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FINANCIAL STABILITY REPORT 2015



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GOVERNOR'S MESSAGE

Financial Stability Report 2015 conveys our baseline assessment regarding major trends in the key financial intermediaries as well as reveals the risks to banks and non-bank financial institutions and their resilience to adverse scenarios. It has taken into account interdependencies between the financial sector and the real economy, and the smooth functioning of the financial markets with the new development initiatives taken by Bangladesh Bank towards promoting awareness of risks among policy-makers and other stakeholders.

Our assessment reveals that the financial sector of Bangladesh demonstrated a moderate level of stability in 2015. Bangladesh has been able to maintain a higher growth rate compared to a number of emerging and developing economies. It has been on a sustained and steady average annual GDP growth for more than half a decade, with mostly stable inflation levels in this region. Major macroeconomic indicators appeared optimistic. Prudent policy stances of the government, Bangladesh Bank and other financial sector regulators/supervisors have helped keeping the economy and financial sector stable.

Bangladesh Bank has undertaken a number of initiatives in 2015 having bearing on financial stability of our country. For instance, implementation of Basel III framework has commenced in the banking sector since early 2015. A new CIB online solution has been developed. Besides, with a view to addressing stressed assets in the economy, a new oversight framework named 'Central Database for Large Credit (CDLC)' has been introduced.

I commend the diligent efforts of the Financial Stability Department in preparing this report. I hope this report will contribute to enhancing risk awareness among the stakeholders of our financial sector and help them devise mechanisms to withstand any endogenous or exogenous shocks a well ahead of time.

Muli Fazle Kabir

Governor



DEPUTY GOVERNOR'S MESSAGE

Domestic macroeconomic conditions in 2015 were on the path to restoring stability after some difficulties experienced in 2014. Consequently, our financial system, led by the banking sector, set its course towards enhancing resilience to ensure financial stability. It along with a favorable macroeconomic environment provides the impetus necessary for boosting economic growth and promoting sustainable development. Indeed, our banking sector has got a new momentum through initiation of the implementation of Basel III framework from early 2015. However, the phase-in reform arrangements will pave the way for the full implementation of Basel III from January 2019. We strongly believe that Basel III will improve the resilience of banks and the banking system as a whole reducing the probability of systemic disruptions in the financial sector through absorbing most of the endogenous and exogenous shocks arising from the internal or external financial and economic stresses.

The Bangladesh banking system is gradually becoming more complex accompanied by an increasing level of interconnectedness and interdependencies, and escalating banks' vulnerabilities to various risks at the institutions as well as the system level. Bangladesh Bank (BB), in this context, has placed its emphasis on intensifying the Macroprudential supervision mechanism and tools to identify and mitigate systemic risks to ensure financial stability in addition to risk-based supervision (RBS) addressing risks of banks at the institution level. Against this backdrop, a number of Macroprudential tools, e.g., Financial Projection Model (FPM), Interbank Transaction Matrix (ITM) and HEAT Map, have been introduced in the recent years to monitor the possible build up of common stresses for interconnectedness of institutions in the banking system. In the meantime, a Central Database for Large Credit (CDLC) is being established for early identification of vulnerabilities of large non financial corporate and examining remedies in case of their defaults. BB has also been examining the mechanisms for determining a Higher Loss Absorbency (HLA) requirement of Domestic Systemically Important Banks (D-SIBs) and implementation of a Countercyclical Capital Buffer. With an early identification of stresses on individual institutions and system as a whole and taking necessary measures could dampen them before those exposed. However, effective implementation of the stated tools would largely depend on the readiness of banks in terms of their preparedness.

Amid the stated developments, this report contains both qualitative and quantitative analyses of the strengths as well as resilience of the individual institutions of Bangladesh financial system along with peer group analyses. The report reveals an overall stable outlook of the financial system in 2015 on the backdrop of a relatively stable macroeconomic condition. While our

banking landscape is poised to change with the introduction of new business models and lines of products, the continued stress on asset quality of banks necessities for stringent supervision.

While BB remains vigilant with respect to domestic vulnerabilities, the developments in the advanced economies as well as emerging market economies are to be closely monitored to respond promptly and effectively to any stability threats originating from those economies. On this front, one of the major challenges at present is cyber security, which requires a broad level of understanding of the threats and probable solutions thereof. We are putting utmost attention on this issue and we hope the efforts will continue to include more forward-looking views in line with international best practices to safeguard our banking system.

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

Shitangshu Kumar Sur Chowdhury Deputy Governor

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Acronyms

AD	Authorized Dealer
ADR	Advance - Deposit Ratio
BACH	Bangladesh Automated Clearing House
BACPS	Bangladesh Automated Cheque Processing System
BB	Bangladesh Bank
BBS	Bangladesh Bureau of Statistics
BCBS	Basel Committee on Banking Supervision
BDT	Bangladeshi Taka
BEFTN	Bangladesh Electronic Funds Transfer Network
BHBFC	Bangladesh House Building Finance Corporation
BoP	Balance of Payment
BSEC	Bangladesh Securities & Exchange Commission
CAR	Capital Adequacy Ratio
CBSL	Central Bank of Sri Lanka
CDBL	Central Depository Bangladesh Limited
CPI	Consumer Price Index
CRAR	Capital to Risk-weighted Asset Ratio
CRM	Credit Risk Mitigation
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
FCB	Foreign Commercial Bank
FDD	Foreign Demand Draft
FI	Financial Institution
FX	Foreign Exchange
FY	Fiscal Year
GC	Gini Coefficient
GDP	Gross Domestic Product
HHI	Herfindahl-Hirschman Index
HV	High Value
ICB	Investment Corporation of Bangladesh
IDR	Investment Deposit Ratio
IMF	International Monetary Fund
IRR	Interest Rate Risk
IT	Information Technology
L/C	Letter of Credit

MCR	Minimum Capital Requirement
MFI	Microfinance Institution
MFS	Mobile Financial Services
MRA	Microcredit Regulatory Authority
MT	Mail Transfer
NBFI	Non-Bank Financial Institution
NDA	Net Domestic Assets
NFA	Net Foreign Assets
NFCD	Non-Resident Foreign Currency Deposit Accounts
NII	Net Interest Income
NIM	Net Interest Margin
NPL	Non Performing Loan
NPM	Net Profit Margin (for Islamic banks)
NPSB	National Payment Switch Bangladesh
NSD	National Savings Directorate
OBU	Off-shore Banking Unit
OTC	Over the Counter
PCB	Private Commercial Bank
P/E	Price Earnings
PKSF	Palli Karma-Sahayak Foundation
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
RTGS	Real Time Gross Settlement
RV	Regular Value
RWA	Risk Weighted Assets
SBP	State Bank of Pakistan
SCB	State-owned Commercial Bank
SDB	Specialized Development Bank
SME	Small and Medium-sized Enterprises

EXECUTIVE SUMMARY

This issue of the Financial Stability Report provides a review of the core indicators of financial stability in the Bangladesh economy and makes an assessment of the resilience of domestic financial system based on the financial data of 2015. Along with describing various development the Report draws attention to sectors which may exhibit signs of vulnerability that raise concern for the stability and soundness of the financial system.

In calendar year 2015 (CY15), differing economic growth took place across advanced and emerging markets. The shock of the Greek sovereign debt crisis along with China's stock market trubulence caused the world economy to slowdown and affected the rest of the world. The Chinese slowdown impacted trade partners' capital flows and financial returns. A change in the US monetary policy may have led to capital outflows, currency volatility and trouble with corporate debt denominated in foreign currency. However, the advanced economies did relatively well. The euro zone economies have been able to leave the euro crisis behind, while the recovery is strengthening. The fall in commodity prices, including oil, is hurting commodity exporters. Some adverse developments have hit emerging markets across the globe. Insolvency conditions are deteriorating in many emerging markets while they are generally improving across advanced markets.

Despite slower growth in the promising external market, the Bangladesh economy demonstrated a notable resilience and stability in the financial year 2015 (FY15). The Bangladesh economy achieved a real GDP growth rate of 6.5 percent in FY15, up from a 6.1 percent growth recorded in FY14. Low oil and food prices, coupled with an accommodative money growth rate and stable exchange rate, contributed to the decline in inflation to 6.4 percent from 7.4 percent in FY14. Besides, at end-December 2015 foreign exchange reserves stood at USD 27.5 billion. On the other hand, surges in import growth against weakened export growth widened the trade deficit as well as reduced the growth of Net Foreign Assets. In spite of a deficit in the current account, there was a surplus in the overall balance of payments due to a rise in foreign direct investment (net) and a moderate pace of portfolio investment flow in the financial account. These developments led to a continued accumulation of gross foreign exchange reserves. Funds from external sources went down and the official external debt as a percentage of GDP declined.

The banking sector displayed a moderate growth in the calendar year 2015 (CY15). Banks were adequately capitalized, and they posted marginally higher profits compared with the calendar year 2014. Banking sector assets have increased. Concentration of assets within a few banks, including sectoral concentration of loans and advances, was reduced; a similar trend was evident in the liability structure too.

The introduction of a temporary large loan restructuring facility along with the existing rescheduling practice, in part, contributed to an improvement in reported asset quality, though the stressed advances ratio increased during the period.

Though the provisions to loans outstanding ratio of the banking industry went down, a deteriorated provision shortfall in state-owned commercial banks (SCBs), coupled with a lower provision surplus recorded in other bank categories, caused the industry to sustain a much higher provision shortfall in CY15 compared with that of CY14. The maintenance of a higher cash reserve ratio (CRR) and statutory liquidity ratio (SLR) by banks, as well as their low advance-to-deposit ratio (ADR), indicated the prevalence of surplus liquidity in the system.

Overall risk exposure of the banking sector remained at a tolerable level, though credit risk increased in CY15. With the objective to improve the capital base and shock resilience of banks, Bangladesh Bank commenced the implementation of Basel III framework in early CY15. Besides, Bangladesh Bank completed bilateral dialogues with 22 banks on their Internal Capital Adequacy Assessment Process (ICAAP). During the review year, the capital to risk-weighted asset ratio (CRAR) of the banking industry slightly declined.

Non-bank Financial Institutions (NBFIs) remained mostly resilient in the face of a deterioration in asset quality. NBFIs recorded a higher growth in their balance sheet than that of the banking sector. Besides, the maintenance of higher CRR and SLR by the NBFIs indicate prevalence of adequate liquidity in the system. However, a deterioration in asset quality, necessitating higher required loan-loss provisions, resulted in a provision shortfall that led to decline in capital adequacy and profitability of the industry during the year.

Both the banking and NBFIs sectors exhibited a mixed resilience in CY15. Stress test analysis revealed that the banking industry was fairly resilient in the face of various market risk shocks. Besides, the individual banks and the banking system as a whole were resilient against stressed liquidity scenarios. However, the banking sector, in terms of sensitivity analysis, was found to be less resilient when different credit shocks were applied. On the other hand, a stress test analysis on the NBFIs revealed that a majority of them were resilient in the event of stress scenarios, while only a few of them were vulnerable to shock events.

The financial markets showed a mixed performance in 2015. The money market went through a structural change due to investment in reverse repos by NBFIs. Major money market indicators such as the call money and interbank repo rates were found to be declining, but the significant presence of NBFIs in both the markets was notable. The bond market recorded a sharp rise in sales of BB bills, whereas long-term treasury bonds decreased markedly. Although there was stability in the market capitalization, the stock market index value and trade volume recorded a decline. The overall weighted average price earnings (P/E) ratio too showed a decreasing trend. Moreover, the turnover to the market capitalization ratio did not improve much compared with 2014.

The financial infrastructure made progress and facilitated an efficient payment and settlement system. Payment systems infrastructures such as National Payment Switch Bangladesh (NPSB), Bangladesh Automated Cheque Processing System (BACPS), Bangladesh

Electronic Funds Transfer Network (BEFTN), Mobile Financial Services (MFS), etc. operated in a stable and safe way and illustrated a positive growth in terms of payment settlements. Electronic banking operations showed a modest growth with higher volume of ATM-based transactions. Besides, introduction of the Real Time Gross Settlement System (RTGS), which settles transactions instantaneously, provided momentum to the payment and settlement system.

The foreign exchange (FX) market displayed a moderate level of stability. The Bangladesh Taka (BDT) against the US Dollar (USD) remained stable for the most part of 2015. The FX market was very active in CY15, settling the major portion of inter-bank FX transactions in USD. An enormous turnover in the FX market indicated a growing interest of the banks in the derivative market in CY15. The overall nominal exchange rate was stable. However, the real effective exchange rate (REER) was more volatile because of declining commodity prices. Importantly, the Foreign Exchange Regulation Act, 1947 has been amended in 2015.

Microfinance Institutions (MFIs) demonstrated positive growth in CY15. MFIs displayed positive credit growth against a robust growth of savings. A decrease in NPL ratio signifies an improvement in their asset quality. Moreover, the fund structure of the MFIs, represented by 35 percent capital and 34 percent savings, strengthened their resilience. During the review year, profitability showed positive growth as well.

A number of significant developments took place in the domestic financial system in CY15. The commencement of implementation of the Basel III Framework, the strengthening of the Credit Information Bureau (CIB) online service, large loan restructuring, an instruction to provide incentive to good borrowers, revision in prudential regulations for consumer financing, introduction of a Central Database for Large Credit (CDLC), development initiatives in the area of prevention of money laundering and terrorist financing were some notable steps having importance for financial stability.

In sum, Bangladesh Bank strengthened its prudential regulation and supervision framework, brought innovations in its risk assessment toolkits, and resorted to several other initiatives to enhance resilience and stability of the financial system of Bangladesh in CY15. However, the efforts of Bangladesh Bank may not always suffice to withstand all sorts of imbalances in the financial system. A combined and coordinated role of other financial sector regulators, financial intermediaries, and other stakeholders of the financial system can play a significant role in this regard.

Chapter 1

OVERVIEW

The domestic macroeconomic situation was mostly stable during the financial year 2015 *(FY15).* A real GDP growth of 6.5 percent was recorded in FY15, 40 basis points higher than the growth recorded in FY14. Led by accommodative money growth, a stable exchange rate and falling oil prices, inflation went down from 7.4 percent in FY14 to 6.5 percent in FY15; inflation of food items dropped while inflation of non-food items rose during this period. The current account balance in the balance of payments recorded a deficit of BDT 127.8 billion in FY15 from a surplus of BDT 109.3 billion in FY14, owing to the increased deficit in trade, service and income accounts. A surge in import growth by 11.2 percent against a slower export growth of 3.3 percent widened the trade deficit as well as reduced the growth of Net Foreign Assets in FY15. Nevertheless, the surplus in the overall balance of payments, driven mainly by a rise in foreign direct investment (net) and a moderate pace of portfolio investment flow in the financial account, led to continued accumulation of the gross foreign exchange reserves, as nominal exchange rate appreciation was prevented. In FY15, funds from external sources went down considerably, as the official foreign aid disbursement and the total outstanding official external debt dropped by 3.6 percent and 3.7 percent to reach at USD 3 billion and USD 23.5 billion respectively.

The banking sector appeared to be stable, registering a moderate growth in the calendar year 2015 (CY15). The banking system, comprising 56 scheduled banks, experienced a positive growth in most of its income-earning assets. The banking sector balance sheet size grew by 12.8 percent; loans and advances contributed the most in the asset structure, followed by investments in government and other securities, registering a growth of 14.8 percent and 13.2 percent respectively. Concentration of assets within a few banks reduced marginally; sectoral concentration of loans and advances reduced, albeit remained at a moderate level. The same trend was observed in the liability structure as well, in which deposits, the highest contributor, posted a 12.5 percent growth, demonstrating reduced concentration within a few banks. Out of total deposits, the share of term deposits increased to 57.3 percent, which provides more stability to banks' sources of funds. Insurance coverage for deposits - BDT 100,000 per depositor per bank - also increased by around 3.5 percentage points in terms of the 'covered deposits to total insurable deposits' ratio.

Though the non-performing loan (NPL) scenario of the banking sector improved, stress in asset quality remained a concern. The gross NPL ratio decreased from 9.7 percent in CY14 to 8.8 percent in CY15, while the net NPL ratio remained at 4.2 percent. In addition to the faster growth rate of total loans outstanding relative to the gross NPL amount, the introduction of a large loan restructuring facility along with the existing rescheduling practice caused the gross NPL ratio to fall in CY15. Consequently, the stressed advances ratio, including 4.5 percent rescheduled loans and 2.8 percent restructured loans of total loans outstanding, increased by 3 percentage points during this period. While state-owned banks¹ are found to be the most affected by NPLs as well

¹ Refer to state-owned commercial banks (SCB) and specialized development banks (SDB).

as stressed advances among the bank categories, loans to small- and medium-sized enterprises are found to be the same among the industry categories. From the standpoint of systemic importance, a higher magnitude of stress on the asset quality of state-owned banks, as well as on those banks that have lent more to small- and medium-sized enterprises, may appear to be a concern for the financial system.

Further shortfall in loan-loss provision was recorded despite the fact that the gross NPL ratio declined in CY15. Due to a lower NPL ratio, the 'required provision to loans outstanding' ratio of the banking industry went down, requiring banks to maintain a relatively lower provision; but a deteriorated provision shortfall in SCBs, coupled with a lower provision surplus recorded in other bank categories, caused the industry to sustain a much higher provision shortfall in CY15 than that of CY14. During this period, a rise in the bad/loss loans to 84.6 percent of gross NPLs may be a matter of concern for the resilience of the banking sector.

Capital adequacy of the banking sector declined marginally, albeit remained higher than the minimum requirement. In CY15, BB initiated its move towards the Basel III capital framework to ensure higher resilience of the banking sector. During the review year, the adjustments in the capital base, accompanied by the higher provision shortfall, pushed the capital to risk-weighted asset ratio (CRAR), previously termed as capital adequacy ratio (CAR), down from 11.4 percent to 10.8 percent against the regulatory minimum requirement of 10 percent. Nevertheless, the Tier-1 capital ratio was recorded at a satisfactory level of 8.1 percent against a minimum requirement of 5.5 percent. The banking sector, on a solo basis, has also been able to maintain a leverage ratio, as measured by Tier-1 capital to total exposure, of 5.2 percent, which is notably higher than the regulatory minimum requirement of 3 percent. Pertinently, to strengthen the capital base of banks, BB completed bilateral dialogues with 22 banks on their Internal Capital Adequacy Assessment Process (ICAAP), a tool that focuses on banks' own internal review of their capital positions.

Excess liquidity was observed in the banking sector in CY15. Call money borrowing and investment experienced a significant decline between CY14 and CY15, leading to a free fall in the call money borrowing rate, which stood at 3.7 percent at end-December 2015. While the call money market did not demonstrate any liquidity pressure, the high maintenance of CRR and SLR by banks as well as their low advance-to-deposit ratio (ADR) indicated the prevalence of excess liquidity in the system. At end-December 2015, the banking industry's ADR was 71 percent, which is much lower than the admissible limit of 85 percent (90 percent for Islamic banks) prescribed by BB.

Income generating activities of the banking sector maintained a positive trend during the review year. Though the operating profit of banks decreased by 0.5 percent, net profit increased by 32 percent in CY15. A decrease in provision expenses by 8.7 percent, led by lower required balance sheet loan-loss provisions due to the lower NPL ratio, contributed significantly to the increase in net profit during this period. Subsequently, return on equity (ROE) and return on assets (ROA) increased by 0.1 and 1.3 percentage points respectively in CY15 over CY14. The interest rate spread declined slightly from 5.06 percent in CY14 to 4.84 percent in CY15. During the same period, banks' reliance on non-interest income increased, as it grew by 8.4 percent, providing needed diversity to income generating sources of the banking industry. **Overseas branches of local banks maintained a steady growth in their banking activities.** In CY15, the total assets of the overseas branches grew by 46.7 percent, mainly due to a significant growth in their loans and advances. Correspondingly, the liabilities increased by 52.3 percent, in which deposits accounted for 68.5 percent. Though net profit increased by 1.4 percent, a large increase in asset size with a small increase in profitability resulted in a decrease in ROA by 0.5 percentage points in CY15. However, the overseas branches together constituted only 3.1 percent of the aggregate asset size of the banking industry.

Islamic banks showed a better performance than the overall banking sector in CY15. Having a market share of almost one-fifth of the banking industry, investments (loans and advances) of Islamic banks grew by 18.6 percent, higher than the industry's growth of 14.8 percent. Though the growth of deposits was lower in CY15 (13.1 percent) compared with the previous year (21 percent), it was higher than the overall industry. The Islamic banks showed more resilience than the overall industry in terms of asset quality, recording a gross NPL ratio of 4.6 percent in comparison with the industry average of 8.8 percent. Though their net profit increased at a lower rate than the industry, their ROA of 0.8 percent was same as the industry ROA while their ROE of 11.6 percent was higher than the industry ROE of 9.4 percent. There was no liquidity pressure observed among the Islamic banks as they maintained a higher CRR and SLR than the regulatory minimum, and a low investment to deposit ratio (IDR), below the admissible limit of 90 percent BB, were able to maintain a CRAR of 10 percent or higher.

New banks are evolving steadily to compete with other banks in the industry. In CY15, assets of nine banks, established in 2013, accounted for only around 3 percent of the banking industry's aggregate assets. Their assets were mostly concentrated in safer liquid assets, resulting in lower ROE (7.8 percent) and higher CRAR (19.5 percent) than those of the industry (9.4 and 10.7 percent respectively). However, profitability of new banks in terms of ROA and ROE was much higher than that of the previous year. Though the loans and advances of new banks grew sharply by 88.9 percent in CY15, their gross NPL ratio remained insignificant (0.24 percent).

Overall risk exposure of the banking sector remained at a tolerable level in CY15. The Risk Weighted Asset (RWA) Density ratio, a measure of the overall risk of the banking sector, continued its downward trend reflecting, in general, the banking industry's willingness to redirect its position from more risk-weighted to less risk-weighted activities. RWA associated with credit risk, market risk and operational risk were 86.5 percent, 4.5 percent and 9 percent of total RWA, respectively, in CY15. Credit risk increased during the review year mainly due to a higher credit growth than the previous year, while market risk, in which movements in equity prices were estimated to be the highest risk factor followed by interest rate risk and exchange rate risk, decreased; operational risk remained constant at the CY14 level. However, all the stated risks were mostly concentrated within conventional PCBs and state-owned banks operating under special attention, particularly the latter being frequently found in the top 5 list. From the corporate solvency viewpoint, credit ratings of corporate entities as well as number of entities rated showed an overall upward migration according to the one-year transition matrix.

Non-bank financial institutions (NBFIs), in CY15, showed resilience in the face of deteriorating asset quality. NBFIs enjoyed a higher growth in their balance sheet than that of the banking sector in CY15, recording a 17.5 percent increase in asset size, backed up by a deposit growth of

29.5 percent. On the other hand, sectoral concentration of loans and leases in NBFIs, which constituted almost three-fourth of the total asset size, was higher than that of loans and advances in the banking system, albeit remaining at a moderate level. During the same period, the gross non-performing loans and leases ratio increased to 8.9 percent in CY15 from 5.3 percent in CY14. This increase is attributable mainly to a deteriorated asset quality of three NBFIs, which went under the reconstruction arrangement of Bangladesh Bank. Consequently, a higher requirement in loan-loss provisions resulted in a provision shortfall, leading to a decrease in CAR² by 2.5 percentage points; however the CAR of 18.7 percent in CY15 was still well above the regulatory minimum requirement of 10 percent. Though the profit before tax and provision increased by 6.3 percent, an increase in provision expense by 73.5 percent pushed down the net profit, thus reduced the ROA and ROE of NBFIs. The liquidity scenario did not show any stress as the industry could manage to maintain a higher CRR and SLR ratio than the minimum regulatory requirement.

Stress tests reveals a mixed resilient scenario of banks and NBFIs in CY15. A number of singlefactor stress tests covering credit risk, market risk, and liquidity risk demonstrated that credit risk is the most dominant one in terms of its impact on CRAR of the banking sector. The sensitivity analysis of minor shocks to the banking sectors' credit portfolio shows that the banking sector is relatively less resilient when different credit shocks are applied. Out of 48 banks, due to default of the largest borrowers, 21 banks would become undercapitalized. Due to an increase in NPL, 7 banks would fall short of minimum CRAR requirements and due to a combined credit shock, 8 banks would become undercapitalized. In different magnitudes of shocks, default of the largest borrowers would have the highest impact on the banks' soundness, in a manner that could disrupt industry resilience. The market and liquidity stress tests demonstrate considerable resiliency of banks to different shock scenarios. Similarly, stress test conducted on NBFIs indicates that out of 32 institutions, 22 were found to be resilient, whereas the remaining ones could fall short of adequate capital if forced to absorb the shocks.

The money market, dominated by scheduled banks, went through a structural change and periods of volatility in 2015. Excess liquidity in the money market brought about a structural change during 2015, in which financial institutions started investing heavily in reverse repos and consequently became net lenders to BB from net borrowers. The interbank repo market experienced a considerable fall in transaction volumes in the first half of 2015 while volatility was observed in the second half. The interbank repo rate, which is the representative rate of the money market, kept dropping gradually during the year. Similarly, a free fall in the call money rate was also observed while the call borrowing volume was volatile throughout the year. The call money market, which was dominated by PCBs as top lenders and borrowers, was highly concentrated, in contrast to the large and competitive interbank deposit market. A significant presence of NBFIs, in both markets, was notable in 2015.

The bond market, led by the primary market, registered a sharp rise in sales of BB Bills in the last quarter of 2015. In the primary treasury auction market, treasury securities were sold almost at a constant pace during 2015, except for the last quarter when BB Bills were used heavily for sterilization purpose. During the review year, issuance of long-term treasury bonds decreased significantly while shorter-term treasury bills remained the common instruments of public fund management. BB Bills ranked at the top in terms of sales volume, a fact that assisted BB favorably

² In the reporting period, NBFIs maintained regulatory capital in line with Basel II capital framework.

in implementing its monetary policy effectively. Other than the first quarter and last month of 2015, no devolvement to primary dealers (PD), non-PDs and BB was observed throughout the year. The secondary market was dominated by OTC transactions, which recorded a small increase over the previous year.

The Dhaka Stock Exchange (DSE) registered a decline in index value and trade volume in 2015. The major index of Dhaka Stock Exchange (DSEX) experienced much volatility during the year, without showing any particular trend. Meanwhile, the market capitalization ratio remained almost stable, though the growth of market capitalization was volatile. A moderate level of volatility was also observed in the turnover to market capitalization ratio, which did not improve much compared with 2014. An increasing dominance of manufacturing sector and a declining share of the financial sector were prominent in the stock market. During the review year, the overall weighted average price earnings (P/E) ratio dropped further following the decreasing trend since September 2014, indicating a rise in earnings of the companies.

The financial infrastructure is evolving continuously to ensure an efficient payment and settlement system. The National Payment Switch Bangladesh (NPSB), which facilitates interbank electronic payments, settled approximately BDT 45.2 billion through 7.8 million transactions in CY15, while electronic banking operations showed a modest growth with a higher volume of ATM-based transactions. High-value cheque clearing through the Bangladesh Automated Cheque Processing System (BACPS) increased by 11.2 percent, while the distribution and settlement of electronic credit and debit instruments through the Bangladesh Electronic Funds Transfer Network BEFTN increased by 46 percent during the review year. Mobile financial services (MFS), which has achieved a rapid and increasing growth, since its introduction, experienced a rather slow growth in CY15 in the face of introduction of additional regulatory measures to prevent the abuses of MFS. Besides, the introduction of the Real Time Gross Settlement (RTGS) system, which settles money or securities on a real time and gross basis, provided momentum to the payment and settlement system.

The foreign exchange (FX) market demonstrated a moderate level of stability in CY15. There was a considerable fluctuation in the overall net FX liquidity position during 2015. The Bangladesh Taka (BDT) demonstrated a mixed movement against the US Dollar (USD), during this period, though BDT remained stable for the most part of 2015, during which BB had to purchase USD 4.5 billion from domestic FX market to ease the appreciation of BDT against USD. As of end-December 2015, the total amount of FX-denominated assets and liabilities constituted only 3.7 and 3.8 percent respectively. Off-shore banking units (OBUs), with a 31 percent share, accounted for the major portion of FX assets, whereas back-to-back L/Cs claimed the highest portion of FX liabilities with about a 34 percent share. The FX market was very active in CY15, settling almost 91 percent of inter-bank FX transactions in USD. The total turnover was USD 19.4 billion, 3.9 times the total foreign exchange assets, which may be attributed to more openness to some international sectors and a growing interest of the banks in the derivative market in CY15. The foreign exchange market displayed some resilience with low volatility in terms of movement of the nominal exchange rate; however, the real effective exchange rate (REER) was more volatile than nominal exchange rate because of the pressure of appreciation of BDT stemming from declining commodity prices and the increased FX inflow in the form of foreign direct investment (net) and portfolio investment. During this period, an increase in wage earners' remittance by 2.5 percent also contributed to the increased inflow of FX.

Microfinance Institutions (MFIs) experienced a broad-based positive growth in CY15. As MFIs increased their outreach in terms of branches, employees, members and borrowers, their credit grew by 25.4 percent on the back of a robust growth of 27.1 percent in savings. The borrowersto-members ratio increased by 1 percentage point, resulting in an increase in average loans and savings per branch. A unique feature of the MFI is its domination by female members, which stood at 91 percent in CY15. The loan structure, categorized as very large, large, medium and small loans, was dominated by very large loans (58 percent of total loans), followed by large loans (24 percent of total loans), indicating the borrowers' increasing demand for higher amounts of loans. Over the last five years, the distribution of outstanding loans has remained almost constant though the outstanding amount in each category has more than doubled reflecting the fact that the loans have been highly concentrated in the very large loan category. However, the NPL ratio has kept falling since 2011 and reached to 3.04 percent in CY15; the NPLs amount also decreased by BDT 1.5 billion, which is impressive in terms of asset quality. Moreover, their fund structure, which included 35 percent capital and 34 percent savings, strengthened their resiliency. During the same period, profitability in terms of ROA and ROE of MFIs showed positive growth as well.

In CY15, the following notable development initiatives have taken place in the financial system:

- i) BB started implementation of the Basel III framework under its phase-in arrangements, which will culminate in full implementation stage in 2019.
- ii) A new CIB online solution was introduced by BB on October 1, 2015, which will allow BB more flexibility to generate more descriptive reports and minimize the maintenance cost of BB as well.
- iii) BB instructed banks to identify and reward the good borrowers to establish a sound credit culture.
- iv) With a view to strengthening and updating the risk management system in banks, BB instructed banks to establish a separate risk management division, along with a risk management committee, and to submit a comprehensive risk management report in a prescribed format.
- v) BB introduced a new oversight framework, named 'Central Database for Large Credit (CDLC),' for close monitoring of large borrowers.
- vi) To create a business-friendly environment, the Foreign Exchange Regulations Act, 1947 was amended that includes the exclusion of section 18A³ and revision of 18B⁴, with effect from September 9, 2015.

³ Restrictions on the individuals or entities operating as local agents in Bangladesh for their foreign counterparts.

⁴ Restrictions on foreign companies: "Person resident outside Bangladesh (whether or not a citizen of Bangladesh) or a person who is not a citizen of, but resident in, Bangladesh or a company (other than a banking company) not incorporated under any law for the time being in force in Bangladesh shall report to Bangladesh Bank within 30(thirty) days of obtaining permission from Board of Investment or similar competent authority in Bangladesh to establish in Bangladesh a branch office or liaison office or representative office or any other place of business for carrying on any activity of a trading commercial or industrial nature."

Chapter 2

MACROECONOMIC DEVELOPMENTS

The macroeconomic situation, which influences the financial system, was mostly stable during the *Financial Year 2015 (FY15)*. Notwithstanding a current account deficit in the first seven months of FY15, the surplus in the overall balance of payments led to continued accumulation of foreign exchange reserves. Throughout the financial year, Bangladesh Bank maintained monetary policy continuity that contributed to maintaining stability of the financial system. Fiscal policy remained consistent with macroeconomic stability.

2.1 GDP Growth

Despite slower growth in the promising external market, Bangladesh economy achieved reasonably a satisfactory growth during the FY15. According to the provisional estimates of Bangladesh Bureau of Statistics (BBS), the real GDP recorded a growth of 6.5 percent in FY15 against the forecasted growth of 6.47 percent. The nominal GDP of the country was BDT 15,136 billion in FY15, which is about 12.7 percent higher than that of FY14. In FY15, per capita nominal GDP and gross national income (GNI) was estimated to be BDT 95,864 and BDT 102,026 respectively.



The growth of per capita nominal GDP was the same as that of the previous year, while the

Source: Research Department, Bangladesh Bank

growth of per capita real GDP was higher compared to that of the previous year because of a decline in the rate of inflation. The overall real GDP growth was 6.5 percent in FY15 (Chart 2.1), of which 3.1 percentage points was contributed by the service sector, followed by the industry sector (2.9 percentage points) and the agriculture sector (0.5 percentage point).

2.2 Inflation

In Bangladesh, the annual average CPI inflation (base: FY06=100) declined in FY15. The inflation recorded at 6.4 percent in June 2015 against the target of 6.5 percent set in the Monetary Policy Statement (January-June 2015), whereas it was 7.4 percent in FY14.

Lower fuel prices, coupled with an accommodative money growth rate and stable exchange rate, contributed to decline in inflation rate. The annual average food inflation dropped from 8.6 percent in July 2014 to 6.7 percent in June 2015. Good harvests and an easing of political unrest together contributed to the decrease in food inflation.



Source: Research Department, Bangladesh Bank

The annual average non-food inflation went down from 5.4 percent in July 2014 to 5.3 percent in September 2014. However, it started to rise from the following month and ended up at 6.0 percent in June 2015. At end-December 2015, annual average CPI stood at 6.05 percent, 6.41 percent and 6.19 percent for food, non-food and general category respectively.

In FY15, inflation in the urban areas was higher than that of the rural areas.

In rural areas, average inflation was 6.2 percent, while it was 6.8 percent in urban areas. Thus, the annual average inflation in both rural and urban areas decreased in June 2015 from 7.1 percent and 7.9 percent respectively in June 2014.

2.3 Balance of Payments

The trade deficit increased substantially by 45.9 percent in FY15 mainly as a result of an increase in import payments compared with the increase in export earnings. Therefore, a higher increase in import than export expanded the trade deficit from BDT 528.0 billion in FY14 to BDT 770.4 billion in FY15.



Source: Research Department, Bangladesh Bank

The deficit in the services account, also, widened by BDT 41.0 billion to BDT 359.5 billion in FY15 from BDT 318.6 billion in the previous year, and the deficit in income accounts widened by BDT 27.9 billion to BDT 232.7 billion in FY15 from BDT 204.8 billion in FY14. Current transfers increased from BDT 1,160.7 billion in FY14 to BDT 1,234.6 billion (6.4 percent) in FY15 reflecting a 7.5 percent increase in wage earners' remittances. All these changes resulted in a shift in current account from a surplus of BDT 109.3 billion in FY14 to a deficit of BDT 127.8 billion in FY15. As a percentage of GDP, the current account balance stood at -0.8 in FY15 against 0.8 in FY14. Chart 2.3 shows the current account balance to GDP ratio.

The increased surplus, in financial account, is the overall outcome of a significant rise in other investments with FDI (net) and a moderate pace of portfolio investment inflow in the financial

account. However, it was not enough to prevent a drop in the surplus from BDT 426.1 billion in FY14 to BDT 339.7 billion in FY15. Chart 2.4 portrays the trends of trade, current account and overall balances as percentages of GDP in recent years.

2.4 Export and Import

Export growth in FY15 was 3.3 percent over FY14. Aggregate exports increased by BDT 75.8 billion from BDT 2,314.3 billion in FY14 to BDT 2,390.1 billion in FY15. Apparels continued to occupy an overwhelming three-fourths share of the export basket in FY15. Though petroleum by-products, tea, leather and leather products, raw jute, and frozen shrimp and fish recorded a negative growth (about 52.2 percent, 29.1 percent, 13.3 percent 11.7 percent and 7.3 percent respectively), all other major exportable items' export increased. A substantial growth of export of footwear (22.4 percent), engineering products (21.9 percent), chemical products (20.1 percent) and jute goods (8.4 percent) contributed to the increase in exports.

Merchandise imports (fob) increased by BDT 318.0 billion (11.2 percent) from BDT 2,842.4 billion



Source: Research Department, Bangladesh Bank

2.5 Terms of Trade

The terms of trade was 86.1 in FY15 compared to 85.9 in FY14 (base year 2005-06). Both the export and import price indices increased by 6.0 percent and 5.8 percent respectively during the year. Chart 2.6 depicts the scenario of the terms of trade.



Source: Research Department, Bangladesh Bank

in FY14 to BDT 3,160.4 billion in FY15.

With the exception of negative import

growth in pharmaceuticals products

increased significantly and resulted in

an increase in overall import

payments in FY15. However, import

(fob), as a percentage of GDP,

decreased by 0.3 percentage point

from 21.2 percent in FY14 to 20.9

other imports

(35.1 percent), all

percent in FY15.

2.6 Foreign Exchange Reserve

The gross foreign exchange reserves grew steadily over FY15. Bangladesh Bank attained USD 25.0 billion at the end of FY15, which was 16.3 percent higher than USD 21.5 billion at the end of FY14⁵. It is mentionable that at end-December 2015 foreign exchange reserves stood at USD 27.5 billion⁶, which can cover about seven months' import payment (Chart 2.7).

2.7 Foreign Aid and External Debt Repayment

Total official foreign aid disbursement decreased by 3.6 percent to USD 3,009 million in FY15 from USD 3,122 million received in FY14. Food aid disbursements stood at USD 38.0 million in FY15, the same as in FY14. The disbursement of project assistance stood at USD 2,972 million in FY15, down from USD 3,047 million in FY14. It is mentionable that no commodity aid was received in FY15 as in the preceding year. Total outstanding official external debt as of 30 June 2015 stood at USD 23,489 million (12.1 percent of GDP) against USD 24,388 million as on 30 June 2014 (14.1 percent of GDP). Repayment of official external debt stood at USD 1,106 million in



FY15, which was USD 188 million or 14.5 percent less than the repayment of USD 1,294 million in FY14.

Out of the total repayments, principal payments amounted to USD 924 million while interest payments stood at USD 182 million in FY15, against USD 1,088 million and USD 206 million respectively during FY14. The debt-service ratio, as percentage of exports, was 3.6 percent in FY15.

Source: Research Department, Bangladesh Bank

2.8 Money and Credit Growth

Broad money (M2) growth was 12.4 percent in FY15, compared to 16.1 percent growth recorded



in FY14. M2 growth was projected to be 16.5 percent by June 2015. But, the decreased growth could be attributed to the lower growth of domestic credit. In FY15, the growth in domestic credit declined to 10.1 percent against 11.6 percent growth in FY14.

Growth in private sector credit was recorded at 13.2 percent in FY15 against 12.3 percent of growth in

⁵ 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)

⁶ Source : Monthly Economic Trends January 2016.

FY14. For all of FY15, growth in credit to the public sector (including government) from the banking system decreased to 2.5 percent from 8.8 percent growth in FY14, mainly due to higher net sale of saving certificates by the government. The growth in Net Foreign Assets (NFA) stood at 20.7 percent against the 38.6 percent growth in FY14. Weak export growth along with strong import growth led to a declined growth in NFA.

The money multiplier decreased to 5.32 in FY15, compared with 5.41 in FY14. The two ratios of the money multiplier -- the reserve-deposit ratio and the currency-deposit ratio - both increased over the year, leading to a decrease in the money multiplier. The former increased to 0.085 in FY15 from 0.084 in FY14, while the latter increased to 0.126 during the period from 0.123 in FY14. Both the money multiplier and the reserve money growth justify the growth in broad money.

2.9 Credit to Government (Gross) by the Banking System

The credit to Government (gross) decreased by BDT 19.0 billion from BDT 1,722.3 billion in FY14 to BDT 1,703.3 billion in FY15. In percentage terms, the annual credit growth to the Government



Source: Research Department, Bangladesh Bank

decreased by 1.1 percent in FY15. It is mentionable that credit to the Government (gross) rose by 9.4 percent in FY14 with respect to the same of the FY13.

In summary, overall macroeconomic situation was mostly favorable during the FY15, which contributed to maintaining stability of the financial system of Bangladesh.

Chapter 3

BANKING SECTOR

The banking system appeared to be stable and resilient in the calendar year 2015 (CY15). During this period, banking sector assets increased steadily, in which loans and advances continued to be the largest component. The credit growth was higher in CY15 than that of the previous year. Banks continued to invest a sizable portion of their portfolio in safer liquid instruments such as government securities. Reduction in the concentration of loans and advances within a few banks and sectors contributed towards a positive development in the banking sector. Though the gross nonperforming loan (NPL) ratio decreased in CY15, concern over the asset quality remained prevalent, as a significant amount of stressed assets was rescheduled and restructured during this period. Though the required loan-loss provision of the banks as percentage of loans outstanding declined, a substantial shortfall in provision of SCBs affected the banking industry's "maintained-to-required" provision ratio adversely. In CY15, the banking industry initiated its transition from Basel II to Basel III capital framework. During this period, the capital to riskweighted asset ratio (CRAR) recorded a minor decline, albeit remained higher than the minimum regulatory reguirement. Banks, on average, maintained a much higher leverage ratio than the regulatory minimum indicating a notable soundness of the industry. No sign of liquidity stresses in the market was evident from a falling call money rate and a low advance to deposit ratio (ADR). During the review year, though operating profit decreased, net profit increased significantly due to a reduced loan-loss provision expense. While private commercial banks (PCBs) performed comparatively better in terms of asset quality, capital adequacy and profitability, state-owned banks (both SCBs and SDBs) were lagging behind the industry average, creating a sort of stability concerns to the industry and thereby necessitates for stringent and prudent supervision.

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 societies, asset management companies, merchant banks, brokerage houses, stock exchanges and credit rating companies, which is supervised by different regulatory authorities. A coordination council has been facilitating smooth sharing of data and information among the regulators and sat three times during 2015.

The financial system includes 6 state-owned commercial banks⁷ (SCBs), 2 specialized development banks (SDBs), 39 domestic private commercial banks (PCBs), 9 foreign commercial banks (FCBs), 4 non-scheduled banks, and 33 non-bank financial institutions (NBFIs). The financial

⁷ In CY2015, Bangladesh Development Bank Ltd. (BDBL) was included in the SCB category that was reported earlier in the SDB category.

system also embraces Investment Corporation of Bangladesh (ICB), Bangladesh House Building Finance Corporation (BHBFC), 2 stock exchanges (Dhaka Stock Exchange (DSE) and Chittagong Stock Exchange (CSE)), 77⁸ insurance companies, 753 registered⁹ micro-finance institutions, 55¹⁰ merchant banks, 8 credit rating companies, various depository participants (stock dealers, brokers, security custodians, 19 asset management companies, etc.)¹¹, and registered co-operative societies.

Bangladesh Bank (BB), as the regulatory authority, oversees the activities of scheduled banks and non-bank financial institutions (NBFIs). Bangladesh Securities and Exchange Commission (BSEC) supervises the capital market, comprising stock exchanges, merchant banks, stock brokers, dealers, security custodians and asset management companies, among other participants. Insurance companies and micro-finance institutions are supervised by the Insurance Development and Regulatory Authority (IDRA) and the Micro-credit Regulatory Authority (MRA) respectively. Cooperatives and credit unions are regulated by the Registrar of Cooperatives. Besides, the Ministry of Finance itself regulates the Bangladesh House Building Finance Corporation (BHBFC) and Investment Corporation of Bangladesh (ICB). The coordination council that has been facilitating exchange of ideas and information and promoting cooperation among the regulators met three times in CY15 with a view to smoothen policy overlapping and support in a well-coordinated manner.

3.2 Asset Structure of the Banking Sector

The asset structure of banking sector evolved steadily, registering a 12.8 percent growth in balance sheet size in CY15. The growth was broad-based as most of the income-earning assets recorded a positive growth.

The balance sheet size of the banking sector grew by 12.8 percent between CY14 and CY15 to reach BDT 10,314.7 billion. This growth rate was lower than 14.3 percent recorded in the previous year, mainly due to a slow deposit growth and declining growth in the interbank call money market. Besides, the phased-in reductions in share market exposure by banks and subsequent adjustments in their balance sheet provisions also appear to be the reasons for this slower growth. Nevertheless, most of the income-earning assets in the banking industry registered a positive growth in CY15.

The asset structure of the banking industry continued to be dominated by loans and advances, which secured a 60 percent share in CY15; it was 59 percent in both CY13 and CY14. This increase was due to the growth in loans and advances by 14.8 percent in CY15 compared with 14.3 percent in CY14. Notably, loans disbursement by new banks witnessed a sharp rise of 88.9 percent during this period.

⁸ Source: http://www.idra.org.bd/idra-org/index.htm

⁹ Source: Information provided by MRA.

¹⁰ Source: http://www.secbd.org/List%20of%20Registered%20Merchant%20Banker..pdf

¹¹ Source: http://www.secbd.org/CR_TRUSTY_ASSETManager_MF.htm



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

The second largest asset share, investment in government and other securities, was mostly stable holding a 20.1 percent share of total assets. Banks continued to invest a sizable portion in government securities, which grew by 16.2 percent, same as the CY14 level. However, the growth of investment in other securities slowed down considerably in CY15 (9.6 percent) compared with CY14 and CY13 (17.2 and 44.3 percent respectively) mainly due to phased-in reductions in share market exposures by banks as prescribed by BB.

As of end-December 2015, the share of banks' assets with BB increased by 0.2 percentage points whereas the share with other banks and FIs decreased by 0.3 percentage points. During the same period, the share of money at call decreased by 0.1 percentage points. The reason for this decrease is the excess liquidity prevalent in the call money market. It is evident from the sharp decline in the call money investment by 8.9 percent in CY15 compared with a 16.4 percent increase in CY14. Finally, the share of cash and other assets decreased by 0.1 and 0.7 percentage points respectively.

The concentration of assets within a few banks reduced slightly in CY15, indicating a positive sign from the viewpoint of concentration risk.

The concentrations of assets among the top 5 and top 10 banks were 32.5 percent (32.8 as of end-December 2014) and 46.2 percent (46.9 as of end-December 2014) respectively as of end-December 2015. During this period, the concentration of assets within a few banks went down marginally. In CY15, list of top 10 banks included 6 PCBs and 4 SCBs, as these two groups held 64.5 percent and 27.5 percent of the total assets of the banking industry; FCBs and SDBs followed with 5.1 percent and 2.8 percent respectively.



Source: DOS, BB; Calculation: FSD, BB.
Concentration of loans and advances, the largest component in the asset structure of the banking industry, decreased in CY15. A moderate level of loan concentration was observed that may not appear to pose any significant threat to the stability of the financial system.

The calculated Herfindahl-Hirschman Index (HHI) of 1300.6 points appears to be a sign of a moderate sectoral concentration of loans and advances in the banking system. Though there are some changes observed in loans by sectoral categories, the data still reveal that the banking sector loans were concentrated within a few sectors in CY15. In particular, wholesale and retail trade showed a 20.6 percent concentration in the total loan portfolio, followed by large industries with a share of 20.5 percent. The index value calculated below in Box 3.1 decreased in CY15 compared with that of CY14 (1323.6 points) indicating that the loans became somewhat less concentrated during this period. Moreover, it is still maintaining a considerable distance from the upper limit of high concentration, an HHI of 1800.

The Basel III framework¹² has also recommended the use of the Gini Coefficient (GC) as a measure of concentration risk. It can be used to verify the result of HHI as well. The value of GC ranges between 0 and 1 where 0 represents perfect equality or no concentration and 1 represents perfect inequality or highest level of concentration. The calculated GC of 0.69 for the banking industry of Bangladesh in CY15 provides the same result as HHI, thereby validating that there is no immediate stability threat from the sectoral concentration in the banking industry.

Box 3.1: Sector-wise Loans Concentration (CY15)							
SI	Sector	Amount (In Billion BDT)	% of Total	HHI*			
1	Sanitary Services	0.10	0.00	0.00			
2	Forestry and Logging	0.24	0.00	0.00			
3	Water-works	1.17	0.02	0.00			
4	Procurement by Government	3.04	0.05	0.00			
5	Air Transport	7.85	0.14	0.02			
6	Housing (Residential) in Rural Area for Individual Person	9.80	0.17	0.03			
7	Road Transport (Excluding Personal Vehicle & Lease Finance)	15.74	0.27	0.07			
8	Water Transport (Excluding Fishing Boats)	18.65	0.32	0.10			
9	House Renovation/Repairing/Extension	23.75	0.41	0.17			
10	Fishing	27.62	0.48	0.23			
11	Lease Financing/Leasing	35.21	0.61	0.37			
12	Infrastructure Development (Road, Culvert, Bridge, Tower etc.)	39.30	0.68	0.46			
13	Cottage Industries/Micro Industries	52.08	0.90	0.81			
14	Other Construction	73.70	1.27	1.62			
15	Housing (Residential) in Urban Area for Individual Person	153.32	2.64	6.99			
16	Housing (Commercial) : For Developer/Contractor	177.13	3.05	9.33			
17	Export Financing	271.84	4.69	21.98			
18	Agriculture	301.26	5.20	26.99			
19	Service Industries	305.99	5.28	27.85			
20	Small and Medium Industries	608.39	10.49	110.08			
21	Import Financing	611.15	10.54	111.08			
22	Miscellaneous	674.40	11.63	135.27			
23	Large Industries	1190.58	20.53	421.57			
24	Wholesale and Retail Trade	1196.25	20.63	425.60			
	Total Loans and Advances	5798.57	100.00	1300.62			

* HHI = Herfindahl-Hirschman Index

Note: Total loans and advances exclude bills payable and OBU figures. Source: Statistics Department, BB; Computation: FSD, BB.

¹² Refer to Guidelines on Risk Based Capital Adequacy (Revised Regulatory Capital Framework for banks in line with Basel III) issued through BRPD Circular No. 18, dated December 21, 2014.

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

Though the monetary amount of gross non performing loans (NPL) increased in CY15, the gross NPL ratio decreased mainly due to the former's much slower rate of increase relative to the increase in total loans and advances. Besides restructuring of large loans, ¹³ accompanied by increased loan rescheduling contributed to this decline as well.

The gross non performing loan (NPL) ratio (i.e. gross non performing loans as percentage of total loans outstanding) in the banking sector declined to 8.8 percent in CY15 from 9.7 percent in CY14. Though, in monetary terms, gross NPLs increased by 2.4 percent over the years, faster growth in the total loan portfolio (14.8 percent), accompanied by the restructuring facility (which has been discussed in details in section 3.4.5) granted by BB and increased amount of rescheduled loans during the same period caused the gross NPL ratio to decline.



Note: Ratios of SCBs and SDBs in CY14 are restated according to the new bank categorization. Source: BRPD, BB; Compilation: FSD, BB.

The gross NPL ratios of different categories of banks are shown in chart 3.4. The gross NPL ratio of all groups of banks except FCBs went down between end-December 2014 and end-December 2015. FCBs experienced a slight increase of 0.5 percentage points in gross NPL ratio during this period. Consequently, FCBs recorded a higher NPL ratio than that of the PCBs for the third consecutive year.

The SDBs demonstrated a better performance during the review period. The gross NPL ratio of these banks dropped to 23.2 percent in CY15 from 32.8 percent in CY14. The gross NPL ratio of



SCBs also recorded a decline of 0.9 percentage points in CY15 and stood at 21.5 percent.

Chart 3.5 shows an increasing trend in the gross NPL in monetary amount. It increased from BDT 501.6 billion in CY14 to BDT 513.7 billion in CY15. The quarterly analysis shows that the gross NPL amount in the last quarter of each year since 2011 was lower

¹³ Refer to BRPD Circular No. 04, dated January 29, 2015.

than the preceding quarters except for the year 2012, in which each quarter recorded a higher NPL amount than the previous one¹⁴.



Bank-wise information indicates that the nonperforming loans were widely distributed among the banks. The distribution of banks based on their gross NPL ratio shows that the number of banks with ratios of 10 percent or higher decreased from 13 (CY14) to 12 (CY15). Eight banks recorded a gross NPL ratio over 20 percent, which comprised 3 SCBs, 2 SDBs, 2 PCBs and one FCB.

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

Notably, the gross NPL ratios of 6 SCBs ranged between 9 percent and 50 percent in CY15, whereas it was between 10.3 percent and 53.3 percent in CY14. Out of 9 FCBs, 6 banks recorded a gross NPL ratio not more than 10 percent as of end-December 2015, while all local PCBs had single-digit ratios except two problem banks. However, only 0.24 percent of gross NPL ratio of the newly established banks helped the PCBs to register the lowest NPL ratio.

The net nonperforming loan (NPL) ratio¹⁵ in CY15 remained the same as it was in CY14 despite having a lower gross NPL ratio in CY15. This is due to a relatively higher provision shortfall experienced by the banking industry during this period.



Note: Ratios of SCBs and SDBs in CY14 are restated according to the new bank categorization. Source: BRPD, BB; Compilation: FSD, BB.

Chart 3.7 shows that the overall net NPL ratio of the industry went down to 4.2 percent from a gross NPL ratio of 8.8 percent after accounting for the loan-loss provisions maintained. The lower the net NPL ratio of the banks, the more resilient they are thought to be to withstand stability threats. In this regard, PCBs holding the largest share of the industry in asset size maintained a net NPL ratio much below the industry average.

- 14 This trend indicates that the banking industry reschedules and/or restructures a portion of their stressed loans at the end of each year, which inflates banks' profitability and reduces provision requirements. However, the rescheduling/restructuring facility, if allowed complying with the conditions set by BB from time to time, would provide the borrower who is in financial difficulty an opportunity to make progress and continue to repay the loan
- 15 Net NPL ratio = (Gross NPLs Loan-loss Provisions Maintained)/Total Loans Outstanding

It is observed that SDBs had a lower net NPL ratio than that of SCBs, despite having a higher gross NPL ratio. The reason mainly is the re-categorization of a SDB with higher gross NPL ratio as SCB, which impacted the net NPL ratio of SCBs by pushing up the ratio to 12.9 percent in CY15 from 9 percent in CY14.

FCBs, usually, maintain relatively higher provisions against gross NPLs compared with other categories of banks. Due to this fact, they had the lowest net NPL ratio in CY15 despite having higher gross NPL ratio than that of PCBs.

Though gross NPL ratio decreased, a sizable provision shortfall in 2 SCBs and 2 PCBs, coupled with reduced provision surplus in the compliant banks, widened the provision shortfall of the banking industry, which prevented net NPL ratio from falling further below 4.2 percent in CY15.

The higher gross nonperforming loans (NPL) amount required the banks to maintain higher loan-loss provisions in CY15, but the maintained provision experienced a further shortfall below the CY14 level. However, all banks except 2 SCBs and 2 PCBs maintained provisions in line with BB policies.

In monetary terms, the gross NPLs increased by BDT 12.2 billion in CY15. This increase required banks to maintain cumulative provisions amounting to BDT 308.9 billion as of end-December 2015, against which banks actually maintained provisions amounting to BDT 266.1 billion. The maintained provision in CY15 is around BDT 15.6 billion lower than that of CY14 leading to a sharp rise in provision shortfall from BDT 8 billion in CY14 to BDT 42.8 billion in CY15. As of end-December 2015, banks maintained 86.1 percent of required provisions compared with 97.3 percent as of end-December 2014. During the same period, the ratio of the maintained provisions to gross NPLs went down from 56.2 percent to 51.8 percent. The decline in the maintained provision amount along with the decline in the provisions to gross NPL ratio may signal an early warning of deteriorating resilience of banks, especially in the presence of bad/loss loans of 84.6 percent of gross NPLs. This deterioration in performance is primarily attributable to the provisions maintained in SCBs. In CY14, SCBs maintained a surplus provision of BDT 6.9 billion whereas it experienced a provision shortfall of BDT 45.7 billion in CY15 mainly due to a sizable provision shortfall in 2 SCBs. It is to mention that, during this period, 2 PCBs (one of which is



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

currently under restructuring arrangements of BB) had a shortfall amounting to BDT 3.8 billion.

However, the rest of the banking industry was able to maintain a surplus in provisions, albeit lower than the CY14 level. The ratio of the maintained provisions to gross NPL goes up to 64 percent if it is calculated excluding the above-mentioned 2 SCBs and 2 PCBs. It is noteworthy that 2 SDBs showed a significant improvement in maintaining provision by having a provision surplus of BDT 1.9 billion in CY15 compared with their provision shortfall of BDT 22.6 billion in CY14.

The concentration of gross NPL amount among banks declined significantly in CY15. However, the presence of nearly all SCBs and SDBs among the top 10 list in terms of gross NPL size and NPL ratio is a matter of concern for the stability of the financial system.



Source: BRPD, BB; Computation: FSD, BB

The gross NPL concentration ratios (based on the size of gross NPLs) of the top 5 and top 10 banks were 49.9 and 64 percent respectively as of end-December 2015. Gross NPL concentration ratios in both top 5 and top 10 banks decreased significantly in CY15 compared with 53.6 and 67.4 percent respectively in CY14. It is mentionable that gross NPL in SCBs were higher than those of other groups. In CY15, the top 10 banks consist of 5 SCBs, 3 PCBs, 1 FCB and 1 SDB.

As for the gross NPL ratio, among the top 10 banks, 4 are SCBs (the number has increased by 1 over CY14 as one SDB is now being categorized as SCB), 2 are PCBs, 2 are SDBs and 2 are FCBs. The presence of SCBs and SDBs among the top 10 list (in terms of both size and ratio) is a matter of concern for the stability of financial system in Bangladesh. However, the improvement in concentration ratio in CY15 is an encouraging sign in the context of systemic risk.

The sector-wise NPL distribution did not show much concentration of NPL in any particular sector in CY15.

It is evident from Table 3.1 that nonperforming loans were distributed throughout different sectors of the economy with a modest level of concentration in CY15. Commercial loans and Large & Medium Scale Industries were the two sectors with the highest share of NPLs (16.7 and 14.6 percent respectively), as these two sectors held the highest share of the total loans outstanding in the banking industry. Only loans to agriculture and loans to small and cottage industries seem to show a significantly disproportionate incidence of NPLs. The overall scenario, however, shows no sign of any acute concentration risk that may arise from the NPLs of a particular sector.

			3	(Amount in hillion BDT)		
SI No.	Name of the Sector	Total Ioans outstading	Gross NPL amount	Gross NPL ratio	% share of industry loans extended to a particular sector	% share of industry NPLs of a particular sector
1	Agriculture	280.21	40.06	14.3%	4.8%	7.8%
2	Industrial (Other than Working Capital): (a) Large & Medium Scale Ind.	755.36	74.78	9.9%	12.9%	14.6%
	(b) Small & Cottage Ind.	81.50	15.22	18.7%	1.4%	2.9%
3	Working Capital:(a) Large & Medium Scale Ind.	740.14	58.23	7.9%	12.7%	11.3%
	(b) Small & Cottage Ind.	129.74	12.03	9.3%	2.2%	2.3%
4	Export Credit	202.96	22.86	11.3%	3.5%	4.5%
5	Import Credit	260.42	24.32	9.3%	4.5%	4.7%
	LTR	320.75	20.63	6.4%	5.5%	4.0%
6	Commercial Loans	1002.17	85.88	8.6%	17.2%	16.7%
7	RMG & Textile	737.53	61.03	8.3%	12.6%	11.9%
8	Ship building & Ship breaking	95.42	9.08	9.5%	1.6%	1.8%
9	Construction : (a) Housing	294.34	16.93	5.8%	5.0%	3.3%
	(b) Other than Housing	188.47	6.49	3.4%	3.2%	1.3%
10	Transport & Communication	117.36	10.63	9.1%	2.0%	2.1%
11	Consumer Credit	224.68	15.58	6.9%	3.8%	3.0%
12	Other Loans	415.10	39.98	9.6%	7.1%	7.8%
	Total	5846.18	513.71	8.8%	100.0%	100.0%

Table 3.1 : Sector-wise Nonperforming Loans Distribution (CY15)

Source : Scheduled banks; Compilation: FSD, BB

Bad loans to gross NPL ratio increased in CY15 despite the above-mentioned lower gross NPL ratio. The recovery of NPL remained a prime concern for the banking industry.

The gross NPL ratio decreased to 8.8 percent in CY15 from 9.7 percent in CY14. But more than four-fifths of gross NPLs (i.e. 84.6 percent), amounting to BDT 434.9 billion were bad/loss loans, which is BDT 44.9 billion higher than that of CY14. The NPLs under the Sub-standard and Doubtful categories constituted 8.9 percent and 6.5 percent respectively of gross NPLs in CY15 as shown in Chart 3.10.



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

The increase in the bad/loss loans to gross NPL ratio implies decreases in the sub-standard loans to gross NPL ratio and the doubtful loans to gross NPL ratio, which are evident from Chart 3.11. Following the trend since 2012 demonstrates an inverse relationship between gross NPL ratio and bad/loss loans to gross NPL ratio. This shows that though migration from unclassified loans to NPLs has increased, the NPLs have increased at a much slower rate than the increase in total loans outstanding. On the other hand, migration from sub-standard and doubtful loans to bad loans has increased at a much faster rate than the increase in gross NPLs. Though the banks are required to maintain a 100 percent provision against bad loans, which mitigates the further risk to banks' profitability and capital, an increase in the amount of bad loans is not desirable from the financial stability viewpoint.

To improve the NPL scenario of the banking industry, BB has initiated more structured monitoring of the NPLs of large groups and non-financial corporations.

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 when extending loans to high-risk sectors and prioritize loans to productive sectors, in conjunction with stringent measures in the monitoring of loan classification and provisioning¹⁶, should help towards further improvement in the nonperforming loans situation. BB has also started initiatives to monitor the NPL scenarios of large groups and non-financial corporations¹⁷ and is expecting to improve the NPL scenario of the banking sector.

3.4 Stressed Advances¹⁸ in Banking Sector

The stressed advances ratio (stressed advances as percentage of total loans outstanding) increased substantially in CY15, owing largely to the relaxation permitted by BB for the restructuring of large loans.

The stressed advances ratio rose to 16.1 percent in CY15 from 13.1 percent in CY14. Though the gross NPL ratio in CY15 was 90 basis points lower than that of previous year, higher percentages of rescheduled and restructured loans led to the rise of stressed advances ratio over the previous year. Excluding the restructured (large) loans, the stressed advances remained almost the same as the preceding years. In this regard, a large volume of rescheduled and restructured loans creates concern for the credit risk management of the banking industry. In the absence of an orderly recovery of these loans, the banks would suffer from non-earning assets, lower profitability, and a deteriorating equity base. Besides, it would increase the cost of capital, widen the mismatch between interest-earning assets and interest-bearing liabilities and upset the economic value additions (EVA)¹⁹ by banks.

3.4.1 Bank-wise Distribution of Stressed Advances Ratio

Compared with CY14, more banks experienced increases in their stressed advances ratios in CY15 thereby resulting in the distribution of banks' skewness towards higher stressed advances ratios.

In CY15, out of 56 banks, 13 banks, compared with 18 banks in CY14, were able to maintain their stressed advances ratios below 5 percent. Correspondingly, the number of banks in the upper echelon of the stressed advances ratios increased during the same period.

- ¹⁶ BRPD Circular No. 8, dated August 02, 2015.
- ¹⁷ FSD Circular No. 1, dated December 24, 2015.
- ¹⁸ Gross nonperforming loans plus restructured/rescheduled loans. Here, the terms 'loans' and 'advances' are used interchangeably
- ¹⁹ EVA is equal to the net operating profit minus cost of capital



In CY15, 19 banks (17 banks in CY14) had their stressed advances ratios between 5 to 10 percent, while 24 banks (21 banks in CY14) registered stressed advances ratios of more than 10 percent. This increased migration to the upper echelon of the stressed advances ratio may pose stability threat to the financial system of Bangladesh.

Source: Scheduled Banks; Computation: FSD, BB.

From Table 3.2, it is evident that 39

banks with 80.4 percent of total advances of the banking industry experienced an increase in their stressed advances ratios in CY15 compared with CY14. On the other hand, 17 banks holding 19.6 percent of the industries' total advances were able to either reduce their stressed advances ratios or maintain the same level as in CY14.

Table 3.2 : Changes in Stressed Advances Ratio in CY15						
Particulars	No. of Banks	Share in total advances				
Increase in Stressed Advances Ratio	39	80.4%				
Decline in Stressed Advances Ratio	14	18.8%				
No Change in Stressed Advances Ratio	3	0.8%				
Total	56	100.0%				

Source: Scheduled Banks; Computation: FSD, BB.

An analysis of stressed advances concentration ratios shows that out of 56 banks, the top 5 and top 10 banks held 41.8 and 64.5 percent of system-wide stressed advances respectively in CY15. The concentration within top 5 and top 10 banks increased substantially from 36.6 and 55.0 percent in CY14 respectively. Among the top 10 banks, 5 are SCBs, 1 is SDB, and 4 are PCBs.



Source: Scheduled Banks; Computation: FSD, BB

3.4.2 Industry-wise Stressed Advances Ratio

Stressed advances ratios were much higher in SCBs and SDBs than PCBs and FCBs in CY15. Higher stressed advances ratios are evident mostly in advances to small and medium industries, though large industries accounted for the highest monetary amounts of stressed advances. The following chart shows the distribution of stressed advances ratios across five major borrower segments²⁰ incorporating both manufacturing and service sectors.



Source: Scheduled Banks; Computation: FSD, BB

As of end-December 2015, SDBs were exposed to the most significant stressed advances ratios, compared with the other participants of the banking industry. SCBs were in the second position of the same list. When data for all banks are viewed, it is clear that the banking industry need to be more concerned about the advances sanctioned to the small and medium industries.

Table 3.3 shows that large industries, having 42.5 percent of total advances of the banking industry, registered 35.2 percent of stressed advances in CY15. On the other hand, medium industries possessing a 13.8 percent share of total advances, accounted for 21.6 percent of stressed advances. The small industries and other segments contained stressed advances proportionate to their total advances. Micro and Cottage industries held a very small portion of stressed advances. Though large industries had the highest exposure to stressed advances during this period, its share was proportionately lower than that of medium industries.

Table 3.3 : Industry-wise Composition of Stressed Advances in CY15 (Percent)						
Particulars	Share in stressed advances	Share in total advances				
Large Industry	35.2	42.5				
Medium Industry	21.6	13.8				
Small Industry	10.8	10.6				
Micro and Cottage Industry	0.8	1.7				
Others	31.6	31.5				

Source: Scheduled Banks; Computation: FSD, BB.

3.4.3 Composition of Stressed Advances

Chart 3.15 shows the change in the three components of stressed advances ratio over time. The gross non-performing loan (NPLs) ratio declined to 8.8 percent in CY15 from 9.7 percent in CY14.

²⁰ Large segments, Medium Segments, Small Segments and Micro & Cottage segments: Definition based on SMESPD Circular No-04, dated 14 July, 2015. Other segments: Loans to individuals and other than MSME and Large segment.(https://www.bb.org.bd/mediaroom/circulars/smespd/jul142015smespd04.pdf)



Note: Loans restructured as per BRPD circular no. 04, dated 29.01.2015; Source: Scheduled Banks; Computation: FSD, BB.

The rescheduled advances ratio (i.e. rescheduled advances as percentage of loans outstanding) increased to 4.5 percent in CY15 from 3.4 percent in CY14. For the first time, the stressed advances ratio in CY15 contained restructured advances (2.8 percent of total loans outstanding) that contributed to the significant increase in the stressed advances ratio compared with CY13 and CY14.

Thus the high transformation of advances into rescheduled or

restructured advances in CY15 yielded a lower percentage of gross NPLs compared with the previous year.

3.4.4 Rescheduled Advances

At present, the rescheduled loans constitute a significant portion of the banks' total loan portfolio. In CY15, the rescheduled loans were 4.5 percent of bank's total outstanding loans, 5.0 percent of total unclassified loans and 28.0 percent of total stressed advances, compared with 3.4, 3.8 and 25.9 percent respectively in CY14. From CY14 to CY15, the total amount of rescheduled loans increased by 50.1 percent, in spite of the availability of large loan restructuring facilities.



Source: Scheduled Banks; Computation: FSD, BB

Chart 3.16 shows that a lower gross NPL ratio was correlated with a higher rescheduled loan ratio and vice versa. Following this trend, the rescheduled loan ratio increased by 113 basis points in CY15, while the gross NPL ratio decreased by 90 basis points. Subsequently, the stressed advances ratio (without the restructured loans portion) increased by 23 basis points in CY15.

In the banking system, industrial loans (other than working capital) [Chart

3.17] were the highest (40.1 percent) in the total rescheduled loans. It reached 46.5 percent while adding the working capital to the industrial sector. Out of it, 81.5 percent were of the large and medium industries. The foreign trade (export credit, import credit and loans against trust receipts (LTR)) and RMG and textile sectors jointly shared 21.2 percent of the total rescheduled loans. Loans categorized as other sectors (including ship building and breaking, transportation and communication and consumer credit, etc.) shared 10.9 percent of total rescheduled loans.



Source: Scheduled Banks; Computation: FSD, BB

The rescheduled loans of industrial sector ranked at top with 12.7 percent [Chart 3.18] in CY15 followed by 7.0 percent of agricultural sector²¹. However, the share of rescheduled loans in remaining sectors was not more than 4.0 percent.

Industry-wise rescheduled loans demonstrate [Chart 3.19] that the major portion (31.2 percent) of the loans rescheduled in CY15 amounting to BDT 82.4 billion was consumer credits, retail loans, short-term agricultural credits, etc. Medium and large industrial borrowers secured the second and third positions with 28.6 and 28.2 percent of total rescheduled loans respectively. In CY14, these borrowers together were responsible for the major portion (72.8 percent) of total rescheduled loans, followed by the other loans category (17.1 percent) and micro and small industrial borrowers (10.0 percent). Compared with CY14, the rescheduled loans concentration among large and medium industrial borrowers went down significantly by 16.0 percentage points. Conversely, the rescheduled loans concentration in the others categories increased significantly by 14.1 percentage points during the same period. For micro and small industrial borrowers, the combined ratio increased by 1.9 percentage points. Notably, large industry's share in the composition of rescheduled loans decreased substantially, though not in absolute amount, because many borrowers from large industries availed the facility of large loan restructuring (BDT 5 billion or above).



Source: Scheduled Banks; Computation: FSD, BB

²¹ BB allowed the scheduled banks to reschedule the short term agricultural credit with relaxed down payment condition through BRPD Circular No. 05, dated February 23, 2015.

Chart 3.20 demonstrates the industry-wise rescheduled loans ratio in CY15. The highest rescheduled loan ratio was observed among enterprises in medium industries. However, in terms of amount, loans rescheduled to borrowers in large industries were significant in value, but not more than 3.0 percent of total loans to these borrowers.

In CY15, PCBs carried the highest amount of rescheduled loans, which accounted for 63.4 percent of the total rescheduled loans in the banking industry as shown in Chart 3.21. During the same period, SCBs, SDBs, and FCBs shared 27.5, 8.9 and 0.2 percent of total rescheduled loans respectively. In CY14, it was 66.3 percent for PCBs, 27.8 percent for SCBs, 5.2 percent for SDBs and 0.7 percent for FCBs. However, the rescheduled amount in PCBs was comparatively smaller relative to their large loan portfolio, which is evident from their rescheduled loans ratio (Chart 3.22). The SDBs came at the top in CY15 in terms of rescheduled loans ratio.



Source: Scheduled Banks; Computation: FSD, BB

During this period, the top 5 banks held 48.5 percent, while the top 10 banks held 69.6 percent of total rescheduled loans. In comparison, the ratios for the top 5 and top 10 banks were 46.8 and 69.6 percent respectively in CY14. Thus, the concentration of rescheduled loans of the top 10 banks remained stable. In CY15, the top 10 list comprised 4 SCBs, 1 SDB and 5 PCBs.



Source: Scheduled Banks; Computation: FSD, BB

3.4.5 Restructured Advances

In CY15, Bangladesh Bank allowed restructuring with respect to large borrowers (loan amounts of BDT 5 billion or above in aggregate) having single or multiple bank exposures. Under the restructuring policy, the loans were allowed to be restructured, with the option of reducing interest rates, for a maximum period of 12 years for term loans and 6 years for continuous/demand loans, with a maximum moratorium period of 12 months within the total tenure of restructuring. For the purpose of classification, such loans are to be reported in the

Special Mention Account (SMA). Failure to pay 2(two) consecutive quarterly installments lead to the cancelation of the facility and classification according to the usual policy. Under this policy, a total amount of BDT 164.1 billion of loans were restructured by the scheduled banks in CY15. These loans constituted 2.8 percent of total loans outstanding, 3.1 percent of total unclassified loans and 17.4 percent of total stressed advances.

The major portion of restructured loans (31 percent) was the industrial loans (other than working capital) followed by the RMG and Textile sectors (21.5 percent) and construction (19.6 percent) [Chart 3.24]. Industrial loans accounted for 41.5 percent of the total restructured loans if loans restructured under working capital (10.5 percent) given to industrial sectors are considered.



Source: Scheduled Banks; Computation: FSD, BB

The restructured loans ratio (i.e. restructured loans as percentage of total loans outstanding) of the construction sector accounted for the highest with 6.6 percent in CY15 [Chart 3.25] followed by the industrial sector (other than working capital) of 6.1 percent. However, the restructured loans of industrial sector stand highest while adding working capital to industrial loans. Only 4.8 percent of loans in RMG and textile sector were restructured in CY15, while ship building and breaking industries restructured 5.8 percent of their outstanding loans. Loans restructured under commercial loans, foreign trade (export credit, import credit and LTR) and others were, in aggregate, less than 2.0 percent.

Chart 3.26 shows the industry wise composition of restructured loans. Though the amount of loans restructured for large industry borrowers was significant (62.2 percent), loans restructured for other borrowers (29.9 percent) also made up a noticeable portion of total restructured loans. The loan amount restructured for small and medium-sized enterprise (SME) borrowers represented only 7.9 percent of total restructured loans.



Source: Scheduled Banks; Computation: FSD, BB

In comparison with total loans outstanding in different industries, the restructured loans for large industry borrowers were only 4.1 percent of total outstanding loans in that particular group. For SME borrowers, the rescheduled loans were not more than 0.8 percent. Loans restructured for other industrial borrowers constituted only 2.7 percent.

23 out of 56 banks comprising 17 PCBs, 5 SCBs, and 1 FCB availed this facility. The PCBs carried 73.8 percent of the total restructured loans, while the SCBs shared 26.2 percent. FCBs restructured only 0.01 percent. Thus, the restructured loans of SCBs and PCBs contributed heavily to the increase in their own and industry stressed advances.



Source: Scheduled Banks; Computation: FSD, BB

Though the amount of restructured loans held by PCBs was significant, in comparison to total loans held by them, only 2.8 percent had been restructured. In contrast, the ratio was highest for SCBs (3.9 percent). FCBs had not more than 0.01 percent of their total loans restructured.

Chart 3.30 shows the restructured loans concentration. The top 5 banks held 64.8 percent of total restructured loans. Among these banks, there are 3 SCBs and 2 PCBs. The share of restructured loans reached 82.4 percent for the top 10 banks, including 4 SCBs and 6 PCBs.



Source: Scheduled Banks; Computation: FSD, BB

3.5 Liability Structure of the Banking Sector

Deposits grew by 12.5 percent in CY15. Compared with CY14, a higher growth in term deposits was observed while deposit concentration within a few banks decreased.

Deposits were the largest source of external funds in the banking sector. The share of total deposits was 84.8 percent of the total liabilities as of end-December 2015.



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

As of end-December 2015, total deposits and borrowings from other banks and FIs increased by 12.5 percent (13.4 percent in CY14) and 27.4 percent (41.3 percent in CY14) respectively. Bills payable recorded a decline of 0.3 percent in CY15 compared with the increase of 27.5 percent in CY14. The slowdown in growth rates of aggregate deposits and borrowings from other banks and FIs indicates that the banking industry was facing less liquidity pressure from new lending. The higher interest rates of government savings certificates also would have contributed in the slowdown of deposit growth. Though term deposits showed an accelerated growth of 15.1 percent in CY15 (8.5 percent in CY14), it could not compensate for the slowdown in current deposit growth along with the sharp decline of 21.1 percent recorded in interbank deposits.



As of end-December 2015, the share of term deposits was 57.3 percent of total deposits, whereas the shares of savings deposits, current deposits, and other deposits were 18.3, 18.9, and 5.5 percent respectively. The relative proportions of term, savings and current deposits increased moderately in CY15. The deposit structure shows a greater reliance on term deposits, regarded as a more stable source of funding, which is desirable from a financial stability perspective.

*Inter-bank deposits are excluded. Source: DOS, BB; Compilation: FSD, BB.

The concentration of deposits among the top 5 and top 10 banks showed a decline in CY15. These banks accounted for 33.8 and 47.8 percent of total deposits respectively during this period, compared with 34.1 and 48.3 percent respectively in CY14. An increase of about 94 percent in the deposit base of new banks might have contributed to some extent in bringing down the deposit concentration ratio in CY15. The top 5 banks include 4 SCBs and one PCB whereas the top 10 banks accommodate 5 more PCBs other than the top 5 banks.



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

3.6 Banking Sector Deposit Safety Net

The present coverage of deposit insurance is BDT 100,000 per depositor per bank. The ratio of covered deposits to total insurable deposits, by value was 31.1 percent in CY15. The fully covered depositors (in number) were 87.5 percent of total number of depositors.

After the global financial crisis (GFC), in terms of coverage, deposit insurance has become more widespread and more extensive. Therefore, the Deposit Insurance System (DIS) is now considered as 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.

Bangladesh introduced the Deposit Insurance System (DIS) long back 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 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.

Table 3.4 shows that the balance of the DITF reached BDT 44.6 billion at the end of 2015, which is more than the double compared with that of 2011. This capacity of DITF is minuscule in the context of total covered deposits of banking system in Bangladesh. The accumulated fund could cover only 2.1 percent of the total insured amount of the entire banking system as of end-December 2015 in consideration of the current coverage of BDT 100,000 per depositor in a single bank.

Table 3.4 : Deposit Insurance Trust Fund and Its Composition (Amount in billion BDT)						
Particulars	2011	2012	2013	2014	2015	
Insurable Deposits	3,857.33	4,229.77	5,322.93	6,034.86	6816.38	
Insurance Premium (during the year)	1.92	2.31	3.34	3.54	4.01	
i. Investment	19.46	23.99	29.76	36.35	44.06 ²²	
ii. Cash	0.32	0.15	0.07	0.005	0.57	
Deposit Insurance Trust Fund Balance	19.78	24.14	29.83	36.36	44.63	

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



The percentage of covered deposits²³ to total insurable deposits, by value, increased in CY15 to 31.1 percent, compared with 27.5 percent in CY14. On the contrary, the percentage of fully covered depositors (87.5 percent) to total number of depositors decreased slightly in CY15. However, this decrease is not very significant to affect the prevailing deposit safety net in the country.

Source: DID, BB; Computation: FSD, BB

It is noteworthy that a proposal to enhance the current coverage to BDT 200,000 per depositor is under process of approval from the government.

By the forthcoming amendment of the Bank Deposit Insurance Act, 2000, if the coverage limit is



extended to BDT 200,000 per depositor, the percentage of fully covered depositors increases to 93.8 percent of total depositors of the entire banking system. The amendment may also include the depositors of non-bank financial institutions and mobile financial service providers in the insurance system, i.e. small deposits of NBFIs and mobile financial services will also be insured.

Source: DID, BB; Computation: FSD, BB

²² Accumulation of the insurance premium after incorporation of deposit insurance in 1984.

²³ The covered amount refers to the total figure considering the deposits up to BDT 100,000 per depositor per bank.

Box 3.2 : The Capacity of Existing DITF and Its Forecast

The capacity of the DITF, in a single bank resolution, seems to be sufficiently adequate. Chart B3.2.1 and B3.2.2 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 under the proposed enhanced insurance level of deposits, i.e. up to BDT 200,000.



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

Chart B3.2.3 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.



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

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 2020* (Chart B3.2.4).

(Continued)

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

- 1. Total time and demand liabilities (TTDL) are forecasted with geometric mean;
- 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 insurable deposits is then estimated. It is to mention here that due to a significant increase (13%) in the premium rate in 2015, the relationship (ratio of premium and insurable deposits) that existed in 2015, 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.

3.7 Banking Sector Profitability

The banking sector experienced significant growth in net profit in CY15 compared with that of CY14.

In CY15, banking sector's operating profit decreased to BDT 216.8 billion from BDT 218.0 billion in CY14, recording a decrease of 0.5 percent. The increase in non-interest income, however, could not offset the decline in operating profit as net non-interest income was lower in CY15 compared with that of CY14.

In spite of the decrease in operating profit, net profit increased by 32.0 percent from BDT 60.0 billion in CY14 to BDT 79.2 billion in CY15. This improvement in reported profitability could be attributed to a decline in loan loss provision expense in CY15. These expenses decreased by 8.7 percent from BDT 84.3 billion in CY14 to BDT 76.9 billion in CY15.

An overall decrease in the size of loan-loss provision expense in the profit and loss account helped the entire banking industry in increasing the ROA and ROE in CY15.

ROA and ROE at end-December 2015 increased by 10 and 130 basis points respectively from CY14, and reached the levels of 0.8 and 9.4 percent respectively. This scenario shows a non-linear trend over the years from CY13 to CY15 as the ratios showed a declining trend during CY13 to CY14. The banking sector experienced higher ROA and ROE figures in CY15 primarily because of the reduced provision expenses.



Source: DOS, BB, Compilation: FSD, BB

Apart from a few banks, overall banking sector showed an improved performance in CY15 as indicated by the presence of an increasing number of banks with higher ROEs. Around 50 percent of total number of banks had ROE higher than 10 percent. In terms of ROA, the performance appears to be quite constant with the CY14 level.

Net Interest Margin²⁴ decreased because of relatively higher decline in weighted average lending rate compared to that of deposit rate and the situation of excess liquidity. Banks relied more on non interest/investment income to generate profit. A higher proportion of the investment portfolio allocated to treasury instruments also helped generate non-interest investment income.

In terms of different components of profitability, the net interest margin (NIM) decreased slightly, by 10 basis points from 1.8 percent in CY14 to 1.7 percent in CY15. The decrease in NIM can be attributed to overall decline in interest rate spread as decline in weighted average lending rate exceeded that of deposit rate. Moreover, there was an indication of excess liquidity in the banking system, which in turn, caused lower asset yields and affected the profitability.



The NIM of FCBs was 3.2 percent in CY15, remaining the same as last year (CY14) and higher than

that of SCBs, SDBs and PCBs, which reported -0.8, 0.7 and 2.7 percent respectively. The SCBs, with negative NIM, depended more on non-interest income to attain profitability compared to other groups of banks.

The NIM for each type of bank was quite stable in CY15 in comparison with CY14. This stability can be attributed to only marginal changes in the interest rate spread.

²⁴ Net interest margin is a measure of the difference between the interest income generated and the amount of interest paid out to their lenders, relative to the amount of their (interest earning) assets.



Gross Operating Income=Net Interest Income + Non-interest Income Source: DOS, BB; Compilation: FSD, BB



Chart 3.41 : Banking Sector Income by Sources

Source: DOS, BB, Compilation: FSD, BB

The ratio of non-interest expense to gross operating income, a measure of the efficiency ratio, increased by 2.1 percentage points from 46.5 percent in CY14 to 48.6 percent in CY15, indicating that banks were not able to generate more net interest and noninterest income to keep up with the non-interest expenses. In CY15, the growth in operating expense (11.5 percent) was less than the growth in operating income (13 percent). However, the growth in operating income was lower in CY15 in comparison with CY14.

The ratio of net interest income to total assets decreased by 8 basis points from 1.53 percent in CY14 to 1.45 percent in CY15, and the ratio of non-interest income to total assets also declined by 10 basis points from 2.8 percent in CY14 to 2.7 percent in CY15.

The interest rate spread was slightly reduced in CY15 compared with CY14.

The decline in the spread could have a number of causes, such as a shift among different classes of interest-earning assets or interest-bearing liabilities, general decline in market interest rates, BB's moral suasion to keep the spread under a certain limit etc. It has been observed that decline in weighted average lending rate in CY15 exceeded that of deposit rate mainly due to moral suasion of BB as well as increased competition.



Source: 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, on average, decreased from 5.1 percent in January 2015 to 4.8 percent in December 2015. BB has, for quite some time, instructed all banks to keep their spread to a level not exceeding by 5.0 percent.

The weighted average spreads of all banks remained close to the directed benchmark following BB's instruction over the years, except for foreign banks. For those banks, spreads continued to remain high, almost double than that of SCBs and SDBs. Overall, as the banking sector appears to be more competitive and efficient, the spread tended to decline, although fluctuations in the general level of interest rates temporarily and occasionally interrupted this smooth decline. It is expected that, in the future, banks in Bangladesh will become more efficient in managing the credit risk, and interest rate spreads will remain at a lower level while encouraging sustainable business activities.

3.8 Capital Adequacy

At end-December 2015 the capital to risk-weighted asset ratio of the banking industry stood at 10.8 percent which was 60 basis points lower than that of end-December 2014.

The capital adequacy of the banking industry recorded a minor decline in the review year. Compared with the end-December 2014 position, the proportion of banks compliant with the minimum capital to risk-weighted asset ratio (CRAR) dropped slightly as of end-December 2015; 86 percent of the scheduled banks were able to maintain their CRARs at 10.0 percent or higher in line with Pillar 1 of the Basel III framework²⁵. Importantly, as evident from Chart 3.44, a quite substantial share of banking assets was concentrated in the CRAR²⁶ compliant banks at end-December 2015; 32 banks' CRARs were within the range of 10-16 percent and their assets accounted for nearly 68.0 percent of the total banking industry's assets, indicating a notable soundness of the banking industry.



Source: DOS, BB, Compilation: FSD, BB

The banking sector capital adequacy recorded a minor decline, in CY15, compared with that of the previous year, as evident from the movements of CRAR and Tier 1 capital. For example, at end-December 2014, the CRAR of the banking industry was 11.4 percent; the ratio stood at 10.8 percent at end-December 2015. Similarly, the Tier 1 capital ratio of the banking industry stood at 8.1 percent at end-December 2015 as opposed to 8.6 percent scored at end-December 2015.

²⁵ The minimum regulatory requirement for CRAR was 10 percent in 2015.

²⁶ Termed as capital adequacy ratio (CAR) under Basel II.

It is mentionable that Tier-1 ratios were 8.2, 7.9, 8.0, and 8.1 percent in the first, second, third and fourth quarters of CY15 respectively (Chart 3.45). It is also evident from the chart that the Tier-1 ratio recorded a fluctuating trend in CY15; nevertheless the ratio was much higher than the minimum regulatory requirement of 5.5 percent.

As of end-December 2015, under Pillar 1 of the Basel-III framework, risk-weighted assets (RWA) arising from credit risk accounted for nearly 87 percent of the total industry RWA, with the next positions being held by operational and market risks respectively (Chart 3.46).





Source: DOS, BB; Computation: FSD, BB



Source: DOS, BB; Computation: FSD, BB

Jurce. DOS, DD, Computation. 13D, DD

It is evident that Foreign Commercial Banks (FCBs) maintained the highest level of CRAR while Specialized Development Banks (SDBs) and Stateowned Commercial Banks (SCBs) could not maintain minimum regulatory capital requirements. Private Commercial Banks (PCBs) were able to maintain a steady rate of CRAR indicating a notable soundness in that segment [Chart 3.47].

Taking the cross-country scenario into account (Table 3.5), however, the capitalization of the banking sector of the country is still lower compared with the ratios of India, Sri Lanka and Pakistan.

Table 3.5 : International Comparison of Capital Adequacy Indicator							
Particulars	CAR/CRAR (%)						
	2010 2011 2012 2013 2014 2						
India	14.6*	13.5***	14.3*	12.7***	12.8***	12.7***	
Pakistan	14.0	14.1**	15.4****	15.5**	17.1****	17.9****	
Sri Lanka	14.9	14.5***	15.0***	16.3****	16.9**	14.2****	
Bangladesh	9.3	11.4	10.5	11.5	11.4	10.8	

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

3.9 Leverage Ratio

In order to avoid build-up of an excessive on- and off-balance sheet leverage in the banking system, a simple, transparent and non-risk based leverage ratio has been introduced under the Basel III framework released by BB on 21 December 2014. The leverage ratio is calibrated to act as a credible supplementary measure to the risk-based capital requirements. The leverage ratio is intended to achieve the following objectives: a) constrain the build-up of leverage in the banking sector which could damage the broader financial system and the economy; and b) reinforce the risk based requirements with an easy-to-understand, non-risk based measure.



Source: DOS, BB; Computation: FSD, BB

At end-December 2015, the minimum requirement for leverage ratio was 3.0 percent, on both solo and consolidated bases. As evident from Chart 3.48, against the regulatory requirement the banking sector was able to maintain a leverage ratio of 5.2 percent on a solo basis; out of 56 banks, 53 maintained leverage ratio of 3.0 percent or higher. On the other hand, in the case of consolidated data, out of 36 banks, 35 were able to fulfill the regulatory requirement.

3.10 Internal Capital Adequacy Assessment Process

Internal Capital Adequacy Assessment Process (ICAAP) focuses on banks' own internal review of its capital positions, aiming to reveal whether it has prudent risk management procedures and adequate capital to cover all the risks in their business. BB reviews and evaluates banks' ICAAP report and their strategies to ensure their compliance with the capital adequacy requirement under the Basel Framework. ICAAP emphasizes having dialogue or interaction between the regulator and banks, rather than being simply a one-sided compliance framework.

As a step towards implementation of Pillar 2 of the Basel Framework, BB provided banks with guidance to calculate the required capital against a number of significant risks and required them to submit the ICAAP report to BB. Earlier, banks were advised to submit their quantitative information regarding ICAAP for the year 2014 before May 31, 2015. Based on the findings of the ICAAP reports from banks and also from the findings of different departments of BB, bilateral meetings, called the SRP-SREP²⁵ dialogue, were held with 22 banks in late 2015. The banks were advised to readdress the errors in their capital adequacy calculation and prepare a supported capital plan where applicable.

²⁷ Supervisory Review Process - Supervisory Review Evaluation Process

3.11 Banking Sector Liquidity

The banking industry did not face any liquidity pressure in CY15, as indicated by a falling call money rate and low advance to deposit ratio (ADR). However, an increasing trend in the ADR was observed from the third quarter of CY15.

The liquidity stress of the banking sector which has been easing down since 2012 eased down further in CY15. 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 and ADR will be relatively higher. In CY15, ADR remained stable without showing any abrupt volatility, while the call money rate was in a falling spree, indicating an excess liquidity in the banking system.

Since the relation between deposits and loans depends 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 for banks. With a surge in ADR in the banking system in early 2011, banks were instructed in February 2011 to rationalize their ADRs within a prescribed level (maximum 85 percent and 90 percent for conventional and Islamic banks respectively) by June 2011. BB has been pursuing the policy and monitoring the ADRs of banks within that limit, other than a few exceptions.

The ADR of the banking industry, from the beginning of 2012, started declining from 81.1 percent to 71 percent in 2014. The drop was attributed to a relatively higher deposit growth compared with loans and advances growth. In CY15, the ADR remained in the same range as experienced in CY14, and the overall industry average remained stable at 71 percent. In CY15, the advances growth rate (14.8 percent) remained higher than the deposit growth rate (12.5 percent), but the growth in monetary terms remained higher for deposits than advances.



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

It is noteworthy that, like CY14, the ADR of the banking industry remained much below the benchmark set by BB in CY15. ADRs of local PCBs and FCBs increased marginally to 79.5 percent and 63.8 percent respectively in CY15 from 78.3 percent and 61.8 percent respectively in CY14. As of December 2015, only 8 banks had ADR above 85 percent, among which 3 are Islamic banks. This indicates that most of the banks are not facing any liquidity pressure. The cautious approach

that banks have adopted in disbursing loans and advances during the macroeconomic uncertainties of CY13 and CY14 might have still persisted, which partially explains the scenario. However, banks have been coming out of this cautious approach as evident from the higher growth rate of loans and advances in CY15.

The ADR ratio remained below the maximum allowable limit throughout the year, indicating



availability of sufficient liquidity in the market. The ADR started picking up at the end of the third quarter of CY15, which signals that business confidence and demand for loanable funds were growing. As an 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.

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

The liquidity position can be assessed by comparing the required and maintained Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR). The following table suggests that the banks maintained SLR well above their required level in CY15. However, the higher portion of SLR maintenance might be attributed to the tendency of the banks to seek safer investments than more risky loans and advances.

Table 3.6 : CRR and SLR for Banking Industry (End December, 2015)						
Bank Group	Required CRR	Maintained CRR	Required SLR	Maintained SLR		
SCBs	6.00	7.35	13.00	41.84		
PCBs	6.00	6.72	13.00	22.51		
FCBs	6.00	8.02	13.00	53.00		
SDBs	6.00	6.95	0.00	0.00		
Islami Banks	6.00	9.14	5.50	13.53		

Source: DOS, BB.

The interbank call money rate registered a sharp fall throughout the year. After an increase from



Source: Monthly Economic Trends, BB.

7.9 percent in December 2014 to 8.6 percent in January 2015, the call money rate kept falling to reach 3.7 percent in December 2015. This trend also suggests that there is no liquidity stress in the banking industry. Rather, falling call money rate along with a low ADR and higher level of SLR is an indication of excess liquidity in the system.

Banks held a large proportion of government securities in their portfolio in CY15.

3.12 Performance of Branches of Local Banks Operating Abroad

Banks licensed in Bangladesh are growing their share in the world financial system gradually, with 7 commercial bank branches, 5 representative offices and 76 branches of 34 exchange houses in 15 countries as of end-December 2015. The branches of commercial banks are mainly located in South Asia and the Middle East.

Two state-owned commercial banks and one private commercial bank are doing their overseas operation in India and United Arab Emirates (UAE) through seven branches to strengthen the overseas business network and smoothen the flow of wage-earners' remittances towards Bangladesh. In CY15, two new licenses for bank branches have also been issued from Bangladesh Bank for expanding overseas banking operations.

Overseas branches of local commercial banks, just as local branches, are carrying out core banking operations such as mobilizing deposits and extending credits. The branches are aiming to encourage Bangladeshi expatriates to remit their hard-earned money to the home country through official channels. Moreover, they are facilitating international trade services to Bangladeshi importers and exporters.

3.12.1 Assets Structure of Overseas Branches

Overseas branches of banks incorporated in Bangladesh experienced a significant growth in their total assets in CY15 compared with CY14.



Source: Scheduled Banks; Compilation: FSD, BB

The total assets of overseas branches of banks incorporated in Bangladesh were USD 400.7 million at end-December 2015, which was only 3.1 percent of total industry assets but USD 127.5 million higher than that of the previous year. The growth was mostly due to the increase in customer credit of USD 80.6 million, and cash and balances in Monetary Authority of USD 63.4 million over the previous year.

In CY15, the asset growth of the overseas branches was 46.7 percent. This remarkable growth was financed mainly by customer deposits of USD 242.1 million. Placements of these funds with the monetary authority and interbank market contributed around 28.7 percent of total assets. The share of loans and advances was 34.1 percent in CY15 which is 14.0 percentage points higher than that of the previous year. Two state-owned commercial banks contributed around 89.6 percent of total overseas assets of all Bangladeshi banks operating abroad. Their share of assets grew by 2.3 percent during CY15 as compared to their position in the previous year. However, the share of assets and liabilities of overseas bank branches are still insignificant, having only around 3.0 percent of the industry assets and liabilities, and focusing less concern for the entire financial system.

3.12.2 Liabilities Structure of Overseas Branches

In 2015, the total liabilities of the overseas branches increased by 52.3 percent in comparison with 2014.



Various deposit accounts constituted 68.5 percent of the total liabilities of overseas branches of Bangladeshi banks. Customer deposits increased by USD 79.5 million in CY15. The liabilities with the head office and other branches abroad constituted 18 percent of total liabilities. Other liabilities declined by 2.5 percent in the review year compared with that of the previous year.

3.12.3 Profitability of Overseas Branches

In 2015, the total aggregate net profit of the overseas branches increased by 1.4 percent from 2014.

The aggregate net profit of the overseas branches²⁸ of Bangladeshi banks during CY15 was USD 5.0 million, which is 0.07 million higher than that of the previous year. A large increase in asset size with a small increase in profitability resulted in a decreased ROA from 1.8 to 1.3 percent for the year 2015. Two state-owned commercial banks with their six overseas branches contributed 64.3 percent of total overseas profit, while one private bank with one branch contributed 35.7 percent.

3.13 Islamic Banking

In parallel with the conventional banking, Islamic banking is gaining share in the financial system of Bangladesh. At present, 8 Islamic banks are operating with 965 branches; in addition, 20 Islamic banking branches of 9 conventional banks and 25 Islamic banking windows of 7 conventional banks are providing Islamic banking services. Those 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.

3.13.1 Growth of Islamic Banking

Islamic banks are continuing with consistent growth over the last couple of years in terms of assets, deposits, investments (loans and advances);²⁹ and shareholders' equity.

²⁹ Islamic Shari'ah based banks term loans and advances as investments.

²⁸ Balances denominated in foreign currencies are translated into USD and recorded at the exchange rate taken from the January 2016 issue of Monthly Economic Trend, Bangladesh Bank as on 31 December 2015.



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

Chart 3.55 and 3.56 illustrate a consistent growth of the Islamic banking segment in CY15. Investments (loans and advances) grew by 18.6 percent (13.3 percent in CY14), while the overall growth of loans of the banking industry was 14.8 percent in CY15. The liability base also grew by 16.6 percent (20.8 percent in CY14), mostly due to a positive growth in the deposit base of 13.6 percent (21 percent in CY14) compared with the growth in the overall deposit base of the banking industry of 12.5 percent. The gross NPL ratio of the Islamic banks was 4.6 percent (4.9 percent in CY14), in contrast with 8.8 percent (9.7 percent in CY14) for the overall banking industry.

3.13.2 Market Share of Islamic Banks

The total market share of the Islamic banks was almost one-fifth of the total banking sector.



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

The aggregate share of Islamic banks (excluding Islamic banking branches/windows of conventional banks) remained almost same in CY15 as compared with that of CY14. Islamic banks possessed 18 percent (18 percent in CY14) of assets, 22 percent (21 percent in CY14) of investments (loans), 19 percent (19 percent in CY14) of deposits, 15 percent (16 percent in CY14) of equity and 19 percent (18 percent in CY14) of liabilities of the overall banking industry as of December 2015.

3.13.3 Profitability of Islamic Banks

Profitability ratios of Islamic banks remained steady in CY15. The key profitability indicator, ROA, of the Islamic banking sector was same as the overall banking sector; whereas, ROE was

higher than that of the overall banking industry; net income of the oldest and largest Islamic bank ranked second from the top in the entire banking industry.

In 2015, the net profit of Islamic banks increased by 12.0 percent from 2014. In contrast, the net profit of the overall banking sector was amplified by 31.7 percent in 2015 (-17.3 percent in 2014), mainly due to rescheduling of a significant portion of their classified loans and also the relatively stable business environment of the country in the reporting year. On the other hand, in the absence of an established Islamic bond market, these banks operate with a special liquidity requirement arrangement, and that may also help them to generate more income with higher loanable funds compared to conventional banks.



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

During CY15, Islamic banks contributed 18.8 percent of total industry profits. The profit income³⁰ to total assets ratio of Islamic banks reached 7.7 percent, which is higher than that of the conventional banking sector (interest income to total assets ratio of 6.2 percent).

On the other hand, the non-profit income to total assets ratio was only 1.0 percent as compared with the industry average of 2.7 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, equal to the overall banking industry in CY15, indicating a comparably efficient use of assets by the Shari'ah compliant banks. On the other hand, the ROE of the Islamic banking industry stood at 11.6 percent, which is higher than that of the overall banking industry ROE of 9.4 percent in CY15, indicating the higher earnings of Islamic banks and relatively lower equity position.

3.13.4 Islamic Banks' Liquidity

Islamic banks are allowed to maintain their statutory liquidity requirement (SLR) at a concessional rate compared with that of the conventional banks, as Shari'ah-compliant SLR eligible instruments are not widely available in the market. Islamic banks are required to maintain 6.5 percent and 5.5 percent of their total time and demand liabilities as CRR and SLR³¹ respectively.

³⁰ For Islamic Shari'ah based banks profit income means income (interest) from investment (loans and advances).

³¹ Refer to MPD Circular No. 02, dated-10/12/2013, and MPD Circular No. 01, dated-23/06/2014.



Chart 3.59 shows that Islamic banks are maintaining much higher SLR than the requirement. This may be because of less available Shari'ah compliant investment opportunities in Bangladesh, which was intensified by some macroeconomic issues prevailing in previous years.

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

The aggregate Investment-Deposit Ratio (IDR) of Islamic banks was 83.2 percent at end-December 2015, a bit higher from 82.9 percent at end-December 2014, but yet below the maximum admissible level of 90 percent.



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

The ADR of the overall banking industry was 70.7 percent³², lower than that of the Islamic bank group, 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 started in 2012, or from the Islamic Investment Bonds Fund issued by the Government.

Since the IDRs of Islamic banks were below the recommended maximum level of 90 percent, it indicates no sign of liquidity stress in these banks in CY15. To address the excess liquidity holding in the Islamic banks, Bangladesh Bank amended the 'Bangladesh Government Islami Investment Bond (Islami Bond) Policy, 2004'. The objective of such amendment was to develop a solid base for the Islamic bond market and also to channel excess liquidity into investments through Islamic bonds. The Debt Management Department of Bangladesh Bank also issued a circular for the introduction of the auction process of Islamic bonds, referring to a gazette notification of 18 August 2014.

With the amendment of the Islamic Bond Policy, the maturity period of Islamic bonds was refixed 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) through open auction, i.e., the profit earned by investing in these bonds will

³² Recommended maximum level is 85 percent.

be shared by the buyer and by the 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 eligible³³ individuals and institutions, and will be used as an instrument for repo operations.

In the case of selling Bangladesh Government Islami Investment Bonds (BGIIB), the government will have to share the profit (or loss) with the investing banks 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 a longer term and in specific projects, then this type of short-term bond would not be the right choice. 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 terms. It can be noted here that Bangladesh is yet to issue any Sukuk.

3.13.5 Capital Position of Islamic Banks

Under the Basel-III accord, given the minimum Capital to Risk-weighted Asset Ratio (CRAR) of 10 percent, a total of 7 out of 8 Islamic banks complied with the regulatory requirement in CY15.



The stronger capital base ensures that Islamic banks are strong enough to meet various kinds of shocks they are exposed to. Out of 8, 7 banks having a CRAR more than 10 percent in CY15. However, from 2006, one Islamic bank's CRAR remained negative on account of a historically huge cumulative loss and provision shortfall, and changed its ownership within a short span of time. This bank operating has been under а restructuring plan since 2008.

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

3.13.6 Remittance Mobilization by the Islamic Banks

In CY15, the Islamic Banking sector, with its only one-fifth share of banking sector assets, collected and mobilized almost one-third of total foreign remittances, distributing them throughout the country.

Besides conventional banks, Islamic banks also play a role in collecting foreign remittances and disbursing them among its beneficiaries across the country.

³³ 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.



Source: Developments of Islamic Banking Sector in Bangladesh, BB publication (quarterly); and Quarterly Report on Remittance inflow. Computation: FSD, BB.

In CY15, the total inward foreign remittance was BDT 1,200,848.1 million³⁴, of which BDT 379,503.9 million was collected and distributed by the Islamic Banking sector. Therefore, the Islamic banks accounted for a 31.6 percent share of remittances collected by the entire banking industry.

3.13.7 Classified Investments of Islamic Banks³⁵

Islamic banks also showed a better position regarding the classified investments to total investments ratio in the review year. The ratio was 4.6 percent, substantially lower than 8.8 percent for the overall banking industry in CY15. However, if only private commercial banks are considered rather than the overall banking industry, the ratio drops to 4.9 percent from 8.8 percent.



Islamic banks, therefore, had only slightly less NPL compared with their closest peer group (PCBs). The classified investment to total equity was 47.1 percent for Islamic banks, as compared with 60.8 percent for the overall banking industry, indicating that Islamic banks were more resilient in limiting possible losses from their investments (loans and advances) compared with the overall banking industry.

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

From the stability point of view, Islamic banks are less vulnerable to risks as 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 risk of their assets to their depositors, and thereby, in principle, discourage the shareholders from taking excessive risks compared with conventional banks. In other words, depositors may provide a degree of market discipline.

³⁴ 15316.94 Million USD, (1 USD = 78.40 BDT).

³⁵ The loans and advances are termed as investments in Islamic banks.

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 onto the shareholders. Moreover, when investment revenues are substantially higher, Islamic banks usually 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. On the other hand, the banks will do the opposite in years when investment revenues are low by reducing its own management (Mudarib) fee share to increase the share of distributions for the depositors.

3.14 Performance of New Banks

In terms of size, the nine (9) new banks incorporated in 2013 still accounted for a very small portion (around 3 percent) of the banking industry. Their assets were mostly concentrated in safer liquid investments. The asset quality of these banks remained high in CY15 as their NPL ratio was 0.24 percent while the NPL ratio of the industry stood at 8.8 percent. The trivial NPL ratio is mainly due to safer investments and the fact that their loans are new.

All the new banks are categorized as private commercial banks (PCBs) according to their pattern of ownership. Among them, only one bank conducts Sharia-based banking and other banks provide conventional banking services. Three of them are sponsored by Non-Resident Bangladeshis (NRBs).

The aggregate assets of these banks accounted for 2.9 percent of the total assets of the banking industry at end-December 2015. The ratio was 2 percent at the end of December 2014. In terms of loans and advances, the share of new banks reached 3.1 percent of the overall industry loans at end-December, 2015, while the share was 1.7 percent at end-December, 2014.

Loans and advances constituted the largest portion of the assets of these banks, and the proportion was slightly higher than the overall banking industry. At end-December 2015, loans and advances accounted for 62.7 percent of the total assets of these banks, whereas the ratio was 60.0 percent for the overall banking industry. The number of branches of these banks stood at 268 at end-December 2015, augmented from 174 branches at end-December 2014. Among these, 129 were rural branches. In terms of bank branches, new banks accounted for around 2.9 percent (268 out of 9397) of the banking industry at end-December 2015, while it was 1.9 percent (174 out of 9040) at end-December 2014.

Asset quality of the new banks at present seems sound as their NPL ratio was insignificant (0.24 percent). This result might be due to a couple of reasons. First, these banks' loans and advances portfolio may have grown only at rates commensurate with the deepening of their credit risk management skills. Second, as the loans were new, the quality of the loans did not deteriorate beyond the expected level. Finally, these banks relied more on safer liquid investments.

As these banks did not have much classified loans, their provision requirements were generated mainly from the standard (unclassified) loans. All these banks maintained their required provision as general provision, and the actual to required provision ratio was higher than 100 percent whereas the industry actual to required provision was 86.1 percent.

New banks registered sharp increase in their net profit in CY15 leading to a much higher profitability than the previous year. A higher proportion of safer investments ensured lesser risk weighted assets (RWA) resulting in higher CRAR than the industry average.

The new banks performed with higher profitability compared with the previous year. In CY15, their net profit increased drastically by more than 500 percent. Consequently, their ROA in CY15 (1.1 percent) was much higher than the banking industry (0.8 percent). Moreover, the new banks' ROE increased from 1.3 percent in CY14 to 7.8 percent in CY15, albeit remained lower than industry ROE (9.4 percent).



Source: DOS, BB; Computation: FSD, BB

Chart 3.65 depicts that the new banks performed better, in terms of generating net interest income, than the banking industry as a whole, but due to their relatively smaller portfolio size, they were not able to generate sufficient income. Due to these factors, ROE of new banks fell behind the industry level whereas ROA was higher owing to smaller asset base. However, the non-interest income to total asset ratio of new banks was at a similar level as the banking industry in CY15.

The capital to risk-weighted assets ratio (CRAR) of these banks was significantly higher than any other category of banks working in the industry. This is expected due to their relatively lower risk-weighted assets and the high minimum absolute equity capital requirement of BDT 4 billion for obtaining the license, which is large relative to their still-small, but growing, asset bases.



However, Chart 3.66 shows that CRAR dropped to 19.5 percent at end-December 2015 from 29.9 percent at end-December 2014. The decline in CRAR of new banks is happening because these banks were gradually expanding their banking business and their risk-weighted assets were gradually moving towards the comparable levels of RWAs prevailing in the overall industry.

Source: DOS, BB; Computation: FSD, BB

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

New banks had lower liquidity compared to the liquidity of banking industry as suggested by the higher advance to deposit ratio (ADR) in these banks.



Source: DOS, BB; Computation: FSD, BB

The new banks had higher liquidity compared with their peer group- PCBs, but lower compared with banking industry as a whole in 2015 as indicated by their ADR. The ADR of these banks (77 percent) were lower than PCBs (79.5 percent) but higher than that of overall industry (71 percent).

The declining trend in deposit rates, observed in the Chart 3.68, indicates that the banks did not engage in competition for mobilizing deposits against the established banks to an extent that could threaten financial stability. If the new banks had followed aggressive deposit-seeking activities at higher rates, the overall deposit rate of the industry would have been higher than the present rate.
Chapter 4

BANKING SECTOR RISKS

The banking sector of Bangladesh is becoming larger in size and also getting complex, with its diversified products, risk structures and interconnectedness. During the last three years, the overall risk of the banking sector, measured by Risk Weighted Asset (RWA) Density ratio, has shown a downward trend reflecting, in general, the banking industry's willingness to redirect its position from more to less risk taking activities.

With respect to credit risk mitigation, the amount of banks' rated exposures as well as the number of rated entities increased in CY15 over CY14. Credit ratings of corporate entities showed an overall upward migration according to the one-year transition matrix. These results indicate that the banking system was not that much exposed to any acute stability threats from the standpoint of corporate solvency over the reporting period.

In pursuit of an efficient risk management framework, Bangladesh Bank (BB) has introduced an integrated framework for managing various risks (e.g. credit risk, market risk, liquidity risk etc.) in line with the international best practices. Moreover, revised guidelines on internal control and compliance in banks, credit risk management and asset-liability management have been brought on board to minimize other types of risks³⁶.

For the purpose of risk analysis, a new categorization of banks has been considered in this chapter rather than traditional form of categorization - state-owned commercial banks (SCBs), state-owned development banks (SDBs), private commercial banks (PCBs) and foreign commercial banks (FCBs). In the new categorization, banks have been rearranged in the following five groups in terms of their financial health and orientation:

Table 4.1 : New Grouping of Banks for Analytical Purpose						
Group number	Description of the group	Number of banks	Share of assets in terms of the industry			
Group 1	Private commercial banks (Long-standing conventional banks)	22	44%			
Group 2	State-owned and Private commercial banks under special attention ³⁷	10	31%			
Group 3	Private commercial banks (Full-fledged Islamic banks)	7	18%			
Group 4	Foreign commercial banks	9	5%			
Group 5	Fourth generation ³⁸ private commercial banks	8	2%			

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

³⁶ Refer to BRPD Circular No. 02, dated 07/03/2016, and BRPD Circular No. 03 and 04, dated 08/03/2016.

³⁷ Banks operating under memorandum of understanding (MOU) or Directives of Bangladesh Bank (DOBB), which require more than the normal amount of supervision and suffer from various constraints inhibiting their performance, including poor asset quality, capital inadequacy and weak governance.

³⁸ Banks granted license in 2013 to operate as scheduled banks in Bangladesh (excluded one Islamic bank that is included in group 3).

4.1 Overall Risk Profile of the Banking Sector

The Risk Weighted Asset (RWA) Density ratio³⁹- defined as the ratio of RWA to total assets - has shown a downward trend over the last three years. As shown in Table 4.2, from the year 2013 to 2015, the ratio fell from 70.7 percent to 67.4 percent. The greater the weight of credit risk in a bank's balance sheet, the higher will be its RWA density ratio. The drop in this ratio reflects that the banking industry has been perhaps redirecting its activities from more risk-weighted products and business lines to less risk-weighted ones. Group-wise analysis demonstrates that the ratio has been decreasing over the last three years except for the fourth generation PCBs (group 5), which have showed an increasing trend. As these banks were expanding their business activities, their inherent risks also increased.

Table 4.2 : Risk Weighted Asset Density Ratio (Percent)					
Banks	2013	2015			
Group 1	82.95	81.48	80.08		
Group 2	54.10	51.73	49.30		
Group 3	66.73	65.24	63.06		
Group 4	85.40	84.31	78.25		
Group 5	50.68	69.84	78.28		
All Banks	70.70	69.20	67.40		

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

4.2 Credit Risk⁴⁰ Structure in Bangladesh

As of end-December 2015, the share of Risk Weighted Assets (RWA) attributed to credit risk was 86.5 percent of the total RWA of the banking system, whereas the RWA associated with market and operational risks were 4.5 and 9.0 percent respectively. The credit risk was mostly concentrated in the balance sheet exposures (87.3 percent). In CY15, RWA for credit risk as a ratio of total RWA increased by 0.8 percentage points over the previous year, while the same for market risk decreased by 0.8 percentage points. At the same time, the share of operational risk remained unchanged. The RWA for credit risk increased by 10.9 percent in CY15 over the previous year mainly due to credit growth, while market risk decreased largely due to a decrease in equity prices⁴¹.

³⁹ The RWA Density ratio is considered as a simple and quick measure of the weighted average relative risk of a bank's on- and off-balance sheet operations. However, there are some criticisms of this ratio for its significant divergences across banks and jurisdictions due to the inconsistency of risk measurement methodologies across jurisdictions. As RWA Density ratio, in this case, has been calculated for the whole banking sector under a single jurisdiction, there may have less bias in the result.

⁴⁰ 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.

⁴¹ Market risk capital charge (RWA for market risk) calculated through multiplying total value of equity measured in market prices of individual equities with the weight represented by CRAR for both specific and general market risk. Hence, a reduction in equity prices leads to a reduction in market risk.



The Capital to Risk-weighted Asset Ratio (CRAR) of the banking sector stood at 10.8 percent at end-December 2015 which is 51 basis points lower than that of the previous year. It appears that this decrease was not due to the deterioration of credit quality, as there was an improvement in the gross NPL ratio and also a decrease in the required provisions to outstanding loan ratio as at end-December 2015. Rather, this decrease appears to be due to the shift from Basel II to Basel III framework in CY15. Under the Basel III framework, banks are required to follow a more stringent procedure to calculate their total regulatory capital. For example, deferred tax assets has been excluded from regulatory capital, only a certain percent of general provision is allowed to include in the regulatory capital under the new framework. All these deductions resulted in a decrease in the growth of the total regulatory capital (numerator) compared to the RWA (denominator) of banks in CY15. In monetary terms, RWA of the banking industry for credit risk was BDT 6,008.4 billion (BS and OBS), while the same for market and operational risks were 313.7 billion and BDT 626.2 billion respectively.

In CY15, the top 5 banks' credit risk accounted for almost a quarter of aggregate credit risk, while the top 10 banks held more than 42 percent. Though, the total credit risk of the banking industry increased over the previous year, the distribution of the risk improved, i.e., the concentration of credit risk within top 5 and top 10 banks slightly decreased during the period.

Table 4.2 : Credit Risk in the Banking System				
Banks	Share in Industry Credit Risk	Share in Overall ⁴² Industry Risk		
Top 5 Banks	24.4	21.1		
Top 10 Banks	42.2	36.5		
All Banks	100.0	86.5		

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

⁴² Total of credit risk, market risk and operational risk.

Box 4.1: Distance to Default Analysis⁴³

Distance to default (DD), which is a measure of default risk of an institution is defined as the number of standard deviations that profit must fall to drive a bank into insolvency. Hence, a larger value means the lower risk of default. Distance to default is calculated as:

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

$$DD = Distance to Default$$

$$ROA = Return on Assets$$

$$E/A = Equity to Asset Ratio$$

$$\sigma_{ROA} = Standard deviation of ROA$$

Group-wise Distance to Default (DD) has been calculated for 43 Banks⁴⁴ operating in Bangladesh, over nine years ranging from 2007 to 2015, based on 31st December data of Return on Assets (ROA), Equity (E)⁴⁵ and Asset (A).





Chart B4.1.1 shows the volatility of return (ØROA) over the sample period. Though group-wise SCBs demonstrated the highest volatility, one PCB and one FCB, at individual level, registered more than five times the volatility of SCBs, which could be a matter of concern. The DD, depicted in Chart B4.1.2, shows that PCBs closely resembled the total industry default risk; SCBs had the highest while FCBs had the lowest default risk. Though the default risk of SCBs increased further in CY15 compared with CY14 level, default risk of the total banking industry remained almost stable.

The group-wise analysis of credit risk (Table 4.4) shows that Group 1 with 22 banks, possessing 43.5 percent of total assets, contained more than half of the credit risk, and 45 percent of overall industry risk. Group 2 with 10 banks, on the other hand, possessed 30.8 percent of the assets, but contained only a little more than one-fifth of the credit risks, and 18.8 percent of overall industry risk. The remaining groups contained risks similar to their asset shares. Thus, the credit risk in the banking system was, indeed, mostly concentrated in the conventional private commercial banks and state-owned banks operating under special attention.

⁴³ This exercise is an extension of the same done in CY14 (See Box 3.5 in Chapter 3 of FSR 2014).

⁴⁴ Two SDBs, two SCBs (previously categorized as SDBs) and banks incorporated in 2013 were excluded.

⁴⁵ Tier 1 Capital.

Table 4.4 : Group-Wise Dissection of Credit Risk in the Banking System				
Banks	Share in industry credit risk	Share in overall industry risk		
Group 1	52.1	45.0		
Group 2	21.7	18.8		
Group 3	17.7	15.4		
Group 4	5.7	4.9		
Group 5	2.8	2.4		
Total	100.0	86.5		

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

4.3 Market Risk⁴⁶ Structure Under Basel III

Under Basel III, the sources of market risk are mainly attributed to the risks pertaining to interest rate related instruments and equities in the trading book as well as foreign exchange risk in both the banking and the trading book. In the total risk structure, market risk decreased from 5.3 percent in CY14 to 4.5 percent in CY15⁴⁷. Equity price risk constituted the highest share (48.7 percent) in the market risk structure in CY15 followed by interest rate risk (32.7 percent) and foreign exchange rate risk (18.6 percent).





Group-wise analysis of market risk reveals that Group 1 with 22 banks and Group 2 with 10 banks were jointly exposed to almost ninety percent of total interest rate risk and equity price risk in CY15, as these banks possessed 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, possessed only about one-fifth of the exchange rate risks. Foreign banks and forth generation commercial banks did not considerably contribute to market risk exposure in the system.

⁴⁶ Market risk can be defined as the risk of loss in on- and off-balance sheet positions arising from movements in market prices.

⁴⁷ In CY14, market risk was calculated under Basel II.

Table 4.5 : Group Wise Dissection of Market Risk in the Banking System (Percent)					
Banks	Share in Industry Interest Rate Risk	Share in Industry Equity Price Risk	Share in Industry Exchange Rate Risk		
Group 1	47.7	53.5	34.0		
Group 2	40.4	35.4	37.5		
Group 3	0.0	9.7	22.8		
Group 4	5.8	0.0	2.8		
Group 5	6.1	1.4	2.8		
Total	100.0	100.0	100.0		

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

4.3.1 Interest Rate Risk (IRR)⁴⁸

As of end December 2015, the share of risk weighted assets (RWA) assigned to interest rate risk (IRR) was only 1.5 percent of total RWA in the banking system, while IRR contributed 32.7 percent of the RWA related to market risk. The banks' capital charge for interest rate risk was BDT 10.3 billion in CY15 which was BDT 10.8 billion in CY14. The top 5 (five) banks contained almost 53.2 percent of industry interest rate risk. Three SCBs and two PCBs were ranked in the top 5 in terms of capital charges for IRR in the banking system. In CY15, both the top 5 and top 10 banks displayed increases in IRR compared with that of the previous year due to increases in trading book assets.

Table 4.6 : Interest Rate Risk in the Banking System (Percent)					
Banks	Interest Rate Risk	Share in Market Risk	Share in Overall Risk		
Top 5 Banks	53.2%	17.4%	0.8%		
Top 10 Banks	72.1%	23.6%	1.1%		
All Banks	100.0%	32.7%	1.5%		

Source: DOS, BB; Computations: FSD, BB.

4.3.2 Exchange Rate Risk⁴⁹

Table 4.7 shows that the share of RWA assigned to exchange rate risk was 0.8 percent of total RWA in the banking system as at end-December 2015, whereas it was 18.6 percent of the market risk. The banks' capital charge for exchange rate risk declined to BDT 5.8 billion as at end-December 2015 from BDT 6.2 billion as at end-December 2014. However, top 10 banks were exposed to 67.5 percent of the industry's exchange rate risk. In particular, three SCBs and two PCBs were found in the top 5 positions with regard to exchange rate risk.

⁴⁸ Interest rate risk can be defined as the current or potential risk to the interest sensitive assets and liabilities of a bank's balance sheet as well as off-balance sheet items arising out of adverse or volatile movements in market interest rate.

⁴⁹ Exchange rate risk can be defined as the variability of a firm's earnings or economic value due to changes in the rate of exchange. In other words, this is the risk of 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.

Table 4.7 : Exchange Rate Risk in the Banking System (Percent)						
Banks	Exchange Rate Risk	Share in Market Risk	Share in Overall Risk			
Top 5 Banks	51.9	9.6	0.4			
Top 10 Banks	67.5	12.5	0.6			
All Banks	100.0	18.6	0.8			

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

4.3.3 Equity Price Risk⁵⁰

As at end-December 2015, the share of RWA assigned to equity price risk was 2.2 percent of total RWA in the banking system, while it was 48.7 percent of market risk. The banks' capital charge for equity price risk was nearly BDT 15.2 billion as at end December 2015, nearly 1.5 billion lower than that of the previous year end. The top 10 banks contained 67.3 percent of industry equity price risk arising from the movement of equity prices. This was slightly lower than that of the previous year, when the top 10 banks were exposed to 68.6 percent of industry equity price risk. It can be noted that three SCBs, one SDB and one PCB occupied the top 5 positions from the perspective of equity price risk.

Table 4.8 : Equity Price Risk in the Banking System (Percent)						
Banks	Equity Price Risk	Share in Market Risk	Share in Overall Risk			
Top 5 Banks	41.7	20.3	0.9			
Top 10 Banks	67.3	32.8	1.5			
All Banks	100.0	48.7	2.2			

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

Box 4.2 : An Analysis of Systemic Risk in Bangladesh Banking Sector: Systemic Contingent Claims Approach (SCCA)

An important feature of the Basel III accord is that it incorporates systemic risk into the capital requirement. Both Basel I and Basel II approached for solvency of each individual bank independently. They did not incorporate the systemic solvency risk into the capital requirement. Since the financial crisis of 2007-2008, the ongoing concern among risk managers has been how financial risk is transmitted through the financial system and how it affects overall financial stability. Bangladesh Bank has conducted an empirical study⁵¹ on 29 listed private commercial banks having almost 64.1 percent of the aggregate assets of the banking industry as of end-December 2015. (Continued)

⁵⁰ Equity price risk is the possible risk of 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.

⁵¹ First, the study measures the expected loss of individual bank by using CCA model. Second, it quantifies the joint expected loss by employing Systemic CCA. Finally, it measures the joint expected shortfall, applying the conditional value-at-risk (CVaR) method.

The empirical results reveal that the systemic solvency risk measured by the joint expected shortfall (12 quarters' average) represents 0.525 percent of the aggregate risk-weighted assets of these banks.

The study found that: (i) the joint expected $loss^{52}$ of these banks is BDT 161.1 billion; (ii) the joint expected shortfall⁵³ is BDT 25.7 billion at a 95% confidence level; (iii) the multivariate dependence function is 0.3291, indicating that these banks have systemic dependence among



them; (iv) the correlation between the banking industry performance and the overall DSE market is 0.86, which hints that these banks are highly correlated with the market; (v) the DSE market Sharpe (i.e. excess return divided by standard deviation) ratio is 0.1305 ; (vi) the risk premium of the banking industry is 0.1126; (vii) the regulatory capital to risk-weighted asset ratio (CRAR) of 29 banks is 12.23

percent, while the CCA⁵⁴ CAR (Equity Market Capitalization/Market Value of Assets) is 10.95 percent, which is 1.28 percent less than CRAR.

The study furthermore forecasts the joint expected losses and joint expected shortfall for the year of 2016. Considering the normal scenario, it shows that joint expected losses of 29 banks would be BDT 171.7 billion. The joint expected losses would be BDT 171.9 billion if the market Sharpe ratio went down by 25 percent and the assets and liabilities decreased by moving average growth rate plus one standard deviation. Similarly, the joint expected shortfall would be BDT 29.6 billion in the case of a normal scenario, and BDT 31.6 billion in the case of a worst scenario.

			(BDT IN DIIIIONS)	
Systemic Risk		2016 Forecast		
		Normal Scenario	Worst Scenario	
Joint Expected Loss		171.7	171.9	
Joint Expected Shortfall		29.6	31.6	
Note 1: Normal Scenario: Who Ban as p		en DSE market Sharpe ratio remaiı k Balance Sheet increases by the l er historical trend.	ns the same as previous years and Moving Average (MA) growth rate	
Note 2: Worst Scenario : Whe Bala histo		en DSE market Sharpe ratio decreases by 25 percent and Bank ance Sheet increases by MA minus 1 Standard Deviation (SD) as per torical trend.		

⁵² Expected Loss = Probability of Default * Loss Given Default * Present value of default-free value of Debt.

53 Expected Shortfall = Conditional Value-at-Risk (CVaR)

⁵⁴ CCA = Contingent Claims Approach.

4.4 Operational Risk⁵⁵

Data as at end-December 2015 indicates that the share of RWA assigned to operational risk was 9 percent of the total RWA of overall banking system, almost same as the end-December 2014. Given the CRAR of overall banking sector of 10.8 percent, the banks' capital charge for operational risk was BDT 62.6 billion as at end December 2015. The top ten banks were exposed to 45 percent of industry operational risk, and the remaining 46 banks contained 55 percent. At end-December 2015, the top ten banks' share of total operational risk was almost the same as that of end-December 2014.

Table 4.9 : Operational Risk Under Basel II Basic Indicator Approach (Percent)				
Banks	Share in industry operational Risk	Share in Industry Overall Risk		
Top 5 Banks	28.5	2.6		
Top 10 Banks	45.4	4.1		
All Banks	100.0	9.0		

Source: DOS, BB; Computation: FSD, BB

Group-wise analysis of operational risk (Table 4.10) demonstrates that, in CY15, three-fourths of the operational risk of the system was confined within the Group 1 and Group 2 banks. However, their share in the overall industry risk was about 6.6 percent only.

Table 4.10 : Group-wise Dissection of Operational Risk in the Banking System (Percent)				
Banks	Share in Industry Operational Risk	Share in Overall Industry Risk		
Group 1	50.3	4.5		
Group 2	22.7	2.1		
Group 3	14.8	1.3		
Group 4	10.7	1.0		
Group 5	1.5	0.1		
Total	100.0	9.0		

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

4.5 Risk Mitigants

Credit ratings are viewed as one of the inputs into the risk assessment process which, combined with banks' own credit analysis, may assist banks to mitigate their credit risk effectively. Further increase in banks' exposures that were rated and achieved the highest credit rating (BB rating grade 1) in CY15 is an encouraging sign from the viewpoint of credit risk mitigation.

⁵⁵ Operational Risk can be 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. Under Basel III, two methods - the Basic Indicator Approach (BIA) and the Standardized Approach (TSA) - have been recommended for calculating operational risk capital charges. Banks in Bangladesh are now implementing BIA, although they are allowed to adopt TSA subject to attaining the qualifying criteria stipulated under the Basel III framework.

Like Basel II, Basel III also allows banks a choice between two wide-ranging methodologies for calculating their capital requirements in relation to credit risk: the standardized approach and the internal rating based (IRB) approach. For the convenience and simplicity in its calculation, the former has been adopted by all the banks in Bangladesh. This approach requires credit ratings⁵⁶ of banks' corporate clients or entities by external credit assessment institutions (ECAIs) recognized by BB. As of end-December 2015, eight (08) credit rating companies, licensed by Bangladesh Securities and Exchange Commission (BSEC), have also been accorded the status of ECAIs by BB.



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

The banking sector of Bangladesh has exposures to non-financial corporations as well as banks and non-bank financial institutions (NBFIs). Under the standardized approach, these exposures are required to be rated by ECAIs for determining the capital requirements against credit risks. The better the ratings of the exposures, the less vulnerable the banks are to default risk.

As at end-December 2015, corporate exposures of the banking system was BDT 3580.54 billion, out of which 66.5 percent was rated and 19 percent of rated exposures carried the best rating⁵⁷, BB rating grade 1(BB RG1). This shows an improvement over end-December 2014, when 60.1 percent was rated and 11.5 percent of it carried BB RG1. Banking sector exposures to banks and NBFIs in CY15 stood at BDT 664.75 billion. During this period, rated exposures reached at 84.8

⁵⁶ 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.

⁵⁷ 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 is the worst.

percent from 81.6 percent in CY14. Out of the rated exposures, 36.1 percent received BB RG1 in CY15 compared with 33.7 percent in the preceding year. In summary, rated exposures to both corporate, and banks and NBFIs increased in CY15, while showing an improvement in achieving BB RG1 in both sectors, indicating an improvement from the standpoint of financial stability.

Banks, however, use a number of techniques to mitigate the credit risk to which they are exposed to. Their 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) that include legal, operational, liquidity and market risks. In this context, credit rating is only an auxiliary tool in the credit information continuum that could assist banks in their own credit analysis and, if properly utilized, could facilitate banks to move away from collateral-based lending to risk-based lending.

4.6 The Credit Rating Transition Matrix

A stable credit rating along with very little downward migration of ratings in 2014-2015 indicates the resilience of the financial system from the standpoint of corporate solvency.

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

Table 4.11 : One Year Transition Matrix (2014-2015) ⁵⁸						
From 2014		To 2015 rating*				
Rating*	1	2	3	4	5	6
1	56 (100.0%)	-	-	-	-	-
2	4 (4.1%)	92 (94.9%)	1 (1.0%)	-	-	-
3	-	15 (10.5%)	127 (88.8%)	1 (0.7%)	-	-
4	-	-	3 (13.6%)	18 (81.8%)	1 (4.6%)	-
5	-	-	-	-	2 (100.0%)	-
6	-	-	-	-	-	-

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

The transition matrix of 2014-15 shows a very stable credit rating scenario where most of the corporate entities (around 99.1 percent or 317 out of 320) was able to maintain either their previous rating or upgrade to higher rating categories. The magnitude of downward migration was relatively lower with only 0.9 percent during 2014-2015 compared with 2.8 percent during

⁵⁸ Analyses considered the entity-wise long-term rating under surveillance category. The 4th quarter ratings of 320 entities of Argus, CRAB, CRISL and ECRL in 2015 and 2014 have been compared.

2013-2014. At the same time, 6.9 percent of the entities migrated to higher rating categories during 2014-15 whereas it was only 3.7 percent during 2013-14. It is a good sign that the number of upgraded entities was much higher than that of downgraded entities during 2014-15. Around 92 percent of the total entities secured a rating of 3 or higher in 2015 indicating a low to moderate level of credit risk in the financial system. It is noteworthy that the number of rated corporate entities increased from 216 to 320 during 2014-15 over 2013-14. This increase in number may have provided more reliability to the analysis of the transition matrix.

Table 4.12 : One Year Transition Matrix (2013-2014) ⁵⁹						
From 2013			To 20 ⁻	14 rating*		
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: BRPD, BB; Computation: FSD, BB. * Rating grades are BB equivalent.

The stable credit rating transition matrix, along with very little downward migration, indicates a stable and resilient financial system. No immediate threat of credit risk shock in the financial sector is expected from the credit exposures to the non-financial corporate entities. It also shows no major instability in the economy, which is evident from a less volatile macroeconomic outlook in 2015⁶⁰.

⁵⁹ 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.

⁶⁰ The stability of ratings, indeed, does not necessarily mean that they are accurate. The reliability of such ratings lies with the reliability and accuracy of the assessment process employed by credit rating companies, which also in turn leads to the reliability of this analysis. However, this analysis is subject to survivorship bias. Only the entities with stable performance might wish to be rated subsequently, whereas many entities with poor performance might decide not to be rated again and therefore are not covered under the above transition matrix.



STRESS TESTING

Stress tests are conducted by Bangladesh Bank, on all scheduled banks and financial institutions, to assess the resilience of those institutions to different extreme but plausible shock scenarios. Bangladesh Bank (BB) also monitors the stress tests, to gauge the resilience of individual institution 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 CRAR⁶¹ is compared with the minimum regulatory requirement of 10 percent⁶². Particular attention is paid to credit risk, which is the major risk in the banking sector.

At present, Bangladesh banking sector consists of 56 scheduled banks. Banking sector data reveals that, out of 56 scheduled banks, 8 had a Capital to Risk-weighted Assets Ratio (CRAR) of less than the minimum regulatory requirement as of end-December 2015. It is mentionable that, out of 8 non-compliant banks, 4 had negative CRAR due to a cumulative loss and provision shortfall. However, the remaining 48 banks were able to meet the minimum regulatory limit of CRAR.

5.2 Credit Risk

A number of tests, for credit risk, were conducted to assess the impact of different shocks on banks' capital. Generally, the ratio of NPL⁶³ 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: CRAR and NPL Ratio after Shocks (Percent)					
Banking System	Required Minimum CRAR	Maintained CRAR	Gross NPL Ratio		
Banking System	10.00	10.84	8.79		
Stress Scenarios ⁶⁴ :					
Shock-1: NPL increased by 3%	10.00	10.01	9.05		
Shock-2: NPL increased by 9%		7.89	9.58		
Shock-3: NPL increased by 15%		4.41	10.11		
Source: ESD BB					

Source: FSD,BE

⁶¹ CRAR-Capital to Risk-weighted Assets Ratio

⁶² The results are based on the unaudited data for the calendar year ended at December 2015.

63 NPL (Non-performing loan) means aggregate of loans in the substandard, doubtful, or bad/loss category.

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



In figure 5.1, historical gross NPL ratios of 4 quarters of Calendar Year 2015 (CY15), are illustrated with a green and the dotted red line shows the stressed NPL ratio. Under the minor shock situation, the banking sectors' gross NPL ratio is likely to rise to 9.05 percent from the current level of 8.79 percent. Consequently, the banking sector CRAR would have declined to 10.01 percent.

Source: FSD,BB

The results also reveal that 7 out of 48 banks may become undercapitalized; the CRAR of 13 banks would decrease by 1.0 percentage point or more.

Table 5.2 : Stress Tests for Credit Risk: Default by Largest Borrowers						
			(Percent)			
	Required Minimum CRAR	Maintained CRAR	After-Shock CRAR			
Banking System	10.00	10.84				
Stress Scenarios						
Shock-1: 3 largest borrowers			9.05			
Shock-2: 7 largest borrowers			7.47			
Shock-3: 10 largest borrowers			6.79			

Source: FSD, BB

The *second test* was done on the credit concentration risk of banks to measure the effect of default by top borrowers for each bank. Under the assumed scenarios of bank wise default of the three largest individual/group borrowers, the system would not be able to withstand this shock. At the individual bank level, 21 out of 48 banks would likely become undercapitalized. The CRAR for 26 of the remaining 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)					
	Required Minimum CRAR	Maintained CRAR	After-Shock CRAR		
Banking System	10.00	10.84			
Stress Scenarios					
Shock-1: 3% of performing loans directly downgraded to bad/loss					
Shock-2: 9% of performing loans di	10.69				
Shock-3: 15% of performing loans direct	10.59				
Source: FSD, BB					

In the *third test*, shock was given to performing loans of selected business sectors such as readymade garments (RMG), textiles, ship building, ship breaking, real estate (residential and commercial), construction, power and gas, transport, storage and communication, capital market, consumer credit, etc. Data at end-December 2015 reveals that the RMG sector had the highest exposure (8.63 percent of the total loans). Yet, risk potential from this sector would be minimal. If an additional 3 percent of this sector's loans become non-performing (bad/loss), the banking sector CRAR is likely to decrease to 10.79 percent, but would still be lying above the minimum regulatory requirement. Therefore, sectoral concentrations of loans, under a minor shock, would have only a trivial impact on capital.

The *fourth test* deals with the fall in the forced sale value (FSV) of collateral, mortgaged against loans. The FSV of mortgaged collateral was given shock to decline by 10, 20 and 40 percent. The result, due to this shock, revealed that 2 out of 48 banks would likely become undercapitalized.

The *fifth test* assumes negative shifts in the existing NPL categories, due to some adverse events for the banks, which result in more provision requirements. The uniform shocks are 5, 10 and 15 percent downward shift in the NPL 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 of the first level of shock revealed that 3 out of 48 banks are likely to become undercapitalized. The CRAR for 1 bank would have also decreased by 1.0 percentage point or more.



Source: FSD, BB

The results suggest that credit risk is the most dominant one in terms of its impact on CRAR. Based on the data as of end-December 2015, the sensitivity analysis on the banking sectors' credit portfolio reveals that the banking sector is relatively less resilient when different types of credit shocks are applied. Out of 48 banks, due to default of the largest borrowers, 21 banks would become undercapitalized. Due to an increase in NPL, 7 banks would fall short of minimum capital requirements, and due to a combined credit shock, 8 banks would become undercapitalized. In brief, default of the largest borrowers is likely to have the highest impact on the banks' soundness.

5.3 Liquidity Risk

The liquidity stress test considers excess withdrawal of demand and time deposits both in local and foreign currency⁶⁵. A bank is considered to be well-liquid if it can survive (after maintaining SLR⁶⁶) up to 5 consecutive days under a stressed situation. Standard shocks are 2, 4 and 6 percent withdrawal of deposit, in excess of bank's normal withdrawal⁶⁷. However, withdrawal is to be adjusted with available liquid assets (excluding SLR).

Table 5.4 : Stress Tests: Liquidity Risk						
Liquidity Stress:	Stress Scenarios					
Consecutive 5 working days	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: FSD, BB

The results of the above table reveal that the individual banks and the banking system, as a whole, are likely to be resilient against specified liquidity stress scenarios.

5.4 Market Risk

The banking industry was found to be fairly resilient in the face of various market risk shocks (interest rate, exchange rate and equity price movements). The CRAR of none of the banks would be impacted much under the exchange rate shock. However, 3 and 2 banks are likely to be become undercapitalized due to interest rate shock and equity price shock respectively.

Table 5.5 : Stress Tests: Interest Rate Risk (Percent)					
	Required Minimum CRAR	Maintained CRAR	After-Shock CRAR		
Banking System	10.00	10.84			
Stress Scenarios :					
Shock-1: 1% increase in interest rate			10.41		
Shock-2: 2% increase in interest rate			9.98		
Shock-3: 3% increase in interest rate			9.54		
Source: ESD PP					

Source: FSD, BB

- 66 SLR= Statutory Liquidity Requirement
- 67 Withdrawal means only deposit outflow

⁶⁵ A liquidity stress test in the context of banks in Bangladesh 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 bank).

Table 5.6 : Stress Tests: Exchange Rate Risk (Percent)					
	Required Minimum CRAR	Maintained CRAR	After-Shock CRAR		
Banking System	10.00	10.84			
Stress Scenarios :					
Shock-1: Currency appreciation/dep	preciation by 5%		10.80		
Shock-2: Currency appreciation/dep		10.75			
Shock-3: Currency appreciation/dep	preciation by 15%		10.70		

Source: FSD, BB

Table 5.7 : Stress Tests: Equity Price Risk (Percent)					
	Required Minimum CRAR	Maintained CRAR	After-Shock CRAR		
Banking System 10.00		10.84			
Stress Scenarios :					
Shock-1: Fall in the equity prices by	10%		10.58		
Shock-2: Fall in the equity prices by 20%			10.32		
Shock-3: Fall in the equity prices by	40%		9.79		

Source: FSD, BB

The results of the above stress tests demonstrated a considerable resilience of the banking sector to adverse scenarios. Most of the banks were able to maintain a sufficient capital buffer that enabled them to absorb adverse shocks and maintain the sector's overall CRAR above the regulatory requirement of 10 percent even in stressed scenarios. The liquidity stress test also revealed banks' resilience to various liquidity shocks. However, concentrated exposures to largest borrowers are likely to create significant risk and require vigilant monitoring.

5.5 Resilience of the Financial Institutions

The financial institutions' (FI) 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 collaterals against loans and leases, an increase in NPLs under bad/loss category (in particular, two sectors where the FI has the highest exposure), and an increase in NPLs due to the default of 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 FI is denoted as the Infection Ratio. An Infection Ratio, which can completely erode the regulatory capital of the FI 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 the 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 FI 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 FI 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 2015 data, revealed that out of 32 Fls, 4 were positioned in green and 18 in yellow zone. Therefore, 22 Fls would have performed as resilient institutions during October-December 2015 quarter. On the other hand, 10 Fls were positioned in red zone. 4 Fls were shifted from red zone to yellow zone in December 2015 quarter.

Source: DFIM, BB

However, a majority of the FIs would remain resilient in the face of different shock scenarios.

Chapter 6

FINANCIAL INSTITUTIONS

6.1 Introduction

The financial institutions (FI) 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 FI sector consists of specialized financing companies, leasing companies, investment companies, merchant banks, etc.

As of end-December 2015, 32 FIs are operating their business across the country; 3 of these are government-owned, 19 privately-owned local companies, and the remaining 10 are established under joint venture with foreign participation. FIs are operating with 211 branches throughout the country.

6.2 Funding Sources



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

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

In Calendar Year 2015, the borrowings and deposits of FIs increased by 3.5 and 29.5 percent respectively while capital decreased by 2.0 percent, compared with those of the previous year.

Source: DFIM, BB

6.3 Deposit Safety Net

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

6.4 Assets Composition



In CY15, total assets of FIs increased by 17.5 percent, compared with that of CY14. The major portion of FIs' funds was deployed in loans and leases, which was 73.4 percent of total assets. On the other hand, cash and balances with banks/FIs, investments, and all other assets (including fixed and non-financial assets) comprised 15.5 percent, 3.3 percent, and 7.8 percent respectively of total assets.

Source: DFIM, BB

	Table 6.1 : FIs' Sector-Wise Loans & Leases as of End-December 2015					
			(BD	T in Billion)		
SI.	Major Sectors	Amount	Percent	HHI*		
1	Trade and Commerce	77.5	17.0	289		
2	Housing	79.4	18.0	324		
3	Power, Gas, Water and Sanitary Service	44.0	10.0	100		
4	Textile	21.2	5.0	25		
5	Iron, Steel and Engineering	23.5	5.0	25		
6	Transport and Aviation	17.3	4.0	16		
7	Food Production and Processing Industry	18.7	4.0	16		
8	Garments and Knitwear	18.4	4.0	16		
9	Margin Loan	14.8	3.0	9		
10	Merchant Banking	16.6	4.0	16		
11	Agriculture	8.1	2.0	4		
12	Others (including other sectors with minor share)	108.9	24.0	576		
	Total	448.4	100.0	1,416		

* HHI = Herfindahl-Hirschman Index

The calculated Herfindahl-Hirschman Index (HHI) indicates that FIs' loans and leases were moderately concentrated⁶⁸ during CY15. The housing sector, in particular, comprises 18 percent of total loans and leases, while the trade and commerce sector accounts for 17 percent.

⁶⁸ HHI lying between 1000-1800 points indicates moderate concentration.

6.5 Asset Quality

The ratio of non-performing loans and leases to total loans and leases increased to 8.9 percent in CY15, 3.6 percentage points higher than the level recorded in CY14. In fact, the higher non-performing assets ratio of the industry attributed to high level of non-performing assets of three FIs. As a part of intensive monitoring, BB had to assign observers to those FIs and instructed to reconstruct their Boards.



Source: DFIM, BB

During CY15, loan loss provisions amounting to BDT 14.2 billion was maintained by FIs, against a requirement of BDT 19.8 billion, representing a coverage ratio of 35.5 percent of non-performing loans and leases, 20 percentage points lower from what was recorded in CY14. Indeed, three FIs with high level of non-performing assets were not able to maintain required provision, which in turn led to the provision shortfall in the industry.

6.6 Capital Adequacy

The capital adequacy ratio (CAR), as per Basel II accord, reached at 18.7 percent at end-December 2015, compared with 21.2 percent recorded at end-December 2014. The total capital decreased



by 2.0 percent compared with that of the previous year as one FI was not able to maintain the regulatory minimum requirement while another suffered from negative reserves and retained earnings.

However, disregarding these two issues, the overall CAR was well in excess of the regulatory minimum requirement of 10.0 percent.

Source: DFIM, BB

6.7 Profitability

Major portion of income of FIs was generated from loans and leases. Interest on deposits and borrowings was the major outlay of total expenses. FIs' profit before taxes increased by 6.3 percent in CY15, mainly due to 66.5 percent increase in investment income, 16.8 percent increase in net interest income and 7.9 percent increase in other operating income. However, income from commission and brokerage decreased by 15.0 percent. On the other hand, operating expenses, loan loss provisions and tax provisions increased by 20 percent, 73.5 percent and 11.8 percent respectively, compared with those of the previous year. Consequently, the profitability ratio lines (ROA, ROE) show a decreasing trend compared with that of the previous year. The return on assets (ROA) and the return on equity (ROE) was 1.6 percent and 9.8 percent respectively at end-December 2015.



Source: DFIM, BB

6.8 Liquidity

FIs, taking term deposits, are required 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. FIs, operating without taking term deposits, are required to maintain an SLR of 2.5 percent and are exempted from maintaining CRR.

As of end-December 2015, the FIs sector maintained a 2.7 percent CRR and 23.5 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 the components of SLR. For this reason, the SLR maintained by the FIs was higher than the amount required. However, 5 FIs failed to maintain minimum CRR in different months during CY15.

The financial institution 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 enhancing financial intermediation to meet the growing needs of investments in the country.

Chapter 7

FINANCIAL MARKETS

7.1 Money Market

During 2015, the money market was dominated by the banks. Bangladesh Bank (BB) provided Liquidity Support Facilities (LSF) to banks up to May 2015 to bolster their liquidity. The Repurchase Agreement (Repo) and Special Repo auction were suspended in 2012 and July 2014 respectively.

7.1.1 Repo Market (With Bangladesh Bank)

The financial institutions collectively became net lenders to the central bank (in the form of reverse repo). Earlier they were net borrowers (in the form of LSF). It signifies a structural change in both the financial intermediaries' strategic position and the central bank's monetary policy stance.



Source: BB Website, Economic Data, and MPD. Calculation: FSD, BB In the early part of 2015, turnover of both the Special Repo and LSF were very low. Indeed, LSF was finally suspended in May 2015 and Special Repo facilities had also not been utilized by the banks since July 2014. In contrast, investment of banks in the reverse repo started to increase since middle of the year to sweep up the extra liquidity. It reached the peak of BDT 236.1 billion on 5th July 2015 while borrowing of banks, in the form of LSF peaked at BDT 51.5 billion on 15th February 2015.

7.1.2 Interbank Repo Market

A drop in the volume of interbank repo was observed in the middle of 2015. The interbank repo rate (monthly weighted average) decreased by 449 basis points from January 2015 to December 2015. The volume also decreased drastically in the first half of 2015, while volatility was observed in the second half. An increasing volume of interbank repo, over the year, suggests that the market players are becoming less interested in collateralized transactions despite the falling rates.

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



which amounted to BDT 4369.9 billion in 2015, showed a 12.0 percent growth from 2014. Volume of transactions declined since March 2015 and remained low throughout the rest of the year. The interbank repo rate steadily decreased and reached to the lowest 3.2 percent⁶⁹ in November 2015 since December 2010. Excess liquidity seemed to be eminent throughout the year in 2015.

Overall interbank repo transactions,

Source: BB website, Economic Data. Calculation: FSD

A rise in banks' investment in reverse repo and the de-emphasis on the LSF by BB, through focusing more on the BB Bill, reduced excess liquidity in banks and helped manage inflationary pressure through cautious movement.

7.1.3 Interbank Call Money and Interbank Deposit Market⁷⁰

Similar to the interbank repo rate, a fall in call money rate was also observed during January 2015 to December 2015 but the transactions in terms of volume were volatile. The presence of NBFIs in both the call money and the interbank deposit market was significant.

The call money market plays a significant role in the day-to-day liquidity management of the entire financial system. Like the interbank repo rate, the call money rate also reflects money market conditions. However, the call money rate, unlike the interbank repo rate, includes a risk premium for being an unsecured class of instrument.

At end-December 2015, call borrowing was BDT 28.3 billion, a 30.7 percent lower than that of end-December 2014 (BDT 40.8 billion). During the year 2015, the highest call borrowing was recorded at end-January of BDT 51.2 billion, and thereafter it gradually declined. The monthly weighted average call money rate started to decrease from January 2015, which continued to decline till December 2015 by 488 basis points and reached at 3.7 percent.

⁶⁹ Monthly weighted average interbank repo rate.

⁷⁰ 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.

The NBFIs played an important role in the call money market. NBFIs on average, borrowed almost 32 percent of the total fund of call money market, but their investments in this market was not that significant. At end-December 2015, banks provided BDT 9.1 billion to NBFIs as money at call and short notice. The call money market was found to be heavily concentrated as only 7 (seven) banks shared 66 percent of the total volume of call money lending.



On the other hand, the top 7 (seven) borrowers accumulated 52.1 percent of the total available short-term call funds. Private commercial banks (PCBs) remained as top lenders as well as borrowers, in the call money market, with a share of 46.4 and 51.7 percent respectively. Banks operating under Islamic principles, as usual, did not participate in the traditional call money market. Development financial institutions (DFIs) did not participate in the call money market during 2015.

Source and Calculations: FSD

In contrast to the structure of the call money market, the interbank deposit market⁷¹ was large and competitive. No single bank or cluster of banks dominated either the demand or supply side of this market. The total market volume of this market at end-December 2015 reached at BDT 379.9 billion, which was 8.2 percent higher than that of the previous year. Deposits of banks in NBFIs were BDT 129.2 billion, while NBFIs' deposit in banks was BDT 78.5 billion. Private commercial banks, NBFIs and banks operating under Islamic Shari'ah were the major players in this market.

7.2 Bond Market

The market for fixed income securities in Bangladesh is yet to travel a long way. Despite several efforts taken by the regulators, bourses and market participants, a thriving market has not yet been established. 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 (including plausible benchmark interest rates) between policy makers and market participants.

⁷¹ Any local currency deposit that is held by one bank for another bank.

7.2.1 Primary Treasury Auction Market

Issuance of long-term treasury bonds was 36.9 percent lower than that of 2014. BB Bills were used heavily in the last quarter for sterilization purpose. Mandatory devolvement of treasury securities to primary dealers (PDs), Non-PDs and BB were almost nil except the first quarter and the last month of 2015.

In December 2015, treasury bills, bonds and Bangladesh Bank bills worth BDT 184.2 billion were sold, almost 92 percent higher than that of the previous year.



Source: BB website, Treasury Bills/ Bonds Auctions. Calculation: FSD, BB (figures in billion Taka)

BB Bills were sold in high volume in the last quarter of 2015 for sterilization purpose. Throughout 2015, treasury securities were sold almost at a constant pace in the primary market. In the last quarter (October- December 2015) BDT 546.6 billion was mopped up from the banks through primary issuance which was 92.5 percent higher than the same quarter of previous year. Issuance of BB Bills in the last quarter of 2015 amounted to BDT 381.3 billion, almost 75 percent of the whole year's issuance.

Long-term treasury bonds worth BDT 154.2 billion were issued in 2015, which was 36.9 percent lower than that of 2014. Out of the total issuance, 2 years and 5 years treasury bonds were issued amounting to BDT 3.0 and 1.9 billion respectively. However, no bonds were issued in May and June of 2015.

Shorter-term treasury bills (91-day T-bills) remained as the most common instruments for the Government, as these provides more flexibility to public fund management than long-term bonds. BB bills ranked at the top with an amount of BDT 507.3 billion, to help the Central Bank to implement monetary policy more effectively. In 2015, among the short-term instruments, the sale of 91-day treasury bills ranked second highest with BDT 336.4 billion, followed by 182-day and 364-day treasury bills worth BDT 158 and 126 billion respectively.



Source: BB website, Treasury Bills/ Bonds Auctions. Calculation: FSD, BB (all figures in billion Taka)

In terms of primary auction sales no significant changes in the operation of PDs, Non- PDs and BB were observed in the last three quarters in 2015 except for December. From December 2015 onward, an increased amount of devolvement mandatory was observed. During the first guarter of mandatory devolvement 2015. amounted to BDT 10.8 billion, which was 5.2 percent of the total primary auction sales and 65 percent of the sales of the total year.

Box 7.1 : Yield Curve

In December, 2015, the treasury auction (weighted average cut-off rate) yield curve exhibited a downward parallel shift both in short and long-term yields compared with that of the December 2014 and July 2015 yield curve.



Source: Major Economic Indicators, February 2016 Issue, BB

Starting from the shorter end, the yield of T-bills fell by 4.5, 4.6, and 4.1 percentage points respectively from December 2014 to December 2015. An overall parallel shift indicates that changes in yields occurred evenly throughout different maturities of T-Bills. The shift was drastic in the later part of 2015.

In the bond market, the lower maturity bond (2 to 5 years) experienced a larger drop in the yield rates compared to those of the longer-tenured bonds. However, the longest maturity treasury bonds (20 years) experienced a single-digit yield for the first time in last 5 years.

Lowering yield curves is a good sign for investors and borrowers. First, institutional investors holding HFT securities will experience a large gain in their income statement because of the price appreciation of the bonds. Secondly, the lower interest rate will help to boost investment over the near future. Overall, the yield curve shows a positive sign for economy over the forthcoming periods.

7.2.2 Secondary Treasury Securities Market

In 2015, the volume of Over-the-Counter (OTC) transactions of treasury securities increased by 1.6 percent compared with that of 2014.

OTC trading of treasury securities exhibited a 1.6 percent growth in 2015 compared with that of the previous year. Other platforms of secondary trading (i.e., Trade Work Station (TWS) and



Data: DMD, BB; Calculation: FSD, BB

Dhaka Stock Exchange (DSE)) were not popular.

The total volume of treasury securities traded in the secondary market was BDT 386.6 billion during the reporting period. Spikes with the trading volume of BDT 51.8, 44.1 and 56.3 billion respectively were observed in January, August and December 2015. In July 2015, trading volume of BDT 17.1 billion was the lowest over the last 12 months.

7.3 Stock Market

In 2015, both index value and trade volume declined at the Dhaka Stock Exchange (DSE), the prime bourse in Bangladesh. However, the number of listed companies and issued securities grew at a steady pace.

At present DSE, has 287 companies and 559 securities listed with it⁷². The market capitalization of DSE stood at BDT 3,159.8 billion at end-December 2015, which is about 3.1 percent lower than that of the previous year-end balance of BDT 3,259.3 billion. Total issued capital at DSE, increased to BDT 1,106.1 billion at end-December, 2015 from BDT 1,054.9 billion at end-December, 2014, recorded a rise of 4.9 percent over the period. A total of 14 companies floated Initial Public Offering (IPO) and raised capital amounting to BDT 9.9 billion over the year in CY 2015.

7.3.1 Major Index and Market Capitalization

The DSEX (major index) and market capitalization both decreased by 4.8 percent and 3.1 percent respectively. The market was volatile in the first half of 2015. The market capitalization ratio remained almost stable but the growth was volatile.

⁷² Apart from the shares of the listed companies, there are 41 mutual funds, 8 debentures, 221 treasury securities and 2 corporate bonds listed and traded at DSE



DSEX, the major index, decreased by 4.8 percent from 01 January 2015 to 31 December 2015. It experienced much volatility during the year. The highest and lowest values were observed in 13 January 2015 (4969.7) and 4 May 2015 (3959.7) respectively. No particular trend was found over the year; however, short-term upward or downward movements have been observed during the year.

Source: Recent Market Information. www.dsebd.org

7.3.1.1 Market Capitalization Ratio



Source: Major Economic Indicators, February 2016 Issue, BB

In FY 2012, the market capitalization-to-GDP ratio was 18.3 percent, then became 16.5 percent in FY 2013. Since then it started to improve, and reached 17.9 percent in FY 2015.

During the last couple of years, growth of nominal GDP and market capitalization found in same direction. While nominal GDP growth rate was stable over the years, market capitalization growth was volatile.

7.3.1.2 Turnover (TO) to Market Capitalization Ratio



Source: Recent Market Information. www.dsebd.org

Turnover to market capitalization ratio did not improve in 2015 over 2014. A moderate level of volatility was observed, with a highest and lowest value of 0.31 percent and 0.05 percent respectively. It experienced high volatility in the middle of the year and then declined from August 2015, indicating investors' eroding confidence level and an uncertain investment environment for both individual and institutional investors.

7.3.1.3 Market Capitalization Decomposition

An increasing dominance of manufacturing sector and waning market share of the financial sector is prominent in the decomposition of market capitalization. At end- December 2015, the manufacturing industry captured more than half of the market, with a share of 53.2 percent, from 47.7 percent in the previous year. This dominance is largely due to an increased share prices of engineering, food and allied products and pharmaceutical industries. The total market share of the service sector shrank because of decreasing share prices of the telecommunication and real estate sectors, while the banking sector prices remained somewhat stable.





7.3.2 Price Earnings (P/E) Ratio



The overall weighted average price earnings (P/E) ratio of the DSE was 15.2 in December 2015, which was 14.5 percent lower than that of the previous year. The P/E ratio has been decreasing since September 2014.

Source: DSE Monthly Review, Several Issues

Chapter 8

FINANCIAL INFRASTRUCTURE

Payment and settlement system is one of the main ingredients of financial infrastructure which facilitates the clearing and settlement of monetary and other financial transactions. It consists of a set of physical and electronic infrastructures with associated procedures for the transfer and settlement of financial obligations arising from the exchange of goods and services. Well-functioning payment system ensures the efficient and safe execution of monetary policy operations and facilitates the smooth and homogeneous transmission of monetary impulses.

8.1 National Payment Switch Bangladesh

It facilitates the expansion of the card-based payment networks and promotes e-commerce by creating a common electronic platform. In CY15, approximately BDT 45.24 billion was settled through 7.78 million transactions.

Bangladesh Bank has established National Payment Switch Bangladesh (NPSB) in order to ease the interbank electronic payments originating from different channels such as Automated Teller Machines (ATM), Point of Sale (POS) terminals, Internet, Mobile Devices, etc. NPSB, the mother switch, creates a common electronic platform for all other switches in Bangladesh.

It assists the expansion of the card-based payment networks substantially and promotes e-commerce throughout the country. The Payment Systems Department (PSD) of Bangladesh Bank is entrusted with the responsibilities of operating and settling the transactions regularly. At present, transactions among 48 banks are being routed through NPSB and 27 banks are connected through POS. As of December 2015, everyday an average of 26,623 transactions, amounting to more than BDT 154 million, were settled through NPSB. As a whole, in CY15, around 7.14 million transactions have been made to settle approximately BDT 41.73 billion through the same.

8.2 Bangladesh Automated Cheque Processing System

Bangladesh Automated Cheque Processing System (BACPS) clears cheques to settle payments for bank companies. The growth rate of High Value instruments from CY14 to CY15 was 11.15 percent, while for Regular Value, it was 3.82 percent.

The Bangladesh Automated Cheque Processing System (BACPS) uses the Cheque Imaging and Truncation (CIT) technology for electronic presentment and payment of paper instruments (i.e. cheques, pay orders, dividend and refund warrants, etc). The system supports both intra-regional and interregional clearing and is based on a centralized processing centre located in Dhaka and in designated clearing regions.

There are two types of cheque clearing under BACPS, i.e. High Value (HV) and Regular Value (RV) Cheque clearing. Cheques amounting to BDT 500,000 or above are eligible for HV clearing, which has a shorter clearing cycle than RV. The total amount of HV and RV instruments amounting to approximately BDT 9,794.51 billion and BDT 5,707.34 billion respectively were cleared in the CY15. The clearing cycle has been brought down to t+0 for high value cheques and t+1 for regular value cheques throughout the country.



Over the years, the number and volume of transactions have increased tremendously after the implementation of BACPS. Chart 8.1 illustrates the continuous upward trend, both in high-value and regular-value transactions, in the last three years. The trend for high-value cheque processing from CY13 to CY15 moved at a relatively faster pace than that of low-value cheque processing within the same period.

8.3 Bangladesh Electronic Funds Transfer Network

Bangladesh Electronic Funds Transfer Network (BEFTN) operates as a processing and delivery centre for the distribution and settlement of electronic credit and debit instruments among all participating banks. In CY15, BEFTN transaction amount increased around 46 percent from the previous year.

In CY15, on an average, 37,704 transactions were settled per day, which is 35 percent higher than that of CY14. The total amount of such transactions was BDT 873.86 billion, which is 46 percent higher than that of the previous year.

8.4 Mobile Financial Services

It plays a significant role in financial inclusion activities in Bangladesh by utilizing the country's vast mobile network coverage. It achieved a rapid growth in CY14, while this growth remained at a moderate level in CY15.

The journey of Mobile Financial Services (MFS) in Bangladesh started in 2010, while BB issued the "Guidelines on Mobile Financial Services for Banks" in September 2011 and subsequently revised it in December 2011 and July 2015. BB has fixed the person-to-person 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 basis⁷³. A holistic view of the MFS status at the end of December 2015 is given in the table below:

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

⁷³ DCMPS Circular No- 10/2011, December 14, 2011.

Table 8.1 : A Holistic View of the Mobile Financial Service (MFS) Status				
Category	Number			
No. of banks authorized for MFS	28			
No. of banks in operation of MFS	18			
Registered customers (Million)	31.8			
Agents	561,189			

Source: PSD, 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 helped to achieve a rapid growth of MFS in CY14 (Chart 8.2).

However, in CY15, 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. BB allowes several transactions using mobile accounts, including inward foreign remittances, cash-in and cash-out transactions, person to person (P2P) transactions, salary disbursement, dividend and refund warrant payments, vendor payments (Business-to-Person or B2P), utility bill payments, merchant payments (Person-to-Business or P2B), elderly allowances, freedom fighter allowances, subsidies (Government-to-Person or G2P), taxes, levies (Person-to Government or P2G) and other transactions. The rate of growth of financial inclusion through MFS from CY14 to CY15 can be categorically shown in the following table:

Table 8.2 : Category-wise Growth of MFS From CY14 to CY15						
Category	CY14 (Million BDT)	CY15 (Million BDT)	Growth (%)			
Inward Remittance	379.5	381.5	0.5			
Cash In Transaction	4,39,396.8	6,65,702.5	51.5			
Cash Out Transaction	38,6616.5	5,76,696.0	49.2			
P2P Transaction	1,79,955.9	27,8795.6	54.9			
Salary Disbursement (B2P)	5,844.2	12,985.7	122.2			
Utility Bill Payment (P2B)	11,422.2	14,562.5	27.5			
Others	7,684.9	28,610.5	272.3			

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

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

8.5 Electronic Banking Operations

Electronic banking operations showed a modest growth in CY15 with higher volume of ATMbased transactions. Number of plastic card holders also went up about 10 percent in CY15.

Banking operations through electronic means have opened a new era in the conventional banking system. 55 out of 56 banks had at least one online branch and 40 banks introduced internet banking facility at end December 2015. To address the customers' demand, today's banks are more inclined to utilize technological advantages.

Table 8.3 : Online Banking Scenario at End-December, 2015						
Type of Bank	No. of ATMs	No. of Total Branches	No. of Online Branches	% of Online Branches		
SOCBs	155	3,697	2,673	72.3%		
SDBs	0	1,408	94	6.7%		
PCBs	7,429	4,278	4,258	99.5%		
FCBs	165	75	75	100.0%		
Total	7,749	9,458	7,100	75.1%		

Source: Quarterly Review Report on Green Banking activities of Banks & FIs and Green Refinance Activities of BB







Source: Scheduled Banks & Statistics Department, BB; Compilation: FSD, BB.

Chart 8.3 exhibits the trend in the adoption of electronic banking means during CY12 to CY15 while chart 8.4 depicts the trend in the monetary volume of electronic banking transactions over the last four years. Though the volume of transactions using ATM and debit cards showed an increasing trend, the volume of transactions using credit cards and internet banking remained stable. The increasing trend of issuing plastic cards such as debit, credit or prepaid cards implied that the purchasing behavior, in particular, might turning more towards virtual payments from physical ones.

8.6 Central Depository System

The Central Depository Bangladesh Limited (CDBL) provides services such as delivery, settlement, and transfer of securities through a computerized book entry system, changing the ownership without any physical movement or endorsement of certificates and execution of transfer instruments.

A depository is like a bank for shares instead of money. As a substitute for holding shares in the form of certificates, investors have accounts in the depository and are able to move securities and settle stock exchange transactions by an electronic update of their accounts.

The depository services are extended through its agents called Depository Participants (DPs). At end December 2015, there were 336 full-fledged DPs, 4 full-fledged exchange DPs, 91 custodian DPs and 44 treasury DPs registered under CDBL. In addition, there were 351 issuers and 349 International Securities Identification Numbers (ISINs) registered under CDBL. The number of investors' BO accounts stood around 3.2 million.

8.7 Real Time Gross Settlement System

This system, operated by Bangladesh Bank, settles money and securities on a "real time" and on "gross" basis from one bank to another. Up to December 2015, it settled approximately BDT 1387.8 billion.

Bangladesh Bank is committed to provide a safe, efficient, inclusive and authorized payment and settlement system for the country. The introduction of the Real Time Gross Settlement (RTGS) system, in CY15, is another milestone of the country's financial sector development. RTGS is a central processing and settlement facility system which was launched on 29th October 2015. It settles 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). From 29 October 2015 to 31 December 2015, it settled approximately 8,820 transactions amounting BDT 1,387.8 billion. The valid settled RTGS transactions are final and irrevocable.

8.8 Upcoming Developments

As the financial market in Bangladesh is growing, and more complex products like derivatives would be offered in the near future, the establishment of a central counterparty clearing house (CCP) will become a necessity.

A Central Counterparty Clearing House (CCP) is an organization that exists in various countries to facilitate trading done in derivatives and equities markets. These are often operated by the major banks in the country to provide efficiency and stability to the financial markets. There are two main processes that are carried out by CCP: one is clearing and the other is settlement of market transactions. Clearing relates to identifying the obligations of both parties on either side of a transaction. Settlement occurs with the final transfer of securities and funds.

The Bangladesh Securities and Exchange Commission (BSEC), with the technical assistance from ADB, has formulated a long-term (2012-2022) master plan incorporating the necessity of a CCP. The ADB has already approved⁷⁴ a loan of USD 250 million to continue capital market reforms with an aim to boost private investments and support the establishment of a clearing and settlement company i.e. CCP. The funds will be released in two tranches of USD 80 million and USD 170 million, as agreed policy milestones for reforms are reached. It is expected that the program will be completed by the end of 2017.

⁷⁴ http://www.adb.org/news/new-adb-loan-support-further-bangladesh-capital-market-reforms

Chapter 9

FOREIGN EXCHANGE MARKET

9.1 Introduction

The foreign exchange (FX) market demonstrated a moderate level of stability in the calendar year 2015 (CY15), compared to the preceding year; however, a considerable fluctuation, in the overall net FX liquidity position, was observed during the review year. The Bangladesh Taka (BDT) demonstrated a mixed movement against the US Dollar (USD); the BDT appreciated very insignificantly during December 2014 to January 2015, remained mostly stable during February-September 2015 and depreciated during October-December, 2015. The current account balance was in deficit, while the overall balance of payments (BOP) was positive during the Financial Year 2015 (FY15). During the whole period of CY15, Bangladesh Bank (BB) had to purchase USD 4.48 billion from the domestic FX market (except in the month of November 2015), as an indirect measure, to ease the appreciation of BDT against the US Dollar and thus kept the FX market stable.

9.2 Foreign Exchange Assets and Liabilities

In the financial system of Bangladesh, the foreign exchange market plays a significant role by facilitating the international trade and finance. The liquidity of this market is maintained by the active participation of 945 authorized dealer (AD) bank branches and 236 money changers. In CY14, these numbers were 960 and 234 respectively. However, actual assets and liabilities of financial institutions, denominated in FX, constitute a minor portion of the banking sector aggregate assets. As of 31 December 2015, 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.



Source: Foreign Exchange Policy Department, Bangladesh Bank
Charts 9.1 and 9.2 show the share of each of the above components of foreign exchange assets in CY15 and CY14 respectively. The OBUs contributed 31.0 percent of the total FX-denominated assets. The OBU demonstrated an important bearing on FX stability in the sense that crossborder 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) accounts and others.



Source: Foreign Exchange Policy Department, Bangladesh Bank

Charts 9.3 and 9.4 depict the shares of each of the components of foreign exchange liabilities in CY15 and CY14 respectively. About 34.0 percent of foreign exchange liabilities were held as backto-back fund awaiting for remittance, 12.0 percent of the FX-denominated liabilities were kept in foreign currency accounts, while 38.0 percent were 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 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 9.5 depicts the shares of each of the components of FX contingent liabilities. About 65.0 percent of foreign exchange liabilities were held as letter of credit, 27.0 percent of the contingent liabilities were due to acceptances, while 8.0 percent were for letter of guarantee purposes. At end-December 2015, total contingent liabilities were USD 28.1 billion.

9.4 Foreign Exchange Turnover

The FX market of Bangladesh is relatively less complex compared to other countries. The FX derivative market, such as futures, options, etc. exists but with very limited scale. Forward transactions are rarely done.



Source: Foreign Exchange Policy Department, Bangladesh Bank

Almost all dealings/transactions were executed in the spot market until 2014. But in 2015, swaps in USD consisted of significant portion of the foreign exchange turnover. Chart 9.6 shows that almost 71.0 percent of the total FX turnover was represented by swap transactions in USD. On the other hand, 23.0 percent of transactions were made in the spot market both in USD and other currencies.

The FX market was more active in CY15 than in the previous year. Almost 91.0 percent of interbank FX transactions were done in USD. The monthly average turnover of inter-bank FX transactions (spot) was USD 370.7 million in CY15, compared with USD 475.7 million in CY14 and USD 387.4 million in CY13; but total monthly average FX turnover was USD 1,612.6 million in CY15 due to a significant amount of swap transactions. During CY15, the total turnover of inter-bank FX transactions was USD 19,351.8 million, 3.9 times the total foreign exchange assets.



Source: Forex Reserve and Treasury Management Department, Bangladesh Bank

Chart 9.7 depicts the trend of foreign exchange turnover in the preceding four consecutive years. During CY13, the foreign exchange turnover was more or less stable compared with that of the succeeding two calendar years. In CY13, standard deviation was 84.9. In CY14, the turnover position became volatile with a monthly standard deviation of 107.0. Although the inter-bank FX trade volume (only spot transactions) decreased by 22.9 percent in CY15 compared with that in CY14, the foreign exchange turnover was also volatile in CY15 with a standard deviation of 119.7. On the other hand, due to swap transactions, the overall FX transactions volume increased by 238.9 percent in CY15. Approval of more openness in some international sectors and a growing



Source: Forex Reserve and Treasury Management Department, Bangladesh Bank interest of the banks in derivative market, during CY15, could be a reason for high volume of turnover in the FX market.

The overall net FX position was USD 500.5 million at end-December 2015, which was the highest position in that year. During the year, there was a moderate stability in the net open FX position (Chart 9.9). The lowest amount was USD 315.0 million at end-March 2015.

9.5 Exchange Rate Movement and Its Volatility

The foreign exchange market displayed some resilience with low volatility in terms of the movement of the nominal exchange rate in the review year. The dispersion between the minimum and the maximum USD-BDT rate was 0.94, compared with that of the three preceding calendar years, when this dispersion was 3.0, 1.7 and 0.46 in CY12, CY13 and CY14 respectively.



Source: Forex Reserve and Treasury Management Department, Bangladesh Bank

During CY15, the lowest exchange rate (USD-BDT 77.80) prevailed continuously from the month of February to September CY15; while the month of December showed the highest rate (USD-BDT 78.74).

Chart 9.10 shows that the monthly average nominal USD-BDT exchange rate in CY15 (green dot line) was stable. As of December 2015, the USD-BDT rate depreciated by 1.13 percent; while as of January 2015 the USD-BDT rate depreciated by 0.14 percent compared with its corresponding month of CY14. And in February, exchange rate appreciated and then remained in a steady state at BDT 77.80 until September 2015 (except during June 2015). The exchange rate again started to depreciate from October 2015, and the trend continued until December 2015. But due to the effort of Bangladesh Bank the overall nominal rate of foreign exchange was somewhat stable and resilient during CY15.

When using standard deviation of daily BDT/USD rates as the measure of volatility of the FX market, the foreign exchange market was found to be more stable in CY15 than CY14 (chart 9.11). The standard deviation of the USD-BDT rate was only 0.0027 in CY15; 0.025 in CY14; 0.055 in CY13; and 0.284 in CY12.

9.6 Movement of REER and Its Volatility

The REER⁷⁵ started to depreciate in January 2013 and the depreciation continued till December 2015 with minor exceptions. The minimum USD-BDT rate was 130.24 in May 2015, and reached the maximum 140.84 in December 2015. The dispersion between the minimum and maximum USD-BDT REER was 10.60 in CY15, while it was 9.26 and 4.96 in CY14 and CY13 respectively. Chart 9.12 depicts that CY15 (green dotted line) demonstrated a more volatile scenario than CY14 and CY13 as the standard deviation of REER was 3.90 in CY15; while it was 3.23 in CY14 and 1.97 in CY13.



When using standard deviation as the measure of volatility, it is observed that the REER was more volatile than the nominal exchange rate in CY15. Declining commodity prices and increased foreign exchange reserves are creating immense pressure on the need for appreciating the exchange rate. BB had to buy dollars to prevent a nominal appreciation of exchange rate of taka against other currency.

Source: Monetary Policy Department, Bangladesh Bank

⁷⁵ The Real Effective Exchange Rate (REER) index is a combination of 10 currencies in a basket with the base year set at 2010-11=100; it is a measure that adjusts the nominal exchange rate for differences in domestic inflation and those of the country's main trading partners.

9.7 LC Opening and LC Settlement

The total value of L/C opening decreased by USD 1,491.7 million in CY15, reaching USD 42,847.9 million in CY15 from 44,339.6 million in CY14; and the value of LC settlement increased by USD 184.6 million, reaching USD 39,167.6 million in CY15 from 38,983.0 million in CY14. In percentage terms, the value of LC opening decreased by 3.4 percent and L/C settlement increased by 0.5 percent in CY15 over CY14. The maximum amount of L/C was opened in November 2015, and the maximum L/C was settled in December 2015.



Source: Foreign Exchange Operation Department, Bangladesh Bank

9.8 Wage Earners' Remittance

The wage earners' remittances increased by USD 374.3 million (2.5 percent) during CY15 from USD 14,942.7 million in CY14. The month of June 2015 demonstrated the highest inflow of remittance of USD 1,439.3 million; while the month of October 2015 recorded the lowest inflow of USD 1,098.5 million.



Source: Monthly Economic Trends, BB

Chapter 10

DEVELOPMENTS IN THE FINANCIAL SYSTEM

The financial system of Bangladesh is advancing with significant developments every year. Notably, the following development initiatives, in the financial system, took place during the calendar year 2015:

10.1 Commencement of Basel III Framework

After Successful completion of Basel-II capital framework in 2014, Bangladesh Bank started implementation of Basel III in the banking sector from January 2015. Having started with phasein manner in 2015, the Basel III capital ratios will be fully implemented from 2019. Under this framework, banks have to maintain the Capital to Risk Weighted Asset Ratio (CRAR) and Leverage ratios. Leverage ratio was introduced in Basel III to avoid building up excessive on and offbalance sheet leverage in the banking system. In addition, capital conservation buffer (2.5 percent of risk weighted assets) was introduced in a phase-in arrangement in addition to Common Equity Tier-1 capital. On the other hand, liquidity ratios such as Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) were introduced for measurement of banks' liquidity.

10.2 CIB Online

Before the online system commenced in 2011, the reports of the Credit Information Bureau (CIB) were generated through the off-line process developed by an outsourced vendor. In 2015, the online CIB was transformed to a new CIB online solution developed by Bangladesh Bank's internal resources and it started live operation from 1 October 2015. Through this new system BB has been able to eliminate foreign vendor dependency and minimize the cost of maintenance as well. Moreover, the new system has allowed Bangladesh Bank more flexibility to generate more descriptive reports. Indeed, with the adoption of a highly sophisticated ICT platform, the performance of the new CIB services has been improved significantly in terms of efficiency and quality.

10.3 Large Loan Restructuring

Due to externalities emanating from various external and domestic factors, banks' borrowers experienced difficulties in running business smoothly and resulted in default with respect to debt servicing. This phenomenon led to a critical situation that necessitated present policy to be liberalized especially with respect to large borrowers having multiple bank exposures. Considering the fact that affected large borrowers had significant importance from the socio-economic and employment generation perspective and hence to support the recovery efforts in

this regard, the Board of Directors of Bangladesh Bank took due cognizance of the situation and recommended necessary policy support for the said borrowers. Accordingly, the following sets of instructions were issued (BRPD Circular No. 4, dated February 23, 2015) in line with international best practices for restructuring of such affected large loans:

- a) Loans of a particular borrower or group in a bank, singly or in clubbed together form, shall be eligible for restructuring. Borrower having exposures in multiple banks may also approach by forming a consortium.
- b) Minimum outstanding loan amount for restructuring shall be BDT 5 billion or above in aggregate.
- c) Restructuring facility will be provided to a particular loan account only once.

However, borrowers indulging in frauds and forgeries will not be eligible for loan restructuring.

10.4 Incentives to Good Borrowers

To establish a sound credit culture in Bangladesh, banks were directed to provide their good borrowers at least 10 percent rebate on interest accrued against the loan accounts (BRPD circular no 06 dated March 19, 2015). The borrowers, whose loan accounts remained unclassified (standard) continuously for three years and complied with all the terms and conditions of approval, would be entitled as good borrowers. At the end of three years, the good borrowers will receive the 10 percent rebate on their loan interest. The benefit will continue if the clients are identified as good borrowers in the following years. The banks also have to take measures to award the good borrowers through annual program. This activity regarding interest rebate was activated from January 01, 2016 through BRPD circular letter no 16 dated December 30, 2015.

10.5 Rationalizing Interest Rate Spread

Banks were advised to limit the interest rate spread (difference between weighted average rate of interest on lending and deposits) within lower single digit in different sectors other than high risk consumer credits (including credit card) and SME loans through BRPD Circular No. 02/2012 (dated January 04, 2012). As mentioned in BRPD Circular No. 13/2015 (dated November 19, 2015) and 14/2015 (dated December 28, 2015), banks were advised to limit the interest rate spread within 5 percent in different sectors other than high risk consumer credits.

10.6 Prudential Regulations for Consumer Financing

Due to a price hike in the construction materials in real estate sector, prudential regulations for consumer financing were amended in CY15 (BRPD Circular No.-01, dated January 01, 2015). According to new regulations, the maximum per party limit in case of housing finance by the banks would be BDT 12 (twelve) million. The housing finance facility would be provided at a maximum debt equity ratio of 70:30.

10.7 New Risk Management System of Banks and Non-Bank Financial Institutions

With a view to strengthening and updating the risk management system in banks, Bangladesh Bank issued a circular (DOS Circular No. 13, dated September 09, 2015) to bring greater expertise

and harmonization to risk management activities of all banks. The new risk management framework is comprised of comprehensive risk management report (CRMR), intensive supervision and comprehensive risk management rating etc.

Besides, an integrated risk management guidelines for financial institutions was issued for NBFIs to strengthen the overall risk management framework and culture.

10.8 Central Database for Large Credit (CDLC)

To enhance financial discipline and establish a robust financial system, in line with the international best practices, Bangladesh Bank introduced a new oversight framework named 'Central Database for Large Credit (CDLC)' in CY15 with a view to address distressed assets in the economy.

The CDLC framework considers both funded and non-funded exposures of Banks/Financial Institutions (FIs) to a certain person, counterparty or group, including investments in bonds/debentures/commercial papers issued by those borrowers/obligors having an aggregate exposure of BDT 500 million and above. Through this framework, Banks and FIs would be able to identify the growing stress (if any) in their exposures by splitting the 'Standard' category loans into 4 sub-categories, i.e., 'Standard-0' for regular/renewed/ rescheduled/restructured exposures, 'Standard-1' for overdue between 01-29 days, 'Standard-2' for overdue between 30-59 days and 'Standard-LQ' through qualitative measures. Once Ioan accounts are reported to CDLC as Standard-2 or Standard-LQ, concerned banks and FIs will have to form a Lenders' Committee which will be recognized as a Joint Lenders Forum (JLF). The JLF is required to come up with a Corrective Action Plan (CAP) for accounts that are signaling a building up of stress and the Banks/FIs with highest exposure would have to convene the forum.

The CDLC framework will help Bank/FIs to obtain early warning signals of stress on their credits and involve all concerned parties to initiate joint or individual corrective measures for managing their distressed assets. It will also help banks/FIs to monitor the large exposures in a more structured way by identifying and managing the low quality assets well ahead of time before they appear as a cause to financial distress and may result in grave systemic consequences.

10.9 Amendment in the Foreign Exchange Regulations ACT, 1947

To create a business friendly environment, a number of changes were made with an effect from September 09, 2015 in the Foreign Exchange Regulations Act, 1947. The amendments covered the exclusion of section 18A and revision of 18B. Notably, section 18A was relevant to the restrictions on local agents whereas section 18B on foreign companies.

10.10 Establishment of Financial Inclusion Department

In pursuit of a vision to achieve a sustainable inclusive growth, Bangladesh Bank established the Financial Inclusion Department (FID) in June, 2015. This department is comprised of two wings: Financial Inclusion Wing and Supervision and Innovation Wing.

10.11 Development Initiatives in the Area of Small and Medium Enterprise (SME) Financing

Formation of Women Entrepreneur Development Unit in Banks and Financial Institutions

Bangladesh Bank instructed all banks and NBFIs to set up a women entrepreneurs' development unit for disbursing credit to women on priority basis, creating and searching new women entrepreneurs as well as clusters. Moreover, the responsibility of this unit is to monitor the activities of women entrepreneur dedicated desks/help desks of branch level.

Other initiatives under SME financing are as follows:

- a. Extending credit services to new women entrepreneurs in cottage, Micro & Small sector.
- b. SME credit facilities for the entrepreneurs belonging to tribal communities, physically disabled, socially deprived entrepreneurs and the people of third gender group (SMESPD Circular No. 3, dated June 09, 2015).
- c. Master circular on SME financing : A master circular (SMESPD Circular No. 04, dated 14 July, 2015) on SME financing removed the cap on credit for small enterprises. It also issued structured and comprehensive reporting formats for SME financing by banks and NBFIs, which would enable BB to monitor the SME financing of banks and NBFIs as well as to create sustainability in SME sector.
- d. Expansion of financial services to CMSME entrepreneurs of new areas that recently included in the map of Bangladesh : With a view to mainstreaming cottage, micro, small and medium enterprises (CMSME) of the newly included 111 Indian enclaves to Bangladesh and to expand the prospective creative business initiatives of the inhabitants of said enclaves, Bangladesh Bank instructed all Banks and NBFIs to extend SME credit to the enterprises of those entrepreneurs who have received citizenship of Bangladesh.
- e. Group-based lending to MSME entrepreneurs of new areas (former enclaves) recently included in the map of Bangladesh.

To support new citizens of Bangladesh who resides in the former enclaves, Bangladesh Bank instructed all banks and NBFIs to include them in group based SME lending activities (SMESPD Circular Letter No. 05, dated October 6, 2015).

10.12 Development of Contingency Planning Framework

Bangladesh Bank undertook a number of preemptive actions to deal with any potential banking crisis during the last year. It considered that crises could require central bank and other authorities to take decisive actions, including devising non-traditional remedies when necessary to curtail systemic risk or contagion effects.

As a part of crisis resolution framework, two separate documents titled 'Contingency Planning and Bank Intervention/Resolution Framework' and 'Lender of Last Resort Framework' were developed in 2013; developments of key activities under the said framework are underway. Notably, a number of bank resolution tools, namely, directed merger and acquisitions, purchase and assumptions, formation of a bridge bank, bail-in within resolution and recovery and resolution plans, were developed under this framework to ensure the orderly resolution of distressed bank(s) and to protect the depositors' interests. The Lender of Last Resort Framework encompasses several guidelines of Emergency Liquidity Assistance (ELA), a special liquidity facility given by the central bank to solvent but temporary illiquid banks. The ELA support is aimed at reducing the negative spillover of liquidity shortage in the financial market arisen from severe liquidity shortfall in the solvent institution.

10.13 Extent of Shadow Banking of Bangladesh

The amount of shadow banking components is a very small proportion (0.63%) of the total aggregate banking sector asset of Bangladesh and that of the GDP of Bangladesh (0.43%) based on financial year 2015. Some banks have transacted a huge amount in different shadow banking components on continuous basis; which may raise question about the reasons behind such large volume of activities of those banks. It may be due to their liquidity coverage purpose which, in turn, would cause huge credit risk and ultimately a greater shock on their capital.

Commitment held the majority of shadow banking in Bangladesh during CY15 about 56.65 percent and interbank reverse repo held the second top position about 41.36 percent.



Source: Interbank Transaction Matrix, FSD,BB

In Bangladesh shadow banking components comprises a small portion of the total banking sector assets. There are four (04) components constitute the shadow banking such as: (1) Interbank reverse-repo (lien); (2) Interbank reverse-repo (sale and buyback); (3) Assets Backed Securities (ABS)/Mortgage Backed Securities (MBS) backed by Other Banks and/or Subsidiaries Guarantee; (4) Commitments and Asset Backed Commercial Paper (ABCP).

Table 10.1 : Present Scenario of Shadow Banking of Bangladesh							
(Amount in BDT crore)							
Particulars	December, 2015	(%) of Banking Sector Assets	(%) of GDP				
Inter-Bank Reverse Repo	2,673.97	0.26%	0.18%				
ABS/MBS	80.00	0.01%	0.01%				
Commitments	3,662.68	0.36%	0.24%				
ABCP	49.09	0.00%	0.00%				
Total Shadow banking activities	6,465.74	0.63%	0.43%				
Total Banking Sector Assets	10,31,466.00	100.00%	68.15%				
GDP (as on 30/06/2015)	13,43,674.00	-	100.00%				

Source: Monthly Economic Trends, BB. & Interbank Transaction Matrix, FSD, BB.

The shadow banking system plays an expanding role in the provision of household and corporate credit through providing credit by purchasing securitized assets from the originating banks and financing these purchases using repos, short-term debt collateralized by the value of the original assets.

10.14 Development Initiatives in the Area of Prevention of Money Laundering and Terrorist Financing

Throughout the world, financial sector is increasingly becoming a major target of Money Laundering (ML) activities and financial crimes due to its variety of financial services and instruments that can be used to conceal the actual source of money. Money Launderers attempt to conceal their real identity to financial sectors with their polished, articulated and disarming behavior, convert their dirty money into white money.

Strong Anti Money Laundering and Combating the Financing of Terrorism (AML & CFT) measures prevent money launderers from abusing financial channels. These measures include formulating respective laws, regulations, directives and other policies; conducting proper supervision on reporting agencies, exchanging information at both domestic and international level; conducting prosecutions of the criminals accordingly and building awareness among reporting agencies, regulatory authorities and mass people. Proper KYC policy, strong customer due diligence system, along with adequate punishment measures for criminals, keep launderers away from the legitimate financial channels. These measures had some explicit effects in reducing capital flight from the country and also have impact on the stability of the financial sector.

In 2015, Bangladesh faced 3rd Round Mutual Evaluation (ME) process conducted by Asia Pacific Group on Money Laundering (APG). The Mutual Evaluation process was a demonstration of the commitment of member states to implement the Financial Action Task Force's (FATF) standards and a remedy against the deficiencies identified in their systems. As a part of facing the 3rd Round Mutual Evaluation, Bangladesh conducted National ML/TF Risk and Vulnerabilities Assessment and prepared report with the active participation of Anti-Corruption Commission (ACC), Criminal Investigation Department (CID) of Bangladesh Police and BFIU. Considering the risks identified in the report, the National Strategy for preventing Money Laundering and Combating Financing of Terrorism 2015-2017 was formulated by a high level committee headed by Deputy Governor & Head of BFIU. The strategy identified the particular action plan for all the Ministries, Divisions and Agencies to develop an effective AML/CFT system in Bangladesh.

Bangladesh Financial Intelligence Unit (BFIU) signed 38 Memorandum of Understandings (MoUs) so far to exchange information related to ML/TF with FIUs of other countries. Among these 38 MoUs, 10 (ten) were signed in CY15.

Being the national central agency and coordinator of all kinds of AML/CFT activities, BFIU issued 8 (eight) circulars and 6 (six) circular letters for the reporting agencies in CY15. These circulars and circular letters contain comprehensive instructions that guide each of the respective agencies to establish proper compliance of AML/CFT issues. The significant focuses in the circulars are as below:

For Financial Institutions (Non-Bank): BFIU instructed [BFIU Circular No. 11 (Dated May 25, 2015)] all Financial Institutions to submit cash transaction reports (CTR) in order to ensure better surveillance on the reporting agencies.

For Financial Institutions (Non-Bank): BFIU instructed [BFIU Circular No. 12 (Dated June 29, 2015)] all Financial Institutions to comply with all respective provisions of the Money Laundering Prevention Act, 2012, Anti Terrorism Act, 2009 and other related international AML/CFT standards through this master circular.

For Designated Non Financial Businesses and Professions (DNFBP's): BFIU instructed [BFIU Circular No. 13 July 09, 2015)] DNFBP's (real estate developers, dealers in precious metals or stones, trusts and company service providers and lawyers, notary publics, other legal professionals and accountants) to formulate a policy guidelines to prevent ML/TF considering the international standards, laws & regulations of the country and the instructions given by BFIU. DNFBF's are also instructed to make a compliance management arrangement and nominate a compliance officer in order to implement the provisions of the laws and directives of BFIU. This circular facilitated the Designated Non Financial Businesses and Professions (DNFBP) sector to comply with domestic and international AML/CFT standards.

For NGO/NPOs: BFIU issued a comprehensive circular [BFIU Circular No. 14 (Dated September 02,2015)] for all NGO/NPOs containing many directions to prevent ML and TF including using single bank account to receive foreign aid/donation. Moreover, they are instructed to use banking channel in case of transactions of BDT 1,00,000 or more. This circular mainly focused on preventing the terrorist financing activities abusing the NGO/NPOs.

For Money Changers: BFIU instructed [BFIU Circular No. 15 (Dated September 09, 2015)] money changers not to make any transaction with the individuals or entities listed in the sanction list by United Nations Security Council Resolutions (UNSCRs) committee. This circular was issued so that all the money changers working in Bangladesh cannot be used for illegal flow of money.

For Insurance Companies: BFIU instructed [BFIU Circular No. 16 (Dated September 10, 2015)] insurance companies to collect complete and accurate information of the customers and identify the beneficial owner of the insurance policies. This circular guides the insurance companies in preventing money launderers and terrorist financiers from abusing this sector.

For Co-Operative Societies: BFIU instructed [BFIU Circular No. 17 (Dated October 07, 2015)] all Cooperative Societies to comply with all respective provisions of the Money Laundering Prevention Act, 2012, Anti Terrorism Act, 2009 and international standards through this master circular. Co-operative Societies were also instructed to make a compliance management arrangement and nominate a compliance officer in order to implement the provisions of the directives and instructions of BFIU.

For Capital Market Intermediaries: BFIU instructed [BFIU Circular No. 18 (Dated October 19, 2015)] all capital market intermediaries(CMIs) to comply with all respective provisions of the Money Laundering Prevention Act, 2012 and Anti Terrorism Act, 2009 through this master

circular. BFIU instructed CMIs to collect complete and accurate information of the customers, to identify the beneficial owner of the accounts and to observe the transactions carefully.

It is mentionable that all of the circulars have proper instructions for the respective reporting agencies about how to - (i) conduct the KYC (Know Your Customer) & CDD (Customer Due Diligence) process accordingly, (ii) identify beneficial owners, (iii) suspicious transaction and activity, (iv) report those transactions and activities, (v) implement United Nations Security Council Resolutions (UNSCRs).

The circular letters were on various issues:

For Banks: BFIU issued a ML/TF risk assessment guidelines [BFIU Circular Letter No. 01 (Dated January 08, 2015)] to help the Banks to assess their own ML/TF risks.

For Financial Institutions (Non-Bank): BFIU introduced [BFIU Circular Letter No. 02 (Dated March 15, 2015)] Uniform Account Opening Form and KYC Form for all Financial Institutions.

For All Reporting Agencies: BFIU circulated [BFIU Circular Letter No. 03 (Dated April 09, 2015)] Money Laundering Prevention Rules, 2013 and Anti Terrorism Rules, 2013 for all reporting agencies.

For Financial Institutions (Non-Bank): BFIU issued a ML/TF risk assessment guidelines [BFIU Circular Letter No. 04 (Dated July 30, 2015)] to facilitate the FI's to assess their own ML/TF risks.

For Banks: BFIU issued ML/TF Risk Management Guidelines [BFIU Circular Letter No. 05 (Dated September 10, 2015)] for Banks to formulate their own ML/TF Risk Management Guidelines and work according to the guidelines so that they may not be abused by the money launderers and terrorist financiers.

For All Reporting Agencies: BFIU circulated [BFIU Circular Letter No. 06 (Dated December 09, 2015)] Money Laundering Prevention (Amendment) Act, 2015 by this circular letter.

Chapter 11

MICROFINANCE INSTITUTIONS (MFIs)

The microfinance sector showed strong and resilient growth in FY 2015. The Microfinance Institutions (MFIs) constitute a major segment of the Rural Financial Market. Along with the formal financial institutions (e.g. state-owned commercial banks and specialized development banks), specialized government Micro-Finance organizations and Non-Government Organizations (NGOs) have been granted licenses to conduct microcredit programs in Bangladesh for creating opportunities for low income people and to make them self-reliant. Besides, MFIs are contributing in savings mobilization, furthering their activities in social businesses, and building confidence among the loan providers for their continuous support. By now, the MFIs have reached to a borrower base of approximately 20.4 million. The credit services provided by the MFIs are: general microcredit for small-scale employment generating activities, microenterprise loans, loans for the ultra poor, agricultural loans, seasonal loans, and loans for disaster management. Loan amounts up to BDT 50,000 are generally considered as microcredit and above this amount are considered as microenterprise loans. Different reports reveal that the transparency and accountability of MFIs are gradually improving.

11.1 Outreach of Microfinance Services

Due to a low transaction cost, no or less collateral requirement, less complexity in loan processing and near to door-to-door services as well as due to the monitoring of Microcredit Regulatory Authority (MRA), the microfinance sector in Bangladesh has reached a sizeable position. It provided valuable financial services to 25.9 million members (increased by 0.8 million from previous year) through 110,781 employees (increased by 1153 from previous period) under 15,609 branches (increased by 879 from previous period) all over the country in FY15. In the same financial year, as shown in Chart 11.2, the net disbursement of this sector was 354 billion in micro credits, with savings services of BDT 136 billion. This sector has also maintained robustness in terms of loans outstanding per borrower, loans outstanding per branch, savings per client and savings per branch and showed a double-digit growth in 2015. However, some indicators such as number of branches, number of members/clients, and clients' per branch experienced somewhat slower growth mainly due to the closure of few MFIs who failed to meet the regulatory requirements of MRA.

	Table 11.1 : Outreach of Microfinance						
	Category	2013-2014	2014-2015	Growth			
1	Total Number of Licensed Institutions	742	753	1.5			
2	Number of Branches	14730	15609	6.0			
3	Number of Employees	109628	110781	1.1			
4	Number of Members (in Millions)	25.1	25.9	3.1			
5	Number of Borrowers (in Millions)	19.4	20.4	4.8			
6	Outstanding loan disbursed by licensed institutions (in Billion)	282.2	354.0	25.4			
7	Outstanding Loan Disbursed by Top 20 Institutions (in Billion)	212.0	278.0	31.1			
8	Outstanding Savings Balance of the licensed institutions (in Billion)	107.0	136.0	27.1			
9	Outstanding Savings Balance Held in Top 20 Institutions (in Billion)	88.0	107.0	21.5			

Source: Microcredit Regulatory Authority; Calculation: FSD, BB

The total number of MFIs was 753 (excluding 56 MFIs whose licenses are now canceled) [Table 11.1 and Chart 11.1] at the end of FY15. During the last five years [FY11 to FY15], the total number of MFIs increased by 177, whereas 101 institutions' licenses have been canceled. The number of branches decreased by 2,457 and the members of this sector have also decreased by 0.1 million. During the same period, total loans disbursed and the total savings accumulated by MFIs have been more than double that of FY11. It demonstrates that both loan per borrower and the savings per member have increased during the reporting period.





12/13

Loan

13/14

14/15

10/11

11/12

Savings

Source: Microcredit Regulatory Authority, Calculation: FSD,BB

At the end of FY15, the MFIs' net disbursement (gross disbursement less recovery) was BDT 354 billion, provided as loan facilities to 20.4 million (78.3 percent) of its current members to support them to be self-employed. A major portion of these loans (38.4 percent) was financed from the savings of BDT 136 billion by its members. During the period, from FY14 to FY15, loan growth was 25.4 percent; whereas the growth of savings was 27.1 percent.

Chart 11.3 shows that the number of borrowers as well as members of the MFIs has increased gradually. However, the growth rate of the borrowers is higher than that of the members from 2014 to 2015; number of borrowers increased by 4.8 percent (0.9 million) whereas the number of members increased by 3.5 percent (0.9 million). It reveals that the more members are taking loan facilities from their respective MFIs.



Source: Microcredit Regulatory Authority, Calculation: FSD,BB

Chart 11.4 shows that the current borrowers to members' ratio reached at 78.3 percent from 77.3 percent in FY14. That is, more members are availing loan facilities than that of the previous year. The reason may be that the members who were not eligible for loan facilities earlier, due to non-fulfillment of the minimum savings target and the group lending restriction policy, became eligible for investment purposes owing to a conducive environment prevailing at present.



Source: Microcredit Regulatory Authority, Calculation: FSD, BB

The average loan and savings per institution (Chart 11.5) also increased in FY15 compared with the previous reporting period, as well as over the last five years. Currently, the average loan portfolio and savings held by each institution is BDT 470.1 million and BDT 180.6 million respectively. During the period, the average loans and the savings per institution increased by 23.6 percent and 25.3 percent respectively.

In FY15, the average loans and savings per branch (Chart 11.6) were BDT 22.7 million (18.4 percent higher than that of FY14) and BDT 8.7 million (20.0 percent higher than that of FY14) respectively. These two indicators also increased in line with total loans and savings in the reporting period.

With the increase in loans and savings per branch, the average loan size and savings per borrower/member, shown in Chart 11.7, also increased. In FY15, the average loan per borrower was BDT 17,395.6 which was 19.7 percent higher than that of the previous period, but was more than double compared with FY11. Similarly, the average savings per member was BDT 5,230.8 which was 22.8 percent higher than that of the previous reporting period and also more than double from FY11. At the end of FY15, the savings to loan ratio per member was 30.1 percent. The reason behind the increasing trend of these two indicators may be the increase in the income level of the members, which results in an increase in their savings as well as the need for a higher amount of loans from MFIs.



Source: Microcredit Regulatory Authority, Calculation: FSD, BB

Chart 11.8 shows that most of the members of MFIs are women and the number of them is increasing steadily. Currently 91.2 percent of the members are women (23.6 million) which is also 3.9 percent higher than the FY14 level. On the contrary, the number of male members is 2.3, million reduced by 2 percent from the previous FY.

Since the major portion of the members is women, the share of women participation to credit access is higher. Currently 19.1 million women are enjoying the credit facility among 23.6 million female members while 2.0 million male has access to credit among 2.3 million male members.



Source: Microcredit Regulatory Authority, Calculation: FSD, BB

Though most borrowers and members are women, in percentage, male members are more willing to take loan facilities (Chart 11.10). Currently, 81.0 percent of female members are taking loan facilities, whereas the number is 86.0 percent for the male members.



Source: Microcredit Regulatory Authority, Calculation: FSD, BB

Data reveal that the members of MFIs are more willing to take very large loans and large loans than the small loans during FY15 [Chart 11.12], as they have high borrowing capacity enhanced through high savings and income-generating activities to pay off the installment of the loan⁷⁶. On the other hand, it is less costly for the MFIs to monitor and process these larger loans.

The following two graphs (Chart 11.13 and 11.14) show the trend of the number of members taking loans under different loan categories. In FY15, 11.6 million members (2.4 percent higher than that of FY14) took very large loans, which constituted 55.5 percent of total borrowers taking loan facilities, compared with 57.0 percent in FY14. Loans taken under each category of large and medium loans in FY15 were almost the same (almost 20 percent each). In FY15, 4.1 million members (12.4 percent higher than FY14 level) took large loans whereas 4.1 million members (8.9 percent higher than FY14 level) accessed loans under the medium category. Though the number of members who took loan under very large, large and medium categories increased, the number of members who took loans under the small loan category decreased by 2.6 percent. In FY15, only 1.1 million members took small loans.



Source: Microcredit Regulatory Authority, Calculation: FSD,BB

In the last five years, from FY11 to FY15, it is observed that most of the borrowers have been very large loan recipients and only a few members have taken small loans, ranking lowest among the categories. Indeed, the rate of enlisted new members of MFIs has been very low (3.5 percent). On the one hand, the savings of new members have not been up to the level that would have helped them to get higher amount of loans. Conversely, old members have been more willing to take bigger amount of loans.

At the end of FY15, 55.6 percent of total disbursed loans remained outstanding. Loan amounts of BDT 220.2 billion (31.9 percent higher than that of FY14) under the very large loan category constituted the major portion (62.4 percent) of outstanding loans. Loans outstanding under the large loan category were BDT 63.9 billion (23.2 percent higher than that of FY14) in FY15. For medium and small loan categories, the outstanding amounts were BDT 56.4 billion, 18.3 percent higher than FY14 and BDT 12.2 billion 4.0 percent higher than FY14 respectively.

⁷⁶ Very large ≡BDT 5 Lac and above, Large ≡ BDT 1 Lac to 5 Lac, Medium ≡ BDT 10,000 to 1 Lac, Small ≡ up to BDT 10,000.



Source: Microcredit Regulatory Authority, Calculation: FSD, BB

Over the last five years, the distribution of outstanding loans has remained almost constant though the outstanding amount in each category has more than doubled. It explains the fact that the loans have been highly concentrated in the very large loan category.

The non-performing loans (NPLs) ratio (Chart 11.17) shows a downward trend, which is an encouraging sign for this sector. It is very important for this sector to lend at a reasonable cost as well as to be sustainable in the long run. Currently, the default rate is 3.0 percent (130 basis points lower than FY14) which is quite low, considering the NPLs of the Banking and NBFI sectors. In last five consecutive years, the default rate has significantly gone down by more than half, indicating the increasing income generating and payment capacity of the borrowers as well as the efficiency of the employees of the MFIs.



Source: Microcredit Regulatory Authority, Calculation: FSD, BB

It is important to mention that the reason behind the reduction in default rates is not necessarily due to the high disbursement in the loan, but also the recovery of default loans. The amount shown in Chart 11.8 demonstrates that the current amount of default loans is BDT 10.8 billion which is 1.5 billion lower than the amount in FY14. In FY14, default loans were the highest within the last five years, but due to an increased disbursement of loans, the rate showed a downward trend. However in FY15, though the loan size increased from FY14, a reduction in defaults amount resulted in a sharp decline in the default rate from its previous trend. It indicates a long run resilience of this sector.

11.2 Fund Composition

The MFIs have been able to maintain an upward trend in mobilizing capital funds from various sources since their inception. However, the dynamics of funding sources have changed over time as they have moved from outward-looking, donor-dependent to inward-looking, self-reliant sources. The contribution of foreign sources in the revolving funds (RLF) of MFIs was 3.7 percent in FY11, has now declined to 1.3 percent by June 2015. Since FY11, they appeared to be inward-looking, as domestic sources of financing dominated their capital portfolio. By June 2015, they collected 34.5 percent of their total funds from capital enhanced through retained earnings, indicating their anchor on a self-reliant model. Other major sources of their capital funds are loans from banks and PKSF.

11.3 Sources of Funds

Minimum capital requirement or a specified capital adequacy ratio for a microfinance institution is not clearly stated neither in the Act nor in the rules, although the sources of funds for microcredit organization are published. The total funds based on which the lending of MFIs are operated increased significantly in FY15 (Chart 11.19).



Source: Microcredit Regulatory Authority, Calculation: FSD,BB

During this period, the total funds increased to BDT 398.9 billion, which was 27.6 percent higher than the FY14 level. This expansion is largely due to a significant increase in MFIs own capital, enhanced through retained earnings (36.4 percent increase from FY14), savings (26.6 percent increase from FY14) and loans from commercial banks (33.2 percent increase from FY14).

Over the last five years, the total fund⁷⁷ has doubled from FY11. During this period, the MFIs enjoyed an average growth rate of more than 25 percent in total funds and it is still growing significantly.

In FY15, capital, savings from members, and loans from commercial banks constituted respectively 34.5, 33.9 and 17.2 percents of total funding of the MFIs. Besides, loan from PKSF, donors' fund and others sources constituted 9.5 percent, 1.3 percent and 3.6 percent respectively. It is mentionable that contribution of capital and loans from commercial banks increased from 32.3 percent and 16.5 percent to 35.0 percent and 17.2 percent respectively whereas the contribution of savings remained mostly unchanged (34.0 percent).

⁷⁷ The total fund mainly comprises MFIs' own capital, savings, loans from commercial banks, loans from PKSF, donors' fund, loans from Government and others' loans.



Source: Microcredit Regulatory Authority, Calculation: FSD, BB

Over the last five years, it is observed that the capital and loans from commercial banks have been increasing gradually. Though contribution of savings to the total funds has almost remained constant, the savings amount has increased steadily. However, as many banks distribute agricultural credit through MFIs, it has become one of the major sources of funds for the MFIs.

11.4 Financial Sustainability

Operational sustainability of MFIs relies largely upon the high Return on Assets (ROA) and Return on Equity (ROE). These indicators showed improvements in FY15 over FY14, which is a good sign for the sector. Another measure of financial sustainability, the dependency ratio (donation to capital ratio), also indicates gradual improvement in MFIs sector.



Source: Microcredit Regulatory Authority, Calculation: FSD,BB

The amount of donated funds decreased in FY15, but the amount of capital increased through retained earnings, which are very important for long term sustainability of this sector, as well as to withstand financial shocks.

The donation to loan ratio is used to indicate the portion of loans which is financed through donations. In FY14, 2.4 percent of loans were financed through donations, while it was only 1.5 percent in FY15.



Source: Microcredit Regulatory Authority, Calculation: FSD,BB

The savings to loan ratio showed an upward trend in terms of contribution of savings in financing loans. In FY15, 38.3 percent of loan was financed through members' savings but in the previous year, the contribution was 37.9 percent.

The MFIs sector is highly concentrated in terms of loans, savings, and number of members. In FY15, the top 10 MFIs mobilized 71.5 percent of total savings, and disbursed 70.3 percent of total loans. They provided financial services to 63.0 percent of members of total MFI sector. Compared with FY14, savings concentration decreased by 1.9 percentage points, while the concentration in terms of loans and members increased by 3.7 percentage points.



Source: Microcredit Regulatory Authority, Calculation: FSD,BB

If the top 20 MFIs are considered, the concentration ratios for savings, loans and members go up to 82.3 percent, 75.1 percent and 70.0 percent respectively. In FY14, the ratios were 74.1 percent, 74.4 percent and 71.0 percent respectively. Therefore, the savings and loan concentration ratios increased by 8.2 and 0.7 percentage points respectively. However, members' concentration decreased by 1.0 percentage point. In the last five financial years, it has been observed that the savings concentration ratio has moved between 74.0 percent and 83 percent, whereas the loan concentration ratio has ranged between 74.0 percent and 78.0 percent when the top 20 MFIs are taken into consideration. During the same period, members' concentration has moved between 70 percent and 75.0 percent. Those concentrations may create instability in the microfinance sector, if those MFIs fail to withstand systemic risk.

List of Appendices

Appendix I: Banking Sector Aggregate Balance Sheet							
Particulars	Amount in E	Sillion BDT			Change (%	<i>i)</i>	
	2012	2013	2014	2015	2013 to	2014 to	
					2014	2015	
Property & Assets							
Cash in Hand (including FC)	81.1	102.7	91.1	92.3	(11.3)	1.3	
Balance with BB & SB (including	450.8	479.3	572.8	666.3	19.5	16.3	
FC)							
Balance with other Banks & FIs	244.7	347.9	409.7	428.9	17.8	4.7	
Money at Call & Short Notice	66.8	46.5	54.2	49.6	16.4	(8.5)	
Investments							
Government	607.6	841.2	977.6	1,136.4	16.2	16.2	
Others	505.9	730.0	855.5	938.0	17.2	9.6	
Total Investment	1,113.4	1,571.2	1,833.1	2,074.4	16.7	13.2	
Loans & Advances							
Loans, CC, OD etc.	4,098.4	4,443.5	5,147.2	5,904.1	15.8	14.7	
Bills purchased & Discounted	288.2	276.6	245.7	287.0	(11.2)	16.8	
Total Loans & Advances	4,386.7	4,720.1	5,392.9	6,191.1	14.3	14.8	
Fixed Assets	162.1	198.2	216.7	224.4	9.4	3.6	
Other Assets	488.1	532.5	570.7	584.4	7.2	2.4	
Non-banking Assets	36.9	1.7	1.9	3.3	11.6	73.1	
Total Assets	7,030.7	8,000.2	9,143.0	10,314.7	14.3	12.8	
Liabilities							
Borrowings from other	316.0	221.6	313.0	398.7	41.3	27.4	
Banks/Fls/Agents							
Deposits & Other Accounts:							
Current Deposit	989.6	1,091.0	1,295.3	1,495.8	18.7	15.5	
Savings Deposit	972.6	1,047.7	1,225.6	1,442.4	17.0	17.7	
Fixed/Term Deposit	2,985.6	3,622.3	3,931.1	4,524.2	8.5	15.1	
Inter -bank Deposit	102.2	140.4	175.6	138.6	25.1	(21.1)	
Other Deposits	327.2	392.9	513.0	431.0	30.6	(16.0)	
Total Deposit	5,422.2	6,294.3	7,140.6	8,032.0	13.4	12.5	
Bills Payable	76.0	68.9	87.8	87.6	27.5	(0.3)	
Other Liabilities	640.6	737.2	860.2	951.7	16.7	10.6	
Total Liabilities	6,454.7	7,321.9	8,401.7	9,470.0	14.7	12.7	
Capital/Shareholder's Equity	575.9	678.3	741.3	844.7	9.3	13.9	
Total Liabilities & Shareholder's	7,030.7	8,000.2	9,143.0	10,314.7	14.3	12.8	
Equity							
Off-balance Sheet Items	1,871.3	2,153.1	2,361.0	2,685.3	9.7	13.7	

(Amount in billion BDT)								
Particulars	2013	% of Total Assets	2014	% of Total Assets	2015	% of Total Assets		
Property & Assets								
Cash in Hand (including FC)	102.7	1.3	91.1	1.0	92.3	0.9		
Balance with BB & SB (including	479.3	6.0	572.8	6.3	666.3	6.5		
FC)								
Balance with other Banks & FIs	347.9	4.3	409.7	4.5	428.9	4.2		
Money at Call & Short Notice	46.5	0.6	54.2	0.6	49.6	0.5		
Investments								
Government	841.2	10.5	977.6	10.7	1,136.4	11.0		
Others	730.0	9.1	855.5	9.4	938.0	9.1		
Total Investments	1,571.2	19.6	1,833.1	20.0	2,074.4	20.1		
Loans & Advances								
Loans, CC, OD etc.	4,443.5	55.5	5,147.2	56.3	5,904.1	57.2		
Bills purchased & Discounted	276.6	3.5	245.7	2.7	287.0	2.8		
Total Loans and Advances	4,720.1	59.0	5,392.9	59.0	6,191.1	60.0		
Fixed Assets	198.2	2.5	216.7	2.4	224.4	2.2		
Other Assets	532.5	6.7	570.7	6.2	584.4	5.7		
Non-banking Assets	1.7	0.0	1.9	0.0	3.3	0.0		
Total Assets	8,000.2	100.0	9,143.0	100.0	10,314.7	100.0		

Appendix II : Banking Sector Aggregate Share of Assets

Data Source: Department of Off-site Supervision, Bangladesh Bank.

Appendix III : Banking Sector Aggregate Share of Liabilities

		(Amount in billion BDT)				
Particulars	2013	% of Total Liabilities	2014	% of Total Liabilities	2015	% of Total Liabilities
Liabilities:						
Borrowings from other	221.6	3.0	313.0	3.7	398.7	4.2
Banks/Fls/Agents						
Deposits & Other Accounts:						
Current Deposit	1,091.0	14.9	1,295.3	15.4	1,495.8	15.8
Savings Deposit	1,047.7	14.3	1,225.6	14.6	1,442.4	15.2
Fixed/Term Deposit	3,622.3	49.5	3,931.1	46.8	4,524.2	47.8
Inter- bank Deposit	140.4	1.9	175.6	2.1	138.6	1.5
Other Deposits	392.9	5.4	513.0	6.1	431.0	4.5
Total Deposit	6,294.3	86.0	7,140.6	85.0	8,032.0	84.8
Bills Payable	68.9	0.9	87.8	1.0	87.6	0.9
Other Liabilities	737.2	10.1	860.2	10.2	951.7	10.1
Total Liabilities	7,321.9	100.0	8,401.7	100.0	9,470.0	100.0

Appendix IV : Banking Sector Aggregate Income Statement

		Amount in Billion BDT				T Change (%)		
Particulars	2012	2013	2014	2015	2013 to	2014 to		
					2014	2015		
Interest Income	572.1	618.9	633.2	636.6	2.3	0.5		
Less: Interest Expense	418.3	486.6	493.2	490.7	1.4	(0.5)		
Net Interest Income	153.8	132.3	140.0	145.9	5.8	4.2		
Non-Interest/Investment Income	186.4	219.8	257.7	279.3	17.3	8.4		
Total Income	340.2	352.1	397.8	425.2	13.0	6.9		
Operating Expenses	142.9	166.0	185.1	208.3	11.5	12.5		
Profit before Provision	197.3	186.1	212.7	216.9	14.3	2.0		
Total Provision	86.4	46.1	84.3	77.0	82.7	(8.7)		
Profit before Taxes	110.8	140.0	128.4	139.9	(8.3)	9.0		
Provision for Taxation	66.2	67.4	68.4	60.7	1.5	(11.3)		
Profit after Taxation/Net Profit	44.7	72.5	60.0	79.2	(17.3)	32.0		

Data Source: Department of Off-site Supervision, Bangladesh Bank.

Appendix V : Banking Sector Assets, Deposits & NPL Concentration (CY15)

(Amount in billion BDT)						
Assets	Top 5 Banks	Other Banks	Top 10 Banks	Other Banks		
Amount (in billion BDT)	3,353.3	6,961.4	4,769.6	5,545.1		
Share (%)	32.5	67.5	46.2	53.8		
Deposit	Top 5 Banks	Other Banks	Top 10 Banks	Other Banks		
Amount (in billion BDT)	2,667.4	5,225.9	3,772.7	4,120.6		
Share (%)	33.8	66.2	47.8	52.2		
NPL	Top 5 Banks	Other Banks	Top 10 Banks	Other Banks		
Amount (in billion BDT)	256.2	257.5	326.3	187.4		
Share (%)	49.9	50.1	63.5	36.5		

Data Source: Department of Off-site Supervision & Banking Regulation and Policy Department

Appendix VI : Banking Sector Loan Loss Provisions						
(Amount in billion BDT)						
Year	Required Provision	Provision Maintained	Surplus/(Shortfall)			
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)			
2015	308.9	266.1	(42.8)			

Data Source: Banking Regulation and Policy Department, Bangladesh Bank.

Appendix VII : Banking Sector Year-Wise Gross NPL Ratio & Its Composition

	(In percentage					
Year	Gross NPL to Total	Sub-Standard Loans	Doubtful Loans	Bad Loans to		
	Loans Outstanding	to Gross NPL	to Gross NPL	Gross NPL		
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		
2015	8.8	8.9	6.5	84.6		

Data Source: Banking Regulation and Policy Department, Bangladesh Bank.

Appendix VIII : Banking Sector NPL Composition (CY15)

(Amount in billion BD				
Particulars	Amount	% of Gross NPL		
Sub-Standard	45.6	8.9		
Doubtful	33.2	6.5		
Bad & Loss	434.9	84.6		
Total	513.7	100.0		

Data Source: Banking Regulation and Policy Department, Bangladesh Bank.

Appendix IX : Banking Sector Deposits Breakdown excluding Interbank Deposit (CY15)

(Amount in billion BDT)					
ltems	Amount	% of Total Deposit			
Current deposits	1,495.8	18.9			
Savings deposits	1,442.4	18.3			
Term deposits	4,524.2	57.3			
Other Deposits	431.0	5.5			
Total deposit	7,893.3	100.0			

				(ln pe	rcentage)
RATIO	CY11	CY12	CY13	CY14	CY15
ROA	1.3	0.6	0.9	0.7	0.8
ROE	14.3	7.8	10.7	8.1	9.4
Net Interest Margin	3.0	2.8	2.1	1.8	1.7
Interest Income to Total Assets	7.5	8.1	7.7	6.9	6.2
Net-Interest Income to Total Assets	2.5	2.2	1.7	1.5	1.5
Non-Interest Income to Total Assets	2.9	2.7	2.7	2.8	2.7
Non-interest expense to Gross	40.5	42.0	47.1	46.5	48.6
Operating Income					
CAR/CRAR	11.3	10.5	11.5	11.4	10.8
Gross NPL to Total Loans	6.2	10.0	8.9	9.7	8.8
Outstanding					
Gross NPL to Capital	43.6	74.2	59.8	67.7	60.8
Maintained Provision to Gross NPL	63.8	44.4	61.6	56.2	51.8

Appendix X : Banking Sector Selected Ratios

Data Source: Department of Off-site Supervision & Banking Regulation and Policy Department; Bangladesh Bank.

Appendix XI : Banking Sector ROA & ROE (CY15)							
ROA (%) Number of Banks ROE (%) Number of Banks							
Up to 2.0	50	Up to 5.00	12				
> 2.0 to 3.0	2	> 5.00 to 10.00	16				
>3.0 to 4.0	0	>10.00 to 15.00	8				
>4.0	4	>15.00	20				

Data Source: Department of Off-site Supervision, Bangladesh Bank.

Appendix XII : Banking Sector Year-wise ADR at end December

	(In percentage)
Year	Advance-Deposit Ratio
2012	76.6
2013	71.2
2014	71.0
2015	71.0

Data Source: Department of Off-site Supervision, Bangladesh Bank.

Appendix XIII : Banking Sector ADR (CY15)					
Range	Number of Banks				
Up to 70%	16				
> 70% to 85%	32				
> 85% to 90%	5				
>90% to 100%	3				
>100 %	0				
Total	56				

Appendix XIV : Banking Sector Month-Wise Deposit & Advance Rate (CY15)								
Month	Deposit Rate	Advan ce Rate	Spread					
Jan	7.26	12.32	5.06					
Feb	7.19	12.23	5.04					
Mar	7.06	11.93	4.87					
Apr	7.04	11.88	4.84					
May	6.99	11.82	4.83					
Jun	6.80	11.67	4.87					
Jul	6.78	11.57	4.79					
Aug	6.74	11.51	4.77					
Sep	6.66	11.48	4.82					
Oct	6.58	11.35	4.77					
Νον	6.46	11.27	4.81					
Dec	6.34	11.18	4.84					

Data Source: Bangladesh Bank Website.

Appendix XV : Islamic Banks Aggregate Balance Sheet									
	Ar	nount in B	illion BDT		Change	Change (%)			
Particulars	2012	2013	2014	2015	(%) 2013	2014To 15			
					To 14				
Property & Assets:									
Cash in Hand (including FC)	12.2	15.6	14.1	15.9	(9.6)	12.7			
Balance with BB & SB (including FC)	104.0	102.3	124.2	151.8	21.4	22.2			
Balance with other Banks & FIs	80.6	80.2	85.3	86.3	6.4	1.2			
Money at Call & Short Notice	0.0	0.0	0.5	0.5	-	0.0			
Investments									
Government	41.4	17.3	22.3	35.9	28.9	60.9			
Others	18.6	87.7	125.3	116.5	42.9	(7.0)			
Total Investments	60.0	105.0	147.6	152.4	40.6	3.2			
Investments & Advances									
Investments & Advances	801.6	899.7	1,105.1	1,311.0	22.8	18.6			
Bills Purchased & Discounted	69.7	75.5	59.9	74.0	(20.7)	23.5			
Total Investments and Advances	871.3	975.3	1,165.0	1,384.9	19.5	18.9			
Fixed Assets	18.7	30.7	32.2	34.8	4.9	7.9			
Other Assets	34.7	50.1	63.0	70.3	25.8	11.6			
Non-banking Assets	0.0	0.0	0.1	1.0	493.8	934.2			
Total Assets	1,181.5	1,359.0	1,632.0	1,897.9	20.1	16.3			
Liabilities									
Borrowings from other	38.3	29.6	26.6	47.5	(10.3)	78.6			
Banks/FIs/Agents									
Deposits & Other Accounts:									
Current Deposit	105.0	76.5	118.0	92.0	54.3	(22.0)			
Savings Deposit	184.9	190.6	234.6	282.3	23.1	20.3			
Fixed/Term Deposit	479.6	718.1	863.1	1042.9	20.2	20.8			
Other Deposit	214.7	148.5	154.8	139.7	4.3	(9.8)			
Total Deposits	995.6	1,133.6	1,370.5	1,556.8	20.9	13.6			
Bills Payable	11.3	9.3	11.2	11.2	20.3	0.4			
Other Liabilities	68.4	83.6	108.7	153.5	29.9	41.2			
Total Liabilities	1,102.2	1,256.2	1,517.0	1,769.1	20.8	16.6			
Capital/Shareholder's Equity	79.3	102.8	115.0	128.8	11.8	12.0			
Total Liabilities & Shareholder's	1,181.5	1,359.0	1,632.0	1,897.9	20.1	16.3			
Equity									
Off-balance sheet Items	280.7	289.1	320.8	369.2	11.0	15.1			

Appendix XVI : Islamic Banks Aggregate Income Statement								
Particulars	An	nount in bil	lion BDT		Change	Change		
	2012	2013	2014	2015	(%) in	(%) in		
					2014	2015		
Profit Income	115.9	133.0	142.5	146.8	7.2	3.0		
Less: Profit Expenses	77.1	94.5	96.8	95.9	2.5	(1.0)		
Net Profit Income	38.7	38.5	45.7	50.9	18.7	11.4		
Non-Profit/Investment	16.6	17.7	19.8	19.0	11.9	(4.3)		
Income								
Total Income	55.4	56.2	65.5	69.9	16.6	6.6		
Operating Expenses	20.1	24.8	28.2	33.3	16.5	18.2		
Profit before Provision	35.2	31.4	36.6	36.52	16.6	(0.2)		
Total Provision	8.1	7.6	11.2	9.3	47.4	(17.1)		
Profit before Taxes	27.1	23.9	25.4	27.2	6.4	7.2		
Provision for Taxation	13.8	11.8	12.1	12.3	2.3	1.9		
Profit after	13.3	12.1	13.3	14.9	10.4	12.0		
Taxation/Net Profit								

Data Source: Department of Off-site Supervision, Bangladesh Bank.

Appendix XVII : Share of Islamic Banks in the Banking Sector (CY15)

(Amount in billion E							
Particulars	All Banks	Islamic Banks	Share of Islamic Banks				
Property & Assets							
Cash in hand	92.2	15.9	17.2				
Due from BB & other banks/FIs	1,144.8	238.1	20.8				
Investments in securities	2074.4	152.4	7.3				
Investments (Loans & advances)	6,191.1	1,384.9	22.4				
Other Assets	812.1	524.4	64.6				
Total Assets	10,314.6	2,315.7	22.5				
Liabilities							
Due to financial institutions	398.7	47.5	11.9				
Total deposits	8,031.9	1,556.8	19.4				
Bills Payable	87.6	11.2	12.8				
Other liabilities	951.7	153.5	16.1				
Total Liabilities	9,469.9	1,769.1	18.7				
Capital/Shareholder's Equity	844.7	546.6	64.7				
Total Liabilities & Shareholder's Equity	10,314.6	2,315.7	22.5				
Off-balance Sheet Items	2685.3	369.2	13.7				

Appendix XVIII : Selected Ratios of Islamic Banks and the Banking Sector (CY15)

Ratio	Overall Banking	Islamic Banking
	Sector	Sector
ROA	0.8	0.8
ROE	9.4	11.6
Net Profit Margin	1.7	3.3
Profit (Interest) Income to Total Assets	6.2	7.7
Net-profit (Interest) Income to Total Assets	1.4	2.7
Non-Profit (Interest) Income to Total Assets	2.7	1.0
Investment (Advance)-Deposit Ratio	70.7	83.2
CRAR	10.8	12.6
Classified Investment (Advances) to Investments	8.8	4.6
Classified Investment (Advances) to Capital	60.8	47.1

*Data on ICB Islami Bank Ltd. is excluded for Islamic Banking Sector

Data Source: Department of Off-site Supervision & Banking Regulation and Policy Department;

Appendix XIX : Islamic Banks' CRAR (CY15)						
CRAR	Number of Islamic Banks					
Below 10.00%	1					
10.00% to 13.00%	4					
>13.00%	3					
Total	8					

Data Source: Department of Off-site Supervision, Bangladesh Bank.

Appendix XX : Islamic Banking Sector Investment (Advance)-Deposit Ratio (as of 31.12.2015) _(Amount in billion BDT)							
Items	Islamic Banks	Islamic Branches/Windows	Islamic Banking Sector				
Deposits (Excluding Interbank)	1,552.3	89.4	1,641.6				
Investments* (Excluding Interbank)	1,306.1	81.7	1,387.8				
IDR	83.2	75.6	82.7				

*Credits are termed as investments in Islamic Banking.

Data Source: Department of Off-site Supervision, Bangladesh Bank.

Appendix XXI : Stressed Advances Ratio in Different Segments

	(Amount in Billion BDT)											
SI	Segments	Year 2015				Gross	Rescheduled	Stressed				
No.		Unclassified	Gross	Total	Rescheduled	NPL to	& Restructured	Advances				
		Advances	NPL Advances &			Total	Loans to Total	Ratio (3) =				
					Restructured	Advances (1)	Advances (2)	(1) + (2)				
01	Large	2,321.4	155 .0	2,476.4	176 .2	6.3%	7.1%	13.4%				
02	Medium	687 .8	115 .7	803 .5	0. 88	14.4%	11.0%	25.4%				
03	Small	547 .9	70.9	618 .8	31.3	11.5%	5.1%	16.6%				
04	Micro &	91.6	6.8	98 .4	0.6	6.9%	0.6%	7.5%				
	Cottage											
05	Others	1,683.7	165 .3	1,849.0	131 .6	8.9%	7.1%	16.0%				
	Total	5,332.4	513.7	5,846.1	427 .7	8.8%	7.3%	16.1%				

Data Source: Scheduled Banks of Bangladesh



Appendix XXII : Overseas Branches Aggregate Share of Assets & Liabilities

Assets	СҮ	% of	СҮ	% of	Liabilities	СҮ	% of	СҮ	% of	
	14	Total	15	Total		14	Total	15	Total	
		Assets		Assets			Liabilities		Liabilities	
Cash &	36.2	13.2	99.6	24.9	Customer	162.6	70.0	242.1	68.4	
Balance					Deposits					
from										
Central										
Banks										
Balance	169.3	62.0	115.0	28.7	Dues to head	69.7	30.0	111.6	31.6	
with other					office &					
Banks &					branches					
Fls					abroad & other					
					liabilities					
Loans &	56.1	20.5	136.8	34.1	Total Liabilities	232.3	100	353.7	100.0	
Advances										
Property &	11.7	4.3	49.3	12.3	Capital/	41.0	17.6	47.0	13.3	
Equipment					Equity					
s and										
other										
assets										
Total	273.3	100.0	400.7	100.0	Total Liabilities	273.3	-	400.7	-	
Assets					& Equities					

Data Source: Scheduled Banks of Bangladesh

Appendix XXIII : Year-Wise Stressed Advances In Banking Sector						
(In percentag						
Year	Gross NPL to Total Rescheduled & Restructured*		Stressed			
	Advances	Advances To Total Advances	Advances			
2012	10.0	3.7	13.7			
2013	8.7	4.8	13.5			
2014	9.7	3.4	13.1			
2015	8.8	7.3	16.1			

* Only loans restructured as per BRPD circular no. 04, dated 29.01.2015 has been incorporated. Data Source: Scheduled Banks of Bangladesh

Appendix XXIV : Stressed Advance Concentration In Banking Sector (CY15)						
Stressed Advances	Top 5 Banks	Other Banks	Top 10 Banks	Other Banks		
Amount (in billions)	393.8	547.6	607.4	334.0		
Share (in percentage)	41.8	58.2	64.5	35.5		

Data Source: Scheduled Banks of Bangladesh

(Amount in Million USD)

(Amount in Billion BD							
ltems	CY11	CY12	CY13	CY14	CY15		
Property & Assets:							
Cash in hand	0.02	0.2	0.04	0.02	0.01		
Balance with other banks and FIs	20.2	31.7	46.9	85.0	94.7		
Money at call & short notice	0.003	0.7	1.0	1.2	0.1		
Investment in government securities	3.0	2.4	4.3	2.2	0.8		
Other investments	13.7	13.5	10.5	16.2	19.4		
Total Ioans & leases	200.0	247.4	315.1	371.0	448.5		
Fixed assets	4.6	5.4	5.7	6.0	7.0		
Other assets	34.9	25.4	50.0	38.3	39.9		
Non-financial assets	-	-	2.3	0.2	0.8		
Total assets	276.4	326.7	435.8	520.1	611.1		
	-		1	I	I		
Liabilities & Equity:							
Borrowing from other banks and FIs	78.4	84.8	108.1	127.9	132.4		
Deposits	116.4	145.2	197.6	245.7	318.1		
Other liabilities	24.3	37.1	43.6	50.7	60.3		
Total liabilities	219.1	267.1	349.3	424.3	510.8		
Shareholders' equity (capital)	57.3	59.6	86.5	95.8	100.3		
Total liabilities and shareholders' equity	276.4	326.7	435.8	520.1	611.1		

Appendix XXV : FIs' Aggregate Balance Sheet

Data Source: Department of Financial Institutions and Markets, Bangladesh Bank.

Appendix XXVI : FIs' Aggregate Income Statement

		(Amount in Billion BDT			
ltems	CY11	CY12	CY13	CY14	CY15
Interest income	28.5	35.0	50.5	50.9	57.4
Less: Interest expense	(19.8)	(25.3)	(33.9)	(33.8)	(37.4)
Net interest income (Net II)	8.7	9.7	16.6	17.1	20.0
Investment income	2.7	2.3	1.6	1.2	2.0
Add: Commission, exchange and brokerage	0.5	0.2	0.8	0.3	0.3
Add: Other operating income	2.9	2.7	2.5	5.2	5.6
Non-interest income (Non II)	6.1	5.2	4.9	6.7	7.9
Total operating income	14.8	14.9	21.5	23.8	27.9
(Net ll + Non ll)					
Operating expenses	(3.5)	(4.0)	(5.4)	(5.5)	(6.6)
Profit before provisions	11.3	10.9	16.1	18.3	21.3
Total provisions	(1.2)	(1.9)	(3.4)	(2.6)	(4.6)
Profit before taxes	10.1	9.0	12.7	15.7	16.7
Tax provisions	(3.1)	(2.9)	(4.7)	(6.2)	(7.0)
Net profit after taxes	7.0	6.1	8.0	9.5	9.7

Data Source: Department of Financial Institutions and Markets, Bangladesh Bank.

Appendix XXVII : FIs' Liquidity Position							
(Amount in Billion BDT)							
ltems	End-Dec.	End-Dec.	End-Dec.	End-Dec.	End-Dec.		
	2011	2012	2013	2014	2015		
Total liabilities	107.2	129.6	158.8	242.9	289.6		
Total term deposits	78.8	99.4	127.0	155.5	191.3		
Industry CRR (required)	2.0	2.5	3.2	3.9	4.8		
Industry CRR (maintained)	2.2	2.9	3.7	8.8	5.2		
Industry SLR (required)	5.4	6.5	7.9	12.1	14.5		
Industry SLR (maintained)	14.1	19.3	24.8	65.6	68.0		

Data Source: Department of Financial Institutions and Markets, Bangladesh Bank.

Appendix XXVIII : FIs' Other Information								
(Amount in Billion BDT)								
ltems	CY11	CY12	CY13	CY14	CY15			
Tier-I Capital	-	57.0	67.6	98.0	94.6			
Tier-II Capital	-	4.9	5.3	5.3	6.7			
Total Capital	57.3	61.9	72.9	103.3	101.3			
	•			-				
Classified loans & leases	10.3	13.7	17.7	19.7	40.0			
Loan loss provisions (required)	6.0	6.9	8.6	10.0	19.8			
Loan loss provisions (maintained)	7.0	7.7	9.5	11.0	14.2			
Loan loss provisions (surplus/shortfall)	1.0	0.8	0.9	1.0	(5.6)			
No. of government-owned FIs	3	3	3	3	3			
No. of local FIs	18	18	18	18	19			
No. of FIs under foreign joint venture	10	10	10	10	10			
Total no. of Fls	31	31	31	31	32			
No. of branches	161	169	176	198	211			

Data Source: Department of Financial Institutions and Markets, Bangladesh Bank.

Appendix XXIX : Fis' Summary Performance Indicators						
				(In per	centage)	
Indicators	CY11	CY12	CY13	CY14	CY15	
Profitability & Efficiency: Return on Assets (ROA) Return on Equity (ROE) Net Interest Margin (NIM)	2.5 12.1 4.3	1.9 10.2 3.9	1.8 9.2 5.2	1.8 9.9 4.6	1.6 9.8 4.4	
Asset Quality: Classified Loans & Leases to Total Loans & Leases	4.9	5.5	5.6	5.3	8.9	
Capital Adequacy: Capital to Risk-Weighted Assets	18.3	19.4	18.3	21.2	18.7	
Liquidity: SLR maintained CRR maintained	13.2 2.8	14.9 2.9	15.6 6.2	27.0 5.7	23.5 2.7	

Data Source: Department of Financial Institutions and Markets, Bangladesh Bank.

Appendix XXX : Fis Sector-wise Distribution of Loans and Leases							
	(In percente						
Major Sectors	CY11	CY12	CY13	CY14	CY15		
Sector-wise Distribution of Loans & Leases to							
Total Loans & Leases:							
Trade & Commerce	9.7	11.3	14.5	16.4	17.3		
Housing	19.3	17.6	12.2	17.5	17.7		
Power, Gas, Water and Sanitary Service	9.5	2.0	12.1	10.5	9.8		
Textile	5.4	5.4	4.8	4.4	4.7		
Iron, Steel and Engineering	3.7	3.5	4.4	4.7	5.2		
Transport & Aviation	4.9	4.3	4.4	4.7	3.9		
Food Production and Processing Industry	3.8	3.5	4.1	4.1	4.2		
Garments & Knitwear	5.0	4.5	4.0	4.0	4.1		
Margin Loan	8.5	4.5	3.9	3.3	3.3		
Merchant Banking	1.6	5.1	3.6	4.1	3.7		
Agriculture	1.2	1.4	1.4	1.9	1.8		
Others (including other sectors with minor share)	27.4	36.9	30.6	24.4	24.3		

Data Source: Department of Financial Institutions and Markets, Bangladesh Bank.

Appendix XXXI : Interbank Repo Volume and Prices							
Month	Interbank Repo Volume (Amount in Billion BDT)	Interbank Repo Rate (%)	Call Money Rate (%)				
January 2015	524.4	8.0	8.6				
February 2015	659.8	7.5	8.2				
March 2015	35.6	7.6	7.7				
April 2015	434.7	7.4	7.6				
May 2015	234.7	5.9	6.4				
June 2015	126.1	5.4	5.8				
July 2015	205.6	5.4	5.7				
August 2015	154.8	5.4	5.6				
September 2015	274.3	5.4	5.7				
October 2015	190.0	5.0	5.6				
November 2015	448.8	3.2	3.9				
December 2015	444.6	3.5	3.7				

Source: Bangladesh Bank Website, Economic Data.

Appendix XXXII : Treasury and BB Bill Yield						
Securities	December 2014	July 2015	December 2015			
91 Day T-Bill	7.5%	5.3%	2.9%			
182 Day T-Bill	7.9%	6.3%	3.3%			
364 Day T-Bill	8.2%	6.6%	4.1%			
2 Years T-Bond	8.5%	7.6%	4.9%			
5 Years T-Bond	9.6%	8.6%	5.0%			
10 Years T-Bond	11.0%	9.8%	7.2%			
15 Years T-Bond	11.5%	10.0%	7.9%			
20 Years T-Bond	12.1%	10.4%	9.0%			
30 Day BB Bill	5.2%	5.3%	3.5%			

Source: Bangladesh Bank website, Treasury Bills/ Bonds Auctions.

Appendix XXXIII : Equity Market Development							
Month	DSEX Index	Market Capitalization (Amount in Billion BDT)	Market P/E				
March 2015	3172.3	4530.5	16.5				
June 2015	3247.3	4583.1	15.9				
September 2015	3355.5	4852.1	16.4				
December 2015	3159.8	4629.6	15.2				

Source: Recent Market Information; www.dsebd.org; and Monthly Economic Trends, Feb, 2015, BB

Appendix XXXIV : Automated Cheque Clearing Operations

(Amount in Billion BDT)							
Category	CY 13		CY 14		CY15		
	Number (in thousands)	Amount	Number (in thousands)	Amount	Number (in thousands)	Amount	
High Value (HV)	1,365.0	6,877.9	1,610.0	8,812.3	1,808.4	9,794.5	
Regular Value (RV)	20,695.0	5,165.5	23,505.0	5,497.4	21,019.4	5,707.3	

Source: Payment Systems Department, Bangladesh Bank.

Appendix XXXV : Volume of Electronic Banking Transactions						
(Amount in Billion BDT)						
Year	Using ATM	Using Debit Card	Using Credit Card	Internet Banking		
2013	654.3	775.7	62.7	90.5		
2014	685.9	805.9	140.8	217.3		
2015	914.2	960.9	152.6	247.6		

Source: Monthly Economic Trends, Bangladesh Bank.

Appendix XXXVI: Number of Banks Providing Electronic Banking Services						
Year	Internet Banking	Credit Card	ATM/Debit Card			
2013	27	28	41			
2014	27	28	41			
2015	30	34	50			

Source: Statistics Department, Bangladesh Bank.

Appendix XXXVII : Comparative Picture of Mobile Financial Services (MFS) in last 3 years

Particulars	2013	2014	2015
Number of agents	188,647	540,984	561,189
Number of registered clients (in millions)	13.2	25.2	31.8
Number of active accounts (in millions)	6.5	12.1	13.2
Number of total transactions (in million BDT)	228.9	589.5	1,166.0
Volume of total transaction (in billion BDT)	517.8	1,031.5	1,577.7

Source: Payment Systems Department, Bangladesh Bank.

Appendix XXXVIII : External Credit Assessment Institutions (ECAIs)								
SI. 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					
	Appendix XXXIX : Microcredit Finance Sector							
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SI	Particulars	2010-11 ^R	2011-12 ^R	2012-13 ^R	2013-14 ^R	2014-15		
No.								
1	Total Number of Licensed	576.0	590.0	649.0	742.0	753.0		
	Institution							
2	Number of Branches	18,066.0	17,977.0	14,674.0	14,730.0	15,609.0		
3	Number of Employees	111,828.0	108,954.0	110,734.0	109,628.0	110,781.0		
4	Number of Members (in millions)	26.1	24.6	24.6	25.1	26.0		
5	Number of borrowers (in millions)	20.7	19.3	19.3	19.4	20.4		
6	Outstanding Loan Disbursed by Licensed institutions (in billions)	173.8	211.3	257.0	282.2	354.0		
7	Outstanding Loan Disbursed by top 20 Institutions (in billions)	131.1	161.4	191.3	212.0	278.0		
8	Outstanding Savings Balance of the Licensed institutions (in billions)	63.3	75.3	94.0	107.0	136.0		
9	Outstanding Savings Balance Held in Top 20 Institutions (in billions)	48.3	57.5	69.6	88.0	107.0		
10	Particulars of Disbursed loan (amount in millions)							
	Very Large(5 lac and Above)	175,502.0	268,772.0	232,256.0	249,786.0	368,734.0		
	Large (1 Lac to 5 lac)	56,344.0	90,432.0	80,020.0	91,287.0	150,149.0		
	Medium (10,000 to 1,00,000)	56,927.0	81,596.0	102,817.0	102,225.0	100,265.0		
	Small(Upto 10,000)	13,430.0	14,408.0	16,897.0	18,713.0	15,806.0		
11	Particulars of Outstanding Loan (in millions)							
	Very Large(5 lac and Above)	103,570.0	127,465.0	145,092.0	166,995.0	220,242.0		
	Large (1 Lac to 5 lac)	28,514.0	36,284.0	42,490.0	51,876.0	63,895.0		
	Medium (10,000 to 1,00,000)	33,751.0	38,375.0	44,539.0	47,704.0	56,431.0		
	Small(Upto 10,000)	8,144.0	9,234.0	10,528.0	11,708.0	12,181.0		
12	Total Number of Loan							
	Recipients (in thousands)							
	Very Large (5 lac and Above)	12,554.0	11,122.0	10,801.0	11,361.0	11,629.0		
	Large(1 Lac to 5 lac)	3,208.0	3,348.0	3,273.0	3,637.0	4,087.0		
	Medium(10,000 to 1,00,000)	3,789.0	3,747.0	3,974.0	3,771.0	4,105.0		
	Small (Upto 10,000)	1,128.0	1,115.0	1,122.0	1,161.0	1,131.0		
12	Average Loan per Recipient	8,416.0	10,944.0	13,337.0	14,530.0	16,821.0		
13	Default Loan (outstanding amount in millions)	10,952.0	10,496.0	11,596.0	12,231.0	10,755.0		

*R= revised figures Source: Microcredit Regulatory Authority.

Appendix XL : Joint Expected Shortfall to Risk Weighted Asset Ratio							
QTRs	Joint Expected Shortfall (JES)	Risk Weighted Asset (RWA)	JES to RWA Ratio				
2013Q1	19.26	3619.75	0.532				
2013Q2	19.93	3785.53	0.526				
2013Q3	22.46	3828.96	0.587				
2013Q4	14.86	3909.00	0.380				
2014Q1	21.79	3998.24	0.545				
2014Q2	26.34	4169.84	0.632				
2014Q3	13.50	4284.83	0.315				
2014Q4	23.73	4410.26	0.538				
2015Q1	31.53	4516.07	0.698				
2015Q2	16.79	4670.74	0.360				
2015Q3	31.92	4811.26	0.663				
2015Q4	25.70	4888.80	0.526				
Mean	22.32	4241.11	0.525				
Note: Aggregate Position of 29 Banks							

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