDT 100,000 per depositor in a single bank. A proposal to enhance the coverage up to BDT 200,000 is under process of approval of the government. The percentage of covered deposits¹⁵ to total insurable deposits, by value, slightly increased in CY14 to 27.54 percent which was 26.63 percent in CY13.

That indicates an inclusion of more small and large deposits in 2014 compared to 2013. A greater percentage of fully covered depositors (87.98 percent of the number of depositors) indicate an even more effective deposit safety net in the country.

Chart 3.23 : Protection of more depositors on enhancement of insured deposit coverage level



Source: Data: DID, BB; Computation: FSD, BB

By the forthcoming amendment of the Bank Deposit Insurance Act, 2000, if the coverage limit is extended to BDT 200,000 per depositor, chart 3.23 shows that the percentage of fully covered depositors increases to 93.68 percent of total depositors of the entire banking system.

The amendment will also include the depositors of non-bank financial institutions in the insurance system, i.e. small deposits of NBFIs will be insured in the banking system.

¹⁵ The covered amount refers to the total figure considering the deposits up to BDT 100,000 per depositor per bank.

Box 3.3 : Depositor safety net in banking system

The Deposit Insurance System (DIS) is one of the most important elements in any financial safety net program. Its role is to protect depositors, particularly small and less financially sophisticated depositors, against losses they may face as a result of the failure of banks. Moreover, the availability of deposit insurance protects banks against the risk of 'bank runs' and therefore contributes to financial stability.

In Bangladesh, the funding mechanism of the existing deposit insurance system is unidirectional; i.e., scheduled banks finance the scheme through regular contributions of premiums depending on the rate applicable to a particular category of bank and the amount of assessable deposits. Bangladesh Bank invests the Deposit Insurance Trust Fund (DITF) mostly in government bonds and the remainder is kept as cash with Bangladesh Bank.

The statute allows for an alternative credit line by the Government in case of insufficiency of fund during reimbursement of insured (covered) depositors; but the provision of back-up financing from private sector credit lines could reduce the taxpayers' burden and improve the depositors' confidence on the banking system. Other alternative sources of funds may include borrowing from sound financial institutions, borrowing from International Financial Organizations (WB/IMF/ADB), issuance of bonds, debentures, or other debt instruments, re-issuance of catastrophe bonds, etc.

Table 3B.1 : Deposit Insurance Trust Fund and its composition

(Amount in billion BDT)

Particulars	2010	2011	2012	2013	2014
Insurable Deposits	3,238.58	3,857.33	4,229.77	5,322.93	6,034.86
Insurance Premium (during the year)	1.65	1.92	2.31	3.34	3.54
i. Investment	16.10	19.46	23.99	29.76	36.35 ¹⁶
ii. Cash	0.01	0.32	0.15	0.07	0.005
Deposit Insurance Trust Fund Balance	16.11	19.78	24.14	29.83	36.36

Source: DID, BB; Compilation: FSD, BB.

Chart 3.24 : Usage of fund from DITF to liquidate two private commercial problem banks at current insured level.

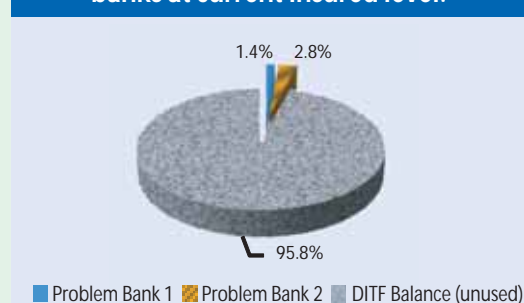
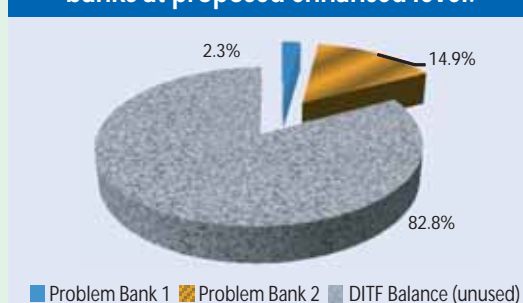


Chart 3.25: Usage of fund from DITF to liquidate two private commercial problem banks at proposed enhanced level.



Source: DID, BB; Compilation: FSD, BB.

(Continued)

¹⁶ Accumulation of the insurance premium after incorporation of deposit insurance in 1984.

(Continued)

Table 3B.1 shows the balance of the DITF reached over BDT 36 billion at the end of 2014, which is more than double compared with that of 2010. This capacity of DITF is awfully persistence in the context of total covered deposits of banking system in Bangladesh. The accumulated fund covers 2.19 percent of the total insured amount of the entire banking system in consideration of the current coverage of BDT 100,000.

In a single bank resolution, the capacity of the DITF is shown to be more adequate. Charts 3.24 and 3.25 depict that the fund from the DITF can easily be utilized to liquidate two private commercial problem banks under the current deposit insurance (covered) level, as well as proposed enhanced insurance level of deposits, i.e. up to BDT 200,000.

Chart 3.26 : Optimum number of small banks can be liquidated using fund from DITF.

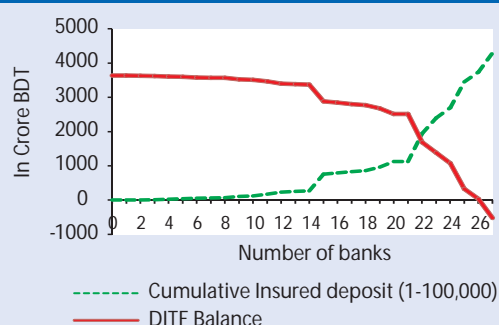
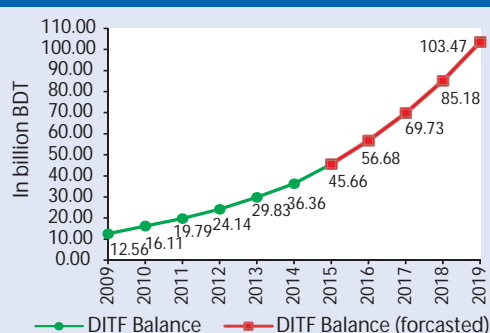


Chart 3.27 : Forecasted Depositors' Safety Net in next 5 years



Source: DID, BB; Compilation: FSD, BB.

Chart 3.26 shows that, the DITF can compensate up to 26 small banks' insured deposits (covered) in the case of either single bank liquidation or a series of banks' liquidation. Here, the small banks are arranged as an ascending order of their corresponding deposit base, irrespective of the category.

However, a significant number of large banks' (with large deposit base) insured deposits could not be compensated (hypothetical scenario) with the current balance of the DITF.

Since incorporation of the deposit insurance system in 1984, the deposit insurance fund (later on, named as Deposit Insurance Trust Fund, DITF) has grown steadily over the years. Bangladesh has not experienced any bank liquidation yet allowing DITF to accumulate a sufficiently large size of fund. Assuming no banks will fail and therefore be liquidated within the next 5 years, the fund may cross 100 billion BDT in 2019* (Chart 3.27).

As one of the pre-conditions for compliance with the Basel Core Principles for Effective Bank Supervision, it is necessary for Bangladesh Bank to formulate a well-designed Resolution Framework for Banks. The accumulated fund can be utilized efficiently in case of liquidation and also other modes of bank resolution, including Purchase and Assumption (P&A), Directed Merger, Insured Deposit Transfer, Good Bank-Bad Bank, and other resolution techniques. At the same time, the mandate of Deposit Insurance System (DIS) in Bangladesh should be extended to 'Pay-

(Continued)

box Plus' rather than the existing 'Pay-box' system, i.e. DIS should have additional responsibilities such as certain resolution functions (e.g., financial support or acting as the liquidator).

*** Methodology of forecasting the Deposit Insurance Trust Fund (DITF):**

1. Total time and demand liabilities (TTDL) are forecasted with geometric mean;
2. Insurable deposits are forecasted based on their relationship between insurable deposits and TTDL;
3. Assessable deposits (base value for determining the premium) are computed by deducting the Statutory Liquidity Requirements (SLR);
4. The relationship between premium (collected) and assessable deposits is then estimated. It is to mention here that due to a significant increase (14%) in the premium rate in 2013, the relationship (ratio of premium and assessable deposits) that existed in 2014, rather than an arithmetic mean, has been used for forecasting premiums;
5. Cumulative premiums are forecasted;
6. The relationship between the deposit insurance trust fund (DITF) and cumulative premiums is estimated and used for forecasting the DITF.

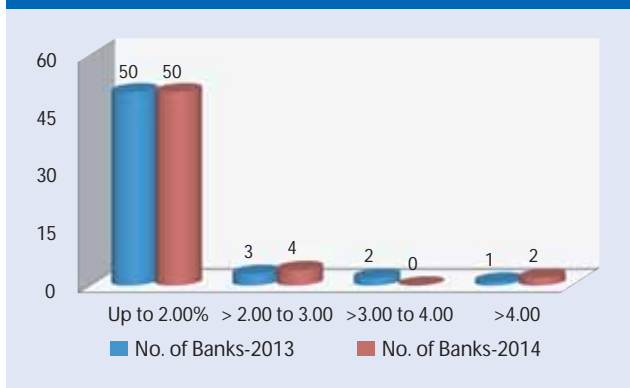
3.8 Banking Sector Profitability

Banking sector showed impressive operating performance in CY14 primarily due to its efficiency in generating non interest/investment income. However, the higher provision requirements for NPLs caused net income to drop below the level of CY13.

The banking sector's operating profit increased by 14.3 percent from BDT 186.1 billion in CY13 to BDT 212.7 billion in CY14. The increase in non-interest income is the primary reason for this growth. Non-interest income increased by 17.3 percent in CY14 over CY13 and this is the primary reason for the growth in operating profit. It is a good sign for financial stability, as the banking industry is not primarily dependent on interest income and banks are being able to generate profits from ancillary businesses. The net profit, however, decreased by 17.3 percent from BDT 72.55 billion in CY13 to BDT 60.0 billion in CY14. The growth in operating performance combined with a decrease in net profit can be attributed to the extensive growth in bad debt provisions maintained by the banks. The amount of provisions increased by 82.7 percent over CY13 and reached to the level of BDT 84.3 billion in CY14 from BDT 46.1 billion in CY13. The provision increased because NPL increased as a percentage of outstanding loans, which requires higher provisioning, and for a one-time special loan rescheduling policy introduced last year that was not applicable in CY14. Both the factors substantially increased the provision maintenance requirement and hence decreased the net income. Accordingly, banking sector return on equity (ROE) had decreased, parallel to the decrease in net profit in CY14.

An inconclusive macroeconomic and business environment throughout the year made it difficult for banks to sustain the profitability level of earlier years. A substantial increase in NPL in a particular bank negatively affected ROA and ROE of the entire banking industry.

Chart 3.28 : Sector return on assets (ROA): CY 2014

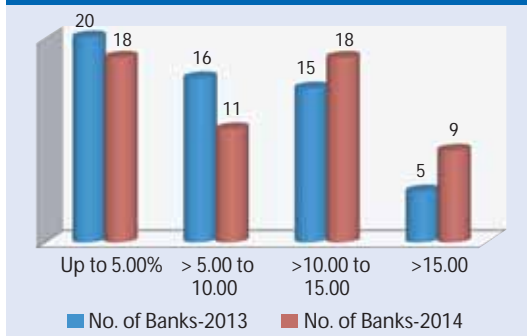


Source: Data: DOS, BB, Compilation (Aggregate P/L account of banking industry): FSD, BB

ROA and ROE at end-December 2014 decreased by 20 and 260 basis points respectively from CY13, and reached the levels of 0.7 and 8.1 percent respectively. This scenario is a complete reverse scenario of what happened between CY12 and CY13. It is primarily due to a one-time relaxation in the loan rescheduling standard and the banking sector posted impressive ROA and ROE figures in CY13 with the ratios actually increasing by 30 and 290 basis points compared with CY12.

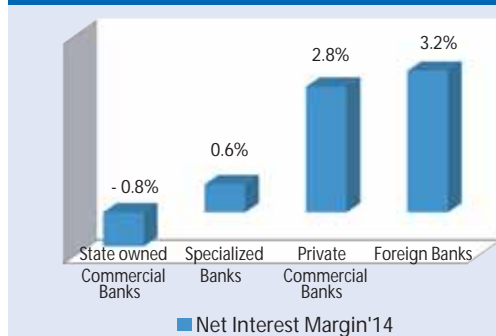
The relaxation in the loan rescheduling standard allowed banks to maintain lower provisions, which ultimately helped to boost profitability. The substantial increase in provision requirements in CY14 may also be attributed to the uncovering of financial irregularities identified in a particular bank. From January 2014 to end-December 2014, the required provision of that bank increased by nearly BDT 18 billion, which seriously dampened the profitability of the banking industry in CY14.

Chart 3.29 : Banking sector return on equity (ROE): CY 14



Source: Data: DOS, BB, Compilation (Aggregate P/L account of banking industry): FSD, BB

Chart 3.30 : Bank Type wise Net-Interest Margin in CY 14



However, it was necessary for BB to maintain its surveillance and the bank had to maintain its required provision. BB, usually, supervises the banks to ensure that actual provision is kept by the banks in compliance with their higher provision requirements. Apart from few banks, overall banking sector showed an impressive performance in CY14 as indicated by the presence of an increasing number of banks with higher ROEs (10 percent and more).

In terms of different components of profitability, the net interest margin (NIM) decreased by 30 basis points from 2.1 percent in CY13 to 1.8 percent in CY14, which had a slight adverse effect on the banking sector's profitability.

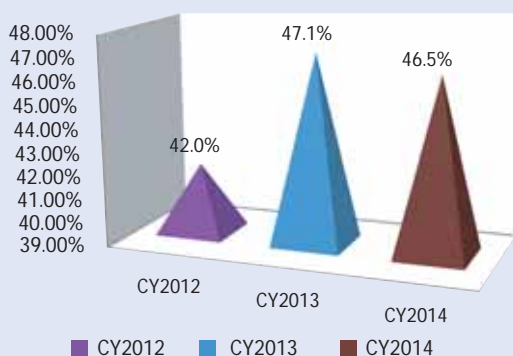
Net interest margin decreased and banks relied more on non interest/investment income to generate profit. A higher proportion of investment portfolio allocated to treasury instruments also helped to generate non interest investment income.

The decrease in net interest margin (NIM) may be attributed to higher classified loans. Due to higher nonperforming loans, interest revenue recognition was negatively affected. The macroeconomic condition in CY14 did not encourage entrepreneurs to expand economic activities, which ultimately caused a slower loan growth and NIM for the banking industry.

The net interest margin (NIM) of foreign banks is 3.2 percent in CY14, which is higher than that of state owned commercial banks, specialized banks and private commercial banks of -0.8 percent, 0.6 percent and 2.8 percent respectively. It is noteworthy that the interest income for foreign banks is much higher compared with their interest expense. However, the difference in this ratio with other banks is diminishing; in CY13 the NIM was 4.2 percent, indicating that the excess profit is getting difficult to maintain as the economy is becoming competitive and local banks are also catching up with the foreign banks.

Despite the progress made by the local banks, their interest incomes still do not exceed interest expenses by a very great amount (in fact, the SOCBs have a negative net interest margin) and they have to depend more on non-interest income to attain higher profitability.

Chart 3.31 : Banking sector non-interest expenses to total income



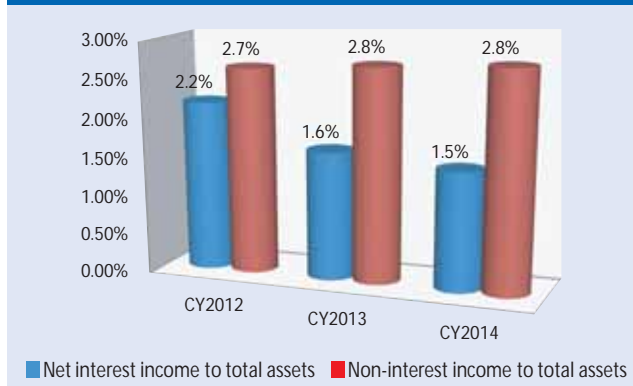
Total Income = Net Interest Income + Non- interest Income

Source: Data: DOS, BB, Compilation (Aggregate P/L account of banking industry): FSD, BB

The net interest margin (NIM) for each type of bank has decreased in CY14 in comparison with CY13. This fact can be attributed to the changes in the composition of gross earning assets, especially the reduction in loans and advances and increase in safe liquid investments in CY14 compared with CY13. It seems that banks are holding safer government securities (20 percent of total asset) in their portfolios, lower-risk assets which usually do not generate enough income to sustain high NIMs.

The volatile business environment in the economy and particularly the lack of business demand and business confidence due to macroeconomic uncertainties might have compelled the banks to hold their assets in safer government securities. The ratio of non-interest expense to total income decreased by 0.6 percentage points from 47.1 percent in CY 13 to 46.5 percent in CY14, indicating that banks have been able to generate more interest and noninterest income to meet the non interest expenses. In 2014, the growth in operating expense (11.5 percent) was less prominent than the growth in operating income (14.3 percent). Ignoring one particular bank, the profitability of the banking industry, in CY14, would have been even more impressive.

Chart 3.32 : Banking sector income by sources



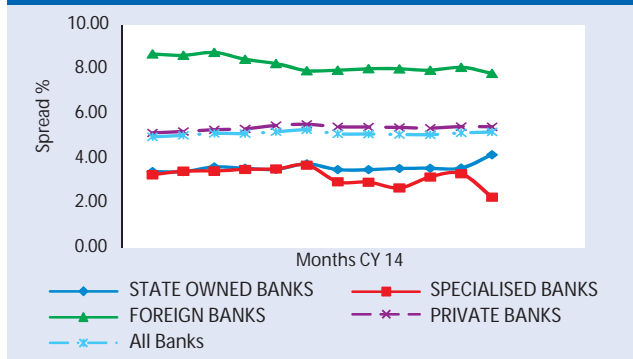
Source: Data: DOS, BB, Compilation (Aggregate P/L account of banking industry): FSD, BB

liquid assets which might have contributed in increasing efficiency in generating service income by the banks.

The ratio of net interest income to total assets decreased by 12 basis points from 1.65 percent in CY13 to 1.53 percent in CY14, and the ratio of non-interest income to total assets increased by 7 basis points from 2.75 percent in CY13 to 2.82 percent in CY14. As the graph shows, the decrease in net interest income and increase in non-interest income as percentage of total assets can be attributed to the shifting of investment funds of banks from loans and advances to investments in safer

The interest spread has widened in CY14 compared with CY13. Higher NPLs might have induced banks to charge a higher spread on the performing loans.

Chart 3.33 : Banking sector monthly weighted average interest rate spread for CY14



Source: Data: Various issues of Economic Trends; Computation: FSD, BB

The interest rate spread provided sufficient margins for banks to continue operating in the market. Interest rate spreads have, on average, increased from 4.99 percent in January 2014 to 5.21 percent in December 2014. Higher NPLs in the portfolio might have induced banks to charge for higher spreads. Bangladesh Bank (BB) has standing instructions to all banks to keep their spread to a level not exceeding 5.0 percent.

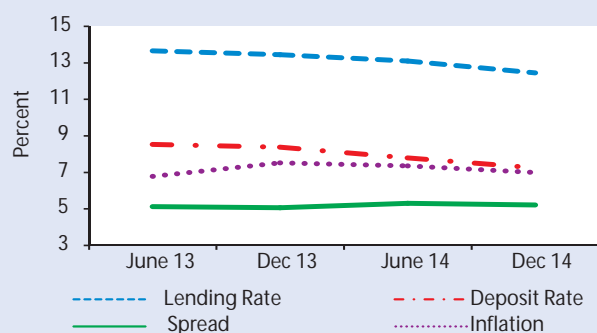
The weighted average spreads of all banks have remained close to the directed benchmark following BB's instruction over the years. However, spreads continued to remain high for Foreign Commercial Banks (FCBs), whose average spread is almost double than that of SCBs and SDBs. It is noteworthy that a high spread is sometime desirable for financial stability, because it makes banks more profitable. Generally, as the banking sector develops, it becomes more competitive and more efficient, and faces less credit risk, the spread will tend to decline, although fluctuations in the general level of interest rates can temporarily interrupt this smooth decline. It is expected that, in the future, banks in Bangladesh will become even more efficient in managing their credit risk, and interest rate spreads remain at a lower level, encouraging more business activities.

Box No 3.4 : Declining Lending Interest Rate Contributes to Economic Growth and Stability

Affordable lending interest rate eases the access to finance to the consumers/business entities and boosts economic activity in any country. On the contrary, a relatively higher interest rate appears as onerous to the consumers/business entities and tends to decrease economic output. Bangladesh Bank, in its view of optimum monetary policy, tolerates only mild inflation so that productivity, labor, and capital growth can proceed without the distorting and harmful effects of rapid price increases. It aims to achieve stable economic growth by exerting influence on the market interest rate, and, thereby indirectly, inflation.

Bangladesh Bank has encouraged the banking industry to enhance the use of information technology to maximize efficiency. Banks' operating costs indeed have been declining due to automation and rationalization of various processes as well as reduction of branch establishment costs and vehicle purchases. As administrative costs of originating and monitoring loans must be recouped by the bank as part of the interest rate charged to the borrower, the benefits of greater efficiency have flowed through to loan costs. On the other hand, the situations like sluggish loan demand during the last year and excess liquidity along with the reduction in inflation etc. appeared as some other contributing factors to declining interest rate. It is logical to say that besides the above mentioned factors, rigorous monitoring and moral suasion of Bangladesh Bank toward the banks, help the weighted average lending rate decline significantly. Finally, at end-December 2014, the weighted average lending rate and spread came down to 12.46% and 5.21% respectively, and Bangladesh Bank anticipates these rates will go down further. Moreover, Bangladesh Bank has also been able to reduce the inflation gradually to a milder level through the implementation of monetary policy. The inflation rate slipped to 6.99% at end-December, 2014.

Chart B 3.4.1 : Lending Interest Rate, Deposit Interest Rate, Spread and Inflation



Source: Monthly Economic Trends, Calculation: FSD

Although public policy can influence rates, a market-based interest rate regime allows the banks to fix their interest rate and structure independently. The Board of Directors of a bank determines those rates according to their discretion and judgment in consideration of the market scenarios. However, in case of priority sectors, Bangladesh Bank sometimes imposes an upper bound on the interest rate in consideration of the greater welfare of society. For example, the current maximum interest rate of pre-shipment export credit and agricultural credit are 7% and 11% respectively while the case of credit from Export Development Fund (EDF) is less than 3%.

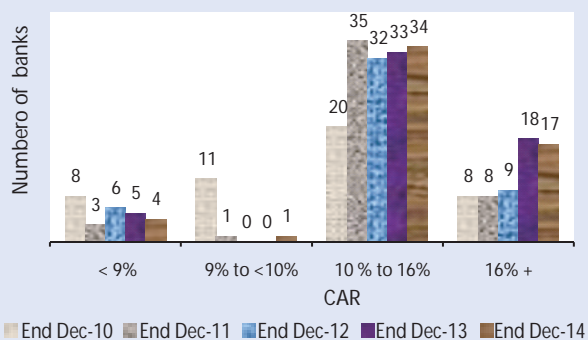
Moreover, for the betterment of the Small and Medium Enterprises (SME) sector and especially woman entrepreneurs, the borrowers are being provided with refinancing facilities at an interest rate of 10%. A subsidized interest rate of 4% has been provided in favor of cultivation of spices, pulses, and oilseeds. Businessmen can also borrow money from foreign sources at a cost effective rate (LIBOR+3~4%, which works out to below 5%)¹⁷. Bangladesh Bank also approved low cost credit in aggregate of BDT 500 billion during 2010-14, the sources of which had come from abroad. All of these abovementioned programs help to reduce the cost of credit in the economy.

¹⁷ Foreign borrowing may lower interest costs, but raises additional foreign exchange risk for the borrower unless matched with receipts in that same currency.

3.9 Capital Adequacy

The capital adequacy of the banking industry recorded a minor decline in the review year. Compared with end-December 2013, the proportion of banks compliant with the minimum capital adequacy ratio (CAR) remained mostly unchanged as of end-December 2014; 91 percent of the scheduled banks were able to maintain their capital adequacy ratio at 10.0 percent or higher in line with Pillar 1 of the Basel II capital framework¹⁸.

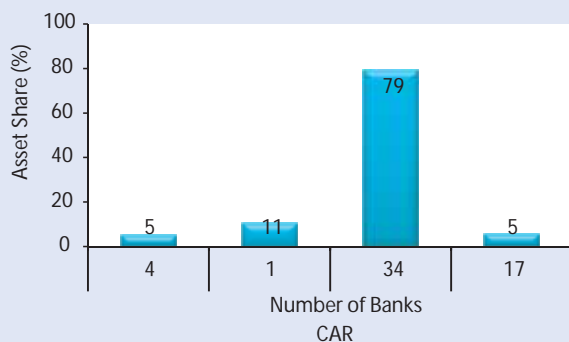
Chart 3.34 : Capital adequacy ratio of the banking sector



Source: Data: DOS, BB; Computation: FSD, BB

Importantly, as evident from the charts, a quite substantial share of banking assets were concentrated in the CAR compliant banks at end-December 2014; 34 banks' CARs were within the range of 10-16 percent and their assets accounted for nearly 79.0 percent of the total banking industry's assets, indicating a notable soundness of the banking industry.

Chart 3.35 : Asset Share of Banks based on CAR in CY14



Source: Data: DOS, BB; Computation: FSD, BB

The banking sector capital adequacy recorded a minor deterioration at end- CY14 compared with the previous year, as evident from the movements of CAR and core capital in CY14. For example, at end-December 2013, the CAR of the banking industry was 11.5 percent; the same stood at 11.4 percent at end-December 2014.

Similarly, the core capital ratio of the banking industry stood at 8.6 percent

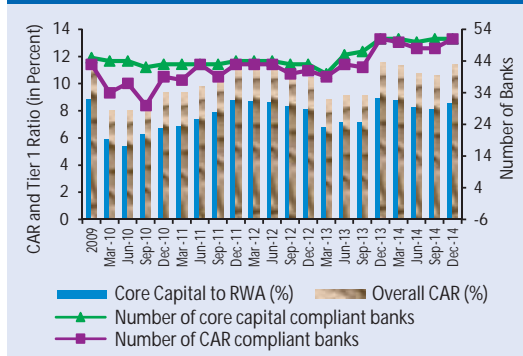
at end-December 2014 as opposed to 9.0 percent scored at end-December 2014.

It is mentionable that Tier-1 ratios were 8.8 percent, 8.3 percent, 8.1 percent, and 8.6 percent in the first, second, third and fourth quarters respectively of CY14 (Chart 3.35). As evident, the Tier-1 ratio (i.e. the core capital ratio) recorded a fluctuating trend in CY14; still the ratio was much higher than the minimum regulatory requirement of 5.0 percent.

¹⁸ The minimum regulatory requirement for CAR is 10.0 percent in 2014.

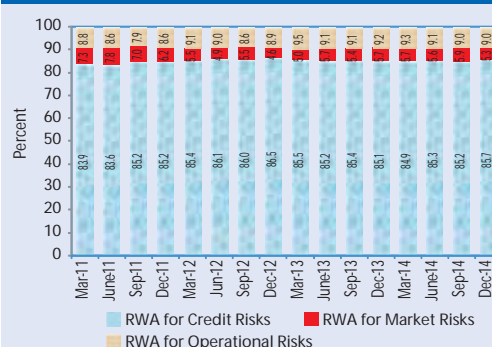
As of end-December 2014, under Pillar 1 of the Basel-II capital adequacy framework, risk-weighted assets arising from credit risk accounted for nearly 86 percent of the total industry risk-weighted assets, while the next positions being held by operational and market risks respectively (chart 3.36).

Chart 3.36 : Tier-1 ratio and overall CAR of the banking industry



Source: Data: DOS, BB; Computation: FSD, BB

Chart 3.37 : Distribution of risk weighted assets (RWA) in CY13



Source: Data: DOS, BB; Computation: FSD, BB

Taking the cross-country scenario into account (Table 3.3), the capitalization of the banking sector of the country still has to go a long way, as the industry CAR of Bangladesh is still lower than that of some of its neighboring peers, such as India.

Table 3.3 : International comparison of capital adequacy indicators

Countries	CAR (%)				
	2010	2011	2012	2013	2014
India	14.6*	13.5***	14.3*	12.7***	12.8***
Pakistan	14.0	14.1**	15.4****	15.5**	17.1****
SriLanka	14.9	14.5***	15.0***	16.3****	16.9**
Bangladesh	9.3	11.4	10.5	11.5	11.4

*as of end-March, **as of end-June, *** as of end-September, ****- as of end-December, Source: RBI, SBP, CBSL, and BB

3.10 Capital Regulation Issued by BB in CY14

In CY14, Bangladesh Bank decided to implement the Basel III framework in the banking sector of Bangladesh. With a view to assessing the preparedness of the banks for implementing the framework, BB has conducted a quantitative impact study. Taking into account the findings of the study, BB issued an 'Action Plan/Roadmap' for implementing the framework through BRPD Circular No.07/2014 dated March 31, 2014. In addition, BB issued guidelines on the Basel III framework through BRPD Circular No. 18/2014 dated December 21, 2014. Reporting of the capital to risk weighted asset ratio (CRAR) and the Leverage Ratio have been mandated to commence from the March quarter of 2015.

Box 3.5 : Distance to Default Analysis

Distance to default (DD) measure was first introduced by Roy (1952) and subsequently referred in many literatures including Stiroh and Rumble (2006) and IMF economists Laeven and Levine (2009). It is often named as Z score and defined as the number of standard deviations that profit must fall to drive a bank into insolvency. Distance to default is calculated as-

$$DD = \frac{ROA + E / A}{\sigma_{ROA}}$$

Where,

DD = Distance to Default

ROA = Return on Asset

It expresses an index of default risk of the institutions, the larger the value (higher distance to insolvency) the lower the risk.

Chart B 3.5.1 : Standard Deviation of ROA

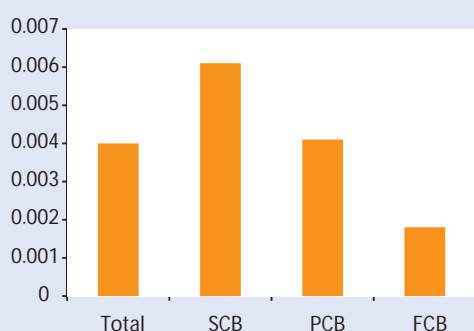
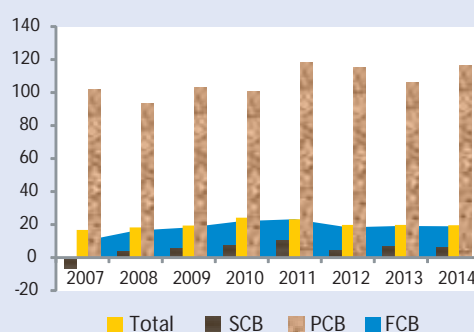


Chart B 3.5.2 : Distance to Default



Calculation: FSD

Group-wise Distance to Default (DD) has been calculated for 43 Banks¹⁹ operating in Bangladesh over eight years ranging from 2007 to 2014 based on 31st December data²⁰ of Return on Asset (ROA), Equity (E)²¹ and Asset (A). Chart B 3.5.1 shows calculated standard deviation of ROA (σ) over the sample period. Calculated Distance to Defaults are summarized in Chart B 3.5.2 which shows Private Commercial Banks (PCBs) closely resemble total industry default risk. State-owned Commercial Banks (SCBs) have the highest while Foreign Commercial Bank (FCB)s have the lowest default risk. Moreover, it is evident that total industry risk was the highest in 2007 (DD=9.93) and the lowest in 2011 (DD=23.26).

3.11 Free Capital

A steady and continuous rise in free capital indicates higher resilience of the banking system.

¹⁹ Five specialized Banks and Banks incorporated in 2013 were excluded

²⁰ Data source: Department of Off-site Supervision, Bangladesh Bank

²¹ Tier1 Capital

^a Laeven, L. and R. Levine (2009). "Bank governance, regulation and risk taking." Journal of Financial Economics 93(2): 259-275.

^b Roy, A. D. (1952). "Safety first and the holding of assets." Econometrica: Journal of the Econometric Society: 431-449.

^c Stiroh, K. J. and A. Rumble (2006). "The dark side of diversification: The case of US financial holding companies." Journal of banking & finance 30(8): 2131-2161.

Chart 3.38 : Equity and free capital of the banking industry(Billion BDT)



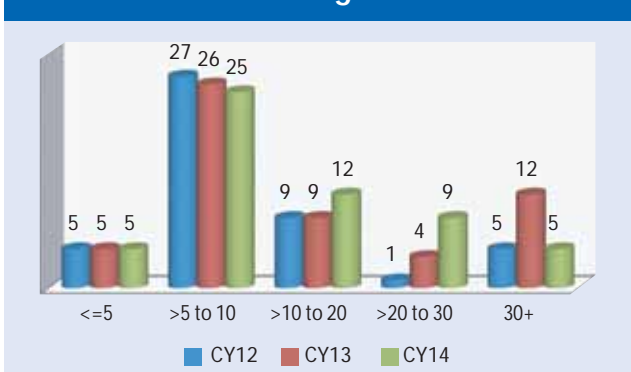
Source: Data: DOS, BB; Computation: FSD, BB

Apart from capital adequacy, the free capital of banks, defined as equity minus fixed assets, could also serve as a financial soundness indicator, especially in the event of any shock. As seen in Chart 3.38, the free capital of the banking industry was in a rising trend from CY11 to CY14, implying that the amount of capital available to absorb losses has increased steadily over the years, which is a promising sign for financial stability.

3.12 Leverage Ratio

Banks continue to maintain a higher leverage ratio (Equity/Total Assets) which also strengthens the loss absorbing capability of the banking system.

Chart 3.39 : Leverage ratio of banks



Source: Data: DOS, BB; Computation: FSD, BB

In CY14, the majority of the banks maintained a leverage ratio (equity/total assets, not risk-weighted) higher than 5 percent. As evident from Chart 3.39, out of 56 banks, 51 had a ratio higher than 5 percent at end-December 2014. Assets are reported on a net basis (that is, after deducting specific provisions on NPLs) in calculating the ratio.

Although in Basel III, off balance sheet assets are duly converted to on-balance sheet equivalent assets with the same credit conversion factors (CCFs) as in the calculation of risk-weighted assets, off balance sheet assets are not included in the above calculation. The ratio is benefitted by the existence of new banks which have higher capital compared with their smaller asset portfolios. However, in 2014, the number of banks having high leverage ratios (10 percent or more) increased compared with the previous two years indicating a higher shock absorbing capacity of these banks. Capital injections from parent offices of some foreign banks helped to strengthen the ratio.

3.13 Internal Capital Adequacy Assessment Process (ICAAP)

ICAAP focuses on a bank's own internal review of its capital positions, aiming to reveal whether it has prudent risk management procedure and sufficient capital to cover its risk profile. BB will review and evaluate banks' ICAAP and strategies, as well as their ability to monitor risks and

ensure their compliance with the capital to risk-weighted assets ratio (CRAR). BB will take appropriate supervisory action if it is not satisfied with the result of this process.

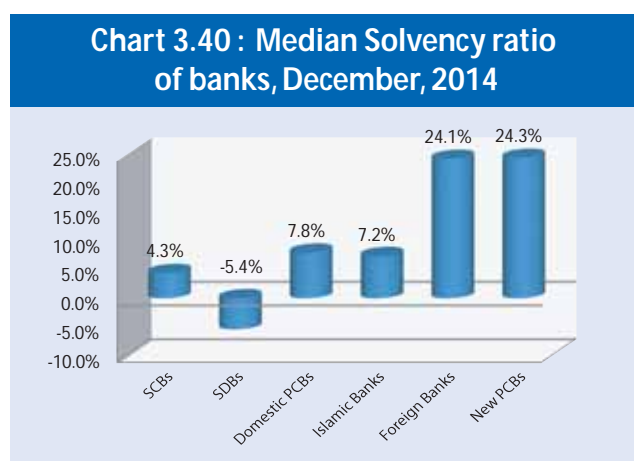
ICAAP expects banks to understand the risks that are material for their business²² making future plans while capturing the risks with state-of-the-art tools like stress testing and scenario analysis, and finally arriving at the appropriate capital buffer. ICAAP gives emphasis to have dialogues and interactions between regulators and the banks rather than a one-sided compliance measurement.

As a step towards implementation of Pillar 2 of the Basel II framework, BB developed a process document titled "Process Document for Supervisory Review Process (SRP)-Supervisory Review Evaluation Process (SREP) Dialogue on ICAAP". Through the process document, BB provided the banks with guidance to calculate required capital against a number of significant risks as per a specified format and to submit the calculations to BB. If a bank fails to produce its own ICAAP backed by proper evidence and rigorous review regarding risk management, BB will apply its prudence and also use the available information from its inspection departments with a view to determining the adequate capital of that bank.

Banks were advised to submit their quantitative information regarding ICAAP as of 31 December 2013. It is noteworthy that each of the banks was advised to update the supplementary documents of 'Process Document for SRP-SREP Dialogue on ICAAP' and submit those documents to BB with Board of Directors' approval by 31 March 2014. Based on the findings of the reports received from banks, a series of bilateral meeting with the banks will be arranged beginning in April 2015.

3.14 Solvency Ratio

Banking sector solvency can also be assessed using the tangible leverage ratio (Tier I Capital/(Total Assets-Intangibles)). The median values for the solvency ratio at end-December 2014 are shown in the graph.



Source: Data: DOS, BB; Computation: FSD, BB

As the graph shows, the solvency position of specialized development banks is a matter of concern.

The domestic private commercial banks (excluding Islamic and new banks) have a better solvency indicator than that of state-owned commercial banks, and a similar solvency ratio as Islamic banks.

The foreign banks are even more solvent backed by their sound capital base. The new banks have the highest solvency ratio among all the banks, as they have just started their operations and now have relatively higher equity capital in comparison with their asset base.

²² These risks include concentration risk, liquidity risk or interest rate risk, plus qualitative risks such as reputation risk, strategic risk and business risk, in addition to traditional credit, market and operational risks.

3.15 Banking Sector Liquidity

The banking industry did not face liquidity pressure in CY14, as indicated by a stable call money rate and low Advance to Deposit (ADR) ratio. The increase in ADR during the latter part of CY14 is actually another encouraging sign, indicating an expected rise in economic activities. The channelization of liquidity in the banking system to productive units of the economy may generate faster economic growth.

Due to various prudential stances taken by BB, liquidity stress of the banking sector remained at a manageable level in CY14. The liquidity scenario can be assessed by using two main indicators: the Advance to Deposit Ratio (ADR) and the call money rate. If liquidity pressure exists in the banking sector then it is expected that call money rates will be relatively higher and the ADR of the banks will also be higher. In CY14, both the ratios remained stable without showing any abrupt volatility, suggesting that the banking system was quite stable with sound liquidity management.

Since the relation between deposits and loans depend on the structure of the domestic financial system, there is no international best practice regarding the benchmark of ADR or upper limit on ADR. Rather, it depends on the domestic regulatory authority to decide on this issue. BB has, from time to time, changed its stance, analyzing the then-prevailing liquidity scenarios in the banking system, and prescribing the level of ceiling of ADR ratios for banks. With a perceived surge in ADR in the banking system in early 2011, banks were instructed in February 2011 to downsize their ADR within a prescribed level (for conventional banks it is maximum 85 percent and for Sha'riah banks it is maximum 90 percent) by June 2011. BB is continuing the policy and monitoring the ADRs of banks within that framework, other than a few exceptions.

The ADR of the banking industry, from the beginning of 2012, started declining from 81.1 percent in January, 2012 to 71.18 percent in December 2013. The drop was attributed to a relatively higher deposit growth compared to advance growth. In CY14, the ADR remained in the same range as experienced in CY13, and the overall industry ADR dropped marginally to 70.98 percent. In CY14, the advance growth (14.3 percent) remained higher than the deposit growth (13.4 percent) but the growth in absolute amount remained higher for deposits than for advances. This factor attributed to a lower overall ADR ratio.

Chart 3.41 : ADR of different types of banks. December 2014

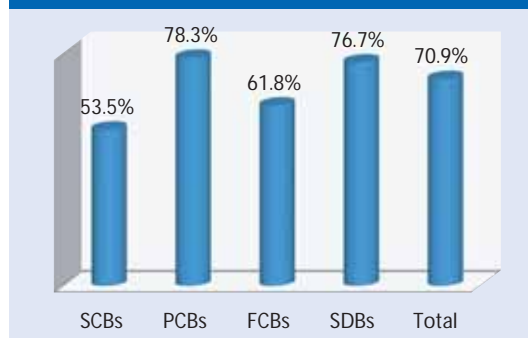
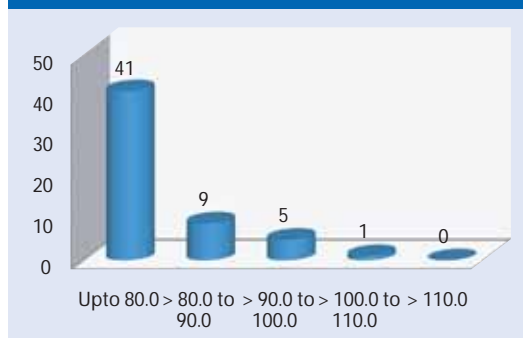


Chart 3.42 : Banking sector ADR: end-December 2014



Source: Data: DOS, BB; Computation: FSD, BB

It is noteworthy that, just as in CY13, the ADR of the banking industry remained much below the benchmark recommended by BB. The overall ADR dropped marginally in CY14 to 70.98 percent from 71.18 percent of CY13. A higher drop in ADR was observed in the foreign banks. Only 15 banks had ADR above 80 percent at end-December 2014, which indicates that major banks are not facing liquidity pressure. The macroeconomic uncertainties might have discouraged further growth in advances, which partially explains the scenario. Channelizing the liquidity to productive units of the economy may help in achieving faster economic growth.

Chart 3.43 : Monthly Advance Deposit Ratio



Source: Data: DOS, BB; Computation: FSD, BB

The ADR ratio remained well below the maximum allowable limit throughout the year, indicating sufficient availability of liquidity in the market. The ADR started to pick up during the fourth quarter of CY14, which signals that business confidence and demand for loanable funds is growing. As ADR at a very low level is not desirable for achieving sound economic growth, the latest increasing trend is encouraging for growth and financial stability as well.

Banks hold a large proportion of government securities in their portfolio but evidence suggests that this fact does not necessarily instigate any crowding out effect.

The liquidity position can be assessed by comparing the required and maintained Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR). As the following table suggests, the banks have maintained SLR well above their required level. This fact may also suggest that crowding out of loans and advances might be taking place in the banking industry as banks are holding excessive liquid investments primarily in government securities which could be provided as loans and advances. The possible crowding out effect of holding excessive government securities by the banks needs to be analyzed properly.

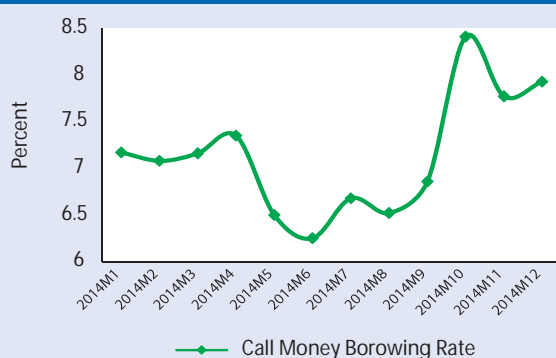
Table 3.4 : CRR and SLR for Banking Industry (End December, 2014)

Bank Group	Required CRR	Maintained CRR	Required SLR	Maintained SLR
SCBs	6.5%	6.59%	13.00%	39.82%
PCBs	6.5%	6.89%	13.00%	25.55%
FCBs	6.5%	6.87%	13.00%	51.83%
SDBs	6.5%	6.54%	13.00%	8.82%
Islami Banks	6.5%	8.33%	5.50%	13.87%

Evidence suggests, however, that the maintenance of high SLRs has not abruptly increased the lending rate or call money rates, which could be the symptoms of crowding out of loanable funds. This is expected because as private credit crowds out, banks tend to charge higher lending

rates on their loans and advances and the call borrowing rate also increases because of the fund shortages. As these factors are not prevailing in the economy, it can be argued that crowding out of private credit is not taking place in the banking sector despite having higher government securities in banks' investment portfolios. Rather, the higher portion of SLR maintenance might be attributed to the tendency of the banks to seek safer investments against the backdrop of macroeconomic uncertainties which are beyond the control of the banks. The higher growth in deposits allowed the banks to meet demand for loanable funds and still hold higher government securities to manage liquidity.

Chart 3.44 Banking sector call money borrowings rate



Source: Data: Economic Trends, January 2014, BB;
Computation: FSD, BB

The interbank call money rate remained quite stable throughout the year. During the start of fourth quarter it increased a little but remained within the manageable level. This steady call money rate also suggests that the liquidity pressure is within a tolerable level and BB has been able to supervise the banks in a way that prevented any shock originating from the call rate.

In summary, it can be argued that the prevailing low ADR and stable call money rates suggests that the banking industry is currently having no liquidity pressure that would create any threat to financial stability.

3.16 Performance of Branches of Local Banks Operating Abroad

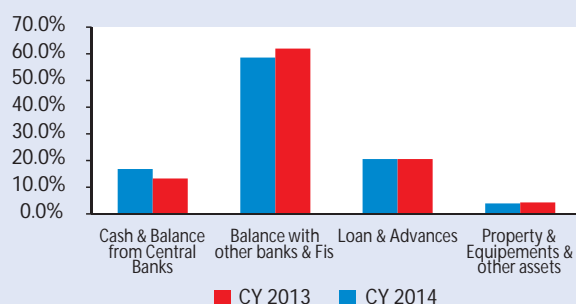
Bangladeshi banks are operating in major global financial centers spread over 20 countries through 7 branches, 7 representative offices and 42 exchange houses (100 percent owned subsidiary companies of local banks) as of end-December 2014. The branches are mainly located in Southeast Asia and the Middle East.

Most of the local banks expand their networks overseas by opening their branches in India and UAE, to facilitate business and wage-earners' remittances. In addition, two more private banks have obtained permission to open foreign branches in the Asian region, but the banking operations have not yet commenced, pending meeting the capital requirement and other formalities of setting up an overseas branch with home and host. Generally, overseas branches of local banks, same as local branches, are extending their services as deposit-takers and loan providers with other ancillary services. Moreover, they are expected to provide smooth remittance services to expatriate Bangladeshis and extend international trade service to Bangladeshi importers and exporters. They are also motivated to offer exclusive services to Non-Resident Bangladeshi's (NRBs).

3.16.1 Assets Structure of Overseas Branches

In 2014 the total assets of the overseas branches grew more than 42 percent from 2013.

Chart 3.45 : Assets Composition of Bangladeshi Banks in abroad as on 31-12-2014



Source: Scheduled banks, Compilation: FSD, BB

The total assets of overseas branches of Bangladeshi banks were USD 273.3 million at end-December 2014, which was only 2.0 percent of total industry assets and USD 81.0 million higher than that of the previous year. This asset growth was mainly due to the increase in customer credit of USD 16.5 million and balance with other banks and financial institutions of USD 56.5 million over the previous year.

It was funded mainly by customer deposits (USD 162.6 million). Two state-owned commercial banks contributed around 87 percent of total overseas assets of all local banks operating abroad.

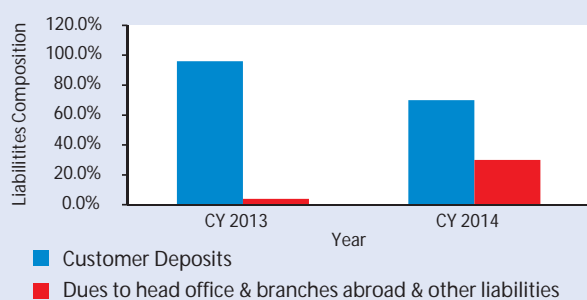
Their share of assets grew by 2 percent during CY14 as compared to their position in the previous year. However, the share of assets and liabilities of overseas banks are still insignificant, less than 3 percent of the industry assets and liabilities, and do not possess any threats and vulnerabilities to the system yet.

Placements of these branches with the central bank and interbank market contributed the major part of the total assets, which together account for around 62 per cent of total assets. In the total assets the share of loans and advances are only 20.5 percent, almost the same as it was in the previous year.

3.16.2 Liabilities Structure of Overseas Branches

In 2014 the total liabilities of the overseas branches grew almost 50 percent in comparison with 2013.

Chart 3.46 : Liabilities Composition of Bangladeshi Banks in Abroad as on 31-12-2014



Source: Scheduled banks, Compilation: FSD, BB

Various deposit accounts constituted 70 percent of the total liabilities of overseas branches of Bangladeshi banks. Customer deposits grew up to USD 14 million over the year CY14. Nearly about 30 percent of liabilities lay with the head office and other branches abroad. Other liabilities grew more sharply than in the previous year.

3.16.3 Profitability of Overseas Branches

In 2014 the total aggregate net profit of the overseas branches grew by more than 48 percent from 2013.

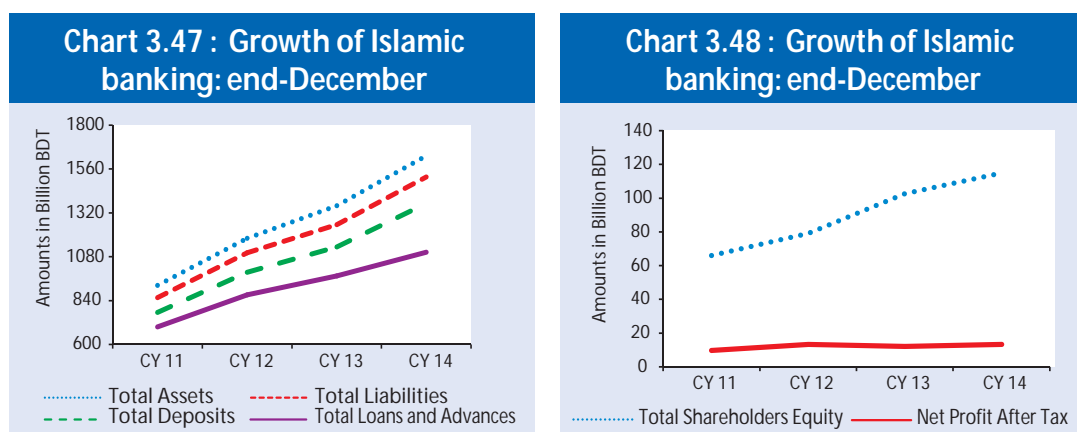
The aggregate net profit of the overseas branches²³ of Bangladeshi banks during CY14 was USD 4.98 million, which is 48 percent higher than that of the previous year. This increase in net profit growth resulted in an increased ROA from 1.76 percent to 1.82 percent for the year 2014. Two state-owned commercial banks with their six overseas branches contributed 70 percent of total overseas profit, whereas one private bank with one branch contributed 30 percent of total overseas profit.

3.17 Islamic Banking

Islamic banks have been operating in Bangladesh successfully over the last three decades alongside conventional banks. The basic principle of Islamic banking is sharing of profit and loss and prohibition of interest. It is an alternative to conventional banking, not a separate component of the financial system. At present, 8 Islamic banks are operating with 843 branches; in addition, 19 Islamic banking branches of 8 conventional banks and 25 Islamic banking windows of 7 conventional banks are providing Islamic banking services. Islamic banks are now broadening their activities, focusing on SMEs, microfinance, agriculture, poverty alleviation, entrepreneurship development, financial inclusion, etc., besides their normal banking activities.

3.17.1 Growth of Islamic Banking

Islamic banks showed a higher growth in CY 14 compared to the previous year in terms of assets, deposits, investments and loans and advances;²⁴ and also in terms of shareholders' equity.



*Note: Excluding Islamic banking branches/windows of conventional banks
Source: Data: DOS, BB; Computation: FSD, BB*

²³ Balances denominated in foreign currencies are translated into USD and recorded at rates of exchange found from www.oanda.com as on 31st December 2014.

²⁴ For Islamic Shari'ah based banks, loans and advances are also termed as investments.

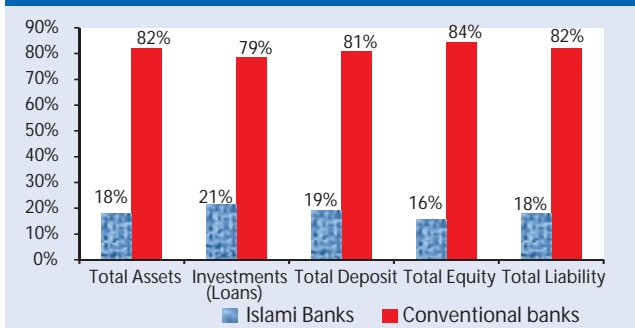
Chart 3.47 and 3.48 illustrate a consistent growth of the Islamic banking segment in CY 14, investments (loan and advances) grew by 13.3 percent (12 percent in CY 13), while the overall industry loan growth was 14.3 percent in CY 14. Just as conventional banks, Islamic banks were also affected due to the troubled business environment. Even more strikingly, the liability base grew by 20.8 percent (14 percent in CY 13), mostly due to a huge positive growth in the deposit base of 21 percent (14 percent in CY 13); compared with the growth in overall deposit base of the banking industry of 14.3 percent. Net profit after tax was augmented by 10.4 percent in 2014 for Islamic banks, whereas declined by 17.3 percent for conventional banks due to higher provisioning. The total NPL ratio of the overall banking industry was 9.7 percent, in contrast to 4.9 percent for Islamic banks.

3.17.2 Market Share of Islamic Banks

Although the growth of Islamic banks was higher than that of the conventional banks in 2014, the market share of Islamic banks increased only slightly due to the incorporation of nine new banks in the industry, only one of which is an Islamic bank. The total market share of the Islamic banks is less than one-fifth of the total banking sector.

The oldest and largest Islamic bank possesses 40 percent of total Islamic banks' assets and liabilities, and 7 percent of total banking sector assets and liabilities. This bank is also positioned as the second-highest in terms of total assets and total deposit base in the overall banking industry.

Chart 3.49 : Market share of Islamic banks and the banking sector in CY 14



Source: Data: DOS, BB; Computation: FSD, BB

The combined share of Islamic banks (excluding Islamic banking branches/windows of conventional banks), was 18 percent (17 percent in CY 13) of assets, 21 percent (20.7 percent in CY 13) of investments (loans and advances), 19 percent (18 percent in CY 13) of deposits, 16 percent (15.2 percent in CY 13) of equity and 18 percent (17.2 percent in CY 13) of liabilities of the overall banking industry as of December 2014.

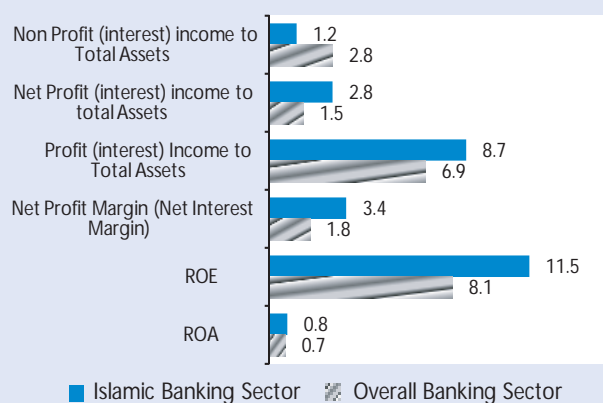
3.17.3 Profitability of Islamic Banks

Profitability ratios of Islamic banks remained steady in CY 14 from CY 13. The key profitability indicators, ROA and ROE, show that Islamic banks' profitability is higher than that of the overall banking industry; the oldest and largest Islamic bank earned the highest net income in the entire banking industry.

In 2014, the net profit of Islamic banks increased by 10.4 percent from 2013. In contrast, the net profit of the overall banking sector declined by 17.3 percent in 2014, because of huge

provisioning requirements for problem loans. As the Islamic banks historically contain fewer problem loans (with the exception of 1 problem Islamic bank) compared to the overall banking sector, these banks could gain a more robust net profit despite their relatively higher provisioning in 2014 than in 2013. In the absence of an established Islamic bond market, these banks operate with a different liquidity requirement, and that may also help them to generate more profit income from higher loanable funds compared to conventional banks.

Chart 3.50 : Selected income ratios for Islamic bank and banking industry



Source: Data: DOS, BB; Computation: FSD, BB

During CY14, Islamic banks contributed 22.5 percent of total industry profits. The profit income²⁵ to total assets ratio of Islamic banks reached at 8.7 percent, which is higher than that of the banking sector interest income to total assets ratio of 6.9 percent. On the other hand, the non-profit income to total assets ratio was only 1.2 percent as compared with the industry average of 2.8 percent, representing a lower income from off-balance sheet (OBS) transactions and service and fee-based incomes.

The ROA of the Islamic banking industry was 0.8 percent higher compared with the overall banking industry of 0.7 in CY14, indicating an efficient use of assets by the Shari'ah compliant banks compared with conventional banks.

Despite the presence of a problem bank in the Islamic bank group, the ROE of the Islamic banking industry, stands at 11.5 percent, which is higher than that of the overall banking industry ROE of 8.1 percent in CY14, indicating the higher earnings of Islamic banks comparing with their equity position. However, part of the explanation may be the negative equity²⁶ of an Islamic bank, which has been operating under a restructuring program of Bangladesh Bank.

3.17.4 Islamic Banks' Liquidity

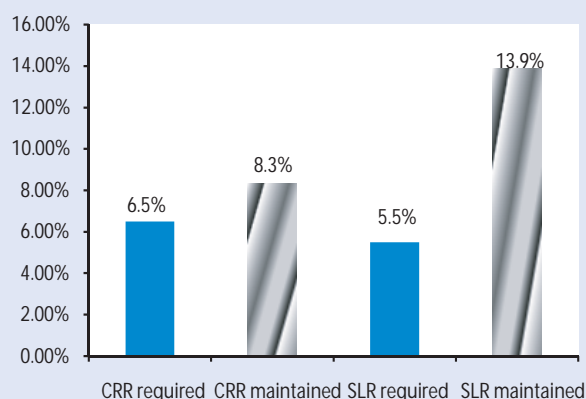
Islamic banks are allowed to maintain their statutory liquidity requirement (SLR) at a concessional rate compared with the conventional banks, as Shari'ah-compliant SLR eligible instruments are not widely available in the marketplace. Now, Islamic banks are required to maintain 6.50 percent and 5.50 percent of their total time and demand liabilities as CRR and SLR²⁷ respectively.

²⁵ For Islamic Shari'ah based banks profit income means income (interest) from investment (loans and advances).

²⁶ Since the negative equity proportionately reduced the total equity of the Islamic banks more than that of the industry as a whole.

²⁷ MPD Circular No.02 Dated-10/12/2013, and MPD Circular No.01, Dated-23/06/2014.

Chart 3.51 : CRR and SLR maintained by Islamic banks in CY 14.



Source: Data: DOS, BB; Computation: FSD, BB

Chart 3.51 shows that Islamic banks are maintaining much higher SLR than the requirement. This is because of less available Shari'ah compliant business opportunities in Bangladesh, which was further intensified by some macroeconomic issues, prevailed in previous year. Other clusters of the banking sector are also suffering from lack of business opportunities, and hence to invest their funds.

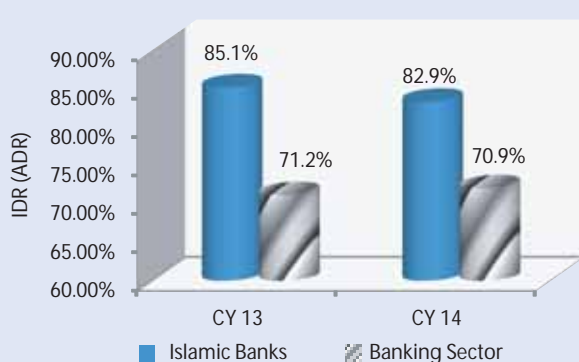
That may affect adversely the whole economy in the coming days and months.

The Investment-Deposit Ratio (IDR) of all Islamic banks is 82.9 percent as of end-December 2014, a bit lower from 85.1 percent at the end December 2013 and somewhat below the maximum recommended level of 90 percent.

However, the ADR of the overall banking industry is 71.0 percent²⁸, lower than the Islamic banks, due to a higher SLR requirement for conventional banks. Since there are limited sources of Shari'ah-compliant funds, Islamic banks can borrow funds either from the Islamic inter-bank money market, which came into existence in 2012, or from the Islamic Investment Bond's Fund issued by the Government. Since the IDR of Islamic banks are below the recommended maximum level of 90 percent, it can be assumed that liquidity stress was not really present in these banks in CY14.

Considering the excess liquidity holding in the Islamic banks, Bangladesh Bank amended the 'Bangladesh Government Islami Investment Bond (Islami Bond) Policy, 2004'. The objective of

Chart 3.52 : IDR (ADR) of Islamic banking and the overall banking sector as in CY 13 and CY 14



Source: Data: DOS, BB; Computation: FSD, BB

such amendment was to develop a sound foundation for the Islamic bond market and also to convert excess liquidity into investment through Islamic bonds. The Debt Management Department of Bangladesh Bank issued a circular for the introduction of the auction process of Islamic bonds referring a gazette notification of 18 August 2014. On the very first day, as on January 1, 2015, bids amounting to Taka 856 million were offered by Islamic banks. All bids for three-month bonds were accepted.

²⁸ Recommended maximum level is 85 percent. industry as a whole.

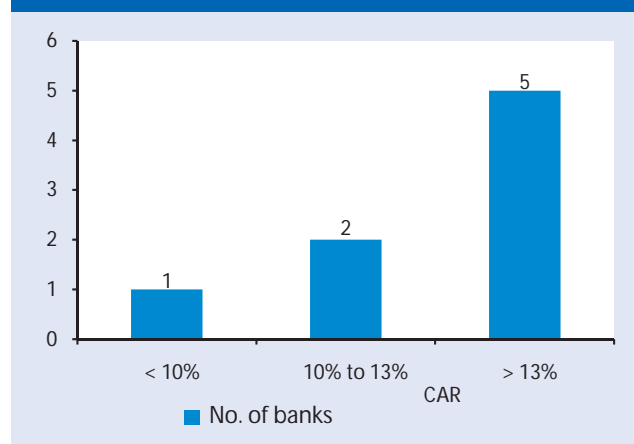
With the amendment of the Islamic Bond Policy, the maturity period of Islamic bonds was re-fixed at 3 months and 6 months to help the Islamic banks/FIs to manage their funds smoothly; previously it was 6 months, 1 year and 2 years. The bonds will be issued based on the Profit Sharing Ratio (PSR) by open auction, i.e., the profit earned by investing in these bonds will be shared by the buyer and by Bangladesh Bank as issuer. The profit of Islamic bonds will be equal to the profit of a three-month fixed deposit scheme of the issuing Islamic banks, instead of the previous profit rate of savings (Mudaraba) deposits. The bonds will be inter-changeable among the eligible²⁹ individuals and institutions, and will be used as an instrument for repo operations.

In case of selling Bangladesh Government Islami Investment Bonds (BGIIIB), the government will have to share with the investing banks of the profit (or loss) that accrue from the use of fund collected from such sales, and the fund will be used by the government complying with Shari'ah requirements. This aspect of concern will be taken care of by the government to the satisfaction of the investing banks. If the government wants to use the funds for longer term, in specific projects, then this type of short-term bond would not be the right one. Financial instruments like long-term bonds complying with Shari'ah requirements, popularly known as 'Sukuk', would be more appropriate. From specific projects, it becomes easier to calculate profit and loss, and the profit (also loss) can be shared with the fund suppliers or Sukuk buyers on a pre-agreed ratio. Bangladesh is yet to issue any Sukuk.

3.17.5 Capital Position of Islamic Banks

Under the Basel-II accord, given the minimum Capital Adequacy Ratio (CAR) of 10 percent, a total of 7 out of 8 Islamic banks have complied well with the regulatory requirement in CY 14.

Chart 3.53 : Capital Adequacy Ratio (CAR) of Islamic banks in CY 14



*Note: Excluding Islamic banking branches/windows of conventional bank
Source: Data: DOS, BB; Computation: FSD, BB*

The stronger capital base ensures that Islamic banks are well equipped to meet various kinds of shocks they are exposed to. However, in 2006, one Islamic bank's CAR turned into negative on account of a historical huge cumulative loss and provision shortfall, and changed its ownership within a short span of time. This bank has been operating under a restructuring plan since 2008. It is noteworthy that the CAR of Islamic banks other than the problem bank is better than conventional banks. Among 8, there are 7 banks having a CAR more than 10 percent in CY 14.

²⁹ Shari'ah based banks/financial institutions, conventional banks having Islamic windows, any person or institution are eligible to buy the bonds through the Shari'ah based banks/financial institutions, conventional banks having Islamic windows.

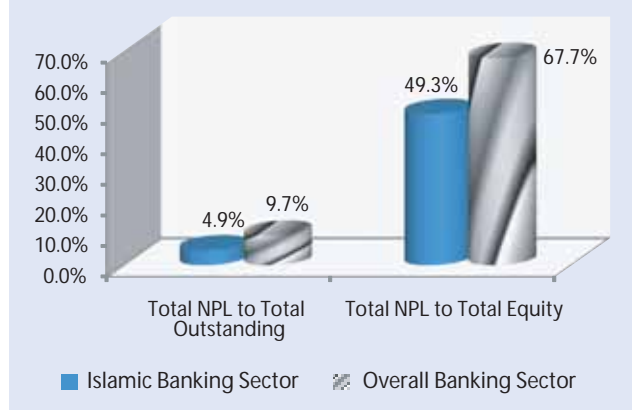
3.17.6 Classified Investments of Islamic Banks³⁰

Islamic banks also showed a better position regarding the classified investments to total investments ratio in the review year. The ratio was 4.9 percent while it was 9.7 percent for the overall banking industry in CY 14. However, if only private commercial banks are considered rather than the overall banking industry, the ratio drops to 4.98 percent from 9.7 percent which indicates that Islamic banks have only slightly less NPL compared with their closest peer group (PCBs). The classified investment to total equity is 49.3 percent for Islamic banks as compared to 67.7 percent for the overall banking industry, indicating that Islamic banks are more resilient in limiting possible losses from their investments (loans and advances) compared with the overall banking industry.

From the stability point of view, Islamic banks are less vulnerable to risks than conventional banks. They are able to pass the negative shocks on the asset side (Loss in Musharaka a/c) to the investment depositors (Mudaraba a/c arrangement).

Such arrangements proportionately transfer the credit, market, and liquidity risks of their assets with their depositors, and thereby support the shareholders from taking excessive risks compared with conventional banks.

Chart 3.54 : Classified investments (loans and advances) of Islamic banks and the banking industry in CY 14



*Note: Excluding Islamic banking branches/windows of conventional bank
Source: Data: DOS, BB; Computation: FSD, BB*

However, it is evident that Islamic banks in practice do not necessarily pass the risk from its assets to its depositors in stressed scenarios. Instead, Islamic banks smoothly distribute their profits to depositors at benchmark rates and thereby do pass the asset portfolio risk to the shareholders. Indeed, when investment revenues are substantially high, Islamic banks may provide a higher percentage of revenues to depositors as a rate of return in line with market deposit interest rates rather than the full profit due to them.

The banks will do the opposite in years when investment revenues are low through reducing its own management (mudarib) fee share to increase the share of distributions for the depositors.

This risk-sharing arrangement on the deposit gives additional protection to the bank, in addition to its book capital. It is indeed desirable from the Islamic banks to develop new products for their customers who are willing to invest their savings in the Shari'ah based products.

³⁰ The loans and advances are termed as investments in Islamic banks.

3.18 PERFORMANCE OF NEW BANKS

Newly established 9 (nine) banks commenced their operation in the year 2013. All these banks are categorized as private commercial banks (PCBs) according to their pattern of ownership. Among them, only one bank conducts Sharia-based banking and the other banks are providing conventional banking services. Three of them are sponsored by Non-Resident Bangladeshis (NRBs).

In terms of size, new banks still account for a very small portion of the banking industry. Their assets are mostly concentrated in safer liquid investment. The asset quality of these banks remained high in 2014 as their NPL ratio is zero, mainly due to safer investments and the fact that their loans are new. However, this asset quality will likely to be difficult to maintain in the upcoming years as the banks start expanding their loans and advances.

Aggregate assets of these banks accounted for 2 percent of the total assets of the banking industry at the end of December 2014. The ratio was 1 percent at the end of December 2013. In terms of loans and advances, it was 1.7 percent of the overall industry at end-December, 2014, increasing from 0.5 percent at end-December, 2013.

Though loans and advances constitute the largest portion of the assets of these banks, the proportion is slightly lower than the overall banking industry. At the end of 2014, loans and advances accounts for 54.9 percent of the total assets of these banks whereas the ratio is 59 percent for the overall banking industry. The branches of these banks are growing steadily and reached to 174 at end-December 2014, increasing from 65 banks at end-December 2013. Among the 174 branches, 83 are rural branches. In terms of bank branches, new banks accounted for around 1.93 percent (174 out of 9040) of the banking industry at end-December 2014, increasing from 0.75 percent (65 out of 8685) at end-December 2013.

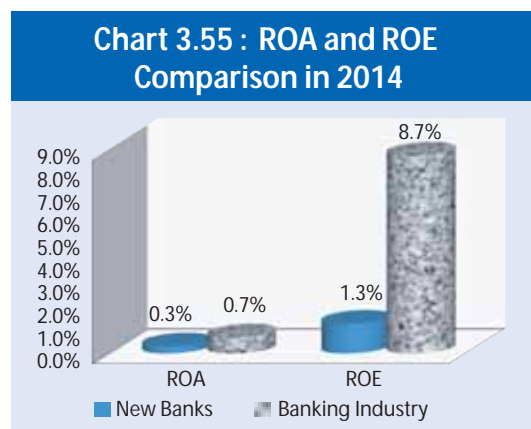
Balances with other banks and FIs are also very high for these banks. These investments and placements account for nearly 16.9 percent (4.5 percent for the overall industry) of total banking assets. The lack of established business networks might, for a time, is hampering the credit distribution and diversification of these banks. As a result the banks might have opted for safer investment rather than aggressively targeting risky credit expansion.

Asset quality of the new banks at present seems sound as their NPL ratio is zero. This may be due to the fact that these banks' loans and advances portfolio has not grown enough, the loans are new and have not had time yet to develop problems, and these banks are still relying more on safer liquid investments. Maintaining the asset quality in the future will be crucial for the sustainability and success of these banks.

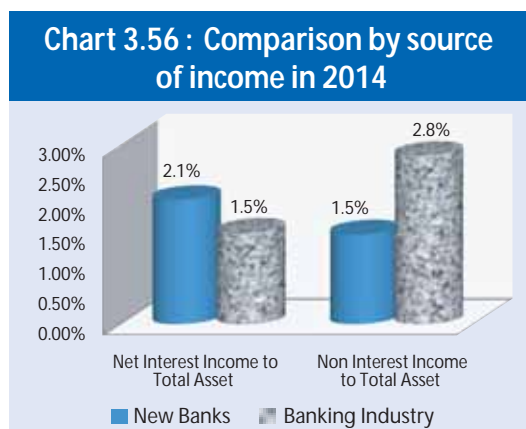
As the banks do not have classified loans, their provision requirement generates only from the standard (unclassified) loans. All the banks are maintaining their required provision as general provision, and the actual to required provision ratios of these banks are more than 100 percent.

Because of the composition of assets, profitability of the newly established banks remained lower than the banking industry. A higher proportion of safer investments ensured lesser risk weighted assets (RWA) of these banks and as a result CAR is quite high.

The new banks showed less impressive profitability indicators than the overall banking industry. The ROA and ROE of these banks for the year 2014 are lower than the banking industry as a whole. The ROA of these banks is 0.3 percent (0.7 percent for industry) and the ROE is 1.3 percent (8.7 percent for banking industry). The higher proportion of safe assets in the portfolio might be the reason for the low profitability of these banks, and ROE of course is affected by the high ratios of capital to assets.



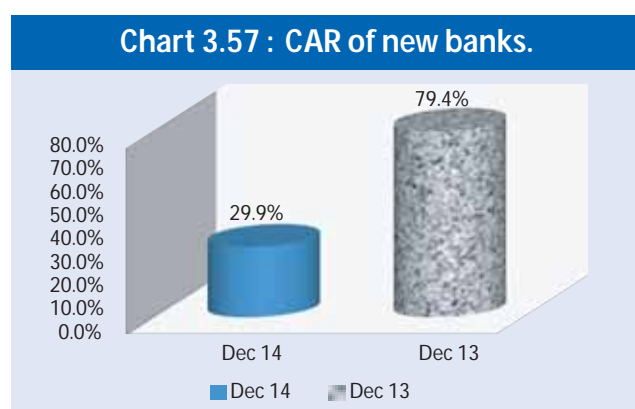
Source: DOS, Computation: FSD, BB



Source: DOS, Computation: FSD, BB

The above graph depicts that the new banks are not able to generate enough noninterest income as compared with overall banking system. Though they performed better in terms of generating net interest income than the banking industry as a whole, their relatively smaller loan portfolio fails to generate sufficient total income. Due to these facts, the ROA and the ROE of these banks are not as good as the overall industry.

The Capital Adequacy Ratio (CAR) of these banks is quite high compared with the overall banking industry. This is expected due to relatively lower risk weighted assets and the high minimum absolute equity capital requirement of BDT 4 billion for obtaining license in the new banks, which is large relative to their still-small, but growing, asset bases.

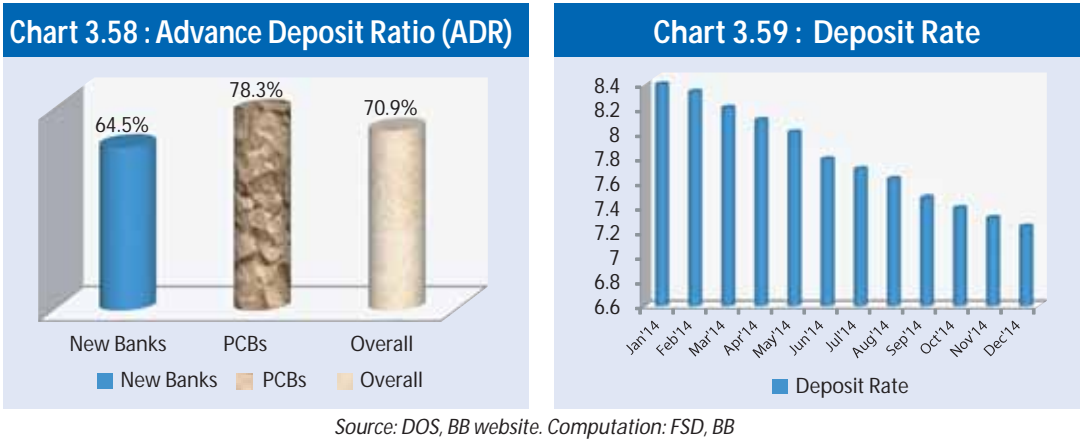


Source: DOS, Computation: FSD, BB

However, as the graph shows, CAR has dropped to 29.9 percent at end-December 2014 from 79.4 percent at end-December 2013. This reduction is due to the common fact that these new banks are gradually expanding their banking business and their risk-weighted assets are gradually moving towards comparable levels of RWAs prevailing in the overall industry.

The current level of CAR indicates that the new banks have higher loss absorption capacity than the overall industry.

New banks have higher liquidity compared to the liquidity of banking industry as suggested by the lower ADR in these banks. The low deposit rate prevailing in the banking industry also suggests that these banks have not competed feverishly against the established banks for deposits.



New banks had higher liquidity compared to their peer group, PCBs, as well as banking industry as a whole in 2014 as suggested by their ADR. The ADR of these banks (64.47 percent) were lower than PCBs (78.28 percent) and overall industry (70.98 percent). As mentioned in earlier sections, this may be due to the fact that these banks' loans and advances portfolio has not grown enough and as a result they are maintaining higher liquidity.

The falling deposit rate observed in the right graph also indicates that these banks have not competed feverishly against the established banks for deposits which were a prime concern of the established banks when new banks got banking license. If the new banks followed aggressive deposit seeking activities at higher rates, the overall deposit rate of the industry should have been higher. The constantly falling deposit rates throughout 2014 suggest that new banks have not been engaged in competition for deposit against the established banks to an extent that threatens financial stability.

Chapter 4

Banking Sector Risks

Bangladesh's banking sector is not only widening and deepening, but also getting complex while embracing various additional risks. Its asset size is as high as 80 percent of Gross Domestic Product (GDP), which is well above that of many countries at similar levels of per capita GDP. Indeed, the current size of the banking sector of Bangladesh requires special attention to risk management, to improve operational efficiencies of banks in managing the increasing risks. An integrated risk management framework, however, recommended for banks by Bangladesh Bank is in place for managing different types of risks, e.g. credit risk, market risk, liquidity risk and operational risk. Thus, banks should prioritize their focus on improving asset quality and the credit risk assessment of borrowers, enhancing customer centricity and efficiency in service delivery, achieving digital convergence, tackling competition from non-banks, and maintaining regulatory compliance. Living in an interlinked and fast-changing global market environment, the big challenge for our banks, above all, is to ensure proper compensation for credit risks and the administrative costs of underwriting and collecting loans, while keeping the cost of credit, a key detriment in investment decisions, as minimum as possible from gradually emerging risk premiums.

Bangladesh Bank (BB) is giving priority to the risk management of the banks and issued a comprehensive risk management guideline for banks in 2012. Through these guidelines, banks have been instructed to establish a separate risk management unit (RMU) to address the risks they are exposed to. Banks, in general, are addressing their risks through a separate risk management unit with an independent department or a division headed by the chief risk officer (CRO). All the banks have nominated their CRO in the capacity of Deputy Managing Director (DMD) to provide highest priority and to mitigate risks. Risk reporting, however, is another important aspect of risk governance. BB is ensuring sound risk governance in banks through their quarterly submitted monthly risk reporting and assessing governance based on the reports and meeting minutes. This process allows BB to assess the management information systems (MIS) utilized by banks in measuring and monitoring their risks. BB, however, is not only analyzing the risk reports but has started compiling a risk rating. These risk ratings are also used in the process of assigning the CAMELS rating, in the component of management and corporate governance. Indeed, banks' overall performance is evaluated together with their quality of risk management and risk mitigation efficiency. Moreover, the recently amended Banking Companies Act, 1991 instructed banks to construct a risk committee comprising members from the board. As the banking sector is relatively large, banks should emphasize the fundamentals of risk management and increase operational efficiencies in managing the entire spectrum of risks.

The banking sector of Bangladesh has been getting robust not only in size but also in complexity, with its diversified products, risk structures and connectivity. In this context BB senses the necessity of a paradigm shift of categorizing and analyzing banks with a new grouping, rather than continuing with traditional categorization of scheduled banks i.e., state owned commercial

banks (SCBs), state-owned development financial institutions (DFIs), private commercial banks (PCBs) and foreign commercial banks (FCBs). At this stage of development in the banking sector, these groups could be rearranged in clusters in terms of their financial health and orientation, in the interest of transparency and analytical convenience, by following five peer groups comprising all 56 scheduled banks. The first group could be categorized as the 22 private, long-standing, non-Islamic banks as they collectively possess about 44 percent of the assets of the system and constitute the core component of the future development of the banking sector. The second group could comprise the 10 banks of various ownership and orientations with larger credit risk exposures, fundamentally distinct from other scheduled banks, as they are operating under either memorandum of understandings (MOUs) or Directives of Bangladesh Bank (DOBB), or otherwise require special attention. Collectively, these banks are expected to lower their market share over time. They all require more than normal amount of supervision and suffer from various constraints inhibiting their performance, including poor asset quality, capital inadequacy and weak governance. These banks collectively possess about 32 percent of the assets of the system. The third group consists of 7 private full-fledged Islamic banks. These banks collectively possess about 18 percent of the assets of the system fundamentally distinct from the other private banks practicing conventional banking. The fourth group represents the 9 foreign bank branches incorporated in various foreign countries but operating in Bangladesh under the Banking Companies Act, 1991. These banks collectively possess about 6 percent of the assets of the system and are fundamentally distinct from the other private banks. The fifth group contains 8 newly licensed private commercial banks, except one Islamic bank providing Shari'ah banking included in group 3. These banks collectively possess about 2 percent of the assets of the system and one by one, over time, they can be subsumed into Group 1.

4.1 Credit Risk Structure in Bangladesh

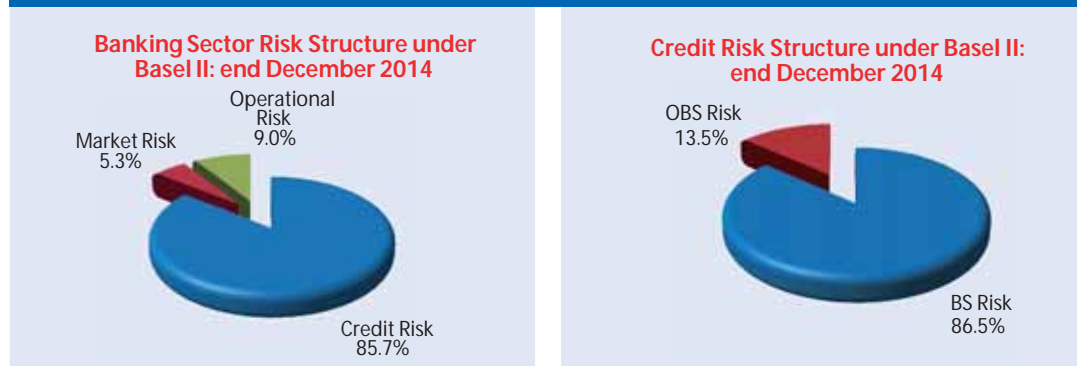
Most of the banks are interested in providing high-quality financial resources, known as credit, to their customers to contribute to the growth of gross domestic product (GDP) of the country. In BB's experience, a key to effective credit risk management is a well thought-out business strategy. The bank's focus over the coming years should be to further enhance risk modeling, processes, and systems infrastructure, in line with its ambition to bring maximum sophistication to the risk management function. Credit risk can be defined as "the probability of loss (due to non-recovery) emanating from the credit extended, as a result of the non-fulfillment of contractual obligations arising from unwillingness or inability of the counter-party or for any other reason." If the expected loss or the dispersion of possible repayment outcomes is high, the credit risk involved is also high.

At end-December 2014, the share of Risk Weighted Assets (RWA) attributed to credit risk was 85.7 percent of the total RWA of the banking system, whereas the RWA associated with market risk and operational risk were 5.3 and 9.0 percent respectively. RWA for credit risk as a ratio of total RWA has increased 0.8 percentage point from that of the previous year, while market risk to the total risk has decreased by 0.7 percentage points. At the same time, the share of operational risk has remained almost unchanged (decreased by 0.1 percentage point) compared with that of previous year. Credit risk, in relative terms as well as absolute terms, has increased (actual

increase from previous year is 12.5 percent) due to credit growth. Market risk decreased due to decreases in equity prices³¹. The Capital Adequacy Ratio (CAR) of the banking sector stood at 11.4 percent at end-December 2014, which was 17 basis points lower than that of the previous year. This decrease in CAR could partly be attributed to an increase in required specific provisions for classified loans. Provisions for classified loans hit profitability, indirectly reducing the growth of retained earnings and, as a result, decreasing the growth of the numerator (i.e. total eligible capital) compared to the denominator (i.e. RWA) of banks. Though it happened for few banks, operating under MoUs and restructuring plans, mainly for overall higher increment in RWA than capital of banks in 2014 compared with that of 2013. Moreover, the 9 (nine) new banks, which were established in 2013, have increased their RWA by 175 percent at the end of 2014, while boosting total eligible capital by only 3.7 percent. In monetary terms, RWA of the banking industry for credit risk were BDT 5419.4 billion, while the same for market and operational risk were 336.9 billion and BDT 567.8 billion respectively.

The top 5 banks' credit risk accounted for almost a quarter of aggregate credit risk, while the top 10 banks possess more than 40 percent. At the same time, total industry credit risk has increased compared with the previous year. This risk is mostly concentrated in balance sheet exposures.

Chart 4.1 : Credit Risk Structure



* BS= Balance sheet; OBS= Off Balance Sheet

Table 4.1 : Credit Risk in the Banking System

Banks	Credit Risk as Percentage of Industry Credit Risk	Credit Risk as Percentage of Overall ³² Industry risk
Top 5 Banks	25.5%	21.9%
Top 10 Banks	43.1%	36.9%

Data Source: DOS, BB; Computation: FSD, BB

³¹ Market risk capital charge (Risk weighted Risk for Market Risk) calculated through multiplying total value of equity measured in market prices of individual equities with the weight represented by CAR (currently 10 percent) for both specific and general market risk. Hence, a reduction in equity prices lead to a reduction in market risk.

³² Total of credit risk, market risk and operational risks.

Table 4.2 : Group wise dissection of credit risk in the banking system

Banks	Credit risk as percentage of industry credit risk	Credit risk as percentage of overall industry risk
Group 1	51.6%	44.2%
Group 2	22.9%	19.6%
Group 3	17.4%	14.9%
Group 4	6.5%	5.6%
Group 5	1.6%	1.4%
Total	100%	85.7%

Group 1 with 22 banks, possessing 44 percent of assets in the system, contains more than half of the credit risk in the system, and two-fifths of overall industry risk in the system. Group 2 with 10 banks, on the other hand, possesses 32 percent of the assets, but contains a little more than one-fifth of the credit risks of the system and almost one-fifth of overall industry risk of the system. The remaining groups contain risks similar to their asset shares. Thus, the credit risk in the banking system is, indeed, very much prevalent in group 1 and group 2 banks.

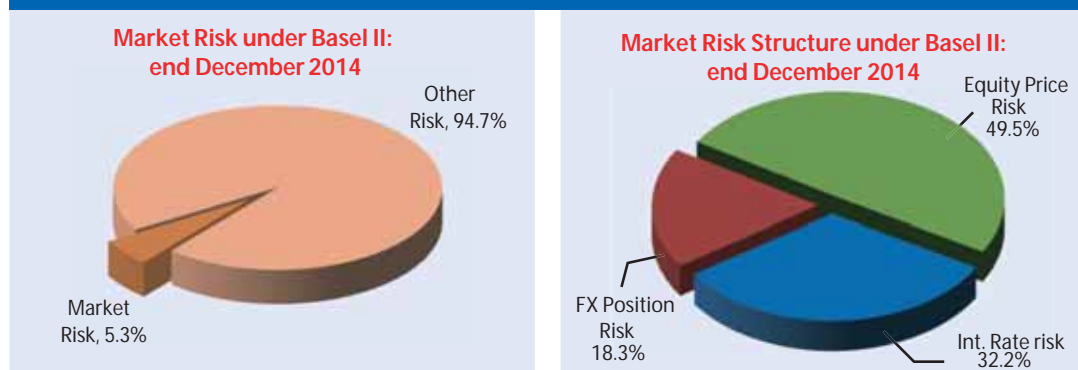
4.2 Market Risk Structure Under Basel II

Market risk is defined as the risk of loss in on-balance sheet and off-balance sheet positions arising from movements in market prices. Under market risk management, interest rate risk, equity price risk and foreign exchange risks are monitored. Interest rate risk can be defined as the possibility of a reduction in the value of a security, in Bangladesh, especially T-bills & T-bonds, resulting from a change in interest rates³³. This risk can be reduced by reducing the durations of the fixed-income investments which are held at any given time. Foreign exchange (FX) risk is defined as the possible reduction in profitability or capital caused by a change in FX rates. It may arise through dealing, but more commonly arises through mismatches between FX-denominated assets and off-balance-sheet items, and FX-denominated liabilities and off-balance sheet items. FX risk is defined as the bank having fixed maximum daylight and overnight exposure for foreign exchange exposures in various currencies. The stop-loss limits and single-deal limits are also in place for monitoring the forex operations of the dealers. Equity risk is the possible reduction in profitability or capital caused by adverse movements in the values of equity securities, owned by the banks, whether traded or non-traded, or taken as collateral securities for credits extended by the bank. Equity risk, at its most basic and fundamental level, is the financial risk involved in holding equities in a particular investment. Although investors can build equity in various ways, including paying into real estate deals and building equity in properties, equity risk, as a general term, most frequently refers to equity in companies through the purchase of common or preferred stock. Investors and traders consider equity risk in order to minimize potential losses in their stock portfolios. Market risk is generally quantified based on assessment of the sensitivity of a bank's earnings or the economic value of its capital to adverse changes in

³³ The Basel II market risk calculation concerns only interest-rate risk in the trading book. Interest-rate risk in the banking book is handled under Pillar 2. There is the consideration of moving it to Pillar 1 and treating it under market risk as well, under Basel III, but the decision has not yet been made.

interest rates, foreign exchange rates, commodity prices or equity prices. Besides, the ability of management to identify, measure, monitor and control exposures to the market risk, given the bank's size, complexity and risk profile also affect the market risk.

Chart 4.2 : Market Risk Structure



Source: Data: DOS; Computations: FSD, BB

4.2.1 Interest Rate Risk

Data as of end December 2014 indicates that the share of risk weighted assets (RWA) assigned to interest rate risk (IRR) is only 1.6 percent of total RWA in the banking system, while IRR contributes 32.2 percent of the RWA related to market risk. The banks' capital charge for interest rate risk was BDT 10.8 billion at end December 2014 up from BDT 7.8 billion at end December 2013. The top 10 (ten) banks (18 percent of the industry) contain almost 47 percent of industry interest rate risk and the remaining 46 banks (82 percent of the industry) do the rest. Three state-owned commercial banks and two private commercial banks were ranked in the top 5 for capital charge for IRR in the banking system. Both the top 5 and top 10 banks, at end-December 2014, displayed more IRR compared with that of the previous year due to an increase in trading book assets.

Table 4.2.1 : Interest Rate Risk in the Banking System

Banks	Interest Rate Risk	Share in Market Risk	Share in Overall Risk
Top 5 Banks	46.7%	15.0%	0.8%
Top 10 Banks	68.8%	22.1%	1.2%

Source: Data: DOS; Computations: FSD, BB

4.2.2 Exchange Rate Risk

Exchange rate risk is defined as the variability of a firm's earnings or economic value due to uncertain changes in the rate of exchange. The possible direct loss (as a result of an unhedged exposure) or indirect loss in the firm's cash flows, assets and liabilities, net profit and, in turn, its estimated market value of equity from an exchange rate movement. Although exchange rates cannot be forecasted with perfect accuracy, firms can at least measure their exposure to exchange rate fluctuations. Transaction risk, translation risk and economic risk, taken together, mean that measuring currency risk may prove difficult, at least with regards to translation and economic risk.

Transaction risk creates difficulties for individuals and corporations dealing in different currencies, as exchange rates can fluctuate significantly over a short period of time. This volatility is usually reduced, or hedged, by entering into currency swaps and other similar securities. At present, a widely used method is the value-at-risk (VaR) model. Exchange rate risk is another important source of market risk, which is primarily driven by banks' investments in FX-denominated assets, acceptance of FX-denominated liabilities, and the possibility of adverse movement in exchange rates. Bangladesh Bank, to limit the exchange rate risk, instructs banks not to expose their net open aggregate FX position, either in long or short, more than 15 percent of their regulatory capital. The net open FX position limit is compared with the actual position calculated on a particular reference date and the comparison is valid until further review.

Data as of end December 2014 indicates that the share of RWA assigned to exchange rate was 1.0 percent of total RWA in the banking system, whereas it is 18.3 percent of the market risk. The banks' capital charge for exchange rate risk was BDT 6.2 billion at end-December 2014, up from BDT 5.1 billion at end-December 2013. However, only 10 banks possess almost 70 percent of industry's exchange rate risk and the remaining 46 banks contain the rest. In particular, three state-owned and two private commercial banks were located in the top 5 positions with regard to exchange rate risk.

Table 4.2.2 : Exchange Rate Risk in the Banking System

Banks	Exchange Rate Risk	Share in Market Risk	Share in Overall Risk
Top 5 Banks	50.9%	9.3%	0.5%
Top 10 Banks	69.4%	12.7%	0.7%

Source: Data: DOS; Computations: FSD, BB

4.2.3 Equity Price Risk

Equity risk is "the financial risk [that is, threat to earnings and capital] involved in holding equity in a particular investment." Equity risk often refers to equity in companies through the purchase of stocks, and does not commonly refer to the risk in paying into real estate or building equity in properties, which is typically handled under credit risk. The measure of risk used in the equity markets is typically the observed standard deviation of a security's price over a number of periods. The standard deviation will delineate the normal fluctuations, one can expect, in that particular security above and below the mean, or average. However, since most investors would not consider fluctuations above the average return as "risk", some economists prefer other means of measuring it. Equity risk premium is defined as "excess return that an individual stock or the overall stock market provides over a risk-free rate." This excess compensates investors for taking on the relatively higher risk of the equity market. The size of the premium can vary as the risk in the stock, or just the stock market in general, increases.

Data as of end-December 2014 indicate that the share of RWA assigned to equity price risk was 2.6 percent of total RWA in the banking system, while it is almost 50 percent of market risk. The banks' capital charge for equity price risk was nearly BDT 16.7 billion at end December 2014, which was not significantly changed from the previous year end (BDT 16.9 billion). The top 10

banks contained 68.6 percent of industry equity price risk and the remaining 46 banks materially contained the remaining 31 percent of the risk arising from the movement of equity prices. However, the top 10 banks at end December 2013 were exposed to 71.0 percent of industry equity price risk. So, it has been noticed that, at end-December 2014, the top 10 banks contained less risk as compared with end-December 2013. Moreover, it is also mentionable that three state-owned commercial banks (SOCBs), one specialized bank (DFI) and one private commercial bank (PCB) occupied the top 5 positions in perspective of equity price risk.

Table 4.2.3 : Equity Price Risk in the Banking System

Banks	Equity Price Risk	Share in Market Risk	Share in Overall Risk
Top 5 Banks	44.5%	22.0%	1.2%
Top 10 Banks	68.6%	33.9%	1.8%

Source: Data: DOS; Computations: FSD, BB

Group 1 with 22 banks and Group 2 with 10 banks are jointly exposed to almost ninety percent of total interest rate risk and equity price risk, as these banks possess most of the interest-rate related instruments and capital market investments of the banking system. Moreover, these banks contained almost 70 percent of the exchange rate risks in the system. However, Group 3, consisting of all Islamic banks, possesses only about one-fifth of the exchange rate risks. The remaining groups do not considerably contribute to market risk exposure in the system.

4.3 Operational Risk

Operational Risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk, but excludes strategic and reputation risk. There are policies and processes for mitigating operational risk. A Key Risk Indicator (KRI) module is in place to gauge operational risk against set parameters. The Basel II Capital Accord requires banks to meet a capital requirement for operational risk as part of an overall risk-based capital framework. Operational risk charges are calculated following the three distinct options which are Basic Indicator Approach, Standardized Approach, and Advanced Measurement Approaches, reflecting increasing levels of sophistication in measuring risk sensitivity. Banks and Non-bank Financial Institutions (NBFIs) are now following the Basic Indicator Approach, although they are allowed to shift to the Standardized Approach subject to the attainment of some qualifying criteria.

Table 4.3 : Operational Risk (OR) under Basel II basic indicator approach

Banks	Share in industry operational Risk	Share in Industry Overall Risk
Top 5 Banks	28.2%	2.5%
Top 10 Banks	45.9%	4.1%

Source: Data: DOS; Computations: FSD, BB

Data at end-December 2014 indicates that the share of RWA assigned to operational risk was 9.0 percent of the total RWA of the banking system, which is 1.7 times higher than that of the RWA against market risk in the same time period. Given the capital adequacy ratio of the banking sector was 11.4 percent, the banks' capital charge for operational risk was BDT 51.9 billion at end-December 2014. Ten banks (18 percent of the industry) contained 46 percent of industry operational risk, and the remaining 46 banks contained 54 percent. At end-December 2014, the top ten banks' share of total operational risk was almost 10 percentage points higher than at end-December 2013.

Table 4.4 : Group wise dissection of operational risk in the banking system

Banks	Share in Industry Operational Risk	Share in Overall Industry Risk
Group 1	50.7%	4.6%
Group 2	22.9%	2.1%
Group 3	14.8%	1.3%
Group 4	10.6%	0.9%
Group 5	1.0%	0.1%
Total	100%	9.0%

In terms of the risk group structure, three-fourths of the operational risk of the system is contained and confined within the Group 1 and Group 2 banks, whereas their share in measurement of the overall industry risk is about 6.7 percent only.

One of the approaches under Basel III as well as Basel II for the calculation of minimum capital requirements for credit risk is the internal ratings-based approach. Under this approach, banks will be able to rely on their own internal rating systems for assessments of credit risk in order to calculate the capital which they must hold, provided that they can satisfy their regulators upon meeting a set of minimum supervisory standards. However, banks in Bangladesh are yet to be optimized for the internal ratings based approach in calculating their capital requirement for credit risk. The roadmap of Basel II, circulated from Bangladesh Bank in 31 December 2007, planned to introduce the IRB approach from the year 2012, but in real sense the IRB approach has not yet been introduced in the banking system of Bangladesh.

Recent guidelines on Risk Based Capital Adequacy suggest that Credit Risk Grading (CRG) may be customized for internal rating in such a way that can help to derive parameters such as probability of default (PD), exposure at default (EAD) and loss given default (LGD), which will be required for determining risk weights under the IRB approach of Basel II (and now Basel III). However, capacity building of both BB and bank officials is still necessary before introducing the IRB approach as regulatory compliance and measuring risk for determining the capital requirements of banks.

Box 4.1 : Basel III & the Internal ratings-based approach

Basel III is part of the continuous effort made by the Basel Committee on Banking Supervision to enhance the banking regulatory framework and seeks to improve banking sector's ability to deal with financial and economic stresses, improve risk management procedures and strengthen the banks' transparency. A focus of Basel III is to foster greater resilience at the individual bank level in order to reduce the risk of system wide shocks. The Basel Committee on Banking Supervision published the first version of Basel III in December 2010, scheduled to be introduced from 2013 until 2015; however, changes³⁴ from 1 April 2013 extended implementation until 1 January 2018 and again the deadline was extended to 1 January 2019.

To mitigate the system wide risks that can build up across the banking sector as well as the procyclical amplification of these risks over time, Basel III's innovative approach is to introduce capital buffers; i.e., the capital conservation buffer and the countercyclical capital buffer. In line with global practices, BB issued an Action Plan/Roadmap³⁵ for implementation of Basel III in Bangladesh with appropriate transitional arrangements for meeting the minimum Basel III capital ratios, full regulatory adjustments to the components of capital, etc. BB also issued "Guidelines on Risk Based Capital Adequacy (Revised Regulatory Capital Framework for banks in line with Basel III)" in December 2014 for effective implementation of Basel III.

Though in the RBCA guidelines BB indicates for countercyclical capital buffer of banks and introduction of capital surcharges for Domestic Systemically Important Banks (D-SIBs), these two components are not implemented for the regulatory compliance for determining capital requirements of banks. However, BB has developed its own customized model for the countercyclical capital buffer and methodology for identifying D-SIBs, and is monitoring the status of banks in this regard.

Risk management of the Basel III capital regulations continue to be based on three-mutually reinforcing pillars, viz. minimum capital requirements, supervisory review of capital adequacy, and market discipline, carried over from the Basel II capital adequacy framework. Under Pillar 1, the Basel III framework will continue to offer options for computing the capital requirement for credit risk and operational risk, albeit with certain modifications / enhancements. These options for credit and operational risks are based on increasing risk sensitivity and allow banks to select an approach that is most appropriate to the stage of development of bank's operations. The options available for computing capital for credit risk are the Standardized Approach and Internal Ratings Based Approach. The options available for computing capital for operational risk are the Basic Indicator Approach (BIA), The Standardized Approach (TSA), and the Advanced Measurement Approach (AMA).

4.4 Risk Mitigants

Basel II and Basel III allow banks a choice between two broad methodologies for calculating their capital requirements in relation to credit risk: the standardized approach and the internal rating based (IRB) approach. For now, Bangladesh has adopted the standardized approach. This

³⁴ http://www.bis.org/bcbs/basel3/basel3_phase_in_arrangements.pdf

³⁵ BRPD Circular NO-18 dated December 21, 2014

approach requires rating of banks' corporate clients or entities by external rating agencies recognized by the Bangladesh Bank.

The Bangladesh Securities and Exchange Commission (BSEC) promulgated the Credit Rating³⁶ Companies Rules, 1996 for investors' protection in issuing debt securities and public issue of shares. Eight domestic credit rating agencies (Table XXXVIII of Appendices) were licensed by BSEC, which were later accorded status of external credit assessment institutions (ECAIs) by Bangladesh Bank. Thereafter, BSEC and Bangladesh Bank issued rules and regulations towards mandatory ratings which led to the building of information frameworks critical to the efficiency of financial markets.

Recently, ECAIs have come to play a more crucial role since the capital adequacy of commercial banks has been tied to rating assessments of bank investments. The use of credit ratings is expected to lead to the establishment of acceptable measures of credit risk evaluation so that commercial banks can meet Basel II and Basel III regulatory prescriptions. As Bangladesh Bank accords ECAIs status to those credit rating agencies, banking sector financing to rated corporate borrowers is receiving a boost. The number of ECAIs, operating in Bangladesh, has risen from two to eight between 2010 and 2014. Furthermore, Bangladesh Bank has introduced ratings for small and medium-sized enterprises (SMEs) and a customized credit assessment framework for SMEs, including a separate rating scale and notation that sets SME ratings apart from the usual bank loan ratings. Access to adequate financing is still a chronic problem for SMEs in the Asian region and here, credit ratings could fill a critical gap in the credit information continuum, moving away from collateral-based lending to risk-based lending.

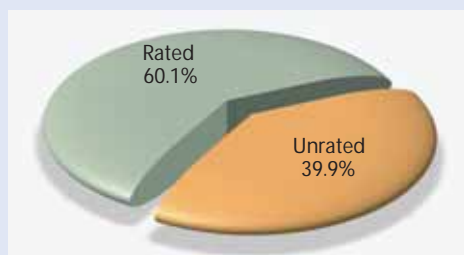
Establishing a framework³⁷ for credit risk capital requirements, which relies on a bank's internal assessment of risk, may pose a challenge for both banks and regulators, particularly with respect to seeking to ensure that estimates of risk are meaningful and robust. This issue may prove particularly challenging given the differing approaches to assigning ratings and to estimating loss characteristics per grade evident in the industry, and the degree of imprecision inherent in measuring these characteristics. In this regard, banks and supervisory practices for validation are critical to the successful implementation of the IRB approach. Market discipline may play a key role in this respect. The disclosure requirements may allow market participants to assess key pieces of information on the capital, risk exposures, assessment and management processes, and capital adequacy of banks under the IRB approach. In India, banks continue to rely on external rating agencies for calculating their credit risk, even as the Reserve Bank of India (RBI) has allowed them to move to an internal ratings based approach. RBI, however, has asked the banks to check their own preparedness before applying to migrate to internal ratings. Banks may have to analyze significant amount of data, as well as develop an internal governance structure, to implement the system effectively.

³⁶ Credit ratings are opinions about the ability and willingness of counterparty or an issuer or issue to meet its financial obligations in accordance with the terms of those obligations.

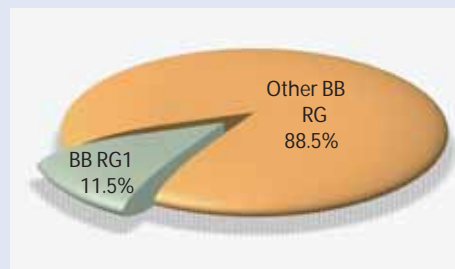
³⁷ Referred to the consultative document of Basel Committee on Bank Supervision: The Internal Rating Based Approach (January 2001).

Chart 4.3 : Exposure rating status in Bangladesh

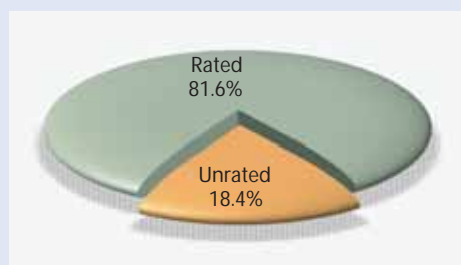
**Banks' Rated Exposures to Corporates:
end December 2014**



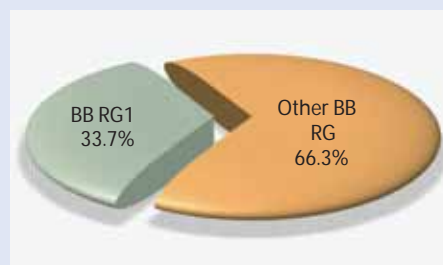
**Banks' Exposures of BB RG1 to Corporates :
end December 2014**



**Banks' Rated Exposures to Banks' & NBFIs':
end December 2014**



Banks' Exposures of BB RG1 to Banks' & NBFIs': end December 2014



Source: Data: DOS, BB; Computation: FSD, BB

The banks have exposures to both non-financial corporations and banks and non-bank financial institutions (NBFIs). At end-December 2014, corporate exposures of the banking system was BDT 3231.51 billion; out of that, 60.1 percent has been rated and 11.5 percent of it carried the best rating³⁸ (BB rating grade 1). But at end-December 2013, 56.4 percent corporate exposures of the banking system was rated and 16.6 percent of it carried the best rating. On the other hand, at end-December 2014, exposures to banks and NBFIs by the banking system stood at BDT 590.68 billion; out of that, 81.6 percent has been rated (80.7 percent at end-December 2013) and 33.7 percent of it (31.0 percent at end-December 2013) carried the best rating (BB rating grade 1). In summary, rated exposures to both Corporate and Banks & NBFIs are increasing as compared to CY13 but not a significant percentage of the exposures have received the best credit rating.

Banks, however, use a number of techniques to mitigate the credit risks to which they are exposed to. For example, exposures may be collateralized, in whole or in part, by cash or securities, deposits from the same counterparty, guarantee of a third party, etc. While the use of credit risk mitigation (CRM) techniques reduces or transfers credit risk, it simultaneously may increase other risks (residual risks). Residual risks include legal, operational, liquidity and market

³⁸ Bangladesh Bank has mapped the rating of the credit rating agencies into 6 notches from 1 to 6 where 1 is the best and 6 the worst.

risks. Therefore, it is imperative that banks employ robust procedures and processes to control these risks, including strategy; consideration of the underlying credit; valuation; policies and procedures; systems; control of roll-off risks; and management of concentration risk arising from the bank's use of certain CRM techniques and its interaction with the bank's overall credit risk profile.

4.5 The Credit Rating Transition Matrix

A stable credit rating and very little downward migration of rating of the rated entities in 2013-2014 confirms resiliency of the financial system. It also indicates that the financial system is not exposed to any pressing stability threat.

The credit rating transition matrix shows the transition or migration of non-financial corporate entities from one rating category to another one. Excessive migration, especially excessive downgrading of most entities in the matrix indicates a potential stability threat for the economy.

Table 4.5.1 : One year Transition Matrix (2013-2014)³⁹

From 2013 Rating*	To 2014 rating*					
	1	2	3	4	5	6
1	43 (100.0%)	-	-	-	-	-
2	1 (1.9%)	50 (96.2%)	1 (1.9%)	-	-	-
3	-	6 (6.7%)	82 (91.1%)	1 (1.1%)	1 (1.1%)	-
4	-	-	1 (4.0%)	21 (84.0%)	3 (12.0%)	-
5	-	-	-	-	6 (100.0%)	-
6	-	-	-	-	-	-

Source: Data: BRPD, BB; Computation: FSD, BB. *Rating grades are BB equivalent

The transition matrix shows that the magnitude of rating migrations is relatively low during 2013- 2014 compared with that of 2012-2013. Most of the corporate entities (around 93.5 percent or 202 out of 216) have been able to maintain their previous rating categories. Higher rated entities (BB rating grades 1 and 2) maintained their stable position and downward migration is also lower as compared with the previous year (the transition matrix for 2012- 2013 is shown below). The stable credit rating transition matrix, along with very little downward migration, shows resiliency of the financial system. It also shows that the financial system is not that exposed to any immediate stability threat.

³⁹ Analyses considered the entity-wise long-term rating under surveillance category. The 4th quarter ratings of 216 entities of Argus, CRAB, ECRL and NCRL in 2014 and 2013 have been compared.

Table 4.5.2 : One year Transition Matrix (2012-2013)

From 2012 Rating*	To 2013 rating*					
	1	2	3	4	5	6
1	27 (93.1%)	1 (3.4%)	1 (3.4%)	-	-	-
2	4 (11.1%)	28 (77.8%)	4 (11.1%)	-	-	-
3	1 (1.4%)	8 (11.3%)	55 (77.5%)	4 (5.6%)	3 (4.2%)	-
4	2 (6.7%)	1 (3.3%)	7 (23.3%)	18 (60.0%)	2 (6.7%)	-
5	-	-	-	2 (50.0%)	2 (50.0%)	-
6	27 (93.1%)	1 (3.4%)	1 (3.4%)	-	-	-

Source: Data: BRPD, BB; Computation: FSD, BB. *Rating grades are BB equivalent

From the analysis of the transition matrix, it appears that no major instability is visible in our economy in 2014 from the perspective of migration of corporates' exposures rating. The transition matrix also shows no sign of immediate credit risk shock in the financial sector and major vulnerability in the system. The corporate entities carried out their business smoothly and generated relatively stable performance, which reduced the probability of credit risk in the overall financial system and contributed to make the system strong.

Firms' commitment to meet its financial obligations is the main outcome of the credit rating score. Qualitative factors help to generate a decision based on the financial health analysis of an entity. And the qualitative factors consider the overall internal and external factors that could impact positively or negatively on the performance of the entity. Accordingly, less migration seems to indicate that the entities are running their business prudently, verifying at a micro-level with relatively robust macro-economic indicators. Smooth functioning of the entities will make the health of the financial system strong and shock absorbent.

The entities obtained grade 1 and scale 5 in 2013 stayed in their positions in 2014. Entities of rating grade 3 and 4 migrated more relative to others. For these entities, downward migration remained quite low, which is desirable for the stability of the economy. Besides, the number of upward moving entities is higher than the downward grading. This fact could be another indication of a stable financial condition of the economy. Around 85.2 percent (184 out of 216) of the total entities have earned ratings of 1, 2, or 3 in 2014 and showing low to moderate risk of not meeting their financial obligations. This is an encouraging sign of financial stability.

The stability of ratings, indeed, does not necessarily mean that they are accurate. Market participants do not want ratings that simply track market-based measures of credit risk; rather the rating should reflect independent analytical judgments that provide counterpoint to market-based assessments. Investors, issuers and regulators want ratings to reflect enduring changes in

credit risk because changes in rating have real consequences and are costly to reverse. Users of rating systems value stability because ratings affect behavior and the actions taken in response to rating changes. Moreover, ratings are used as tools of governance to monitor and to constrain the investment choices available to portfolio managers.

The Bangladesh economy suffered stagnation during 2014 from the macroeconomic volatilities that affected the normal activities of different business entities. Thus, it was usual to find more dispersion in overall credit migration of the corporate entities. However, since upward credit migration is more prominent than downgrading, it can be deduced that the overall corporate ratings were fairly stable, over a one year horizon, and provide a reasonable measure of the relative chances of a corporation's default and, with no wild swings to report, do not depict any immediate threat to maintaining financial stability in Bangladesh. However, this analysis is subject to survivorship bias. Only the entities with stable performance might wish to rate again, whereas there might be many entities with poor performance that decided not to rate again and are not covered under the above transition matrix.

Chapter 5

Stress Testing

Stress tests are conducted on all scheduled banks and non-bank financial institutions to assess the resilience of the sectors to different shock scenarios. Bangladesh Bank (BB) monitors the stress tests, conducted by the stated institutions, to gauge the resilience of individual institutions and the sectors to different extreme yet plausible risk scenarios.

5.1 Banking Sector Resilience

A number of single factor sensitivity stress tests covering credit risk, market risk and liquidity risk are conducted to assess the resilience of the banks. Under each scenario, the after-shock CAR⁴⁰ is compared with the minimum regulatory requirement of 10 percent⁴¹. Particular attention is paid to credit risk, which is the largest one in the banking sector.

At present, Bangladesh banking sector consists of 56 scheduled banks. Banking sector data reveal that, out of 56 scheduled banks, 5 had CAR with less than the minimum regulatory requirement as of end-December 2014. It is mentionable that, out of 5 non-compliant banks, 4 had negative CAR due to cumulative loss and provision shortfall.

5.2 Credit Risk

A number of tests, for credit risk, have been conducted to assess the impact of different static shocks on banks' capital. The ratio of NPL⁴² to total gross loans is taken as the main measure of credit risk, since credit risk is associated with the quality of the sector's loan portfolio.

Table 5.1 : Stress tests for credit risk: CAR and NPL ratio after shocks

(Percent)			
Banking System	Required Minimum CAR	Maintained CAR	Gross NPL Ratio
Before Stress Scenario	10.00	11.35	9.69
Stress Scenarios ⁴³ :			
Shock-1: NPL increase by 3%	10.00	10.60	9.98
Shock-2: NPL increase by 9%		8.64	10.56
Shock-3: NPL increase by 15%		5.33	11.14

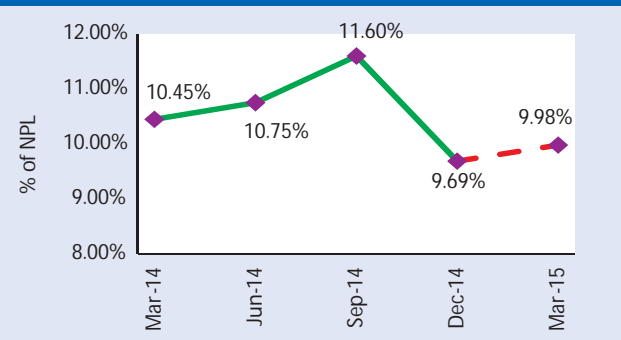
Source: Financial Stability Department, BB

⁴⁰ CAR-Capital Adequacy Ratio

⁴¹ The results are based on the unaudited data for the calendar year ended at December 2014.

⁴² NPL (Non-performing loan) means loan classified in either the substandard, doubtful, or bad/loss category.

⁴³ Shock-1, Shock-2, and Shock-3 stand for minor, moderate and major shocks respectively.

Chart 5.1 : Probable NPL ratio after minor shock

Source: Financial Stability Department, BB

In figure 5.1, historical gross NPL ratios of 4 quarters, during CY14, have been illustrated with a green line and the dotted red line shows the stressed NPL ratio. Under the minor shock situation, the banking sectors' gross NPL ratio may rise to 9.98 percent from the current level of 9.69 percent. Consequently, the banking sector CAR may decline to 10.60 percent.

The results also reveal that 5 of the 51 banks may become undercapitalized, although CAR for 9 of the remaining banks may decrease by 1.0 percentage point or more.

Table 5.2 : Stress tests for credit risk: default by largest borrowers

(Percent)

Banking System	Required Minimum CAR	Maintained CAR	After-Shock CAR
Before Stress Scenario	10.00	11.35	
Stress Scenarios :			
Shock-1: 3 largest borrowers			7.49
Shock-2: 7 largest borrowers			5.33
Shock-3: 10 largest borrowers			3.92

Source: Financial Stability Department, BB

The **second test** has been done on the credit concentration risk of banks to establish the effect of default by the largest borrowers for each bank. Under the assumed scenarios of default of the largest three individual/group borrowers, bank by bank, the system would not be able to withstand this default. At individual level, 24 out of 51 banks would become undercapitalized. The CAR of the remaining 27 banks would also decrease by 1.0 percentage point or more.

Table 5.3 : Stress tests for credit risk: increase in NPLs in particular sector

(Percent)

Banking System	Required Minimum CAR	Maintained CAR	After-Shock CAR
Before Stress Scenario	10.00	11.35	
Stress Scenarios :			
Shock-1: 3% of performing loans directly downgraded to bad/loss			11.30
Shock-2: 9% of performing loans directly downgraded to bad/loss			11.19
Shock-3: 15% of performing loans directly downgraded to bad/loss			11.08

Source: Financial Stability Department, BB

The **third test** has shocked performing loans to selected business sectors such as readymade garments (RMG), textiles, ship building and breaking, real estate (residential and commercial), construction, power and gas, transport, storage and communication, capital market, consumer credit, etc. Data at end-December 2014 reveal that the RMG sector had the highest exposure (8.60 percent of the total loans), however, from a risk standpoint, the impact would be minimal. If an additional 3 percent of this single sector's loans became non-performing (bad/loss), then the banking sector CAR would decrease to 11.30 percent, still remaining above the minimum regulatory limit. Therefore, sectoral concentrations of loans, under a minor shock, would have an insignificant impact on capital.

The **fourth test** dealt with the fall in the forced sale value (FSV) of collateral, mortgaged against loans. The FSV of mortgaged collateral was allowed to decline by 10, 20 and 40 percent. The result, due to the minor shock, reveals that 3 of the 51 banks would become undercapitalized.

The **fifth test** assumed negative shifts in the existing NPL categories, due to some adverse events for the banks, which result in more provision requirements. The uniform shocks were 5, 10 and 15 percent downward shift in the NPLs categories (amount of loan shift from one category to another inferior category). For example, for the first level of shock, 5 percent of the standard and special mention term loans are downgraded to substandard, 5 percent of the substandard are downgraded to doubtful, and 5 percent of the doubtful are downgraded to the bad/loss category. The result, due to minor shock, reveals that 3 banks out of 51 would become undercapitalized.

Chart 5.2 : Stress tests: minor shock on different credit risk factors

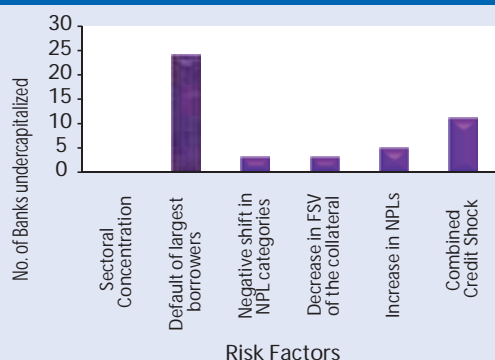
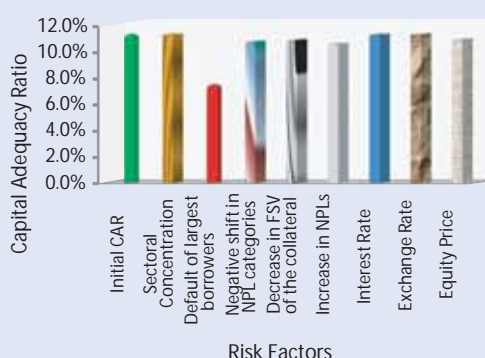


Chart 5.3 : Stress tests: minor shock on different risk factors



Source: Financial Stability Department, BB

The results suggest that credit risk is the most dominant risk factor in terms of its impact on CAR. Based on the data as of end-December 2014, the sensitivity analysis on the banking sectors' credit portfolio reveals that the banking sector is relatively less resilient when different credit shocks are applied. Out of 51 banks, due to default of the largest borrowers, 24 banks would become undercapitalized. Due to an increase in NPL, 5 banks would fall short of requirements, and due to a combined credit shock, 11 banks would become undercapitalized. In brief, default of the largest borrowers would have the highest impact on the banks' soundness.

5.3 Liquidity Risk

The liquidity stress test considers chronic withdrawal of demand and time deposits both in local and foreign currency⁴⁴. A bank is considered to be well-liquid if it can survive (after maintaining SLR⁴⁵) up to 5 consecutive days under a stressed situation. Standard shocks are 2, 4 and 6 percent respectively, which are given on in excess of bank's normal withdrawal⁴⁶. However, withdrawal is adjusted with available liquid assets (excluding SLR).

Table 5.4 : Stress tests: Liquidity risk

Liquidity Stress: Consecutive 5 working days	Stress Scenarios		
	Shock 1	Shock 2	Shock 3
Day:1 Liquid or not (1=Yes, 0=Not)	1	1	1
Day:2	1	1	1
Day:3	1	1	1
Day:4	1	1	1
Day:5	1	1	1

Source: Financial Stability Department, BB

The results reveal that the individual banks and the banking system, as a whole, are resilient against specified liquidity stress scenarios.

5.4 Market Risk

The banking industry is found to be fairly resilient in the face of various market risk shocks (interest rate, exchange rate and equity price movements). The CAR of none of the banks would be impacted much under the exchange rate shock. However, 7 banks would become undercapitalized due to interest rate shock and 3 banks due to equity price shock.

Table 5.5 : Stress tests: interest rate risk

(Percent)			
Banking System	Required Minimum CAR	Maintained CAR	After-Shock CAR
Before Stress Scenario	10.00	11.35	
Stress Scenarios :			
Shock-1: 1% increase in interest rate			11.30
Shock-2: 2% increase in interest rate			11.25
Shock-3: 3% increase in interest rate			11.20

Source: Financial Stability Department, BB

⁴⁴ A liquidity stress test has been conducted to assess the ability of a bank and the banking sector to withstand an unexpected liquidity drain without taking recourse to any outside liquidity support. This test shows how many days a bank and the banking sector would be able to survive a liquidity drain without resorting to liquidity from outside (other banks, financial institutions or central banks).

⁴⁵ SLR= Statutory Liquidity Requirement

⁴⁶ Withdrawal means only deposit outflow

Table 5.6 : Stress tests: exchange rate risk			
(Percent)			
Banking System	Required Minimum CAR	Maintained CAR	After-Shock CAR
Before Stress Scenario	10.00	11.35	
Stress Scenarios :			
Shock-1: Currency appreciation/depreciation by 5%			11.33
Shock-2: Currency appreciation/depreciation by 10%			11.30
Shock-3: Currency appreciation/depreciation by 15%			11.28

Source: Financial Stability Department, BB

Table 5.7 : Stress tests: equity price risk			
(Percent)			
Banking System	Required Minimum CAR	Maintained CAR	After-Shock CAR
Before Stress Scenario	10.00	11.35	
Stress Scenarios :			
Shock-1: Fall in the equity prices by 10%			10.92
Shock-2: Fall in the equity prices by 20%			10.49
Shock-3: Fall in the equity prices by 40%			9.62

Source: Financial Stability Department, BB

The results of stress tests demonstrate considerable resilience of the banking sector to adverse scenarios. Most of the banks have a sufficient capital buffer that enables them to absorb adverse shocks and maintain the sector's overall CAR above the regulatory threshold of 10 percent even in stressed scenarios. The liquidity stress test also reveals banks' resilience to various liquidity shocks. However, concentrated exposures to largest borrowers may create significant risk and requires vigilant monitoring.

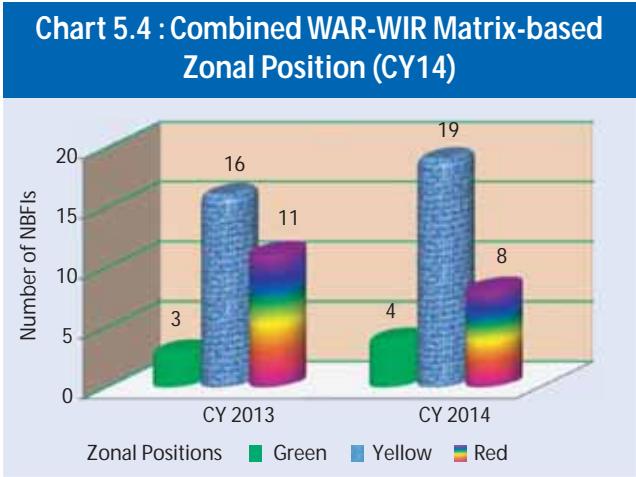
5.5 NBFIs Sector Resilience

The NBFIs' stress test technique is primarily based on a simple sensitivity analysis, using four risk factors, namely interest rate, credit, equity price and liquidity. The stress test for credit risk assesses the impact of an increase in NPLs, a downward shift in the NPL categories (i.e., special mentioned account to substandard, substandard to doubtful, doubtful to bad/loss), a fall in the value of eligible collateral against loans and leases, an increase in NPLs under bad/loss category (in particular, two sectors where the NBFIs have the highest exposure), and an increase in NPLs due to the default of the top large borrowers. Minor, moderate and major levels of shock scenarios to the individual risk factors are applied giving weights of 50.0 percent, 30.0 percent and 20.0 percent respectively.

The Weighted Average Resilience (WAR) is calculated based on the weights of 10 percent for interest rate, 60.0 percent for credit, 10.0 percent for equity price and 20.0 percent for liquidity at three levels of shock scenarios.

The NPL to loan ratio of an NBFI is denoted as the Infection Ratio. An Infection Ratio which can completely erode the regulatory capital of the NBFI to zero is called the Critical Infection Ratio (CIR). CIR implies distance to default or insolvency. Computation of CIR assumes the erosion of full regulatory capital due to increase in NPL in the bad/loss category ignoring the tax impact. Insolvency Ratio (IR) is the ratio of Infection Ratio to the CIR. IR implies the percentage an NBFI is towards insolvency. For stress testing, minor, moderate and major level of shocks are applied giving weights of 50.0 percent, 30.0 percent and 20.0 percent respectively to derive the Weighted Insolvency Ratio (WIR).

Both the WAR and WIR are then scaled from 1 to 5 (best to worst) grades and categorized as either green (for grade 1) or yellow (for grade 2 and 3) or red (for 4 and 5) zone. The overall financial strength and resilience of an NBFI is identified by plotting its achieved ratings in the WAR-WIR Matrix. The combined zonal position is set based on the weights of 80.0 percent on WAR and 20.0 percent on WIR.



Stress test results, based on end-December 2014 data, reveal that out of 31 NBFIs, 4 were positioned as green and 19 were positioned as yellow. Therefore, 23 NBFIs performed as resilient institutions during October-December 2014 quarter. On the other hand, 8 NBFIs were positioned as red. However, a majority of the NBFIs were resilient in the face of different shock scenarios.

Source: Department of Financial Institutions & Markets, BB

Chapter 6

Non-Bank Financial Institutions

6.1 Introduction

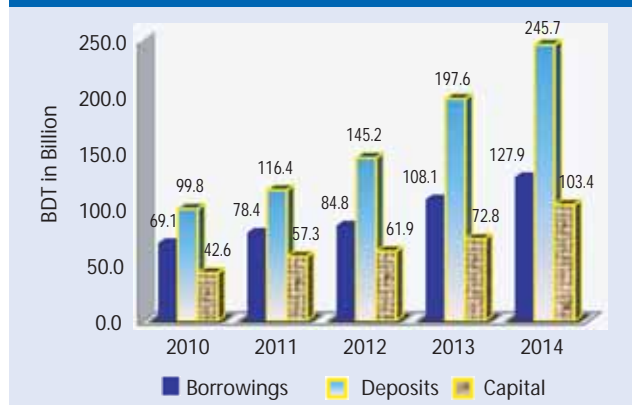
The non-bank financial institutions (NBFIs) sector, in Bangladesh, plays an important role in financing various sectors, such as manufacturing and service industries, trade, housing, transport, information and communication technology, and capital markets. The NBFIs sector consists of specialized financing companies, leasing companies, investment companies, merchant banks, etc.

As of end-December 2014, 31 NBFIs are operating their business across the country, of which 3 are government-owned, 18 are privately-owned local companies, and the remaining 10 are established under joint venture with foreign participation. NBFIs are operating with 198 branches throughout the country.

6.2 Funding Sources

The major funding sources of NBFIs are capital, term deposits, credit facilities from banks and other NBFIs, call money, bonds and securitization.

Chart 6.1 : NBFIs' borrowings, deposits & capital trend



Source: Department of Financial Institutions & Markets, BB

NBFIs are allowed to mobilize term deposits only, with a tenor of at least 3 months. Banks also invest in bonds and debentures issued by NBFIs, which is another source of funds.

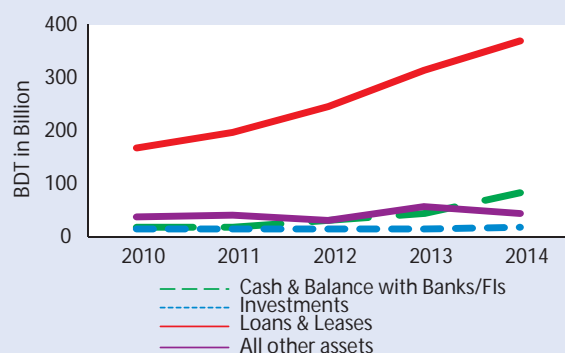
The borrowings, deposits and capital of NBFIs increased by 18.3 percent, 24.3 percent and 41.9 percent respectively, in CY14, compared with those of the previous year. The trend of increasing capital shows a moderately sound financial base of the NBFIs.

6.3 Deposit Safety Net

The deposit insurance system aims at minimizing the risk of loss of depositors' funds with NBFIs. At present, there is no deposit insurance coverage for the depositors of NBFIs. However, the proposal to bring the NBFIs' depositors, under the umbrella of insurance coverage, is under process of approval with the Ministry of Finance.

6.4 Assets Composition

Chart 6.2 : NBFIs' financing trend



Source: Department of Financial Institutions & Markets, BB

NBFIs' total assets increased by 19.3 percent, in CY14, compared with that of CY13. The major portion of NBFIs' funds was deployed in loans and leases, which was 71.3 percent of total assets in CY14. On the other hand, cash and balance with banks/FIs, investments, and all other assets (including fixed and non-financial assets) comprised 16.3 percent, 3.8 percent, and 8.6 percent respectively of total assets in CY14.

Table 6.1 : NBFIs' sector-wise loans & leases as of end-December 2014

(BDT in Billion)				
Sl.	Major Sectors	Amount	Percent	HHI*
1	Trade and Commerce	60.8	16.4	256
2	Housing	65.0	17.5	324
3	Power, Gas, Water and Sanitary Service	39.1	10.5	121
4	Textile	16.5	4.4	16
5	Iron, Steel and Engineering	17.5	4.7	25
6	Transport and Aviation	17.5	4.7	25
7	Food Production and Processing Industry	15.3	4.1	16
8	Garments and Knitwear	14.9	4.0	16
9	Margin Loan	12.2	3.3	9
10	Merchant Banking	15.3	4.1	16
11	Agriculture	7.0	1.9	4
12	Others (including other sectors with minor share)	89.9	24.4	576
	Total	371.0	100	1,404

* HHI = Herfindahl-Hirschman Index

The calculated Herfindahl-Hirschman Index (HHI) indicates that NBFIs' loans and leases were moderately concentrated⁴⁷ during CY14. The housing sector, in particular, comprises 17.5 percent of total loans and leases, while trade and commerce sector accounts for 16.4 percent of the total loans and leases.

⁴⁷ HHI lying between 1000-1800 points indicates moderate concentration.

6.5 Asset Quality

Classified loans and leases increased by 11.3 percent or BDT 2.0 billion, in CY14, compared with the previous year. However, the ratio of classified loans and leases to total loans and leases was 5.3 percent, 30 basis points lower than the level recorded in CY13. This is due to the proportionately higher increase in the total loans and leases (17.7 percent), in CY14, compared with the previous year.

Chart 6.3 : NBFIs' classified loans and leases

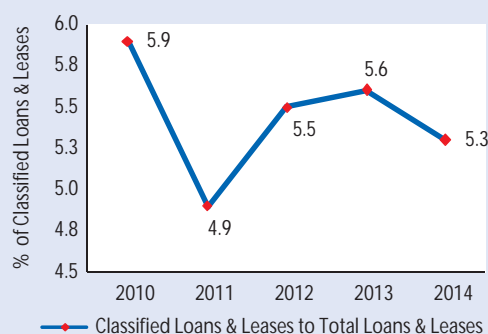
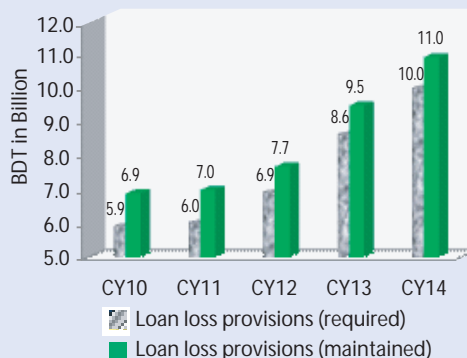


Chart 6.4 : NBFIs' loan loss provisioning

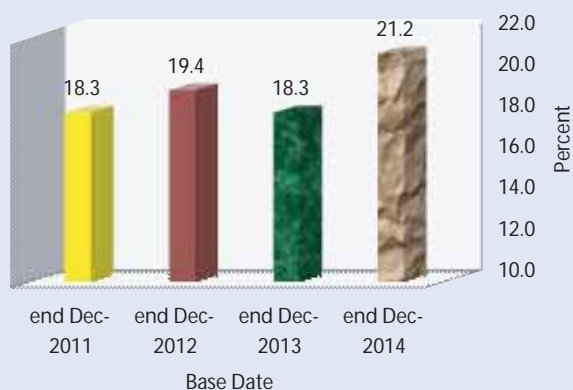


Source: Department of Financial Institutions & Markets, BB

During CY14, an amount of BDT 11.0 billion in loan loss provisions was maintained against a requirement of BDT 10.0 billion, representing a coverage ratio of 55.5 percent of classified loans and leases, 1.7 percentage points higher from what was recorded in CY13.

6.6 Capital Adequacy

Chart 6.5 : NBFIs' Capital Adequacy Ratio (CAR)



Source: Department of Financial Institutions & Markets, BB

NBFIs commenced the implementation of the Basel II accord to determine capital adequacy in 2012. The capital adequacy ratio (CAR) for the NBFIs stood at 21.2 percent at end-December 2014, compared with 18.3 percent recorded at end-December 2013, attributable to a 41.9 percent increase in the total eligible capital and 22.5 percent increase in risk weighted assets.

This position was well in excess of the regulatory minimum requirement of 10.0 percent, although 1 NBFIs out of 31 failed to maintain the regulatory minimum requirement.

6.7 Profitability

NBFIs' major portion of income was generated from loans and leases. Interest on deposits and borrowings was the major outlay of total expenses. NBFIs' profit before taxes increased by 23.6 percent in CY14, which is mainly due to a 36.7 percent increase in non-interest income and a decrease in the cost of deposits and borrowings. The return on assets (ROA) and the return on equity (ROE) was 1.8 percent and 9.9 percent respectively at end-December 2014. The profitability ratio lines (mainly ROE) show an increasing trend compared with that of the previous year.

Chart 6.6 : NBFIs' profitability trend

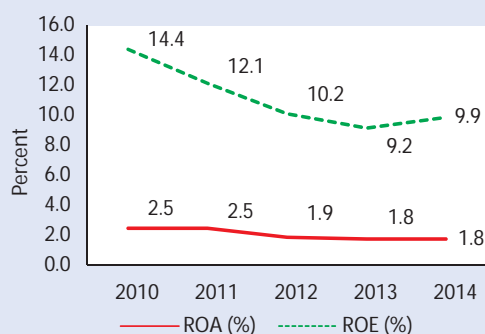
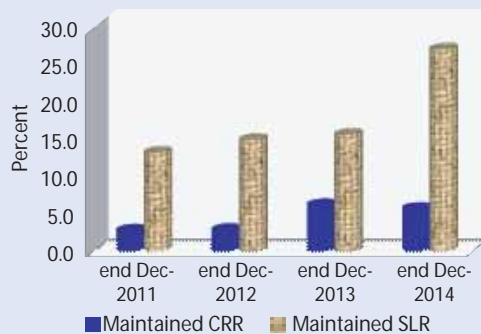


Chart 6.7 : NBFIs' CRR & SLR



Source: Department of Financial Institutions & Markets, BB

6.8 Liquidity

NBFIs, taking term deposits, have to maintain a statutory liquidity requirement (SLR) of 5.0 percent of their total liabilities, inclusive of an average 2.5 percent cash reserve ratio (CRR) of their total term deposits. NBFIs, operating without taking term deposits, have to maintain an SLR of 2.5 percent and are exempted from maintaining CRR.

As of end-December 2014, NBFIs sector maintained a 5.7 percent CRR and 27.0 percent SLR. Balances with other banks and FIs, call money investment, investments in government securities and any other assets, approved by BB, are considered as components of SLR. For this reason, the SLR maintained by the NBFIs was higher than the amount required. However, 3 NBFIs failed once to maintain minimum CRR during CY14.

The NBFIs sector works as a catalyst to the economic growth of the country. This sector has been contributing towards increasing both the quality and quantity of financial services and thus mitigating the lapses of existing financial intermediation to meet the growing needs of different types of investments in the country.

Chapter 7

Financial Markets

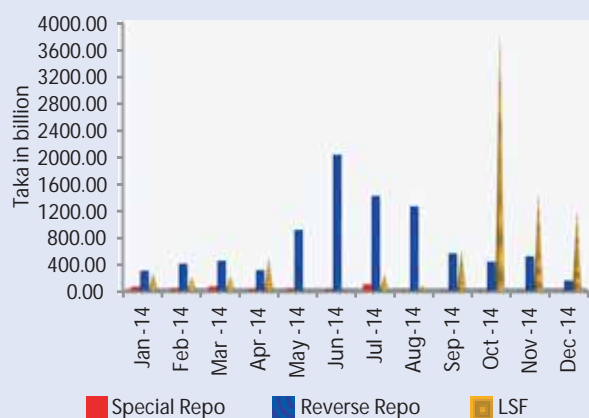
7.1 Money Market

During 2014, the money market was as usual dominated by the banks. Bangladesh Bank (BB) provided Liquidity Support Facilities (LSF) along with the Special Repo facility to meet banks' day to day liquidity needs, instead of using the Repurchase Agreement (Repo) facility.

7.1.1 Repo Market (With Bangladesh Bank)

A directional change was observed in money market operations as the financial institutions collectively changed from net lenders to the central bank (in the form of reverse repo) to net borrowers (in the form of LSF). This signifies a compelling change in both the financial intermediaries' strategic position and the central bank's monetary policy stance, to continue to facilitate smooth running of financial intermediation.

Chart 7.1 : Average Daily Turnover of Special Repo, LSF and Reverse Repo (January, 2014- December, 2014)



Source: BB website, Economic Data, and Monetary Policy Department. Calculation: FSD

In the early part of 2014, both LSF and reverse repo turnover were at moderate level. During the middle part of the year (May-August), banks invested much of their excess liquidity in the form of reverse repo with BB, while in the latter part of the year the data show increased borrowing from BB in the form of LSF. No Special Repo facilities were utilized by the banks since July 2014.

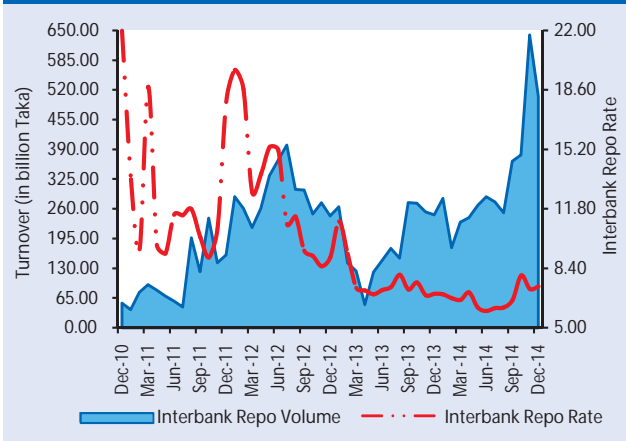
Investment of banks in the reverse repo reached a peak of BDT 78.8 billion on 22nd June 2014 while borrowing of banks, in the form of LSF crested at BDT 102.7 billion on 2nd October 2014.

7.1.2 Interbank Repo Market

A spike in volume of interbank repo was observed in the last quarter of 2014. The interbank repo rate (monthly weighted average) increased by 203 basis points from June 2014 to October 2014, accompanied by increased volatility in the second half of 2014. An increasing volume of interbank repo, over the year, suggests that market players are becoming more interested in collateralized transactions than the unsecured ones.

The interbank repo rate closely represents the money market rate, as it is determined by the immediate market forces of demand and supply of funds.

**Chart 7.2 : Interbank Repo Turnover and Price
(December, 2010- December, 2014)**



Source: BB website, Economic Data. Calculation: FSD

Overall interbank repo transactions, amounting to BDT 3900.7 billion in 2014, show a 75.4 percent growth from 2013. Market transactions in terms of volume have increased gradually since March 2013, and reached its peak in November 2014 (BDT 640.5 billion). The interbank repo rate of 5.97 percent⁴⁸ in June 2014 was the lowest since December 2010. From July 2014, the repo rate gradually increased with the interbank repo volume. The highest interbank repo rate was recorded in October 2014 at 8 percent.

Pressure on liquidity seemed to be eminent in the last quarter of 2014. A rise in the LSF with a high interbank repo rate from October 2014, coupled with historical high volume of interbank repo in November 2014, suggests that banks and financial institutions (at least a cluster of the industry) faced difficulties in their fund management and liquidity operation.

7.1.3 Interbank call Money and Interbank Deposit Market⁴⁹

A few banks dominated the call money market in 2014. Like the interbank repo rate, a call money rate hike was also observed from June 2014, and the rate showed high volatility in the latter part of 2014. Participation of NBFIs in both the call money and the interbank deposit market was significant.

The call money market possesses a great deal of importance in the day-to-day liquidity management of the entire financial system. Like the interbank repo rate, the call money rate mirrors and reflects money market conditions. The call money rate, unlike the interbank repo rate, includes a risk premium for being an unsecured class of instrument.

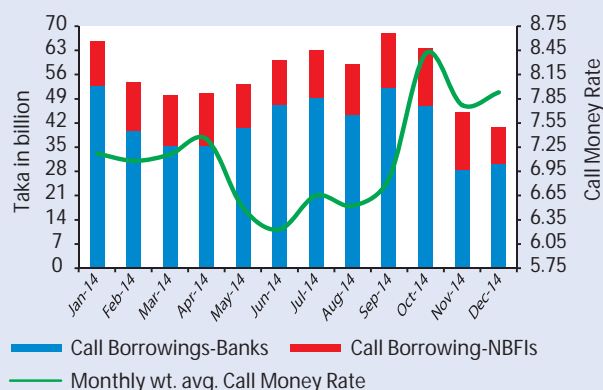
At end-December 2014, call borrowing of BDT 40.8 billion was 27.4 percent higher than that of end-December 2013 (BDT 32.1 billion). During the year 2014, the highest call borrowing was recorded at end-September (BDT 67.9 billion), and after that it gradually declined. Monthly weighted average call money rate, on the other hand, increased by 170 basis points from June 2014 to December, 2014.

⁴⁸ Monthly weighted average interbank repo rate.

⁴⁹ Interbank call money only includes exposures of scheduled banks and NBFIs with one another. Assets or liabilities with non-scheduled financial institutions are omitted from this discussion.

NBFIs played an important role in the call money market. NBFIs on average, borrowed almost 25 percent of the total volume of call money market funds, but their investment in this segment was not that significant. At end-December 2014, banks provided BDT 10.6 billion to NBFIs as money at call and short notice. The lending side of the call money market was found to be heavily concentrated as only 5 (five) banks contributed 62.2 percent of the total call money volume.

Chart 7.3 : Call borrowing volume and monthly wt. avg. call money rate (January, 2014- December, 2014)

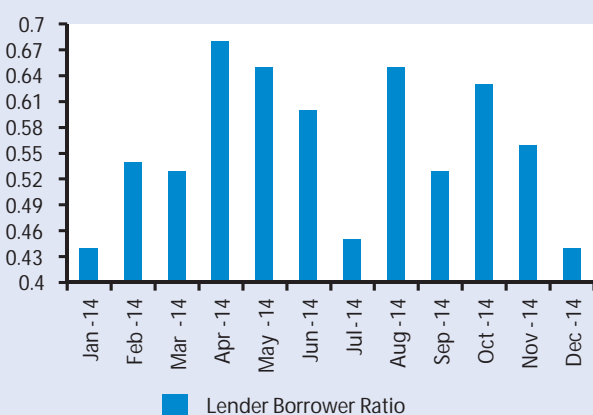


Source and Calculations: FSD

On the borrowing side, the top 5 (five) borrowers accumulated 35.5 percent of the total available short term call funds, indicating moderate concentration. State owned commercial banks (SOCBs) remained as top lenders in the call money market with 56.9 percent of the total market volume, while the private commercial banks remained as top borrowers with 49.5 percent of the total market volume. Banks operating under Islamic principles, as usual, did not participate in the traditional call money market.

Box 7.1 : Lender dominated call money market

Chart B.7.1 : Lender- Borrower Ratio (January, 2014- December, 2014)



Source and Calculations: FSD

The lender- borrower ratio⁵⁰ of the call money market was 0.4 at end-December, 2014 which implies a lender dominated call money market. The ratio starts falling from October, 2014 and became the lowest during December, 2014. The lending side was mostly dominated by the state owned commercial banks.

This structure exhibits the possible existence of an oligopoly market, where a large number of borrowers compete for call funds from a small number of lenders.

⁵⁰ Lender- Borrower ratio = Number of net lenders / Number of net borrowers (at a given time). Lender borrower ratio less than 1 can be interpreted as existence of few lenders compared to the number of borrowers.

In contrast to the structure of the call money market, the interbank deposit market⁵¹ was large and competitive. No single bank or cluster of banks dominated either the demand or supply side of the market. Total market volume at end-December 2014 reached at BDT 351.1 billion which was 21.5 percent higher than that of the previous year ending. Deposits transferred from banks to NBFIs amounting to BDT 90.0 billion, while NBFIs deposited BDT 73.1 billion in the banks. Private commercial banks, NBFIs and banks operating under Islamic principles were the major players in this segment of the market.

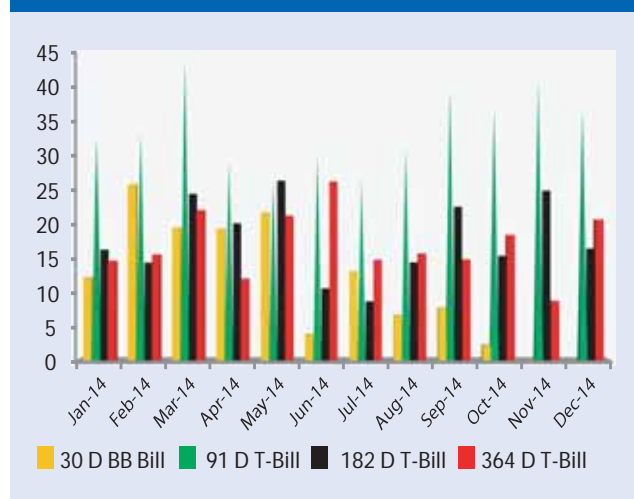
7.2 Bond Market

The market for fixed income securities has yet to travel a long way in Bangladesh. Despite several efforts of the regulators, bourses and market participants, a thriving market has not yet emerged in operation. Trading of bonds is important as it increases the efficiency and competitiveness of the financial system, enhances the stability of the system by creating an alternative to bank finance, and, of course, acts as a vehicle of transfer of information of credit market facts (including plausible benchmark interest rates) to and from policy makers and market participants.

7.2.1 Primary Treasury Auction Market

Though government borrowing from banking system decreased in the later part of 2014, mandatory devolvement to primary dealers (PDs), Non-PDs, and BB increased. BB slowed down issuance of 30-day BB bills from July 2014 and eventually stopped issuing the instrument in December 2014.

Chart 7.4 : Volume of T- Bills Auction Sales (January, 2014- December, 2014)

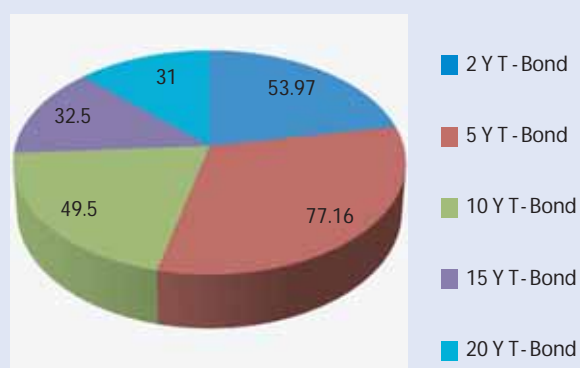


Data: Bangladesh Bank website, Treasury Bills/ Bonds Auctions.
Calculation: FSD (all figures in billion Taka)

In December 2014, treasury bills, bonds and Bangladesh Bank bills worth BDT 95.6 billion were sold, which was 3.1 percent lower than the amount sold in December 2013. Throughout 2014, treasury securities were sold at a constant pace in the primary market. In the last quarter (October- December 2014) public sector primary issuance absorbed BDT 284.0 billion from the banks, which was 6.6 percent lower than that of the same quarter of previous year.

⁵¹ Any local currency deposit that is held by one bank for another bank.

Chart 7.5 : Volume of T- Bonds Auction Sales, 2014



Data: Bangladesh Bank website, Treasury Bills/ Bonds Auctions.
Calculation: FSD (all figures in billion Taka)

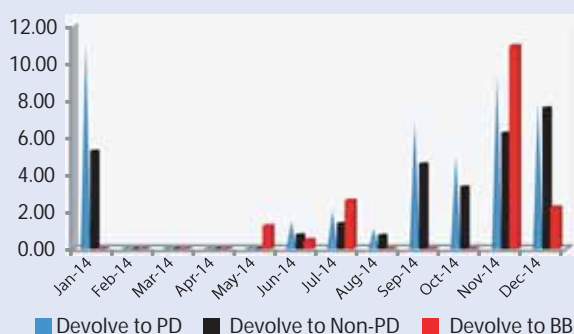
However, it was 1.4 percent higher than that of the July- September 2014 quarter. BB gradually slowed down the issuance of 30-day BB bills, and discontinued it totally in December 2014.

Long-term treasury bonds were issued in the amount of 244.1 billion in 2014 which was 178.0 percent higher than that of 2013.

Of this issuance, treasury bonds of 5 years and 2 years of maturity were issued in the amount of BDT 77.2 billion and 54.0 billion respectively. Shorter-term treasury bills (91-day T-bills) remained as a more common instruments for the Government, as they provided more flexibility to public fund management than long-term bonds.

In December 2014, among the short-term instruments, the sale of 91-day treasury bills ranked highest at BDT 37.3 billion, followed by 364 days and 182 days treasury bills worth of BDT 20.8 and 16.5 billion respectively.

Chart 7.6: Volume of Treasury Securities Auction Sales - Mandatory Devolvment (January, 2014- December, 2014)



Data: Bangladesh Bank website, Treasury Bills/ Bonds Auctions.
Calculation: FSD (all figures in billion Taka)

Devolvement to PDs, Non- PDs and BB was largely absent in the earlier part of the year. From August 2014 and onward an increased amount of mandatory devolvment was observed. During the last quarter of 2014, mandatory devolvment amounted to BDT 52.6 billion which was 18.5 percent of the total primary auction sales. It was only BDT 19.3 billion, or 6.9 percent of the total primary auction sales, in the previous quarter.

Box 7.2 : Flattening Yield Curve?

In December, 2014, treasury auction (weighted average cut off rate) yield curve exhibited a rising short term yield and a falling long term yield compared with that of July, 2014 yield curve.

Chart B.7.2 : Treasury Bill Yield Curve

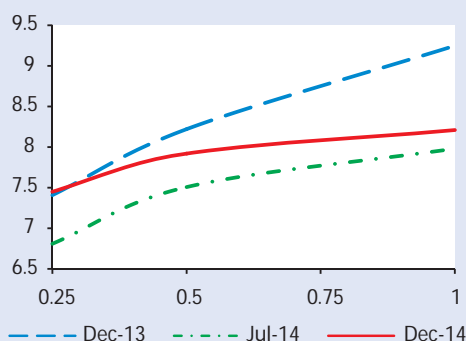
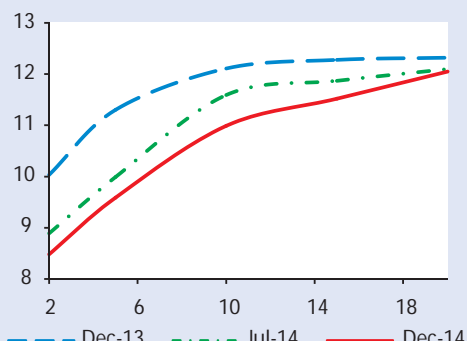


Chart B.7.3 : Treasury Bond Yield Curve



Source: Monthly Economic Indicators, January 2015 Issue

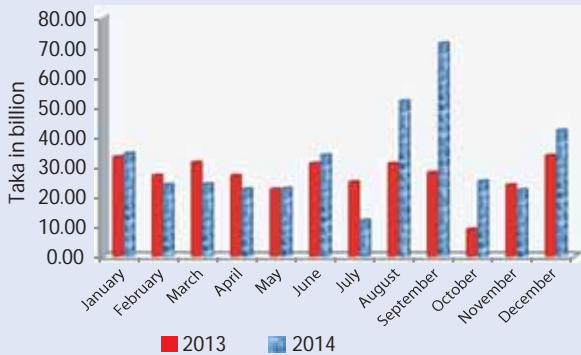
On the shorter end, the yield of T-bills generally reached the December 2013 level, and was always higher than that of July 2014. On the longer end, the December 2014 curve was lower than the yield curve of both December 2013 and July 2014, indicating a flattening yield curve compared with that of July 2014. The flattening of the yield curve may represent the expectation of greater volatility in short-term rates. If short-term rates over the next few months are expected to be volatile, rates might rise across all maturities as investors seek to be compensated for the risk. But long-term rates, which can be viewed as the average of current and expected future short-term rates, may stay stable or actually fall, if the expectation of low short-term rates at certain periods in the future more than completely offsets expected periods of high short-term rates. A flattening yield curve can be an early warning sign for economic slowdown and a lower expected inflation rate, but it is too early to infer such an indication because of two reasons. First, in the absence of a vibrant secondary bond market, information from the primary market may not be efficiently translated into the credit market. Second, short-term yield volatility may be caused by localized liquidity needs of financial intermediaries, which might be eased periodically and do not necessarily have an impact on long-term economic activities.

7.2.2 Secondary Treasury Securities Market

In 2014, the volume of Over-the-Counter (OTC) transactions of treasury securities increased by 19.5 percent compared with that of 2013. BB used this market to sell off treasury securities and over 2014, private commercial banks were the most active participants. The OTC market was another source of liquidity to the private commercial banks.

OTC trading of treasury securities exhibited a 19.5 percent growth in 2014 compared with the previous year. Other platforms of secondary trading (i.e., Trade Work Station (TWS) and Dhaka Stock Exchange (DSE)) were not popular. The total volume of treasury securities traded was BDT 387.8 billion. Market participants preferred to trade long-term bonds (53 percent of the total trade) than short-term bills.

Chart 7.7 : Monthly Volume of OTC Trade (2013- 2014)



Data: Debt Management Department Calculation: FSD

In August and September 2014, spikes were observed in the trading volume of BDT 51.9 billion and 71.3 billion respectively. In July 2014, trading volume of BDT 12.1 billion was the lowest among the last 12 months. Trading volume in the last 6 months of 2014 was almost 48.7 percent higher than that of the last six months of 2013. However, in the first half of 2014, trade volume was almost similar to that of 2013.

Monthly average yield to remaining maturity stayed within the band of 8.6 percent to 10.6 percent.

Chart 7.8 : Buy side decomposition of the OTC trade in 2014

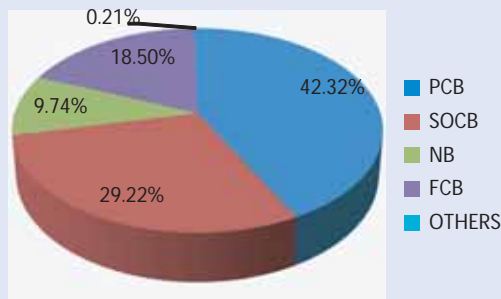
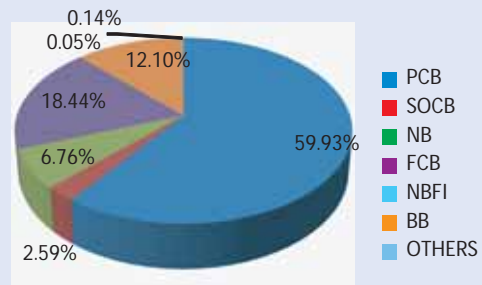


Chart 7.9 : Sell side decomposition of the OTC trade in 2014



Data: Debt Management Department Calculation: FSD

Private commercial banks were the major participants in the OTC market. They held 42.3 percent and 59.9 percent of the market share of the buy and sell volume respectively. Bangladesh Bank held 12.1 percent of the sell volume, showing that the central bank is using this platform to maintain monetary discipline. On a net basis, private commercial banks (PCBs) sold BDT 68.3 billion worth of treasury securities and, on the other hand, SOCBs bought BDT 103.3 billion worth of securities from the OTC market.

7.3 Stock Market

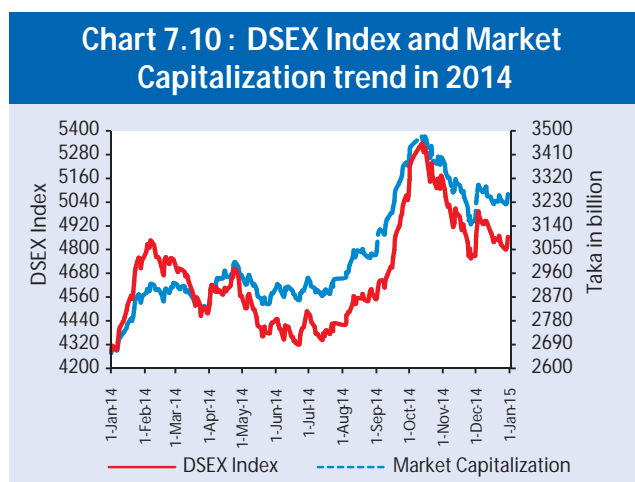
In 2014, the prime bourse in Bangladesh, the Dhaka Stock Exchange (DSE), improved both in terms of index value and trade volume (in BDT). The number of listed companies and issued securities grew at a reasonable pace.

DSE, with 274 companies and 546 listed securities, is accomplishing its ample contribution towards establishing a sound capital market⁵² in Bangladesh. Market capitalization of DSE stood was BDT 3259.3 billion at end-December, 2014 increased by about 23.1 percent than that of the previous year end balance of BDT 2647.8 billion. Total issued capital at DSE, climbed to BDT 1054.9 billion at end-December, 2014 from BDT 980.0 billion at end-December, 2013, recorded an increase of 7.7 percent over the period.

A total of 147 listed companies out of 274 at DSE raised their paid up capital amounting BDT 30.4 billion by issuing bonus shares, and 9 companies raised their paid up capital amounting BDT 10.0 billion by issuing right shares during CY 2014. A total of 18 companies floated IPO in CY 2014. Out of 30 listed banking companies, 22 issued bonus shares amounting BDT 14.7 billion and 2 banking companies issued right shares amounting BDT 4.4 billion in CY 2014.

7.3.1 Major Index and Market Capitalization

DSEX (major index) boosted by 14.0 percent while market capitalization grew by 23.1 percent. Market was volatile in the second half of 2014. Market capitalization ratio⁵³ improved slightly. However, market liquidity declined in the last quarter of 2014.



Data Source: Recent Market Information. www.dsebd.org

DSEX, the major index, increased by 14.0 percent in 2014. It experienced some upward and downward movements during the year, implying the inconsistency and volatility in the perception among market participants. However, the movements tended to be trendy; meaning any upward or downward impact upon the market showed persistence over the subsequent months.

Market volatility was more prominent in the second half of 2014. The highest index return observed during the month of September was 11.5 percent while the lowest was -7.8 percent during the month of November. Market capitalization increased by 23.1 percent over the last year. Besides price appreciation, market capitalization improved on account of the issuance of IPOs and rights shares by the listed companies.

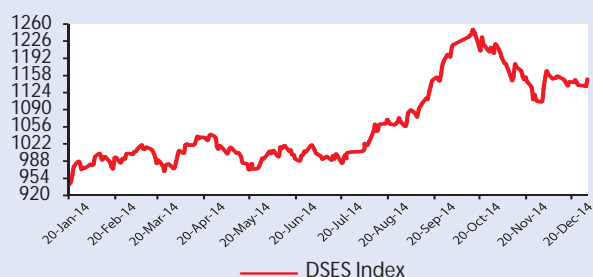
⁵² Apart from the shares of the listed companies, there are 40 mutual funds, 8 debentures, 221 treasury securities and 3 corporate bonds listed and traded at DSE

⁵³ Market capitalization ratio is defined as the Total Market Capitalization to Nominal GDP ratio. Total Market Capitalization is the capitalization of DSE only. Market capitalization of CSE is excluded from this calculation.

Box 7.3 : DSEX Shariah Index (DSES)

On 20th January 2014, DSE introduced a new Shariah compliant broad market benchmark index DSES. The index is constructed as a subset of the DSE broad index (DSEX) and includes all stocks included in the parent index that pass rule-based screens for Shariah compliance. An index committee is formed to govern the maintenance of the index. The index provides broad market coverage of Shariah-compliant listed equity securities that meet eligibility for inclusion in terms of size and liquidity criteria. Constituents are weighted by float-adjusted market capitalization. The Shariah screening methodology and processes for the index closely follow the methodology employed by the S&P Shariah Family of Indices.

Chart B.7.4 : DSES Index trend in 2014

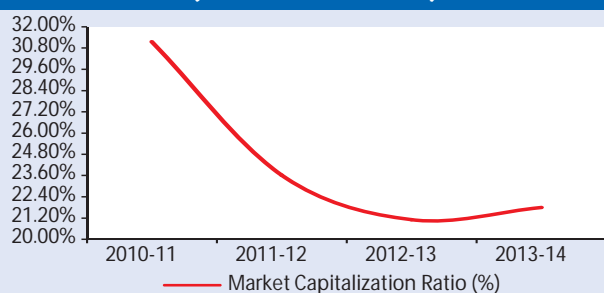


Data Source: Recent Market Information. www.dsebd.org

Since inception, the DSES index increased by 22.2 percent, a higher rate than that of the broad market index (DSEX). The index had a very high correlation coefficient with the broad market index (0.85) and the DS30 index (0.96), implying limited diversification benefits that can be achieved from investing in such index.

7.3.1.1 Market Capitalization Ratio

Chart 7.11 : Market Capitalization Ratio (FY 2011- FY 2014)



Data: Monthly Economic Trends, December, 2014

In FY 2011, the market capitalization ratio was 31.2 percent which subsequently plummeted to 21.1 percent in FY 2013. However, in FY 2014, the ratio slightly improved to 21.8 percent.

Chart 7.12 : Market Capitalization & GDP Growth (FY 2012-14)



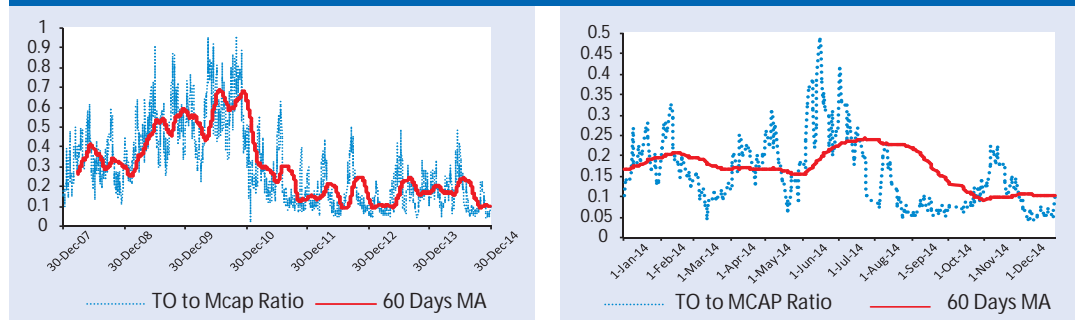
Data: Monthly Economic Trends, December, 2014

During the recent financial years, nominal GDP growth and market capitalization growth were found to be trending in opposite directions. Market capitalization growth was negative in FY 2012, but improved in the subsequent years. Market capitalization growth has been more volatile and unstable in the recent past compared to nominal GDP growth rate.

7.3.1.2 Turnover (to) to Market Capitalization Ratio

Turnover to market capitalization ratio has not improved since 2010, when it plummeted from the historical high level of 0.95%. In recent years, it has shown a flat trend with temporary ups and downs. In 2014, the ratio improved and became more consistent than that of 2013. However, in the last quarter of 2014, the ratio degraded to a very low level which implies deterioration in the investors' confidence level and an uncertain investment environment for both individual and institutional investors. The average daily turnover to market capitalization ratio dropped to 0.1 percent in the last quarter of 2014 from an average of 0.18 percent as recorded in the earlier three quarters.

Chart 7.13 : Turnover to market capitalization ratio. First figure shows long term TO to MCAP ratio (CY 2008- CY 2014). Second figure focuses on the 2014 trend only.



Data Source: Recent Market Information. www.dsebd.org

7.3.1.3 Market Capitalization Decomposition

Decomposition of market capitalization reveals the increasing dominance of manufacturing sector and sliding market share of the financial sector. As on December, 2013, financial institutions dominated the market with 35.1 percent of the total market capitalization. Within that total, the banking industry dominated with 20.2 percent among all the industries traded at DSE. In 2014, the financial sector became the least dominant among all the major sectors, and the banking industry (15.4 percent) lost its dominance to the rising telecommunication industry (18.8 percent). Acknowledging the fact that the listed banks increased their paid up capital by 19.1 billion over the last year, market prices of those bank stocks were not able to keep pace with the entire price level of the market. Poor performances of the large banks especially put deteriorating pressure on the shares of the whole banking industry.

Chart 7.14 (a) : Decomposition of MCAP (Dec- 2014)

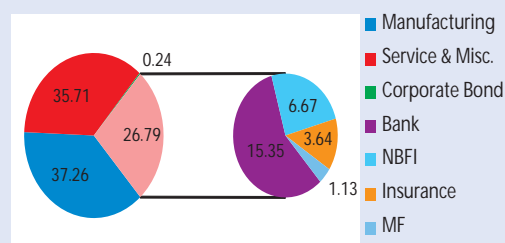
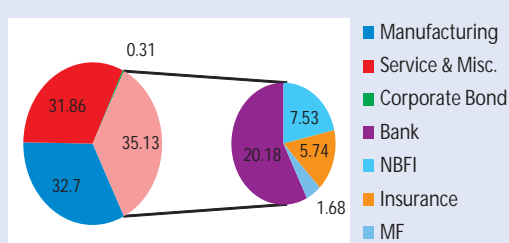


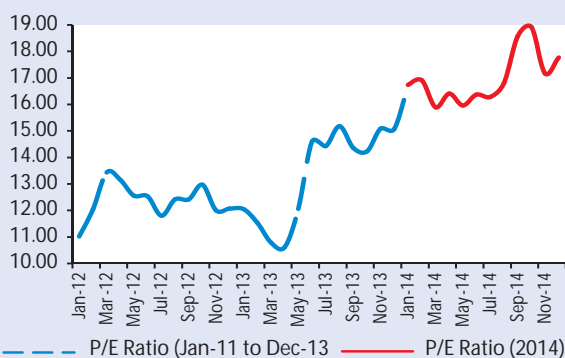
Chart 7.14 (b) : Decomposition of MCAP (Dec- 2013)



Data Source: DSE Monthly Review, Issue: December, 2014 and December, 2013

7.3.2 Price Earnings (P/E) Ratio

Chart 7.15 : Market Price Earnings Ratio (January, 2012- December, 2014)



Data Source: DSE Monthly Review, Several Issues

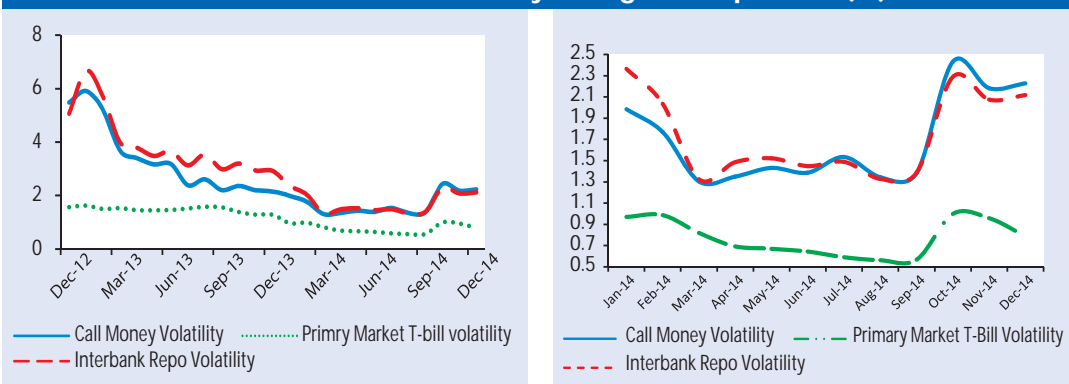
The overall weighted average price earnings (P/E) ratio of DSE was 17.8 in December 2014, which was 47.2 percent and 17.9 percent higher than that of December 2012 and December 2013 respectively, indicating an increase in market valuation of companies' share relative to their profitability. In 2014, the P/E ratio peaked at 18.9 in the month of October, and troughed at 15.9 in the month of March.

7.4 Issues Regarding Financial Market Stability

7.4.1 Money and Bond Market Stability

The money market showed rising volatility in the latter part of 2014. Major money market indicators such as the call money, interbank repo and short term treasury bill rates were found to be rising. This was due to liquidity shortages faced by some banks for a short span of time. Treasury operations with BB and interbank market operations smoothly offset those liquidity needs.

Chart 7.16 : Short term rate volatility. Left figure shows volatility trend from December, 2012 to December, 2014. Right figure focuses on volatility characteristics of 2014 only. All figures in percent (%).

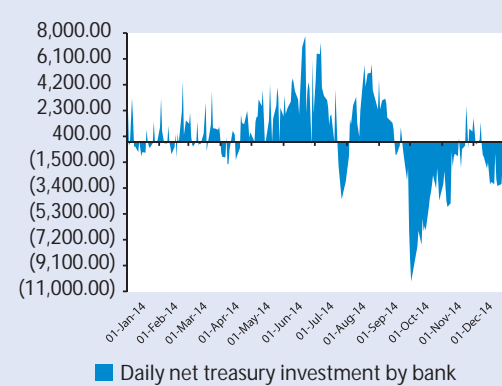


Data Source: Monthly Economic Indicators, Several Issues. Calculation: FSD

Interest rate volatility showed a decreasing trend from December 2012 to September 2014, but rising afterwards. Volatility hikes were observed in all the short-term rates. As expected, the 91-day treasury bill was the least volatile, but unexpectedly, the interbank repo rate seemed more volatile than the call money rate for most of the sample period (December 2012- December 2014).

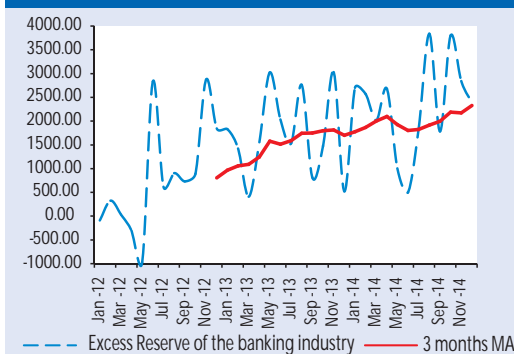
Increasing liquidity needs for banks, during the last quarter of 2014, were found to be the initial cause for the rise in the short term rate volatility. Higher credit growth compared with deposit growth created a mismatch in the fund management of the banks, initiating a pro-cyclical movement in short-term rates.

Chart 7.17 : Daily net investment in treasury instruments⁵⁴ by banks- 2014



Source: BB website, Economic Data, and Monetary Policy Department. Calculation: FSD

Chart 7.18 : Excess reserve maintained with BB by the banking industry- January, 2012- December, 2014



Source: Monthly Economic Trends, Several Issues

Daily net investment in treasury instruments (Chart 7.17)⁵⁵ in the latter part of 2014 has fortified the explanation of the short-term liquidity needs. The liquidity impact was highest during September- November, 2014 period. This explanation is also supported by the fact that, during this period, a large amount of treasury securities was forcefully devolved to BB, PD and Non- PD banks and NBFIs (Chart 7.6).

As explained earlier, the liquidity stress was an outcome of the operational fund mismatches. In the 3rd quarter of 2014, credit and deposit growth was 11.7 and 7.6 percent respectively, and in the last quarter, credit and deposit growth was 21.1 and 16.8 percent respectively⁵⁶. In both time frames, credit growth surpasses deposit growth, suggesting an additional liquidity requirement to support the credit growth. However, financing credit with short-term liabilities may create a stability concern for the banking industry in the future.

The 12-month moving average of excess reserve (showed in chart 7.18) was BDT 23.3 billion on December, 2014 which was the highest recorded since December, 2012. This is counter- intuitive to the phenomena explained in the earlier paragraph, that the credit disbursement was insufficiently funded by the deposit accumulation and eventually financed with the short term money market instrument. It was more prudent just to finance the credit with banks' own fund, rather to borrow at high cost from the market.

⁵⁴ Daily Net Investment in treasury instruments = Investment in T-bills + Reverse Repo - Repo - LSF - Special Repo. Investments in T-bonds are excluded as they are long term investment in nature.

⁵⁵ Large disinvestment means large cash inflows to banks, to satisfy their soaring liquidity needs

⁵⁶ All growth rates are annualized quarterly growth rates.

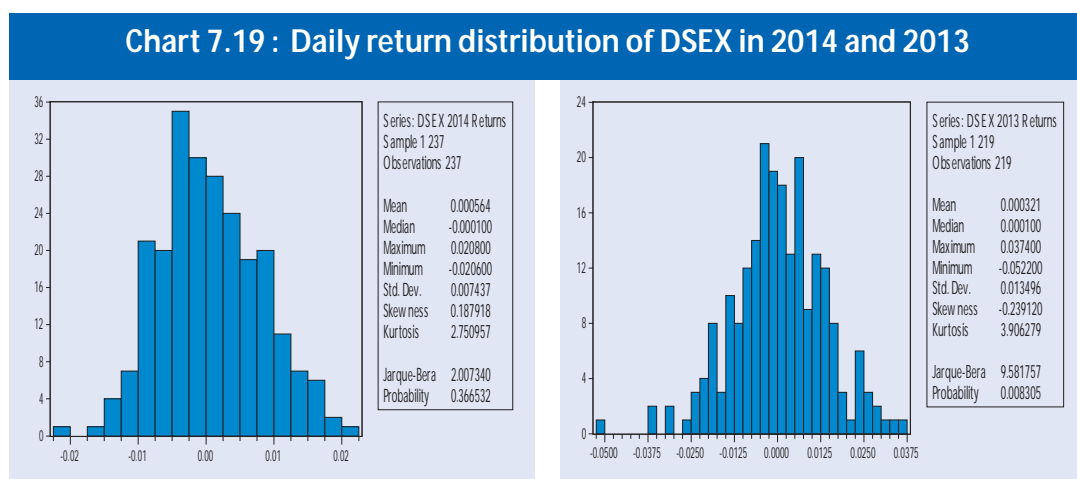
It is apparent that the increasing demands for loans and high quality liquid assets were contemporaneous in the late part of 2014. Though unusual, but a plausible reasoning for this phenomenon lies with the ability of the banks to mitigate the asset- liability mismatch in the short run. In the tightening liquid environment, the cost of being illiquid seemed to be higher for the banks compared to the borrowing cost. With the rising demand for credit, banks found more solace to borrow from market to finance credit, and hold liquid asset to manage future asset-liability mismatch uncertainties.

Whether the liquidity needs were system-wide or localized might require further investigation. During the last quarter of 2014, the volume of interbank repo and call money surged, meaning some banks were lending at high volume to the deficit banks (See Chart 7.2 and 7.3). In fact, the interbank repo volume was at a historical high level, but the call money volume declined in the last quarter of 2014 compared to the previous quarter (June- September 2014), leading to the conclusion that lenders were more comfortable with secured short-term lending compared to unsecured facilities. SOCBs remained as the fund providers in most cases (as call money lenders and OTC bond buyers), and private commercial banks were the fund receivers (as call borrowers and OTC bond sellers).

7.4.2 Capital Market Stability

The capital market was more stable in 2014 compared with 2013. Daily returns were less dispersed and more concentrated near mean value. Earnings of the listed companies, however, declined (on average) in 2014.

The stock market was more stable in 2014 than in 2013. The market was trendier in the earlier part of the year 2014, but volatility increased in the latter half. From 20th July 2014 to 12th October 2014, the broad market index increased by 21.9 percent, and after that it declined by 8.8 percent up to end- December 2014.



Data Source: Recent market Information, www.dsebd.org

The distribution of daily returns reveals that both average daily return and daily standard deviation of returns were favorable in 2014 compared to those of 2013. Moreover, 2014 returns were positively skewed and platykurtic while 2013 returns were negatively skewed and

leptokurtic. It means, returns of 2014 had a thinner tail compared with that of 2013, as well as returns were more concentrated near average values.

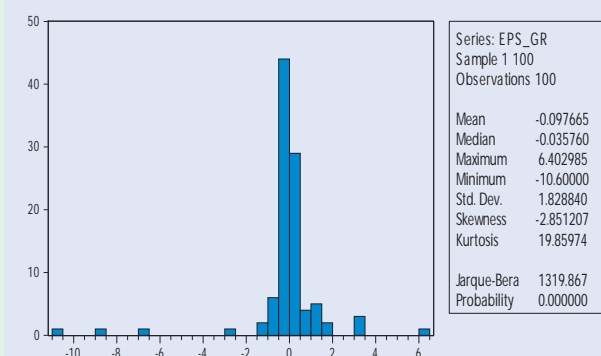
A typical value at risk (VaR) analysis reveals that the threshold value⁵⁷ for 2013 and 2014 was -3.1 percent and -1.7 percent respectively, which implies the probability of incurring a higher loss was less in 2014.

In 2014, the aggregate price level increased by 14.0 percent while the P/E ratio increased by 17.9 percent. In this case, more than proportionate growth in the P/E ratio was caused by the lower EPS growth rate reported by the listed companies at DSE. This phenomenon raises the question of fundamental soundness of the aggregate price level rise and the stability of the price levels in the capital market.

Box 7.4 : Earnings growth of non- financial corporations listed on DSE

An investigation into the earnings growth of non- financial companies listed at DSE is conducted by using a basic EPS of 100 non-financial corporations for the years of 2013 and 2014. This list includes a sample of companies from all the sectors except financial companies (banks, NBFIs, insurance, and mutual funds).

Chart B.7.5 : EPS growth of non- financial corporations listed at DSE- 2014



Data Source: www.dsebd.org

The mean EPS growth rate of 100 companies was found to be -9.76 percent with a standard deviation of 182.88 percent. The distribution is negatively skewed and leptokurtic.

This cross-sectional analysis suggests that profitability of the majority of the non-financial corporations declined in 2014. Out of 100 sample companies, 43 had positive EPS growth while 56 companies displayed negative EPS growth.

⁵⁷ Threshold value measured at 5 percent level. Both series are assumed to be normally distributed.

Chapter 8

Financial Infrastructure

Bangladesh Bank has developed a payment system strategy, automated cheque processing system, national payment switch, legal and regulatory framework for electronic fund transfer, mobile financial services, agent banking, e-commerce, m-commerce, and other electronic payment systems in order to implement a secure and efficient payment system in the country.

In Bangladesh, the Payment and Settlement System (PSS) is the main skeleton of financial infrastructure. That is, PSS enables the major transmission channel of funds through accounts of financial institutions to settle financial obligations between individuals, between individuals and institutions, and among institutions.

Bangladesh Bank believes that an efficient financial infrastructure can facilitate clearing, settlement, and recording of monetary and other financial transactions, which can in turn strengthen the markets and play a critical role in fostering financial stability. The financial infrastructure usually encompasses the existing legal and regulatory framework for financial sector operations. So, if not properly managed, the financial infrastructure can pose significant risks to the whole financial system and be a potential source of contagion, particularly in periods of market stress.

Along with the existing regulatory framework for payment and settlement systems, in April 2014, Bangladesh Bank adopted the Bangladesh Payment and Settlement System Regulation (BPSSR), 2014 and Regulations on Electronic Fund Transfer Network, 2014, in order to provide legal and regulatory support for growing the process of electronic transfer of funds.

8.1 National Payment Switch Bangladesh (NPSB)

To provide a common platform for transactions through electronic devices; Bangladesh Bank launched the National Payment Switch Bangladesh (NPSB) on December 27, 2012 with the participation of 3 private banks. NPSB is uniformly functional with different channels such as Automated Teller Machines (ATM), Point of Sales (POS) terminals, internet banking, mobile banking, e-commerce related transactions, etc. Currently, only ATM-based transactions are being operated; trials are being conducted for the connection of POS transactions.

At the end of December 2014, 31 banks were connected with the NPSB including inter-bank card-based ATM transactions; and everyday an average of 6,860 transactions, amounting to more than BDT 30 million, are settled through NPSB.

8.2 Automated Cheque Clearing

Bangladesh Automated Clearing House (BACH), the country's most modern and sophisticated payment infrastructure, was the outcome of the Remittance Payment and Partnership (RPP)

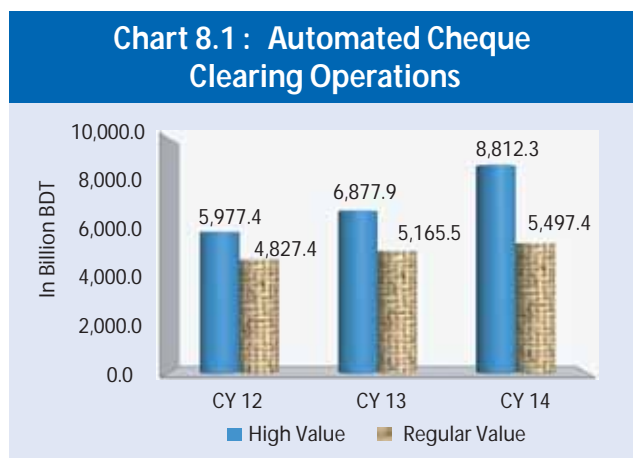
project which was commenced by Bangladesh Bank with the financial assistance from the United Kingdom's Department for International Development (DFID). BACH is comprised of two wings, namely-

1. Bangladesh Automated Cheque Processing System (BACPS), and
2. Bangladesh Electronic Funds Transfer Network (BEFTN).

8.2.1 Bangladesh Automated Cheque Processing System (BACPS)

BACPS deals with automated inter-bank cheque clearing. It enables electronic exchange of cheque images and data, instead of physical cheques, for settling the obligations of the participants. It became live with a pilot project in Dhaka on October 7, 2010. After successful implementation in Dhaka, it was gradually extended to all over the country and established a central clearing house in Bangladesh.

BACPS revolutionized the payment landscape of Bangladesh. It provides a prompt, efficient and cost effective payment and settlement system in Bangladesh that enables integration of all bank branches in the country's 64 districts to clear inter-bank and inter-regional cheques within the T+0 and T+1 cycles. It induced banking sector to adopt new, modern, technology-intensive infrastructure and to develop new products for better customer services. It facilitates the inflow of foreign remittances through official channels and also the smooth flow of funds all over the country, helping to energize economic activities.



Source: Data from PSD, BB; Compilation: FSD, BB

Over the years, the number and volume of transactions have been increased tremendously after BACPS was implemented. Chart 8.1 illustrates the continuous upward trend in high-value and regular-value transactions in the last 3 (three) years. The trend for high-value check processing from CY 12 to CY 14 moved at a relatively faster pace than that of low-value check processing within the same period.

8.2.2 Bangladesh Electronic Funds Transfer Network (BEFTN)

The commencement of the Bangladesh Electronic Funds Transfer Network (BEFTN) added a new milestone in the country's payment and settlement system. BEFTN is the paperless electronic exchange that ensures transfer of funds from one account to another, either within a single institution or across multiple institutions through computer-based systems. After a successful pilot implementation of BACPS, BEFTN started its live journey on February 28, 2011.

BEFTN drives the payment mechanism towards a green and almost risk-free dimension. It accommodates both credit and debit transactions. The impact of credit or debit entries on receivers' account can easily be recognized from BEFTN. Government entities are the largest stakeholders of BEFTN for disbursing staff salaries, benefits, vendor payments, etc. In addition, salary disbursements, business payments, dividend and refund warrant payments, insurance premiums and installment payments of the private sector, and also foreign remittance disbursements are being facilitated by BEFTN. In 2014, on average, 27,988 transactions were settled per day, which is 33 percent higher than that of 2013. Total monetary amount of such transactions was 598 billion BDT, which is 51 percent higher than that of the previous year.

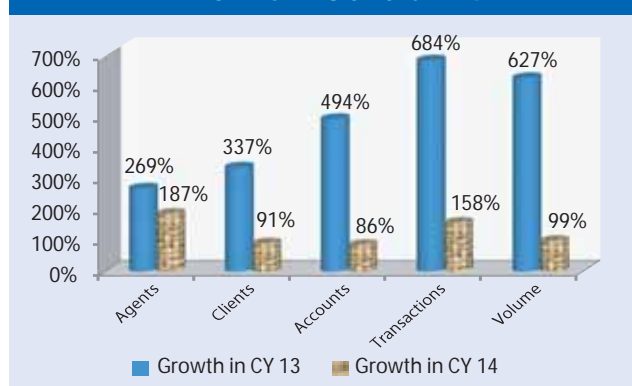
8.3 Mobile Financial Services (MFS)

The journey of Mobile Financial Services started in 2010 in Bangladesh, while BB issued the "Guidelines on Mobile Financial Services (MFS) for Banks" in September 2011 and subsequently amended it in December, 2011. In Bangladesh, the mobile financial market is 'bank-led' that offers an alternative to conventional branch based banking to unbanked population through appointed agents facilitated by the Mobile Network Operators (MNOs)/ Solution Providers. However, Bangladesh Bank has fixed the transaction limit for the account holders of mobile financial services at maximum BDT 10,000 daily and a total of BDT 25,000 on a monthly basis vide DCMPs Circular No. - 10/2011 December 14, 2011. A holistic view of the MFS status at the end of December 2014 is given in the table below:

Table 8.1 : A holistic view of the Mobile Financial Service (MFS) status

No. of banks authorized for MFS	28
No. of banks in operation of MFS	19
Registered customers	25,186,250
Agents	540,984

Chart 8.2 : Rate of Growth of MFS in CY 13 and CY 14



Source: Data from PSD, BB; Compilation FSD, BB

The countrywide coverage of mobile operators' networks and the rapid growth of mobile phone users have made their delivery channel an important tool-of-the-trade for extending banking services to the unbanked population, especially to expedite faster delivery of remittances across the country. It helped to achieve a rapid growth of MFS in 2013 (Chart 8.2). However, in 2014, the growth was moderate, as additional regulatory measures were introduced to prevent the abuses of MFS.

The continuous growth of MFS is expected to exert a constructive impact on financial inclusion activities. Though Bangladesh Bank allowed several transactions using mobile accounts, including inward foreign remittances, cash-in transactions, cash-out transactions, salary disbursement, dividend and refund warrant payments, vendor payments (business-to-person or B2P) transaction, utility bill payments, merchant payment (person-to-business or P2B)

transactions, elderly allowances, freedom fighter allowances, subsidies (Government-to-person or G2P) transactions, taxes, levies, etc. (person-to Government or P2G) transactions and others, but only a few banks are focused on 'Banking' while others are concentrated on 'Money Transfer'.

As a bank-led model, the MFS should be more focused on 'Banking'; i.e., savings, lending and providing various services on a single wallet (account) to help financial inclusion in a real sense. There are millions of shop-keepers in the rural areas, the sales proceeds of whom are kept at the shop or in the home in an idle and unsafe manner. The habit of the rural people and small/micro enterprises should be motivated through a joint and right drive by all the banks working in the MFS arena. More attention is yet to be given to develop this banking habit among the rural people. This habit will bring a large amount of funds into the banking channel, and contribute more to financial inclusion and economic growth of the country⁵⁸.

8.4 E-Commerce And M-Commerce

In Bangladesh, e-commerce is a subset of e-business, dealing with the purchase and sale of goods and services over the internet, including support activities such as marketing and customer support. The current status of e-commerce is not significant in Bangladesh compared with that of the developed countries, as Bangladesh is ranked 73rd in the world on this issue.

BB has issued directives to the banks for starting e-commerce activities around the country. BB has permitted transfer of funds up to BDT 500,000 from one client's account to another client's account with the same bank using internet/online facilities, subject to the compliance of prevailing Money Laundering Prevention legislation and related circulars. In order to ensure IT security for online and e-commerce transactions, BB has mandated the banks to introduce Two Factor Authentication (2FA) for transactions without card that are valued at BDT 5,000 and above.

In order to start m-commerce in Bangladesh, mobile network operators have been given permission to sell railway tickets and tickets of cricket matches organized by the Bangladesh Cricket Board (BCB) using mobile technology. Three mobile network operators so far have been permitted for m-commerce related transactions.

8.5 Electronic Banking Operations

Chart 8.3 : Number of banks providing electronic banking facilities in CY 12, CY 13 and CY 14

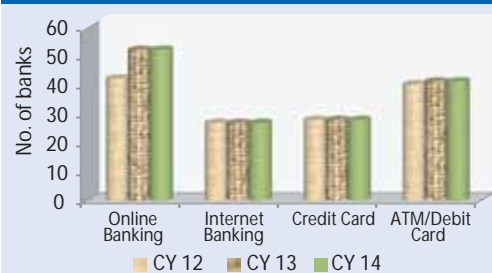
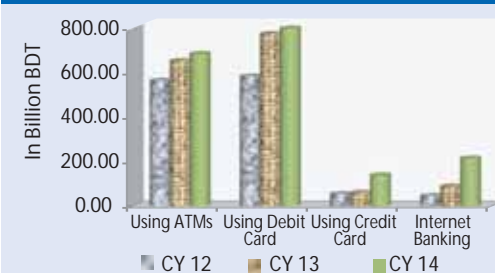


Chart 8.4 : Total volume of electronic banking transactions in CY 12, CY 13 and CY 14



Source: Statements from Scheduled Banks

⁵⁸ Abul Kashem Md. Shirin, Insights of the Mobile Financial Services, The Daily Star, Published on Wednesday, April 23, 2014. Web link: <http://www.the-daily-star.net/insights-of-the-mobile-financial-services-21238>, last retrieved: 02/04/2015.

Banking operations through electronic means have opened a new era in the conventional banking system. A total of 52 banks out of 56 are providing full or partial online banking services. To address the customers' demand, today's banks are more inclined to utilize technological advantages.

Chart 8.3 shows the trend in the adoption of electronic banking means during CY 12 to CY 14. In 2013, 10 more banks were included offering online banking with the existing 42 online banking providers. Currently, most of the banks (52 out of 56) are providing online banking.

Chart 8.4 depicts the trend in the monetary volume of electronic banking transactions over the last three years. Though the volume of transactions using ATM and debit cards shows a slightly increasing trend, the volume of transactions using credit cards and internet banking shows a sharp (124 percent and 140 percent respectively) rise. These data imply that the users of credit cards have increased in 2013 and 2014 and the purchasing behaviour is also turning towards virtual payments from physical ones.

8.6 Central Depository System

The Central Depository System (CDS) of Bangladesh is operated by Central Depository Bangladesh Limited (CDBL) and was incorporated on 20th August 2000. It is sponsored by the banking sector, Investment Corporation of Bangladesh (ICB), merchant banks, publicly-listed companies, insurance companies, and the Dhaka and Chittagong Stock Exchanges with the collaboration of the Asian Development Bank (ADB). The incorporation of CDBL has been proven as a convenient and reliable means to settle securities transactions. The investors are now free from the complications of physical handling of certificates, errors in paperwork, and the risks associated with damaged, lost and forged certificates.

The operation of CDBL is governed by the Depositories Act 1999, Depositories Regulations 2000, Depository (User) Regulations 2003 and the CDBL By-Laws. Its operation is carried out in its main data centre; which is linked to a remote Disaster Recovery Centre (DRC) as a backup where data update takes place simultaneously. Network connectivity to depository participants (DPs), issuers, banks, stock exchanges and the Bangladesh Securities and Exchange Commission (BSEC) has been set through a front-end interface accessed by fiber optics network connections. Low volumes of data transmission are also possible via PSTN telephone lines.

Like the Bangladesh Electronic Fund Transfer Network (BEFTN) of BB, CDBL has provided bank routing numbers and 13-digit bank account numbers for access into the Beneficial Owner (BO) Account opening module. All existing BO Account holders are requested to update their bank account information to facilitate DPs and issuers transferring money to the BO account holders' bank accounts directly via BEFTN.

A new module named 'Shortage Checking' has been added to allow DPs to check their pending pay-in transactions according to their sell obligations online. Currently, DPs can check their shortages online at the end of trading hours when trade files are uploaded to the CDBL server by the stock exchanges.

At present, there are 330 full-fledged DPs, 4 full-fledged exchange DPs, 90 custodian DPs and 44 treasury DPs registered under CDBL. In addition, there are 335 issuers and 332 ISINs (International Securities Identification Numbers) registered under CDBL.

8.7 Online Payment Gateway Service

In view of the growing role of the services provided by the Online Payment Gateway Service Providers (OPGSPs), Bangladesh Bank decided to allow the Authorised Dealers (ADs) to offer the facility of repatriation of remittances against small value (not more than USD 500) service exports in non-physical form such as data entry/data process, off-shore IT service, business process outsourcing, etc.

Online payment gateway service authorizes credit card payments for e-businesses, online retailers, bricks and clicks, or traditional brick and mortar businesses. It is equivalent to a physical POS terminal located in most retail outlets. Payment gateways protect credit card details by encrypting sensitive information, such as credit card numbers, to ensure that information is passed securely between the customer and the merchant and also between merchant and the payment processor. It is usually a third-party service that is actually a system of computer processes that process, verify, and accept or decline credit card transactions on behalf of the merchant through secure Internet connections.

To avail the online payment gateway service, ADs will have to enter into standing arrangements with internationally recognized OPGSPs and maintain a separate nostro collection account for each OPGSP to repatriate the service export-related payments. The ADs will repatriate the balances held in the nostro collection accounts and arrange to credit the respective exporter's account with a bank in Bangladesh. However, the ADs will also have to comply with the foreign exchange regulations, anti-money laundering or combating of terrorism financing regulations, and any other relevant laws and regulations in force. A very few banks have entered agreement with Payza, Payoneer and Skrill for this purpose.

8.8 Upcoming Developments

8.8.1 Real Time Gross Settlement (RTGS)

A Real Time Gross Settlement (RTGS) System is a settlement system for money or securities in which both processing and final settlement of funds transfer can take place with immediate effect (i.e., in real time and gross in amount). It enables instant settlement of high-value local currency transactions as well as government securities and foreign currency-based transactions.

The RTGS System reduces counterparty credit risk in payments by settling transactions in gross, one by one in real time, instead of netting payments between counterparties and settling the net amount either at the end of the business day, or at regular intervals throughout the business day. The RTGS systems are usually operated by central banks as it is a critical infrastructure for any economy; over the years the adoption of RTGS systems continues to grow and presently it is adopted by 124 payment systems in 160 countries.

Box 8.1 : Different Aspects of RTGS relevant to Financial Stability*

RTGS systems are vital to cash and securities settlements, and also play a vital role in monetary policy. Hence, it is systemically important. Thus, to operate this system, the central banks must ensure that it is resilient enough to withstand a variety of threats to its security and integrity.

The potential threats for RTGS may include-

1. Natural disasters - earthquake, tsunami, flood, forest fire, cyclone and many more;
2. Loss of essential services - electricity, telecommunication, water supply, etc.;
3. Data corruption - malicious attack or an inadvertent error by maintenance staff can cause the corruption or loss of data;
4. Cyber-attacks - may be posed by terrorist groups, which aim to intimidate government or populations by shutting down a crucial national infrastructure;
5. Unavailability of staff - Key personnel may be unable to reach the office because transport networks are down or for other extraordinary reasons;
6. War - in wartime, opposing forces have always fought to destroy or disable infrastructures that are vital to sustain military, industrial or civilian morale.

The consequence of RTGS failure

On failure of RTGS system due to any one of the threats, the ability to send and receive payments will be disrupted. Then banks will have to continue payments bilaterally, without the liquidity trapped in the RTGS system. If any bank does not have sufficient liquidity to meet its obligations, it will be forced to go into the market and borrow. In the middle of a crisis, the cost of borrowing is likely to be high and rising.

A prolonged failure would be catastrophic. When banks are unable to make transfers, the commerce of entire economies slows down, and eventually halts. The money and securities markets, in which governments finance their expenditure, would also be slowed down and potentially be dried up as the reintroduction of credit risk led to a loss of confidence. The equity markets would be seized up. Confidence in the economic health of any country affected by the disruption of its RTGS system would be evaporated, and its currency would likely be collapsed.

RTGS Resiliency Planning

Continuous availability of real-time payment service requires a high degree of resilience. The Committee on Payment and Settlement Systems (CPSS) and the Technical Committee of the International Organization of Securities Commissions (IOSCO) published 24 principles for financial market infrastructures in April 2012 that emphasize the need for operational contingency plans that guarantee continuity of service through both catastrophic and marginal disruptions.

Following those principles, every RTGS system in major markets prepared and practiced resiliency planning that includes -

1. A second or third back-up platform to operate throughout the disruption without re-introducing credit risk;

(Continued)

2. Proper plan to resume the RTGS service with a speed that avoid re-introduction of credit risk;
3. To capture the latest balances and transaction status continuously in real-time;
4. To avoid any restriction on the number of participants and volumes of transactions;
5. To minimize the impact on users of the switch to the back-up system;
6. To ensure the back-up facility is geographically remote from the other sites;
7. Technical diversification to limit the risk of cross-contamination;
8. Reduction of reliance on essential staff to operate systems;
9. Independent, trusted storage of balances and messages exchanged between counterparties.

** Compilation from the document 'Reducing risk and increasing resilience in RTGS payment systems', released by SWIFT as White Paper. Web link: http://www.swift.com/about_swift/shownews?paramdcr=news.data/en/swift.com/2014/wp_mirs.xml. Last retrieval: 02/04/2015.*

Bangladesh Bank has taken an initiative to implement a project named "Institutional Support for Migrant Workers' Remittances; Real Time Gross Settlement (RTGS)" jointly funded by the ADB and Government of Bangladesh (GoB). The project is expected to go live in September 2015.

In RTGS or large-value funds transfer system, the transmission and processing of payment messages are typically automated or electronic, while settlement takes place with central bank funds. Along with these individual interbank transactions all other Deferred Net Settlement Batches (DNSB) such as BACPS, BEFTN or NPSB will settle their net position through the RTGS system. RTGS, in turn, will be linked to BB's core banking solution.

For efficient operating of RTGS, connectivity among participants and central systems is very important, and BB will use Virtual Private Network (VPN)⁵⁹ for network connectivity. BB also considers SWIFT as a second operational line for this purpose. For the development of a single, common format of message for all financial communication regardless of its location, BB adopted ISO20022⁶⁰ as a uniform message format.

Towards the implementation of RTGS, Bangladesh Bank undertook a contract with a Sweden-based systems solution provider as its vendor on 20 November 2014, and a Bangladeshi IT company has been selected as its local partner.

8.8.2 Central Counterparty (CCP)

As the financial market in Bangladesh is growing and more sophisticated and complex products (such as derivatives) are being offered, the establishment of a central counterparty (CCP) is now

⁵⁹ VPN is a network that uses a public network (usually the Internet) to connect remote sites or users together.

⁶⁰ ISO 20022 - Universal financial industry message scheme (also called "UNIFI") is the international standard that defines the ISO platform for the development of financial message standards. Its business modeling approach allows users and developers to represent financial business processes and underlying transactions in a formal but syntax-independent notation. These business transaction models are the "real" business standards. They can be converted into physical messages in the desired syntax.

in demand. The main role of a central counterparty (CCP) is to become the legal counterparty to all qualifying trades shortly after they have been executed⁶¹. Trading participants will, therefore, settle all these trades with the CCP rather than with each other. To achieve this, each original trade is replaced by two new trades by a process called 'novation'. Thus a sale from participant A to participant B is replaced by a sale from A to CCP, and a sale from CCP to B. The CCP assumes all the rights and responsibilities of counterparty to these new trades.

Thus, a CCP reduces counterparty risk, provides trading anonymity, and improves the efficiency of the overall settlement process. Although a CCP helps to reduce risks to market participants significantly, it also concentrates risks on its own failure. So, a trade-off should be done between efficiency in a single CCP structure and the potential of systemic risk that could arise from the failure of a single CCP. Another trade-off is between the maximum netting ratio achieved by the single CCP solution and the concentration of risk in a single infrastructure, as the market size in Bangladesh is not big enough for an additional CCP to be self-sustaining.

The Bangladesh Securities and Exchange Commission (BSEC), with the technical assistance from ADB, has been formulated a long-term (2012-2022) master plan incorporating the necessity of a CCP. The master plan sets the direction to transition from a nascent to an emerging capital market, and the implementation of reform measures elucidated in the master plan that place Bangladesh's capital markets on a path to sustainable growth. A follow-up operation will be proposed under the Third Capital Market Development Program (planned for the second half of 2015) to enhance the sustainability of structural reforms under the second tranche program in 2014.

⁶¹ ADB, Technical Assistance Consultant's Report, Project No. 43477-012, August 2012, Bangladesh: Capital Market Development Program II.

Chapter 9

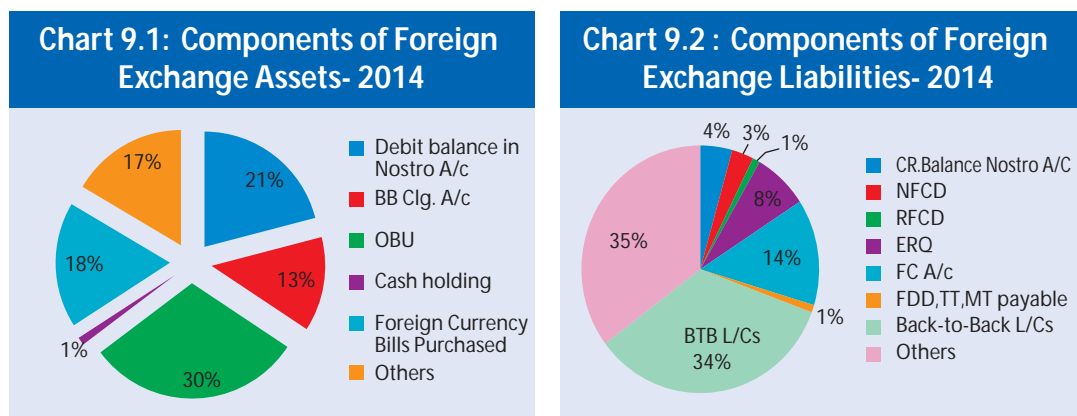
Foreign Exchange Market

9.1 Introduction

The foreign exchange (FX) market demonstrated notable stability and resilience in the calendar year 2014 (CY14) compared with the same in CY13. However, there was a considerable fluctuation in the overall net FX liquidity position during the review year. The Bangladesh Taka (BDT) demonstrated a mixed movement against the US Dollar (USD) during CY14. The BDT appreciated during January-September 2014 and depreciated during October-December, 2014. Both the current account balance and the overall balance of BOP were positive during Financial Year 2014 (FY14). Despite the surplus of current account balance & BOP overall balance and the huge FX reserve, the BDT did not appreciate largely. During January-October 2014, Bangladesh Bank (BB) purchased USD 4.1 billion from the domestic FX market and during November-December, 2014 it sold USD 357.0 million as indirect measures to keep the FX market stable.

9.2 Foreign Exchange Assets and Liabilities

In the financial system of Bangladesh, the foreign exchange market holds a significant position, facilitating international trade and finance. It becomes possible mainly due to active performance of 960 authorized dealer (AD) bank branches and 234 Money Changers. In CY13, these numbers were 935 and 237 respectively, indicating a dominant role of FX trade initiatives in the banking and broader financial sector. However, actual assets and liabilities, denominated in FX, are minor relative to the banking sector aggregate assets.



Source: Foreign Exchange Policy Department, Bangladesh Bank

As of 31 December 2014, the total amount of foreign exchange assets and liabilities were only USD 4.2 billion and USD 4.0 billion respectively, representing only about 3.6 percent of banking sector aggregate assets and about 3.4 percent of liabilities. Foreign exchange assets are held by banks in six major accounts; namely BB clearing account, cash holding, debit balance in nostro account in local banks, foreign currency bills purchased, off-shore banking units (OBUs) and others.

Box 9.1 : Offshore Banking Unit (OBU)

An offshore banking unit (OBU) is a separate banking window of a banking company operating in Bangladesh with a status of bank in different territory. Such banking units started their operation in 1985 [BCD Circular No. BCD (P) 744(27)/1416; Dated: 17/12/1985]. Presently, 32 Banks are licensed for operating their OBUs. OBUs bear a great importance for the transactions of 100% foreign owned (Type A) industries in Export Processing Zones (EPZs).

OBUs are permitted to discount bills against deferred letter of credits (LCs) issued by authorized dealers (ADs). Enhancement of the interest ceiling from LIBOR to 6.0 per cent for buyers' and introduction of suppliers' credit brought real opportunity for the OBUs of private commercial banks (PCBs) and Islamic shari'ah banks to increase their asset size. The Usance Pay At Sight (UPAS) transactions for the importers expanded remarkably since early 2013.

OBUs' individual assets are composed of mainly bills discounted & suppliers' credits while liabilities of borrowing from local parent office of local banks and foreign correspondent, the IFC, the ADB or banks' own onshore units for foreign banks.

Investment in OBUs by the AD banks is basically used for export-financing with different terms of maturity. Table B.9.1 shows that OBUs' aggregate assets in less than 1 month maturity is USD 668.7 million whereas aggregate liabilities is USD 1481.1 million as on 31 December, 2014. This depicts that OBUs cannot meet emergency financial needs through these illiquid assets. This creates, on one side liquidity risk and on the other maturity mismatch risk of deposits and investments. Some banks are dependent on interbank foreign exchange market. If the foreign exchange market of Bangladesh becomes abruptly tight, they will fall in cross-border exposure risk. In this regard, formulation of guidelines for OBUs' activities is under process in order to address these risks.

Table B.9.1 : OBUs' Assets and liabilities (End-December, 2014)

(Amount in million USD)

Maturity Period	OBUs' Assets	OBUs' Liabilities
On Demand	134.164	397.442
$X \leq 1$ month	668.725	1481.14
$1 < X \leq 3$ months	1040.84	980.23
$3 < X \leq 6$ months	902.374	490.416
$6 < X \leq 12$ months	382.464	163.173
$X > 12$ months	542.94	158.56

Source: Foreign Exchange Policy Department, Bangladesh Bank.

Most of the OBUs' loan transactions are with ADs and nature of lending is of short term. The volume of non-performing loans, as a whole, is insignificant. Deposit base of OBUs is extremely narrow; they cannot obtain deposit from entities other than type A industries of EPZ or foreign sources. Borrowing from local and foreign parent banks is the main component of liabilities portfolio.

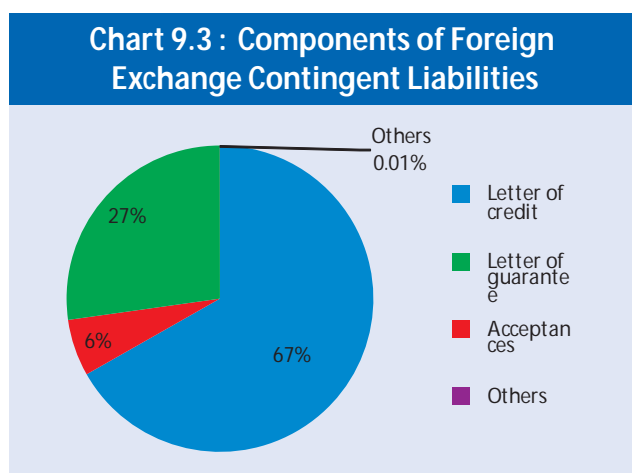
The extensive reliance of OBUs on borrowed funds is costly as compared to the deposits. Foreign borrowing affects the interest expenses of the OBUs.

OBUs need a handy guide for their smooth operation and greater efficiency. They also need clear guidelines regarding the applicability of existing risk management guidelines of Bangladesh Bank released for the scheduled banks.

Chart 9.1 shows the share of each of the above components of foreign exchange assets. The OBUs contributed 30.0 percent of the total FX-denominated assets. The OBU has an important bearing on FX stability in the sense that cross-border turbulence may affect the FX market in Bangladesh.

On the other hand, foreign exchange liabilities are held in eight major accounts. These are back to back L/C fund awaiting for remittance, credit balance in nostro account from local banks, exporters' retention quota, foreign currency deposit accounts, Foreign Demand Draft (FDD), Telegraphic Transfer (TT), Mail Transfer (MT) payable, Non-Resident Foreign Currency Deposit (NFCD) accounts, Resident Foreign Currency Deposit (RFCD) account and others. Chart 9.2 depicts the shares of each of the components of foreign exchange liabilities. About 34.0 percent of foreign exchange liabilities are held as back-to-back fund awaiting for remittance, 14.0 percent of the FX-denominated liabilities are kept in foreign currency accounts, while 35.0 percent are held for other purposes.

9.3 Foreign Exchange Contingent Liabilities



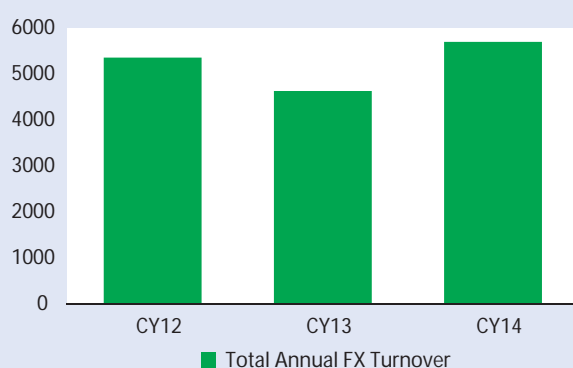
Source: Foreign Exchange Policy Department, Bangladesh Bank

Contingent liabilities constitute an important part of FX liabilities. Banks are participating in this lucrative market to earn more profit without the burden of carrying additional on-balance-sheet liabilities. Foreign exchange contingent liabilities are held in four major accounts; letter of credit, letter of guarantee, acceptances and others. Chart 9.3 depicts the shares of each of the components of FX contingent liabilities.

About 67.0 percent of foreign exchange liabilities are held as letter of credit, 27.0 percent of the contingent liabilities are due to acceptances, while 6.0 percent are for letter of guarantee purposes. At end-December 2014, total contingent liabilities were USD 27.4 billion.

9.4 Foreign Exchange Turnover

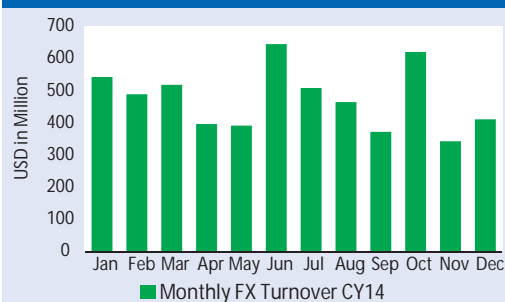
The FX market of Bangladesh is relatively less complicated than in other countries. The FX derivative market, such as futures, options, swaps, etc., exists, but with very limited scale. Forward transactions are rarely done. Almost all dealings/transactions are executed in the spot market. The FX market was more active in Bangladesh during the CY14 than in previous year. On an average, almost 91.9 percent of inter-bank FX transactions were done in USD. The monthly average turnover of inter-bank FX transactions was USD 475.7 million in CY14, compared with USD 387.4 million in CY13 and USD 448.2 million in CY12. The monthly average trade volume decreased in CY13, but rose upward significantly by 12.9 percent in CY14. During CY14, the total turnover of inter-bank FX transactions was USD 5708.3 million, 1.4 times the total foreign exchange assets.

Chart 9.4 : Annual Foreign Exchange Turnover

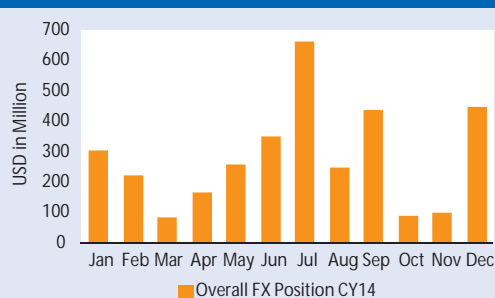
Source: Foreign Exchange Reserve and Treasury Management Department, Bangladesh Bank

Chart 9.4 depicts the trend of foreign exchange turnover in the preceding three consecutive years. During CY12, the foreign exchange turnover was high as well as unstable compared with that of the succeeding two calendar years (standard deviation: 175.3 in CY12). In CY13, the turnover position became less volatile with monthly standard deviation of 84.9. Although the inter-bank FX trade volume increased by 12.9 percent in CY14 compared with that in CY13, the foreign exchange turnover was more

volatile in CY14 (standard deviation of 107.0). Macroeconomic stability during CY14 could be one explanation of the higher volume of trade in the FX market.

Chart 9.5 : Monthly Foreign Exchange Turnover, 2014

Source: Foreign Exchange Reserve and Treasury Management Department, Bangladesh Bank

Chart 9.6 : Foreign Exchange Open Position, 2014

The total FX long position for the banking sector was USD 536.7 million, while the total short position was USD 91.1 million; i.e. the overall net FX position was USD 445.6 million at end-December 2014. During the year, there was a huge fluctuation in the net open FX position (Chart 9.6). The highest amount of FX net open position was USD 662.3 million at end-July 2014 and the lowest amount was USD 82.0 million at end-March 2014. The FX net open position considerably decreased at end-October and end-November 2014. BB sold USD 357.0 million during the months of November and December 2014 to keep the FX market more liquid and stable.

9.5 Foreign Exchange Reserve Position

The gross foreign exchange reserve position, in general, demonstrated an increasing trend during CY14. The month-end average FX reserve increased by 1.8 percent during the review year. The gross foreign exchange reserve displayed a decreasing trend during May, July, September and November of 2014; while during the rest of the months there was an increasing trend compared to the preceding months.

Chart 9.7 : Gross Foreign Exchange Reserve Position



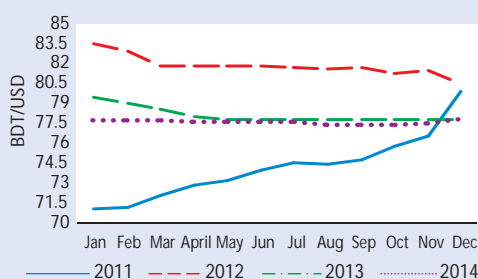
Source: Monthly Economic Trend, Bangladesh Bank

The FX reserve amounted to USD 18.1 billion at end-January 2014 and it reached its peak at end-October 2014 (USD 22.3 billion). At end-December 2014, the reserve increased by USD 4235.2 million to USD 22.3 billion, which was 23.4 percent higher than the USD 18.1 billion recorded at end of CY13 (chart 9.7). The FX reserve could meet nearly 6 months' import obligations of Bangladesh.

9.6 Exchange Rate Movement and its Volatility

The foreign exchange market displayed resilience with low volatility in term of the movement of USD-BDT exchange rate in the review year. The dispersion between the minimum and the maximum USD-BDT rate was 0.46, compared with the same of the three preceding calendar years. It is mentionable that this dispersion was 8.9, 3.0 and 1.7 in CY11, CY12 and CY13 respectively. During CY14, the month of September demonstrated the lowest exchange rate (USD-BDT 77.4000); while the month of December showed the highest rate (USD-BDT 77.8647).

Chart 9.8 : Exchange Rate Movement



Source: Foreign Exchange Reserve and Treasury Management Department, Bangladesh Bank

Chart 9.9 : Volatility of exchange rate movement

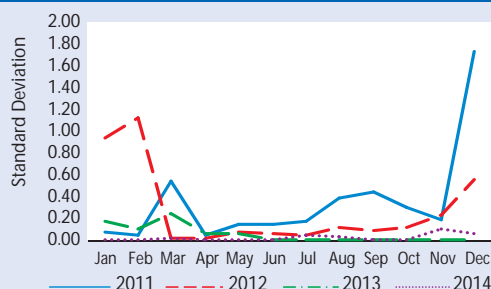
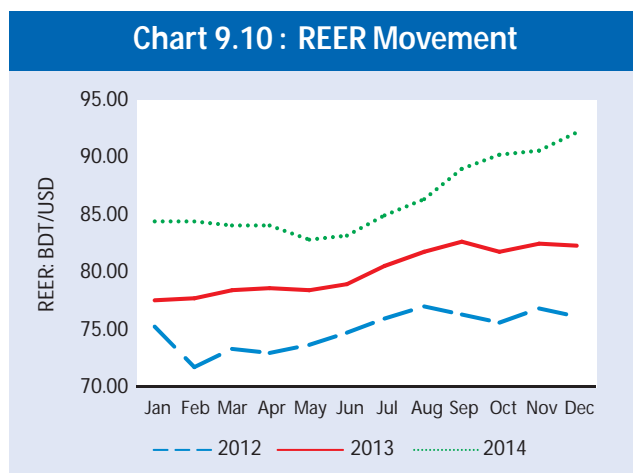


Chart 9.8 shows that the monthly average USD-BDT exchange rate (dot line) was very much stable. As of December 2014, the USD-BDT rate depreciated by 0.15 percent; while as of January 2014 the USD-BDT rate appreciated by 2.21 percent compared with its corresponding months of CY13. And the appreciation continued until September 2014. Again it started to depreciate from October 2014, and continued until December 2014. But the rates of depreciation and appreciation were not that much significant. Overall, the foreign exchange movement was quite stable and resilient during CY14.

When using standard deviation of daily BDT/USD rates as the measure of volatility of the FX market, the fact emerges that the foreign exchange market was more stable in CY14 compared

with CY13 (chart 9.9). The standard deviation of the USD-BDT rate was only 2.5 percent in CY14; 5.5 percent in CY13; 2.8 percent in CY12; and 3.6 percent in CY11.

9.7 Movement of Reer and its Volatility



Source: Monetary Policy Department, Bangladesh Bank

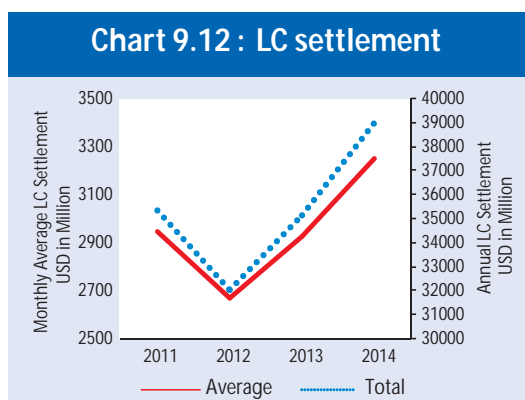
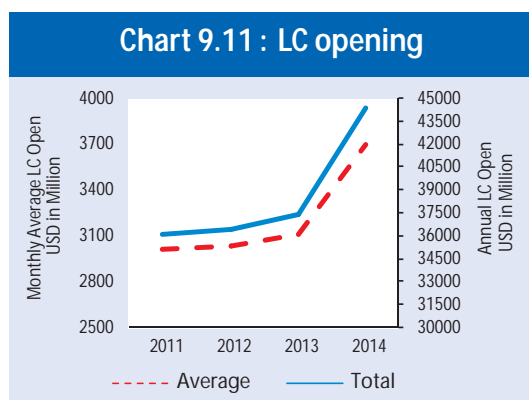
When using standard deviation as the measure of volatility, it is observed that the real effective exchange rate (REER) was more volatile than the USD-BDT exchange rate in CY14. The standard deviation of REER was 3.23 in CY14; while it was 1.97 in CY13 and 1.67 in CY12.

The REER started to depreciate in January 2013 and continued its depreciation through December 2014 with minor exceptions.

The minimum USD-BDT REER was 82.8 in May 2014, and the maximum 92.0 was reached in December 2014. The dispersion between the minimum and maximum USD-BDT REER was 9.26 in CY14, while it was 5.12 and 4.96 in CY12 and CY13 respectively. Chart 10.10 depicts that CY14 (green dotted line) demonstrated a more volatile scenario than CY13 and CY12.

9.8 LC Opening and LC Settlement

The total value of LC opening increased by USD 6977.9 million in CY14, reaching USD 44,339.6 million in CY14 from 37,361.7 million in CY13; and the value of LC settlement increased by USD 3851.2 million, reaching USD 38,983.0 million in CY14 from 35,131.8 million in CY13. In percentage terms, the value of LC opening and LC settlement increased by 18.7 percent and 11.0 percent in CY14 respectively compared to CY13.



Source: Foreign Exchange Operation Department, Bangladesh Bank

The maximum amount of LC opened was in June 2014, and the maximum LC settled was in August 2014.

9.9 Trade Balance and Wage Earners' Remittance

The wage earners' remittance increased by USD 1110.5 million (8.0 percent) during CY14 from USD 13,832.13 million in CY13. The month of July 2014 demonstrated the highest inflow of remittance of USD 1492.5 million; while the month of October 2014 recorded the lowest inflow of USD 1018.0 million.

Chart 9.13 : Month wise wage earners' remittance (2012-14)

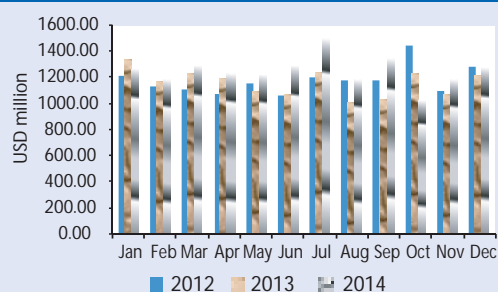
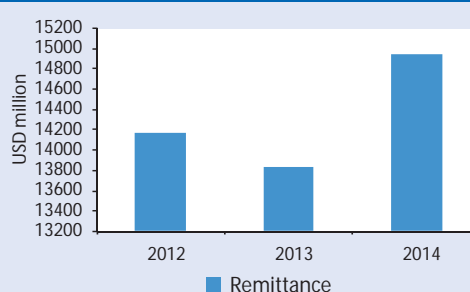


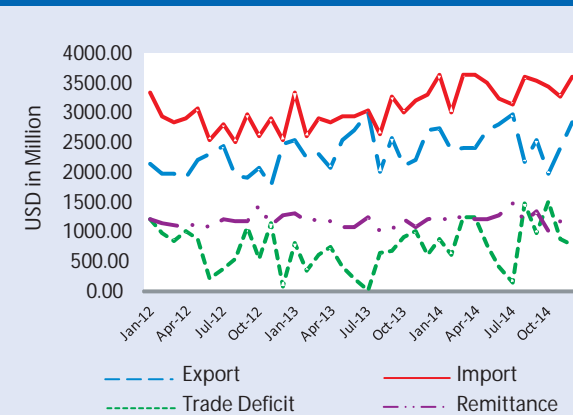
Chart 9.14 : Wage Earners' Remittance (2012-14)



Source: Foreign Exchange Operation Department, Bangladesh Bank

Aggregate exports increased by USD 1301.7 million to USD 30,415.1 million in CY14 from USD 29,113.4 million in CY13. Likewise, aggregate import increased by USD 5208.7 million in CY14 to USD 41,432.4 million from USD 36,224.0 million in CY13. As a result, the trade deficit increased by USD 3907.0 million in CY14, a 55.0 percent increase from CY13, going from USD 7110.6 million in CY13 to USD 11,017.6 million in CY14.

Chart 9.15 : Coverage of trade deficit (2012-14)



Source: Foreign Exchange Operation Department, Bangladesh Bank

It is observed that the trade deficit was mostly covered by the wage earners' remittance during the whole year CY14, although there were ups and downs in this relationship during the year.

Both the current account balance and overall balance in BOP were in surplus in FY14, and the foreign exchange reserve touched its peak in October 2014. These developments were consistent with an appreciation of BDT from January 2014 until September 2014.

After that, the currency began to depreciate and continued until December 2014. One possible explanation could be that BB purchased USD 4140.5 million during the January-October 2014 period to prevent further appreciation of BDT against USD, resulting in the increased FX reserves; and sold USD 357.0 million during November-December 2014 to prevent further depreciation against USD.

Chapter 10

Financial Inclusion Initiatives and other Developments in the Financial System

In order to ensure balanced, sustained, inclusive and equitable growth it is worthwhile to continue and expedite the efforts to enhance the coherence and consistency of the financial system, and also to tackle the challenges, confronting the global economy, through acting decisively. Bangladesh Bank (BB) is mandated to support attainment of the country's developmental aspirations alongside maintaining price and financial stability. To this end, Bangladesh Bank emphasizes financial inclusion and continuing development in the financial system. Following are some important financial inclusion drives of BB and developments in the financial system of Bangladesh in CY14:

10.1 Financial Inclusion

Financial inclusion aims at drawing the "unbanked" population into the formal financial system so that they have the opportunity to access financial services ranging from savings, payments, transfers, access to credit, and insurance. Financial inclusion helps an economy to be strong and more resilient to shocks, either endogenous or exogenous.

BB has strengthened its financial inclusion drive considerably in recent years, as an important development priority of the country as well as to maintain the stability of the financial system. Some recent and notable financial inclusion initiatives of the Bank are as follows:

10.1.1 Banking Services for Street Urchin (Street Children) and Working Children

Financial literacy and a savings culture are just beginning in some communities. However, not only do even the poorest benefit from financial access, but accumulation of their small savings can also activate the whole financial system and contribute to the overall development of the country. As one recent initiative, BB issued **BRPD Circular No.05 in CY14**, to ensure the "Banking Services for Street Urchin (Street Children) and Working Children." Under this circular, all the scheduled banks are to allow the street urchins and working children to open savings bank accounts for as little as Tk.10 through an NGO (listed by BB). The initiative aims to grow a savings attitude among the stated population segment, to protect their hard-earned money and to prevent their derailment into a permanent underclass through developing their financial position. The concerned NGO will nominate at least two of its officials to operate the account on behalf of the child and their activities will be treated as a fiduciary duty. New accounts require a co-signature from an NGO, whose staff retains control of the account until the child attains the age of 18. The NGO will be liable for all kinds of transactions in the account. It is mentionable that NGO involvement for the poorest children is aimed at ensuring the use of children's money for their chief needs: survival, emergencies and planning for the future.

10.1.2 Ensuring Banking Services for Physically Challenged Persons

The actual benefits of financial inclusion will be elusive unless physically challenged persons are brought under the umbrella of financial access. BB has taken this reality into cognizance and taken different initiatives to ensure banking facilities for this segment of the population.

- BB instructed all scheduled banks to appoint a focal official to provide banking services in a facilitating and caring manner (BRPD Circular No.14 dated 28/10/2009).
- BB instructed the banks to open savings accounts in the names of physically challenged persons with initial deposit of Tk.10 (BRPD Circular No.05 dated 19/06/2011). Neither a minimum deposit nor any charge is applicable to these accounts.
- BB instructed the banks (SMESPD Circular No. 01/2013 dated 11/09/2013) to give preference to disabled persons as entrepreneurs. To fill the gap of access to finance of physically challenged persons, BB has formed the "Bangladesh Bank Fund" to give refinancing facilities to physically challenged SME entrepreneurs with a minimum financing facility of BDT 10,000 and maximum limit of BDT 500,000.

10.1.3 Guidance Notes for Approval and Operation of Agent Banking Activities of Banks

Agent banking aims at serving the underserved population through engaged agents under valid agency agreements in limited scale banking and financial services.

BB introduced agent banking service in 2013 and for the purpose of ensuring a safe, secure and sound agent banking delivery channel, BB has issued "Guidelines on Agent Banking" vide **PSD Circular No. 05 dated 09/12/2013** and guidance notes for approval and operation of Agent Banking Activities of Banks vide **GBCSRD Circular No. 02 dated 03/06/2014**. The guidance note has been issued to articulate a clear framework for approval requirements of launching agent banking activities of scheduled banks, agent selection criteria and approval procedure, and criteria of agent banking to ensure the safety, security and soundness of the proposed delivery channel. Banks have been instructed to give most emphasis on the rural area to cover the lion's share of the target group, but not to ignore the rest of the target group by concentrating on the urban area in a limited scope.

The guidelines and the guidance notes will smooth the agent banking activities in our country, expedite the inclusive growth as well as the stability in the financial system and help to enhance the number of financially included persons.

10.1.4 School Banking as Move of Youngsters Towards Financial Inclusion

Making the youngsters financially literate could result in a strong future financial base for the nation. Moreover, the habit of savings by these youngsters will help to enhance deposit mobilization and productivity, and accumulation of these small deposits is a stabilizing factor for the financial system. Considering these, BB introduced School Banking facilities in November,

2010 and issued a guideline in 2013 to provide students with necessary banking services. Students aging 6-18 years are entitled to open a school banking account with an initial deposit of BDT 100 operated by their parents or legal guardians. Under this program, around 850,000 accounts have been opened with an outstanding balance of BDT 7,175 million as of end-December 2014.

10.1.5 Mobile Banking Services

BB introduced mobile financial service in 2011 as part of its financial inclusion drive. It is the most responsive inclusionary measure in the financial sector of our country. Every year, a significant portion of unbanked population is coming into the arena of financial services using this facility. It has been able to convey the financial services to those remote areas where people had faced much difficulty in the past. The response has been overwhelming: 25.2 million mobile bank accounts have been opened as at end-December 2014, and the total transactions through the year were BDT 1,031.5 billion. To accelerate these services, BB has already permitted 28 banks (as of December 2014), who have, in turn, deputized about 540,000 agents across the country. It is also noteworthy that the Alliance for Financial Inclusion has awarded BB for its policy contribution towards reaching out to the vast population's very doorstep with mobile financial services. Bangladesh has been ranked seventh in a recently published list of top developing countries in mobile banking services by the London-based Economist magazine. Though state-owned banks have a huge network of branches, the superior use of technology and linkages with other entities made it possible for private banks to expand their remittance services to rural unbanked population.

10.2 Guideline on Early Warning System for Financial Institutions

Non-Bank Financial Institutions (NBFIs) are gradually scoring an increasing percentage of market share in the financial sector. The demand for long-term financing, equity-providing services, enhanced financial intermediation with diversified investment instruments, and risk pooling services are some notable reasons behind the expansion of the industry. With the augmentation of the size of the industry, the close monitoring of NBFIs has become indispensable. BB is committed to develop policies and procedures that would lead to prompt detection and mitigation of problems faced by NBFIs before they affect their viability.

Bangladesh Bank introduced **"Guideline on Early Warning System for Weak and Problem Financial Institutions"** in June 2014. The system has been developed to identify the weaknesses in the condition or the performance of the financial institution at an early stage, before problems become intractable. It is an automated system where CAMELS rating data for 3 (three) consecutive semi-annual period are used as input. The system automatically generates the output, i.e., the weak performing banks. The NBFIs' individual performance is then found out in comparison with the industry's overall performance. Use of relatively long-term data and consideration of industry trends make the output of the Early Warning System more reliable.

Box 10.1 : Bank Health Index and HEAT Map

Financial Stability Department is working to develop a Bank Health Index (BHI) and HEAT Map using different financial ratios, designed to provide a glimpse of financial health of the individual institutions, compare to their peers as well as the financial system following Ong et al., 2013. It also provides the performance of an individual bank's financial health with average performance of its peers over the period.

The index and Map are examined with six financial ratios namely, Asset Quality Ratio (aq); Capital Adequacy Ratio (ca); Efficiency Ratio (eff); Leverage Ratio (lev); Liquidity Ratio (liq); and Profitability Ratio (prof). Each ratio is normalized by Z-Score over three years to obtain both cross-sectional and time variant comparability:

$$Z_{i,t} = \frac{X_{i,t} - \mu}{\sigma}$$

Where
 $Z_{i,t}$ = Normalized Value for the financial ratio of bank i at time t
 $X_{i,t}$ = Financial ratio of bank i, at time t
 μ = Peer group/system mean (arithmetic mean) of a particular financial ratio over the three periods to time t
 σ = Peer group/system standard deviation of a particular financial ratio over the three periods to time t

An overall health score, BHI, for each bank at a particular point of time is calculated by summing the z-scores for each of the financial ratios, such as:

$$BHI_{i,t} = Zaq_{i,t} + Zca_{i,t} + Zeff_{i,t} + Zlev_{i,t} + Zliq_{i,t} + Zprof_{i,t}$$

Chart B10.1 : HEAT Map



HEAT⁶² map, on the other hand, is an Excel-based tool that shows relative soundness of individual banks with colors green, yellow, and red. The individual constituent components of the Index, for a particular period and over time with institutions in the top 90th percentile of soundness denoted in green, those in the bottom 10th percentile denoted in red and the rest in between shown in various shades of yellow.

⁶² Li Lian Ong, Phakawa Jeasakul and Sarah Kwoh, (2013) "HEAT! A Bank Health Assessment Tool," IMF Working Paper, WP/13/177, August.

10.3 Bangladesh Payment and Settlement Systems Regulations, 2014

One of the main objectives of Bangladesh Bank is to promote, regulate and ensure a secure and efficient payment system in Bangladesh. Indeed, an efficient payment and settlement system is the prerequisite for the financial stability of the country. In 2014, the national parliament passed the "Bangladesh Payment and Settlement Systems Regulations 2014" with a view to regulating and supervising the payment systems operating in Bangladesh, including cross-border transactional activities that could affect its currency. Some notable objectives of the regulations are: (a) to establish effective regulation and supervision on the issuance and use of payment instruments, mechanisms, and channels; (b) to regulate the establishment and operations of payment systems and payment services in Bangladesh; (c) to ensure secure and efficient arrangements for settlement on a gross basis, as well as on a bilateral or multilateral netting basis; (d) to define the standards under which payment services may be provided and systems operated; and (e) to define the means and procedures under which Bangladesh Bank shall exercise its oversight powers.

10.4 Regulation on Electronic Fund Transfer 2014

Electronic Fund Transfer (EFT) is one of the most important initiatives in formulating a paperless banking system. The velocity of banking transactions has been enhanced through the use of different media of EFT. With the extensive increase of e-transactions in the banking sector in Bangladesh, the chance of misuse of the system has been increased. In 2014, the national parliament of Bangladesh passed the "**Regulation on Electronic Fund Transfer 2014**" through which Bangladesh Bank has been empowered to look after the EFT system. The regulation will help the related stakeholders to get the best outcomes from EFTs. The greater use of EFT will, however, decrease the reliance on cash through providing safety, efficiency, and transparency in transactions and increasing financial integrity. Besides, EFT can accelerate Green Banking activities and can help ensure green profit, which will help a bank to absorb shocks in the long run. It will also help in stabilizing the financial system.

10.5 New Policy for Covering Risks with Money in Banks

A new insurance policy has been introduced for banks to cover risks arising from banknotes, whether lying in vaults, ATM booths, or in transit. The Insurance Development and Regulatory Authority (IDRA) of Bangladesh has initiated the new non-life insurance policy aimed at covering risks from the unfortunately frequent incidents of money burglary and robbery in the financial system. Cash that remains on tables or desks in bank premises, during business hours, will be brought under the insurance coverage. The IDRA designed the policy with title '**Money Insurance**' after studying the experiences of many advanced nations. It has replaced the existing policies on cash in safe, cash in transit and cash on counters. Under the new and comprehensive policy, risks of money transfer during transit from banks to banks, banks to ATMs, banks to pavement and money in vaults and out of vaults will be covered. However, the policy will not be applicable to risks of money transfer outside the jurisdiction of banks.

This new move would help to build up a stable financial system through ensuring a secured transmission of the money supply in the form of banknotes, throughout the banking sector.

10.6 Master Circular Regarding Prevention of Money Laundering and Terrorist Financing

Money laundering attempts, with a view to disguise the origin and destination of illegal sources of money, fueling even more crime and corruption, and terrorist financing can strike at the very heart of a nation's economic security. Both, may, generate many negative consequences in the financial system of a country, such as, damage to the reputation of affected financial institutions and a corresponding loss of public confidence as well.

The Money Laundering Prevention Act, 2012 and the Anti-Terrorism (Amendment) Act, 2012 were passed in the parliament to protect and reinforce financial stability by preventing money laundering and combating terrorist financing. Being empowered by these acts, the Bangladesh Financial Intelligence Unit (BFIU), housed in Bangladesh Bank, issued a Master Circular in 2014 containing instructions to scheduled banks for the prevention of money laundering and terrorist financing (BFIU Circular No-10 dated 28/12/2014).

Every bank is expected to have its own policy, approved by the Board of Directors or a higher authority (where applicable), to prevent money laundering and terrorist financing in line with the international standards, concerned acts and regulations existing in the country, and different instructions provided by BFIU. The instructions, contained in this circular, cover important issues such as the common account opening form, KYC maintenance, regular transaction monitoring, cash transaction reporting, suspicious transaction monitoring, record preserving, training of employees, etc. The instructions contained in the stated circular would assist the banks in resisting money laundering and terrorist financing in an ordered manner.

10.7 Consolidated Capital Market Investment Limit for the Scheduled Banks and Financial Institutions

Scheduled banks, having capital market exposures, are susceptible to potential losses due to the fluctuation in security prices. Indeed, excessive capital market exposures may cause the erosion of the capital base of banks and create a threat to the resilience of the banks as well as to the entire financial system. International best practices require that capital adequacy and risk management should be done on a consolidated basis to make the health of a bank sound. In order to strengthen the capital base of the banks in Bangladesh, BB has fixed a limit of capital market exposures of banks through DOS Circular letter no. 07 dated 25/02/2014. The Circular letter of DOS stipulates that market value of the total investment of a banking company in capital market on a consolidated basis shall not exceed 50 percent of the sum of its consolidated paid up capital, balance in share premium account, statutory reserve and retained earnings as stated in its latest audited financial statements.

According to Financial Institute Act 1993, financial institutions can invest in capital market up to 25% of their paid up capital and reserve. Besides, they can also have capital market exposure up to 50% of paid up capital and reserve with the approval of BB.

10.8 Differential Supervision Regime for Domestic Systemically Important Banks

The Global Financial Crisis (GFC) in 2007-08 recognized the "Too Big to Fail" (TBTF) phenomenon as a key issue for banking supervisors and highlighted that systemically important banks (SIBs) could be a source of systemic disruption when they have problems. There have been several new

regulatory standards developed by the Financial Stability Board and the Basel Committee on Banking Supervision in order to mitigate the risks to financial systems created by SIBs and ending the "Too Big to Fail" problem.

Keeping into account international best practices, Bangladesh Bank has finalized the methodology of identifying the Domestic Systemically Important Banks (D-SIBs). In the event of failure of a D-SIB, the impact on the banking sector or even the real economy could be significantly greater than the failure of a non-systemic bank. Therefore, to address the issue of TBTF and ensure the uninterrupted banking service to the greater economy, Bangladesh Bank is currently developing the differential supervision mechanism for D-SIBs. A cross-departmental team comprising officials from concerned departments is working to develop the detailed guidelines on D-SIBs supervision.

Moreover, in line with international best practices, Bangladesh Bank is planning to conduct a Quantitative Impact Study (QIS) to determine the exact setting of Higher Loss Absorbency (HLA) capital requirements for D-SIBs.

10.9 Contingency Planning

Planning for events that could destabilize the financial system, such as financial crises, unexpected natural disasters, or terrorist attacks are important for the stability of the financial system. Focusing today on planning for financial crises ensures that authorities will be better able to prevent/mitigate/manage real crises when they emerge. The basic reason for contingency planning is obvious - the costs of problems in the financial sector are potentially large. There are different kinds of costs. The financial costs affecting shareholders, depositors, and other counterparts can be substantial; as demonstrated by recent experiences in Iceland, Ireland, and Cyprus, the costs to the public, government and central bank may be catastrophic.

The GFC has brought to forefront the urgency of having a robust contingency planning framework alongside maintaining the soundness of individual institutions. Since 2013 Bangladesh Bank has been working on "Contingency Planning and Bank Intervention/Resolution Framework" and "Lender of Last Resort Framework", considering international best practices with reference to the Bangladesh local context.

10.9.1 Contingency Planning and Bank Intervention/Resolution Framework

A wide range of policy tools and approaches to crisis resolution have been developed under this framework. The Recovery and Resolution Plan for banks and a proactive public information and education campaign have been initiated as a forward-looking monitoring and awareness building program respectively. Moreover, restructuring through forced/directed merger and acquisition, purchase and assumption, bridge bank, and bail-in within resolution etc. are being developed under the provision of current legislations to ensure the orderly resolution of distressed banks. With a view to improving the depositors' protection, transformation of the existing deposit insurance department into a full-fledged deposit insurer is also under active consideration.

It is expected that the aforementioned contingency planning framework would help to resolute distressed banks without disrupting the stability of the financial system. Those frameworks would benefit the entire financial system even more through the enhancement of public confidence, expanding the deposit base particularly of small savers.

10.9.2 Lender of Last Resort Framework

Alongside finalizing the "Contingency Planning and Bank Intervention/Resolution Framework" BB also finalized the "Lender of Last Resort Framework" in late 2013.

Bangladesh Bank has commenced the process of establishing a clear framework of procedures for allowing banks to access Emergency Liquidity Assistance (ELA) under LOLR framework. Access criteria will be explicit and available to all conventional banks, because when faced with a bank failure or the threat of a systemic crisis, the market needs to know that Bangladesh Bank will ensure adequate liquidity under its role as Lender of Last Resort. ELA is defined as liquidity management by Bangladesh Bank at a micro level, where the cash injection is directed to a scheduled bank which is temporarily illiquid but solvent. It is an important tool in maintaining financial stability under the comprehensive contingency plan of Bangladesh Bank. The ELA is not meant to replace the need for banks to hold adequate liquidity buffers to manage their liquidity through market mechanisms. However, even in a stable period, any solvent bank can face sudden, unexpected, serious and persistent shocks through liquidity shortfall (such as a sharp excess of withdrawals over deposits). Buffers may turn out to be inadequate given the size of the shock or market liquidity may be temporarily constrained. Under such circumstances, Bangladesh Bank's provision of extending temporary liquidity may limit contagion and give the authorities time to determine the appropriate course of actions. The provision of providing temporary liquidity aims at assisting banks to overcome unexpected and temporary distortions in normal market functions.

10.10 Coordinated Supervision Framework

Coordinated supervision is a supervision mechanism of coordinated approach for regulators of various types of financial institutions towards achieving a sound, comprehensive supervision framework. Strengthening policy coordination among financial regulators is an important step forward toward setting up a strong financial system as well as warding off potential financial risks. Indeed, financial regulations sometimes need to be cross-referenced to avoid contradictions and unnecessary duplications. In this regard, and with the aim of ensuring and maintaining financial stability, Bangladesh Bank has taken an initiative to develop a 'Coordinated Supervision Framework' for the financial system. As part of developing this framework, a working committee, comprising the officials of Bangladesh Bank, Bangladesh Securities and Exchange Commission, Insurance Development and Regulatory Authority, Microcredit Regulatory Authority, and Registrar of Joint Stock Companies and Firms has been working on the preparation of a draft concept paper regarding policy coordination among the regulators, considering the individual roles of them without creating conflicts over policies adopted. This committee has been entrusted with finalizing the concept paper.

The Coordination Council (CC) of Regulators, which was formed in 2012, is best seen as the collaborative dimension of the regulatory agencies' activities, rather than as a separate body with its own ability to make the regulatory agencies cooperate. The key to strengthening the CC is a commitment by the regulatory agencies to cooperate more closely. The CC could give early attention to considering issues of systemic stability spanning their respective jurisdictions, such as the risk characteristics of clearing and settlement arrangements, the risk control systems of futures and options exchanges and other markets, and arrangements for handling situations posing systemic problems.

Chapter 11

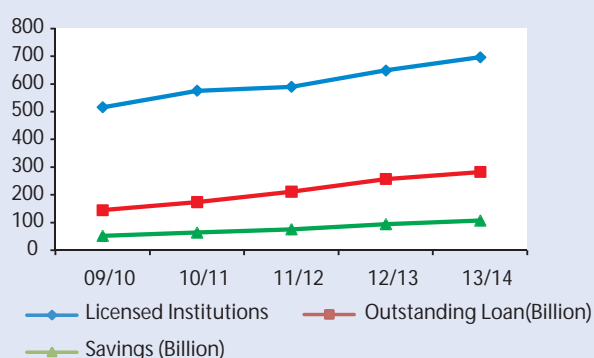
Microfinance Institutions (MFIs)

The member-based Microfinance Institutions (MFIs) constitute a rapidly growing segment of the Rural Financial Market (RFM) in Bangladesh. Microcredit programs (MCP), in Bangladesh, are usually implemented by various formal financial institutions (nationalized commercial banks and specialized banks) as well as specialized government organizations and Non-Government Organizations (NGOs). The growth in the MFI sector, in terms of the number of MFIs as well as total membership, was phenomenal during the 1990s and continues until today.

The Microcredit Regulatory Authority (MRA) was established by the Government of the People's Republic of Bangladesh under the "Microcredit Regulatory Authority Act 2006" to ensure accountability and transparency in the activities of microfinance institutions. MRA is the licensing authority of the microfinance institutions and it also bears the responsibility of license cancelation of non compliant microcredit institutions (if required). The authority also conducts regular on and off-site supervision on the MFIs. However, MRA continues to regulate mainly retail MFIs; Grameen Bank and wholesale agencies such as PKSF (Palli Karma-Sahayak Foundation) are, usually, not supervised by MRA. Figures presented in this chapter about MFIs exclude Grameen Bank and the analysis is applicable for MFIs, regulated by MRA.

The microfinance sector has been growing steadily since 1990. Effective regulation by the MRA has ensured increased entrepreneurial skills among the borrowers, and loan volume, per participant, has also increased.

Chart 11.1 : Loans, Savings and Licensed Institutions



Source: Microcredit Regulatory Authority, Calculation: FSD

The microfinance sector is growing rapidly as shown in the graph by the increasing trend in loan and savings. MRA is the authority to provide or cancel the licenses of MFIs. The number of licensed institutions has increased steadily over the years. In 2013-2014, 697 licensed institutions, 14,730 branches and 109,628 employees were involved in microfinance sector.

All these facts indicate that microfinance sector is playing an

important role in the overall health of Bangladesh economy.

As the graphs showing below, the relationship between the number of borrowers and number of members has remained quite similar throughout the years, and the number of members usually exceeds the number of borrowers. This is expected due to the nature of operations of the MFIs,

where only the members are entitled (but not required) to receive micro credit. Loans are, usually, distributed among the relatively seasoned members of the MFIs and the new members are restricted for some initial time period to get loans.

Chart 11.2 : Borrowers and members of MFI

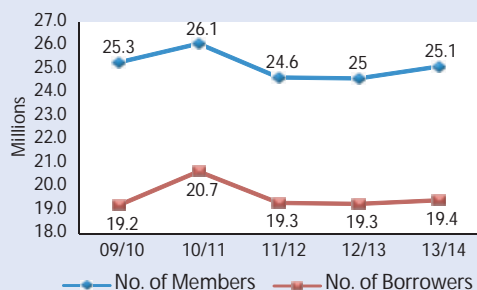
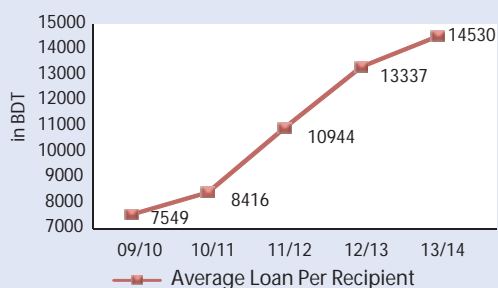


Chart 11.3 : Average loan per participant

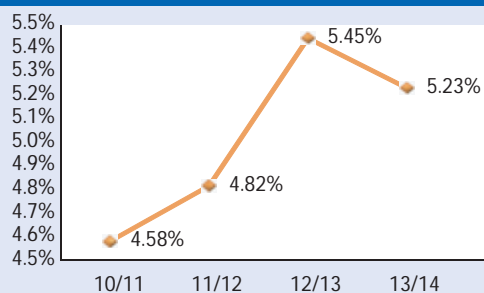


Source: Microcredit Regulatory Authority, Calculation: FSD

The average loan per participant has increased steadily which might be primarily due to the improvement in the entrepreneurial skills of the existing members. After successful endeavors, a group of seasoned borrowers is able to demand higher loan amounts than before, backed by their enhanced ability. The rising price level and increased costs of doing business might also have elevated the average loan per participant. The loan default rate, in MFI sector, has also remained quite low compared with that of the banking industry. This is a positive factor for the microfinance sector as it suggests that microfinance has successfully increased the loan servicing capacity of the borrowers and borrowers have been turned into successful entrepreneurs.

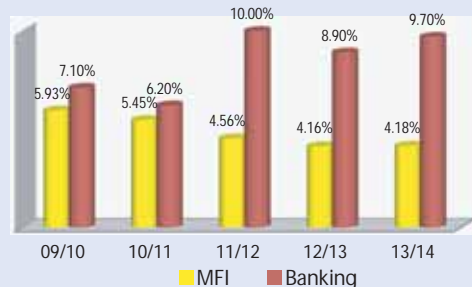
The size of the microfinance sector does not pose any immediate threat to the stability of the financial system. The lower incidence of nonperforming loans compared with that of the banking industry suggests effective check and balance mechanisms are maintained in the microfinance sector.

Chart 11.4 : MFI as percentage of banking industry in terms of loan disbursement



Source: Microcredit Regulatory Authority and Banking Regulation and Policy Department. Calculation: FSD

Chart 11.5 : NPL to Outstanding loan



Though the aggregate size of the microfinance institutions (MFIs) has increased over the years, it still remains very small in comparison with that of the banking industry. It seems that, due to its smaller size (in terms of amount) and non-connectedness with banking assets and liabilities, any vulnerability in the microfinance sector has minimal impact on the stability of financial system as a whole. However, it should be considered that participants in MFI sector are substantial in

number. Thus, any disruption in this sector might adversely affect the confidence of many beneficiaries in the financial system, which might create a stability threat to the system. The experience of loan defaults in the microfinance sector is consistently lower than the banking industry which is a very encouraging sign. It indicates that the check and balance mechanism in microfinance sector is working quite efficiently in Bangladesh and the asset quality of the MFIs is better than that of the banking industry. The low default rates, experienced by MFIs, have enabled MRA to concentrate on supervisory issues beyond asset quality, such as governance and transparency.

Loan disbursement was relatively concentrated among few institutions and intensity of supervision is stricter for those institutions. Moreover, a higher portion of equity in the capital structure and moderate use of leverage strengthens the stability of the microfinance sector.

It is a matter of concern that loan disbursement by just a few ranked institutions remained quite high in the microfinance sector. Despite the initiatives of MRA, the top 20 institutions still account for a substantial amount of loan disbursement in this sector. Thus, there remains a threat that problems in a few of those institutions might adversely affect the performance of microfinance sector as a whole. From the following graph it is seen that the top 20 MFIs cover almost 75 percent of the total loan disbursement. Though this figure has been reduced consistently over the last couple of years, the existing concentration is still very high and less concentration is desirable under stability point of view for developing a sustainable MFI sector. It may be mentionable that, as on end December 2014; top 20 banks control 68.6 percent of the total loans and advances of the banking industry. To counter risk from the large MFIs, MRA has enhanced its supervision on the large MFIs, and top 20 MFIs are being inspected more frequently and intensively.

Chart 11.6 : Outstanding Loan Disbursed by Top 20 MFIs as % of Total Loan disbursed by MFIs

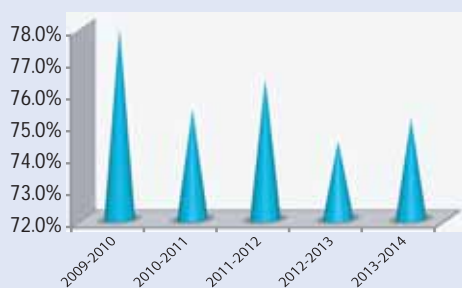
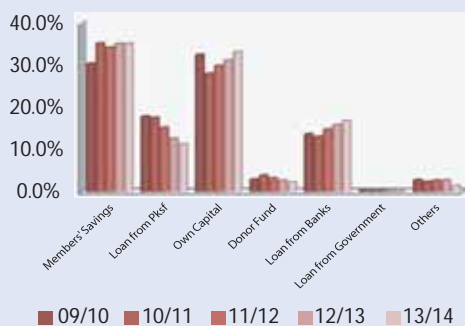


Chart 11.7 : Sources of Funds



Source: Microcredit Regulatory Authority, Calculation: FSD

One positive fact about the MFIs' sources of funds is that the MFI financing is primarily accomplished with equity financing (and sources resembling equity) rather than extensive use of leverage. Members' savings and equity of MFIs are the prime sources of financing, indicating a higher loss absorbing capacity of the MFIs. Stable donor fund also enhances MFIs loss absorbency.

Loans from PKSF and commercial banks are the primary source of borrowing of MFIs. Though the MFIs regularly utilize these sources and use a moderate level of leverage, the existing levels of leverage might not threaten the stability of the microfinance sector and it is not likely that they will experience any shock from this channel.

Loan disbursement was relatively more concentrated among the large and ultra-large borrowers both in terms of distributed amount and number of recipients.

There are 19.4 million borrowers receiving loans from MFIs. The loans can be segregated as ultra-large loans (BDT 300,000 and above), large loans (BDT 100,000 to 300,000), medium loans (BDT 10,000 to 100,000), and small loans (up to BDT 10,000). In the microfinance sector, a total of BDT 282.2 billion loans had been disbursed by the licensed institutions as of the end of FY14. Among this amount, large loans comprised 64 percent and 66 percent of total loans in the FY13 and FY14 respectively. It seems that microcredit disbursement is skewed, relatively, towards larger borrowers. This might be due to the enhanced borrowing demand by seasoned members and borrowers from MFIs who developed their entrepreneurial skills over the years.

The aim of microfinance is to support the small borrowers and increase their entrepreneurial skills. The effectiveness of microfinance can be assessed in light of number of microcredit recipients. Ultra-large loan recipients are in the dominant position in the micro finance system. They represented almost 41 percent and 43 percent of the total number of participants in FY13 and FY14 respectively.

Chart 11.8 : MFI loan recipient 2012-13

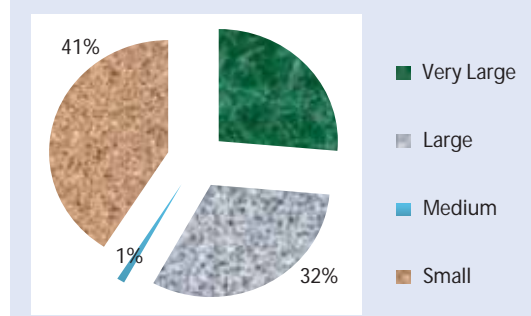
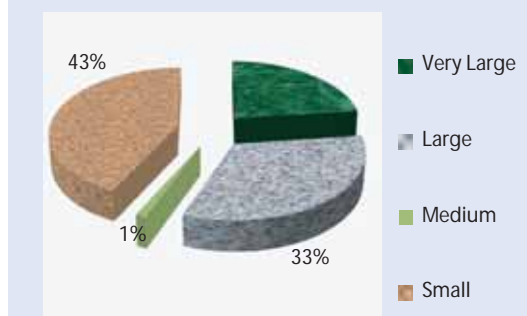


Chart 11.9 : MFI loan recipient 2013-14



Source: Microcredit Regulatory Authority, Calculation: FSD

The relatively high concentration in large and ultra-large borrowers may be explained by scrutinizing the definitions of large and ultra large borrowers. Against the backdrop of a declining value of BDT and higher inflation, such definitions might need revision. An absolute amount that was considered large five years back may not be considered large at the present scenario. After considering the rising price level and increased cost of doing business, the loan distribution might seem to be relatively less concentrated towards large borrowers.

MRA has continued to adopt up-to-date and timely policies for the microfinance sector in order to ensure accountability and transparency in the activities of microfinance institutions.

To establish the stability in the microfinance sector, some initiatives have been taken by the Microcredit Regulatory Authority (MRA), among which a few are summarized as followed:

Table 11.1 : Activities and initiatives taken by MRA

Serial no.	Activities	Initiatives by MRA
1	Formulation of Rules	Microcredit Regulatory Authority Rules, 2010 and Depositors' Safety Fund Rules, 2014 have been formulated to safeguard the microcredit recipients' interest.
2	E-Regulatory System	A central database, ICT platform, and Digital Archiving have been established to enable the micro-credit financial institutions to input required data from their own offices.
3	Credit Information Bureau Establishment	A CIB establishment is in process to assess the credit-worthiness of the borrowers and collect additional credit information.
4	Skill improvement	Different training programs for MFIs' representatives are arranged on MRA Act, Finance Management, Management, E-regulatory System Usage, Governance and Regulations, and Financial Statements Formulation, among others.
5	Monitoring & Supervision	Every year the top 20 MFIs and license applicants are inspected at least once during a year. All other MFIs are also being inspected as a regular basis.

The Microcredit Regulatory Authority (MRA) is playing a commendable role in supervising and monitoring the MFIs in Bangladesh to ensure stable and sustainable growth in the MFI sector. Though loan disbursement is relatively concentrated among the large borrowers, a high loan growth rate with lower default rate and increased use of equity capital suggest that the microfinance sector is quite sound and less likely to instigate any stability threat for the financial system.

Appendices

Table I : Banking Sector Aggregate Balance Sheet

Particulars	Amount In Billion BDT				Change (%)	
	2011	2012	2013	2014	2012 to 2013	2013 to 2014
Property & Assets						
Cash in Hand (including FC)	59.7	81.1	102.7	91.1	26.7%	-11.3%
Balance with BB & SB (including FC)	399.5	450.8	479.3	572.8	6.3%	19.5%
Balance with other Banks & FIs	155.9	244.7	347.9	409.7	42.2%	17.8%
Money at Call & Short Notice	128.1	66.8	46.5	54.2	-30.4%	16.4%
Investments						
Government	662.1	607.6	841.2	977.6	38.5%	16.2%
Others	131.3	505.9	730.0	855.5	44.3%	17.2%
Total Investment	793.4	1,113.4	1,571.2	1,833.1	41.1%	16.7%
Loans & Advances						
Loans, CC, OD etc.	3,525	4,098.4	4,443.5	5,147.2	8.4%	15.8%
Bills purchased & Discst.	267.5	288.2	276.6	245.7	-4.0%	-11.2%
Total Loans & Advances	3,792.5	4,386.7	4,720.1	5,392.9	7.6%	14.3%
Fixed Assets	143.7	162.1	198.2	216.7	22.3%	9.4%
Other Assets	401	488.1	532.5	570.7	9.1%	7.2%
Non-banking Assets	1.2	36.9	1.7	1.9	-95.4%	11.6%
Total Assets	5,875.0	7,030.7	8,000.2	9,143.0	13.8%	14.3%
Liabilities						
Borrowings from other Banks/FIs/Agents	226.3	316.0	221.6	313.0	-29.9%	41.3%
Deposits & Other Accounts:						
Current Deposit	992.9	989.6	1,091.0	1,295.3	10.3%	18.7%
Savings Deposit	933.7	972.6	1,047.7	1,225.6	7.7%	17.0%
Fixed/Term Deposit	2,583.2	2,985.6	3,622.3	3,931.1	21.3%	8.5%
Other Deposits	-	474.4	533.3	688.6	12.4%	29.1%
Total Deposit	4,509.8	5,422.2	6,294.3	7,140.6	16.1%	13.4%
Bills Payable	65.3	76.0	68.9	87.8	-9.3%	27.5%
Other Liabilities	546.4	640.6	737.2	860.2	15.1%	16.7%
Total Liabilities	5,347.8	6,454.7	7,321.9	8,401.7	13.4%	14.7%
Capital/Shareholder's Equity	527.1	575.9	678.3	741.3	17.8%	9.3%
Total Liabilities & Shareholder's Equity	5,874.9	7,030.7	8,000.2	9,143.0	13.8%	14.3%
Off-balance Sheet Items	1,814.6	1,871.25	2,153.08	2,360.95	15.1%	9.7%

Table II : Banking Sector Aggregate Share of Assets

(Amount in billion BDT)

Particulars	2012	% of Total Assets	2013	% of Total Assets	2014	% of Total Assets
Property & Assets						
Cash in Hand (including FC)	81.1	1.2	102.7	1.3	91.1	1.0
Balance with BB & SB (including FC)	450.8	6.4	479.3	6.0	572.8	6.3
Balance with other Banks & FIs	244.7	3.5	347.9	4.3	409.7	4.5
Money at Call & Short Notice	66.8	1.0	46.5	0.6	54.2	0.6
Investments						
Government	607.6	8.6	841.2	10.5	977.6	10.7
Others	505.9	7.2	730.0	9.1	855.5	9.4
Total Investments	1,113.4	15.8	1,571.2	19.6	1,833.1	20.0
Loans & Advances						
Loans, CC, OD etc.	4,098.4	58.3	4,443.5	55.5	5,147.2	56.3
Bills purchased & Discounted	288.2	4.1	276.6	3.5	245.7	2.7
Total Loans and Advances	4,386.7	62.4	4,720.1	59.0	5,392.9	59.0
Fixed Assets	162.1	2.3	198.2	2.5	216.7	2.4
Other Assets	488.1	6.9	532.5	6.7	570.7	6.2
Non-banking Assets	36.9	0.5	1.7	0.0	1.9	0.0
Total Assets	7,030.7	100.0	8,000.2	100.0	9,143.0	100.0

Table III : Banking Sector Aggregate Share of Liabilities

(Amount in billion BDT)

Particulars	2012	% of Total Liabilities	2013	% of Total Liabilities	2014	% of Total Liabilities
Liabilities:						
Borrowings from other Banks/FIs/Agents	316.0	4.9	221.6	3.0	313.0	3.7
Deposits & Other Accounts:						
Current Deposit	989.6	15.3	1091.0	14.9	1295.3	15.4
Savings Deposit	972.6	15.1	1047.7	14.3	1225.6	14.6
Fixed/Term Deposit	2,985.6	46.3	3,622.3	49.5	3,931.1	46.8
Other Deposits	474.4	7.4	533.3	7.3	688.6	8.2
Total Deposit	5,422.2	84.0	6,294.3	86.0	7,140.6	85.0
Bills Payable	76.0	1.2	68.9	0.9	87.8	1.0
Other Liabilities	640.6	9.9	737.2	10.1	860.2	10.2
Total Liabilities	6,454.7	100.0	7,321.9	100.0	8,401.7	100.0

Table IV : Banking Sector Aggregate Income Statement

Particulars	Amount in billion BDT				Change (%)	
	2011	2012	2013	2014	2012 to 2013	2013 to 2014
Interest Income	442.8	572.1	618.9	633.2	8.2	2.3
Less: Interest Expense	297.5	418.3	486.6	493.2	16.3	1.4
Net Interest Income	145.3	153.8	132.3	140.0	(14.0)	5.8
Non-Interest/Investment Income	168.5	186.4	219.8	257.7	17.9	17.3
Total Income	313.8	340.2	352.1	397.8	3.5	13.0
Operating Expenses	127.0	142.9	166.0	185.1	16.1	11.5
Profit before Provision	186.8	197.3	186.1	212.7	(5.7)	14.3
Total Provision	44.7	86.4	46.1	84.3	(46.6)	82.7
Profit before Taxes	142.1	110.8	140.0	128.4	26.3	(8.3)
Provision for Taxation	66.9	66.2	67.4	68.4	1.9	1.5
Profit after Taxation/Net Profit	75.2	44.7	72.5	60.0	62.5	(17.3)

Table V : Banking Sector Assets, Deposits & NPL Concentration (CY14)

(Amount in billion BDT)

Assets	Top 5 Banks	Other Banks	Top 10 Banks	Other Banks
Amount (in billion BDT)	2,999.0	6,144.0	4,287.3	4,855.7
Share (%)	32.8	67.2	46.9	53.1
Deposit	Top 5 Banks	Other Banks	Top 10 Banks	Other Banks
Amount (in billion BDT)	2,374.8	4,590.3	3,362.1	3,602.9
Share (%)	34.1	65.9	48.3	51.7
NPL	Top 5 Banks	Other Banks	Top 10 Banks	Other Banks
Amount (in billion BDT)	268.99	232.57	338.07	163.49
Share (%)	53.6	46.4	67.4	32.6

Table VI : Banking Sector Loan Loss Provisions

(Amount in billion BDT)

Year	Required Provision	Provision Maintained	Surplus/(Shortfall)
2006	106.1	52.9	-53.1
2007	127.1	97.0	-30.1
2008	136.1	126.2	-9.9
2009	134.7	137.8	3.1
2010	150.8	146.8	-3.9
2011	139.3	148.9	9.6
2012	242.4	189.8	-52.6
2013	252.4	249.8	-2.6
2014	289.6	281.6	-8.0

Table VII : Banking Sector Year-wise Classified Loans Ratios

(Figure in Percentage)

Year	Classified Loans to Total Loans	Sub-Standard Loans to Classified Loans	Doubtful Loans to Classified Loans	Bad Loans to Classified Loans
2002	28.1	8.7	5.3	86.1
2003	22.1	10.2	8.8	80.9
2004	17.6	7.2	6.6	86.2
2005	13.6	8.7	6.9	84.4
2006	13.2	13.1	7.2	79.7
2007	13.2	9.8	7.5	82.7
2008	10.8	9.4	9.4	81.1
2009	9.2	12.2	8.4	79.4
2010	7.1	13.4	8.4	78.1
2011	6.2	14.8	11.5	73.8
2012	10.0	19.1	14.2	66.7
2013	8.9	11.2	10.1	78.7
2014	9.7	11.0	11.2	77.8

Table VIII : Classified Loan Composition (CY14)

(Amount in billion BDT)

Particulars	Amount	% of Total NPL
Sub-Standard	55.3	11.0
Doubtful	56.2	11.2
Bad & Loss	390.0	77.8
Total	501.6	100.0

Table IX : Banking Sector Deposits Breakdown excluding Interbank Deposit (CY14)

(Amount in billion BDT)

Items	Amount	% of Total Deposit
Current deposits	1,295.3	18.6
Savings deposits	1,225.6	17.6
Term deposits	3,931.1	56.4
Other Deposits	513.0	7.4
Total deposit	6,965.1	100.0

Table X : Banking Sector Call Money Investment & Borrowing

(Amount in billion BDT)

Items	CY12	CY13	% of Change	CY14	% of Change
Borrowings	316.0	221.6	-29.9	244.9	10.5
Call money Investment	66.8	46.5	-30.4	63.32	36.2

Table XI : Banking Sector Selected Ratios

(Figure in Percentage)

RATIO	CY10	CY11	CY12	CY13	CY14
ROA	1.7	1.3	0.6	0.9	0.7
ROE	19.9	14.3	7.8	10.7	8.1
Net Interest Margin	3.1	3.0	2.8	2.1	1.8
Interest Income to Total Assets	6.6	7.5	8.1	7.7	6.9
Net- Interest Income to Total Assets	2.5	2.5	2.2	1.7	1.5
Non-Interest Income to Total Assets	3.4	2.9	2.7	2.7	2.8
Non-interest expense to Total Income	40.3	40.5	42.0	47.1	46.5
Capital Adequacy Ratio	9.3	11.3	10.5	11.5	11.4
Classified Loans to Total Loans	7.1	6.2	10.0	8.9	9.7
Classified Loans to Capital	54.8	43.6	74.2	59.8	67.7
Provision to Classified Loans	65.1	63.8	44.4	61.6	56.2

Table XII : Banking Sector ROA & ROE (CY14)

ROA (%)	Number of Banks	ROE(%)	Number of Banks
<i>Up to 2.0</i>	<i>50</i>	<i>Up to 5.00</i>	<i>18</i>
<i>> 2.0 to 3.0</i>	<i>4</i>	<i>> 5.00 to 10.00</i>	<i>11</i>
<i>>3.0to 4.0</i>	<i>0</i>	<i>>10.00 to 15.00</i>	<i>18</i>
<i>>4.0</i>	<i>2</i>	<i>>15.00</i>	<i>9</i>

Table XIII : Banking Sector Year-wise ADR at end December

(Amount in billion BDT)

Year	Deposits (Excluding Inter-Bank)	Advance (Excluding Inter-Bank)	Advance-Deposit Ratio
2012	5,395.7	4,318.6	*76.59%
2013	6,272.9	4,638.7	71.20%
2014	7104.7	5287.5	70.97%

* ADR= Advances excluding interbank minus EDF and refinance/deposit excluding interbank

Table XIV : Banking Sector ADR in CY14

Range	Number of Banks
<i>Up to 80.00%</i>	<i>41</i>
<i>> 80.00% to 90.00%</i>	<i>9</i>
<i>> 90.00% to 100.00%</i>	<i>5</i>
<i>>100.00% to 110.00%</i>	<i>1</i>
<i>>110.00%</i>	<i>0</i>
<i>Total</i>	<i>56</i>

Table XV : Banking Sector Month-wise Deposit & Advance Rate (CY 14)

Month	Deposit Rate	Advance Rate	Spread
Jan	8.40	13.39	4.99
Feb	8.34	13.40	5.06
Mar	8.21	13.36	5.15
Apr	8.11	13.25	5.14
May	8.01	13.23	5.22
Jun	7.79	13.10	5.31
Jul	7.71	12.84	5.13
Aug	7.63	12.75	5.12
Sep	7.48	12.58	5.10
Oct	7.40	12.49	5.09
Nov	7.32	12.49	5.17
Dec	7.25	12.46	5.21

Table XVI : Islamic Banks Aggregate Balance Sheet

Particulars	Amount in Billion BDT				Change (%)	Change (%)
	2011	2012	2013	2014	2012 To 13	2013 To 14
Property & Assets:						
Cash in Hand (including FC)	9.3	12.2	15.6	14.1	27.1	-9.6
Balance with BB & SB (including FC)	77.3	104.0	102.3	124.2	-1.7	21.4
Balance with other Banks & FIs	33.2	80.6	80.2	85.3	-0.6	6.4
Money at Call & Short Notice	24.8	0.0	0.0	0.5	-	-
Investments						
Government	26.9	41.4	17.3	22.3	-58.2	28.9
Others	15.9	18.6	87.7	125.3	372.1	42.9
Total Investments	42.7	60.0	105.0	147.6	75.1	40.6
Investments & Advances						
Investments & Advances	644.9	801.6	899.7	1105.1	12.3	22.8
Bills Purchased & Discounted	52.3	69.7	75.5	59.9	8.4	-20.7
Total Investments and Advances	697.2	871.3	975.3	1,165.0	11.9	19.5
Fixed Assets	14.3	18.7	30.7	32.2	63.8	4.9
Other Assets	24.3	34.7	50.1	63.0	44.2	25.8
Non -banking Assets	0.0	0.0	0.0	0.1	19.1	493.8
Total Assets	923.2	1,181.5	1,359.0	1,632.0	15.0	20.1
Liabilities						
Borrowings from other Banks/FIs/Agents	31.1	38.3	29.6	26.6	-22.6	-10.3
Deposits & Other Accounts:						
Current Deposit	241.1	105.0	76.5	118.0	-27.1	54.3
Savings Deposit	181.9	184.9	190.6	234.6	3.1	23.1
Fixed/Term Deposit	346.1	479.6	718.1	863.1	49.7	20.2
Other Deposit	-	214.7	148.5	154.8	-30.8	4.3
Total Deposits	776.1	995.6	1,133.6	1,370.5	13.9	20.9
Bills Payable	7.0	11.3	9.3	11.2	-18.0	20.3
Other Liabilities	49.9	68.4	83.6	108.7	22.3	29.9
Total Liabilities	857.1	1,102.2	1,256.2	1,517.0	14.0	20.8
Capital/Shareholder's Equity	66.1	79.3	102.8	115.0	29.7	11.8
Total Liabilities & Shareholder's Equity	923.2	1,181.5	1,359.0	1,632.0	15.0	20.1
Off -balance Sheet Items	255.8	280.7	289.1	320.8	3.0	11.0

Table XVII : Islamic Banks Aggregate Income Statement

Particulars	Amount in billion BDT				Change (%) in 2013	Change (%) in 2014
	2011	2012	2013	2014		
Profit Income	80.7	115.9	133.0	142.5	14.8	7.2
Less: Profit Expenses	52.2	77.1	94.5	96.8	22.5	2.5
Net Profit Income	28.5	38.7	38.5	45.7	-0.5	18.7
Non-Profit/Investment Income	15.1	16.6	17.7	19.8	6.2	11.9
Total Income	43.6	55.4	56.2	65.5	1.5	16.6
Operating Expenses	15.9	20.1	24.8	28.2	23.0	16.5
Profit before Provision	27.7	35.2	31.4	36.6	-10.8	16.6
Total Provision	6.9	8.1	7.6	11.2	-6.8	47.4
Profit before Taxes	20.8	27.1	23.9	25.4	-12.0	6.4
Provision for Taxation	11.1	13.8	11.8	12.1	-14.3	2.3
Profit after Taxation/Net Profit	9.7	13.3	12.1	13.3	-9.7	10.4

Table XVIII: Share of Islamic Banks in the Banking Sector (CY14)

(Amount in billion BDT)

Particulars	All Banks	Islamic Banks	Share of Islamic Banks
Property & Assets			
Cash in hand	91.1	14.1	15.5
Due from BB & other banks/FIs	1036.6	210.1	20.3
Investments in securities	1833.1	147.5	8.0
Investments (Loans & advances)	5392.9	1165.0	21.6
Other Assets	789.3	95.3	12.1
Total Assets	9143.0	1632.0	17.8
Liabilities			
Due to financial institutions	313.0	26.6	8.5
Total deposits	7140.6	1370.5	19.2
Bills Payable	87.8	11.2	12.8
Other liabilities	860.2	108.7	12.6
Total Liabilities	8401.7	1517.0	18.1
Capital/Shareholder's Equity	741.3	115.0	15.5
Total Liabilities & Shareholder's Equity	9143.0	1632.0	17.8
Off-balance Sheet Items	2360.9	320.8	13.6

Table XIX: Selected Ratios of Islamic Banks and the Banking Sector (CY14)

Ratio	Overall Banking Sector	Islamic Banking Sector
ROA	0.7	0.8
ROE	8.1	11.5
Net Profit Margin	1.8	3.4
Profit (Interest) Income to Total Assets	6.9	8.7
Net-profit (Interest) Income to Total Assets	1.5	2.8
Non-Profit (Interest) Income to Total Assets	2.8	1.2
Investment (Credit)-Deposit Ratio	71.0	82.2
Capital Adequacy Ratio	11.5	13.1*
Classified Investment (Credits) to Investments	9.7	4.9
Classified Investment (Credits) to Capital	67.7	49.3

*Data ICB Islami Bank Ltd. is excluded for Islamic Banking Sector

Table XX : Islamic Banks' Capital Adequacy Ratio (CY14)

CAR	Number of Islamic Banks
Below 10.00%	1
10.00% to 13.00%	2
>13.00%	5
Total	8

Table XXI : Islamic Banking Sector Investment (Credit)-Deposit Ratio (as of 31.12.2014)

(Amount in billion BDT)

Items	Islamic Banks	Islamic Branches/Windows	Islamic Banking Sector
Deposits (Excluding Interbank)	1349.8	67.6	1417.4
Investments* (Excluding Interbank)	1137.6	57.7	1195.3
IDR	82.9%	69.0%	82.1%

*Credits are termed as investments in Islamic Banking.

Table XXII : Stressed Advances Ratio in Different Segments

(Amount in Billion BDT)

Sl No.	Segments	Year 2014				GNPL to Total Advances (1)	Rescheduled Loans to Total Advances (2)	Stressed Advances Ratio (3) = (1) + (2)
		Unclassified Advances	GNPL	Total Advances	Rescheduled			
01	Micro & Small	538.07	65.48	603.54	17.61	10.85%	2.92%	13.77%
02	Medium & Large	2718.61	299.37	3017.99	127.85	9.92%	4.24%	14.16%
03	Retail & Others	1420.14	136.71	1556.85	30.08	8.78%	1.93%	10.71%
	Total	4676.82	501.56	5178.38	175.54	9.69%	3.39%	13.08%

Table XXIII : Overseas Branches Aggregate Share of Assets & Liabilities

(Amount in Million USD)

Assets	CY 13	% of Total Assets	CY 14	% of Total Assets	Liabilities	CY 13	% of Total Liabilities	CY 14	% of Total Liabilities
Cash & Balance from Central Banks	32.4 ^R	16.8	36.2	13.2	Customer Deposits	148.7 ^R	96.0	162.6	70.0
Balance with other Banks & FIs	112.8 ^R	58.7	169.3	62.0	Dues to head office & branches abroad & other liabilities	6.2 ^R	4.0	69.7	30.0
Loans & Advances	39.6 ^R	20.6	56.1	20.5	Total Liabilities	154.9 ^R	100	232.3	100
Property & Equipments and other assets	7.6 ^R	3.9	11.7	4.3	Capital/Equity	37.5 ^R	24.2	41.0	17.6
Total Assets	192.4 ^R	100.0	273.3	100	Total Liabilities & Equities	192.4 ^R	-	273.3	

*R= revised figures

Table XXIV : Stressed Assets in Banking Sector

(In Percentage)

YEAR	GROSS NPA TO GROSS ADVANCES	RESCHEDULED ADVANCES TO GROSS ADVANCES	STRESSED ADVANCES
2012	10.0	3.7	13.7
2013	8.7	4.8	13.5
2014	9.69	3.39	13.08

Table XXV : Stressed Concentration in Banking Sector (CY14)

STRESSED ASSETS	WORST 5 BANKS	OTHER BANKS	WORST 10 BANKS	OTHER BANKS
Amount (in billions)	247.80	429.2	372.4	304.6
Share	36.6%	63.4%	55.0%	45%

Table XXVI : NBFIs' Aggregate Balance Sheet and Income Statement

(BDT in Billion)

Items	CY10	CY11	CY12	CY13	CY14
Property & Assets:					
Cash in hand	0.01	0.02	0.2	0.04	0.02
Balance with other banks and FIs	19.9	20.2	31.7	46.9	85.0
Money at call & short notice	0	0.003	0.7	1.0	1.2
Investment in government securities	3.1	3.0	2.4	4.3	2.2
Other investments	13.6	13.7	13.5	10.5	16.2
Total loans & leases	169.0	200.0	247.4	315.1	371.0
Fixed assets	7.6	4.6	5.4	5.7	6.0
Other assets	30.4	34.9	25.4	50.0	38.3
Non-financial assets	-	-	-	2.3	0.2
Total assets	243.6	276.4	326.7	435.8	520.1
Liabilities & Equity:					
Borrowing from other banks and FIs	69.1	78.4	84.8	108.1	127.9
Deposits	99.8	116.4	145.2	197.6	245.7
Other liabilities	32.1	24.3	37.1	43.6	50.7
Total liabilities	201.0	219.1	267.1	349.3	424.3
Shareholders' equity (capital)	42.6	57.3	59.6	86.5	95.8
Total liabilities and shareholders' equity	243.6	276.4	326.7	435.8	520.1
Income Statement:					
Interest income	22.1	28.5	35.0	50.5	50.9
Less: Interest expense	(14.6)	(19.8)	(25.3)	(33.9)	(33.8)
Net interest income (Net II)	7.5	8.7	9.7	16.6	17.1
Investment income	7.2	2.7	2.3	1.6	1.2
Add: Commission, exchange and brokerage	1.3	0.5	0.2	0.8	0.3
Add: Other operating income	3.9	2.9	2.7	2.5	5.2
Non-interest income (Non-II)	12.4	6.1	5.2	4.9	6.7
Total operating income (Net II + Non-II)	19.9	14.8	14.9	21.5	23.8
Operating expenses	(7.9)	(3.5)	(4.0)	(5.4)	(5.5)
Profit before provisions	12.0	11.3	10.9	16.1	18.3
Total provisions	(2.0)	(1.2)	(1.9)	(3.4)	(2.6)
Profit before taxes	10.0	10.1	9.0	12.7	15.7
Tax provisions	(3.8)	(3.1)	(2.9)	(4.7)	(6.2)
Net profit after taxes	6.2	7.0	6.1	8.0	9.5

Data source: Department of Financial Institutions & Markets, BB.

Table XXVII : NBFIs' Other Information					
(BDT in Billion)					
Items	CY10	CY11	CY12	CY13	CY14
Tier-I Capital	-	-	57.0	67.6	98.0
Tier-II Capital	-	-	4.9	5.3	5.3
Total Capital	42.6	57.3	61.9	72.9	103.3
Classified loans & leases	10.5	10.3	13.7	17.7	19.7
Loan loss provisions (required)	5.9	6.0	6.9	8.6	10.0
Loan loss provisions (maintained)	6.9	7.0	7.7	9.5	11.0
Loan loss provisions (surplus/shortfall)	1.0	1.0	0.8	0.9	1.0
No. of government -owned NBFIs	1	3	3	3	3
No. of local NBFIs	18	18	18	18	18
No. of NBFIs under foreign joint venture	10	10	10	10	10
Total no. of NBFIs	29	31	31	31	31
No. of branches	108	161	169	176	198

Data source: Department of Financial Institutions & Markets, BB.

Table XXVIII : NBFIs' Liquidity Position				
(BDT in Billion)				
Items	End-Dec. 2011	End-Dec. 2012	End-Dec. 2013	End-Dec. 2014
Total liabilities	107.2	129.6	158.8	242.9
Total term deposits	78.8	99.4	127.0	155.5
Industry CRR (required)	2.0	2.5	3.2	3.9
Industry CRR (maintained)	2.2	2.9	3.7	8.8
Industry SLR (required)	5.4	6.5	7.9	12.1
Industry SLR (maintained)	14.1	19.3	24.8	65.6

Data source: Department of Financial Institutions & Markets, BB.

Table: XXIX : NBFIs' Summary Performance Indicators					
(in Percentage)					
Indicators	CY10	CY11	CY12	CY13	CY14
Profitability & Efficiency:					
Return on Assets (ROA)	2.5	2.5	1.9	1.8	1.8
Return on Equity (ROE)	14.4	12.1	10.2	9.2	9.9
Net Interest Margin (NIM)	4.3	4.3	3.9	5.2	4.4
Asset Quality:					
Classified Loans & Leases to Total Loans & Leases	5.9	4.9	5.5	5.6	5.3
Capital Adequacy:					
Capital to Risk -Weighted Assets	-	18.3	19.4	18.3	21.2
Liquidity:					
SLR maintained	-	13.2	14.9	15.6	27.0
CRR maintained	-	2.8	2.9	6.2	5.7

Source: Department of Financial Institutions & Markets, BB.

Table XXX : NBFIs' Sector-wise Distribution of Loans and Leases				
(in Percentage)				
Major Sectors	CY11	CY12	CY13	CY14
Sector-wise Distribution of Loans & Leases to Total Loans & Leases:				
Trade & Commerce	9.7	11.3	14.5	16.4
Housing	19.3	17.6	12.2	17.5
Power, Gas, Water and Sanitary Service	9.5	2.0	12.1	10.5
Textile	5.4	5.4	4.8	4.4
Iron, Steel and Engineering	3.7	3.5	4.4	4.7
Transport & Aviation	4.9	4.3	4.4	4.7
Food Production and Processing Industry	3.8	3.5	4.1	4.1
Garments & Knitwear	5.0	4.5	4.0	4.0
Margin Loan	8.5	4.5	3.9	3.3
Merchant Banking	1.6	5.1	3.6	4.1
Agriculture	1.2	1.4	1.4	1.9
Others (including other sectors with minor share)	27.4	36.9	30.6	24.4

Source: Department of Financial Institutions & Markets, BB.

Table XXXI : Interbank Repo Volume and Prices			
Month	Interbank Repo Volume (Taka in Billion)	Interbank Repo Rate (%)	Call Money Rate (%)
January, 2014	282.93	6.91	7.17
February, 2014	175.37	6.70	7.08
March, 2014	230.97	6.60	7.16
April, 2014	240.90	7.02	7.35
May, 2014	267.37	6.17	6.50
June, 2014	286.64	5.97	6.25
July, 2014	275.32	6.13	6.68
August, 2014	251.72	6.16	6.52
September, 2014	364.36	6.60	6.86
October, 2014	378.08	8.00	8.41
November, 2014	640.45	7.22	7.77
December, 2014	506.57	7.36	7.93

Table XXXII : Treasury and BB Bill Yield			
Securities	December, 2013	July, 2014	December, 2014
91 Day T-Bills	7.41%	6.81%	7.45%
182 Day T-Bills	8.22%	7.51%	7.92%
364 Day T-Bills	9.25%	7.98%	8.21%
2 Years T- Bonds	10.03%	8.89%	8.48%
5 Years T- Bonds	11.30%	9.99%	9.59%
10 Years T- Bonds	12.11%	11.59%	10.99%
15 Years T- Bonds	12.28%	11.87%	11.52%
20 Years T- Bonds	12.32%	12.10%	12.05%
30 Days BB Bills	7.09%	5.25%	5.25%

Table XXXIII : Equity Market Development

Month	DSEX Index	Market Capitalization (In Billion)	Market P/E
January, 2014	4753.170	2875.711	16.74
February, 2014	4749.869	2923.123	16.91
March, 2014	4491.984	2835.372	15.89
April, 2014	4566.860	2953.078	16.41
May, 2014	4430.478	2884.869	15.96
June, 2014	4480.522	2943.202	16.37
July, 2014	4427.155	2936.965	16.28
August, 2014	4549.519	3030.338	16.80
September, 2014	5074.307	3374.283	18.58
October, 2014	5173.232	3398.768	18.91
November, 2014	4769.428	3164.398	17.17
December, 2014	4864.964	3259.247	17.77

Table XXXIV : Automated Cheque Clearing Operations

(Amount in Billion BDT)

Category	CY 12		CY 13		CY 14	
	Number (in thousands)	Amount	Number (in thousands)	Amount	Number (in thousands)	Amount
High Value (HV)	1,263	5,977.4	1,365	6,877.9	1,610	8,812.3
Regular Value (RV)	18,824	4,827.4	20,695	5,165.5	23,505	5,497.4

Table XXXV : Volume of Electronic Banking Transactions

(Figures in Billion BDT)

Year	Using ATM	Using Debit Card	Using Credit Card	Internet Banking
2012	565.8	585.0	57.0	48.7
2013	654.3	775.7	62.7	90.5
2014	685.9	805.9	140.8	217.3

Table XXXVI : Number of Banks Providing Electronic Banking Services

Year	Online Banking	Internet Banking	Credit Card	ATM/Debit Card
2012	42	27	28	40
2013	52	27	28	41
2014	52	27	28	41

Table XXXVII : Comparative picture of Mobile Financial Services (MFS) in last 3 years

Particulars	2012	2013	2014
Number of agents	51,078	188,647	540,984
Number of registered clients	3,018,989	13,179,834	25,186,250
Number of active accounts	1,101,424	6,543,710	12,154,492
Number of total transactions (in million BDT)	29.19	228.85	589.48
Volume of total transaction (in billion BDT)	71.23	517.83	1,031.55

Table XXXVIII : External Credit Assessment Institutions (ECAIs)

Sl. No.	Rating Companies	Subsidiary/Technical Partner of	Date of Issuance of Registration Certificate
1.	Credit Rating Information and Services Ltd (CRISL)	Rating Agency Malaysia Berhad	28/08/2002
2.	Credit Rating Agency of Bangladesh Ltd. (CRAB)	ICRA Limited of India	24/02/2004
3.	Emerging Credit Rating Ltd. (ECRL)	Malaysian Rating Corporation Berhad	22/06/2010
4.	National Credit Rating Ltd. (NCRL)	The Pakistan Credit Rating Agency Ltd	22/06/2010
5.	ARGUS Credit Rating Services Ltd. (ACRSL)	DP Information Group, Singapore.	21/07/2011
6.	WASO Credit Rating Company (BD) Limited	Financial Intelligence Services Ltd.	15/02/2012
7.	Alpha Credit Rating Limited (ACRL)	Istanbul International Rating Services Inc.	20/02/2012
8.	The Bangladesh Rating Agency Limited (BDRAL)	Dun & Bradstreet South Asia Middle East Ltd.	07/03/2012

Table XXXIX : Microcredit Regulatory Authority

SI No.	Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
1	Total Number of Licensed Institution	516	576	590	649	697
2	Number of Branches	17252	18066	17977	14674	14730
3	Number of Employees	109597.0	111828.0	108654.0	110734.0	109628.0
4	Number of Members (in millions)	25.3	26.1	24.6	24.6	25.1
5	Number of borrowers (in millions)	19.2	20.7	19.3	19.3	19.4
6	Outstanding Loan Disbursed by Licensed institutions (in billions)	145.0	173.8	211.3	257.0	282.2
7	Outstanding Loan Disbursed by top 20 Institutions	113.1	131.1	161.4	191.3	212.0
8	Outstanding Savings Balance of the Licensed institutions (in billions)	51.4	63.3	75.3	94.0	107.0
9	Outstanding Savings Balance Held in top 20 Licensed institutions (in billions)	41.1	48.3	57.5	69.6	88.0
10	Particular of Outstanding Loans (amount in millions)	-	-	-	-	-
	1. Ultra Large (300 thousand and above)	52009.3	49646.4	46498.6	45035.2	45530.7
	2. Large (100 thousand to 300 thousand)	79167.8	101362.7	131899.8	165245.1	187044.0
	3. Medium (10 thousands to 100 thousand)	12086.4	19643.1	27203.2	38825.4	39459.3
	4. Small (up to 10 thousand)	1760.1	3147.3	5727.3	7908.9	10172.9
11	Total Number of Loan Recipients (in thousands)					
	1. Ultra Large (300 thousand and above)	12391.0	12011.0	9623.0	8592.0	7816.0
	2. Large (100 thousand to 300 thousand)	6505.0	8417.0	9414.0	10310.0	11150.0
	3. Medium (10 thousands to 100 thousand)	158.0	206.0	250.0	344.0	405.0
	4. Small (up to 10 thousand)	158.0	20.0	30.0	32.0	46.0
12	Average Loan per Recipient	7549.0	8416.0	10944.0	13337.0	14530.0
13	Default Loan (outstanding amount in millions)	8604.0	9463.0	9643.0	10685.0	11791.0

Source: Microcredit Regulatory Authority

