Banking Sector Performance, Regulation and Bank Supervision

5.1 The banking sector of Bangladesh experienced a moderate level of resilience in FY18. Bangladesh Bank persistently continues its efforts to uplift and ensures a sound and stable performance in the banking sector. In FY18, Bangladesh Bank (BB) adopted a number of policy measures to emphasize risk management and corporate governance in the banks, periodic review of stability of the individual bank as well as the whole banking system, monitoring of large borrowers, fraud-forgeries and strengthening internal control and compliance through self assessment of anti-fraud internal controls etc. Monitoring of investment in shares by the scheduled banks has been made stringent in light of the amendment brought in the Bank Company Act, 1991 (amended up to 2018). Risk Management Committee at the board level has been made mandatory, with regular evaluation. A revised Risk Management Guideline has already been put into effect for banks to improve resiliency. Besides, all core risks management guidelines have been revised recently for timely identification, measurement, control, and monitoring of all existing and probable risks of banks.

Banking Sector Performance

5.2 The banking sector in Bangladesh comprises four categories of scheduled banks-state-owned commercial banks (SCBs), state-owned development financial institutions (DFIs), private commercial banks (PCBs) and foreign commercial banks (FCBs). Total number of 57 banks operated in 2017. The number of bank branches increased at the end of December 2017 to 9955 from 9654 of December 2016. (Appendix 4, Table 1). Information on the banking structure and activities by types of banks is shown in Table 5.1.

5.3 In 2017, the SCBs held 25.88 percent share of the total assets which was 27.61 in 2016. PCBs' share in the total assets increased from 65.03 percent in 2016 to 67.07 percent in 2017. The FCBs held 4.62 percent share in the total assets in 2017, showing a decline of 0.18 percentage points over the previous year. The DFIs' share in the total assets declined to 2.43 percent in 2017 from 2.58 percent in 2016 (Table 5.1).

5.4 Total deposits of the banks in 2017 rose to BDT 9874.89 billion from BDT 8933.92 billion in 2016, showing an increase of 10.53 percent. The SCBs' share in deposits decreased from 28.38

Table 5.1 Banking Systems Structure, Assets and Deposits

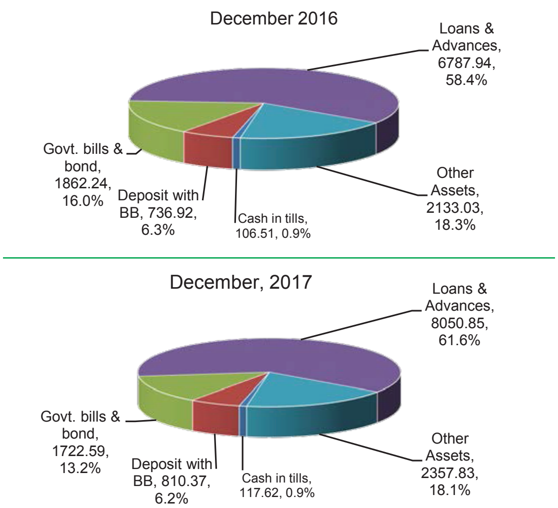
(In billion BDT)

Bank types	2016						2017					
	Number of banks	Number of branches	Total assets	Share in industry assets (in percent)	Deposits	Share in deposits (in percent)	Number of banks	Number of branches	Total assets	Share in industry assets (in percent)	Deposits	Share in deposits (in percent)
SCBS	6	3710	3209.5	27.6	2535.4	28.38	6	3721	3379.5	25.88	2700.6	27.35
DFIS	2	1407	299.5	2.6	249.4	2.79	2	1407	317.6	2.43	273.3	2.77
PCBS	40	4467	7560.0	65.0	5788.0	64.79	40	4758	8758.3	67.07	6508.2	65.91
FCBS	9	70	557.6	4.8	361.1	4.04	9	69	603.9	4.62	392.8	3.98
Total	57	9654	11626.6	100	8933.9	100	57	9955	13059.3	100	9874.9	100

Note : All banks, except BKB and RAKUB, prepare their balance sheet on calendar year basis, and are obliged to submit their audited balance sheet at the end of every calendar year.

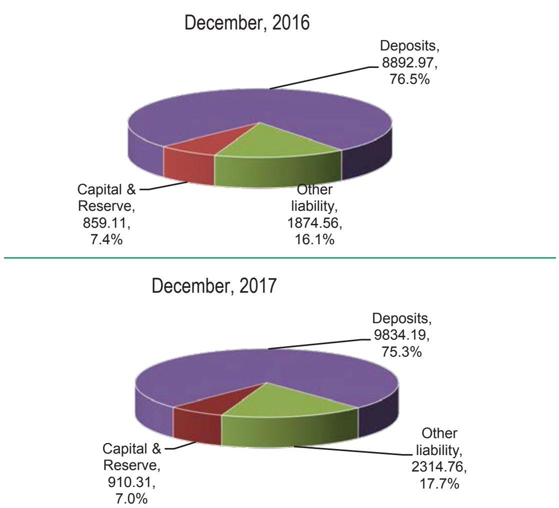
Source: BRPD and DOS, BB.

Chart 5.1 Aggregate Industry Assets
(In billion BDT)



Source: Department of Off-site Supervision (DOS), Bangladesh Bank

Chart 5.2 Aggregate Industry Liabilities
(In billion BDT)



Source: Department of Off-site Supervision (DOS), Bangladesh Bank

percent in 2016 to 27.35 percent in 2017. PCBs' deposits in 2017 amounted to BDT 6508.19 billion or 65.91 percent in the total deposit compared to BDT 5788.02 billion or 64.79 percent in 2016. FCBs' deposits in 2017 slightly increased by BDT 31.65 billion over the year 2016, although its contribution to total deposits decreased slightly. The DFIs' deposits in 2017 was BDT 273.32 billion against BDT 249.4 billion in 2016, showing an increase of 9.59 percent over the year (Table 5.1).

Aggregate Balance Sheet

5.5 Total industry assets in 2017 showed an increase of 12.34 percent over 2016. During this period, the SCBs' assets rose by 5.29 percent and that of the PCBs' increased by 15.85 percent. In 2017, loans and advances of BDT 8050.85 billion constituted the most significant portion (61.6 percent) in the sector's aggregate assets of BDT 13059.26 billion. Moreover, cash in tills including foreign currencies was BDT 117.62 billion; deposits with BB was BDT 810.37 billion; other assets was BDT 2357.83 billion and investment in government bills & bonds was BDT 1722.59 billion during the same period (Chart 5.1).

5.6 Deposits continued to be the main sources of funds of the banking industry and constituted 75.3 percent (BDT 9834.19 billion) of total liability in 2017. Capital and reserves of the banks were BDT 910.31 billion (7.49 percent) in 2017 as compared to BDT 859.11 billion (7.40 percent) in 2016 (Chart 5.2).

The development of a sound banking sector is important for the sustainable development of an economy. Since banking sector is the main component of the overall financial system in Bangladesh, the health of the economy is closely related to the soundness of its banking system. BB has adopted many prudential policies for maintaining stability in the banking sector. The aggregate micro-prudential soundness indicators (Capital Adequacy, Asset Quality, Management, Earnings, Liquidity and Sensitivity to Market Risk) of the banking sector also known as Financial Stability Indicators are consider for measuring banking sector performance.

Capital Adequacy

5.7 Capital adequacy focuses on the total position of banks' capital and the protection of depositors and other creditors from the potential losses that a bank might incur. It helps absorbing all possible financial risks related to credit, market, operation, interest rate, liquidity, reputation, settlement, strategy, environment & climate change etc. Under Basel-III, banks in Bangladesh are instructed to maintain the Minimum Capital Requirement (MCR) at 10.0 percent of the Risk Weighted Assets (RWA) or BDT 4.0 billion as capital, whichever is higher. Under the Supervisory Review Process (SRP), banks are directed to maintain a level of "adequate" capital which is higher than the minimum required capital and sufficient to cover for all possible risks in their business. This higher level of capital for the banks is usually determined and finalized through SRP and SREP (Supervisory Review Evaluation Process, the central bank's assessment) dialogue. The aggregate amount of capital of the banking sector was BDT 280.58 billion as on December 2009 which increased to BDT 945.61 billion at the end of December 2017.

5.8 Table 5.2 shows the Capital to Risk Weighted Assets Ratio (CRAR) by type of banks. It is observed that on 31 December 2017, SCBs, DFIs, PCBs and FCBs maintained CRAR of 5.04, -35.45, 12.52 and 24.90 percent respectively. But individually, 4 SCBs, 3 PCBs and 2 DFIs could not maintain the minimum required CRAR. The CRAR of the banking industry as a whole was 10.83 percent at end of December 2017 as against 10.80 percent at the end of 2016. The CRAR of the industry was 10.0 percent at the end of June 2018 (Chart 5.3).

Asset Quality

5.9 Loans and advances (61.6%) are the major components in the asset composition of all commercial banks. The high concentration of loans and advances increases the vulnerability of assets to credit risk. However, investment of banks in bills, bonds, shares etc. also demonstrates somewhat concentration, which is 13.2 percent to total assets in 2017.

5.10 The most important indicator to demonstrate the asset quality in the loan portfolio is the ratio of gross Non-Performing Loans (NPLs) to total loans and net NPLs to net total loans. At the end of December 2017, the gross NPL of the banking sector stood at 9.31 percent. Table 5.3 (a) shows that PCBs had the lowest and SCBs had the highest gross NPLs. PCBs' gross NPLs was 4.87 percent, whereas those of SCBs, FCBs and DFIs were 26.52, 7.04 and 23.39 percent respectively at the end of December 2017.

5.11 The ratio of gross NPLs to total loans indicates a mixed trend in the banking system

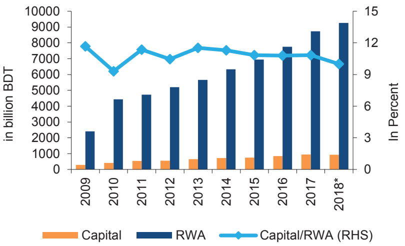
Table 5.2 Capital to Risk Weighted Assets Ratio by Type of Banks

(In percent)

Bank types	2010	2011	2012	2013	2014	2015	2016	2017	End June 2018
SCBs	8.9	11.7	8.1	10.8	8.3	6.4	5.9	5.0	2.0
DFIs	-7.3	-4.5	-7.8	-9.7	-17.3	-32.0	-33.7	-35.5	-31.9
PCBs	10.1	11.5	11.4	12.6	12.5	12.4	12.4	12.5	12.2
FCBs	15.6	21.0	20.6	20.2	22.6	25.6	25.4	24.9	23.0
Total	9.3	11.4	10.5	11.5	11.3	10.8	10.8	10.8	10.0

Source: Department of Off-site Supervision (DOS), Bangladesh Bank.

Chart 5.3 Aggregate Capital Adequacy Position



*30 June 2018
Source: Department of Off-site Supervision (DOS), BB.

Box 5.1 Importance of Basel-III Liquidity Standard: LCR and NSFR

The Basel Committee on Banking Supervision has developed two minimum standards for funding liquidity. These standards have been developed to achieve two separate but complementary objectives. The first objective is to promote short-term resilience of a bank's liquidity risk profile by ensuring that it has sufficient high-quality liquid assets (HQLA) to survive a significant stress scenario lasting for one month. The Committee developed the Liquidity Coverage Ratio (LCR) to achieve this objective. The second objective is to promote resilience over a longer time horizon by creating additional incentives for banks to fund their activities with more stable sources of funding on an ongoing basis. The Committee developed the Net Stable Funding ratio (NSFR) to achieve the second objective, which supplements the LCR and has a time horizon of one year.

Table.1 LCR and NSFR during FY18

(In percent)

As On	LCR	NSFR
30 Jun 2017	178.45	110.22
30 Sep 2017	172.19	110.13
31 Dec 2017	173.43	107.54
31 Mar 2018	167.40	108.95
30 Jun 2018	175.29	109.08

Source: DOS, Bangladesh Bank.

The LCR is intended to achieve resilience against potential liquidity disruptions over a 30 days horizon. It helps to ensure that banks have sufficient unencumbered, high quality liquid assets to offset the net cash outflows which can effectively encounter an acute short-term stress scenario. LCR is calculated in the following way:

$$LCR = \frac{Stock\ of\ HQLA}{Total\ net\ cash\ out\ flows\ over\ the\ next\ 30\ calendar\ days}$$

The minimum standard for the LCR shall be ≥ 100 percent.

The NSFR requires a minimum amount of stable sources of funding at a bank relative to the liquidity profile of the assets, as well as the potential for contingent liquidity needs arising from off-balance sheet commitments, over a year horizon. The NSFR aims to limit over-reliance on short-term wholesale funding and encounter better assessment of liquidity risk across all on and off-balance sheet items. The NSFR is calculated in the following way:

$$NSFR = \frac{Available\ Amount\ of\ Stable\ Funding\ (ASF)}{Required\ Amount\ of\ Stable\ Funding\ (RSF)}$$

"Available stable funding" is defined as the portion of capital and liabilities expected to be reliable over the time horizon considered by the NSFR, which extends to one year. This ratio should be greater than 100 percent indicating that available stable funding (ASF) should be greater than required stable funding (RSF). LCR and NSFR introduced in Bangladesh, in 2015.

Table.1 shows that, banking sector in Bangladesh maintained the LCR much above the minimum standard of 100 percent throughout FY18, indicating banks had high-quality and liquid asset that would cover the banks cash outflows for a minimum of 30 days. Banks also maintained the minimum standard of holding NSFR that indicates they had enough funding for the whole year in any unfavorable situation.

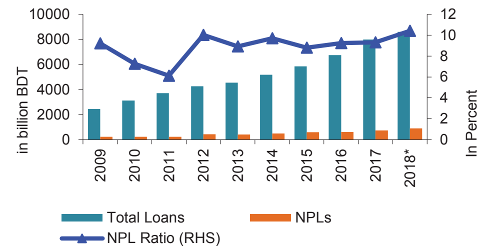
during 2010-2017. It declined in 2011 and increased in 2012 (10.0 percent) and again declined in 2013 (8.9 percent). Afterward, the ratio jumped in 2014 (9.7 percent) and again declined in 2015 (8.8 percent). But the ratio shows an upward trend in recent years mainly due to increase in total classified loans, defaulted outstanding and non-recovery of loans. At the end of June 2018, it stood at 10.41 percent (Chart 5.4).

5.12 The high level of NPLs in SCBs and DFIs continued due to substantial loans disbursed by them was on considerations other than commercial criteria. Poor assessment and inadequate follow-up and supervision of the loans disbursed by the SCBs and DFIs eventually consequence the current situation of poor quality assets. However, BB took various measures (i.e. loan classification, loan rescheduling, provisioning and write-off) to recovery the loan. Besides, BB has also taken steps with regard to internal restructuring of these banks to strengthen their loan recovery mechanism and write-off measures in recent years.

5.13 Table 5.3 (b) show that the ratio of net NPLs (net of provisions and interest suspense) to net total loans (net of provisions and interest suspense) was 2.2 percent in 2017 for the banking sector and it was 11.2 percent for SCBs. The table demonstrates that SCBs' and PCBs' non-performing portfolios increased in 2017 as compared to that of the previous year. The net NPLs were 11.2, 9.7, 0.2 and 0.7 percent for the SCBs, DFIs, PCBs and FCBs respectively at the end of December 2017. Net NPL of the industry was 2.7 percent at the end of June 2018.

5.14 Table 5.4 shows the amount of NPLs of the four types of banks since 2010 to 2017. The amount of NPLs of the SCBs increased from BDT 127.6 billion in 2008 to BDT 373.3 billion in 2017. The amount of NPLs of the PCBs stood at BDT 294.0 billion in 2017 up from BDT 64.3 billion in 2010. The amount of NPLs of the DFIs increased to BDT 54.3 billion in 2017 from BDT 37.3 billion in 2008. The amount of NPLs of the FCBs increased to BDT 21.5 billion in 2017 as against BDT 5.5 billion in 2010. The table also demonstrates that total NPLs of the banking sector have increased to BDT 743.0 billion in 2017 as compared to BDT 621.8 billion in 2016

Chart 5.4 Aggregate Position of NPLs to Total Loans



*Up to 30 June 2018
Source: Department of Off-site Supervision (DOS), BB.

Table 5.3(a) Gross NPLs to Total Loans by Type of Banks

(in percent)

Bank types	2010	2011	2012	2013	2014	2015	2016	2017	End June 2018
SCBs	15.7	11.3	23.9	19.8	22.23	21.5	25.1	26.5	28.2
DFIs	24.2	24.6	26.8	26.8	32.81	23.2	26.0	23.4	21.7
PCBs	3.2	2.9	4.6	4.5	4.98	4.9	4.6	4.9	6.0
FCBs	3.0	3.0	3.5	5.5	7.30	7.8	9.6	7.0	6.7
Total	7.3	6.1	10.0	8.9	9.7	8.8	9.2	9.3	10.4

Source: Department of Off-site Supervision (DOS), Bangladesh Bank.

Table 5.3 (b) Ratio of Net NPL to Total Loans by Type of Banks

(in percent)

Bank types	2010	2011	2012	2013	2014	2015	2016	2017	End June 2018
SCBs	1.9	-0.3	12.8	1.7	6.1	9.2	11.1	11.2	11.7
DFIs	16.0	17.0	20.4	19.7	25.5	6.9	10.5	9.7	7.4
PCBs	0.00	0.2	0.9	0.6	0.8	0.6	0.1	0.2	0.8
FCBs	-1.7	-1.8	-0.9	-0.4	-0.9	-0.2	1.9	0.7	0.8
Total	1.3	0.7	4.4	2.0	2.7	2.3	2.3	2.2	2.7

Source: Department of Off-site Supervision (DOS), Bangladesh Bank.

Table 5.4 Amount of NPLs by Type of Banks

(in billion BDT)

Bank types	2010	2011	2012	2013	2014	2015	2016	2017	End June 2018
SCBs	107.6	91.7	215.2	166.1	227.6	272.8	310.3	373.3	428.5
DFIs	49.7	56.5	73.3	83.6	72.6	49.7	56.8	54.3	52.4
PCBs	64.3	72.0	130.4	143.1	184.3	253.3	230.6	294.0	389.8
FCBs	5.5	6.3	8.5	13.0	17.1	18.2	24.1	21.5	22.7
Total	227.1	226.4	427.3	405.8	501.6	594.1	621.8	743.0	893.4

Source: Department of Off-site Supervision (DOS), Bangladesh Bank.

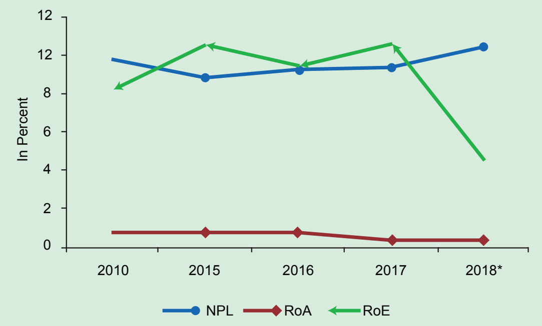
Box 5.2 Consequences of NPL on Banks' Profitability and Financial Stability

The recent rising trends of NPLs in the overall banking system in Bangladesh are major concerned for policymakers and the stakeholders, because high NPLs give huge stress in the banks to earn profit¬ and weaken the financial stability. Chart -1 show the trends of NPLs and two key profitability indicators; the Returns on Assets (RoA) and Returns of Equity (RoE) during the 2014-2018. It is observed from the table that there is a negative relationship NPLs and RoA /RoE. The negative relationship between NPLs and banks' profitability is a major concern for the policymakers.

Consequences of NPL on banks' profitability

- Bank needs to keep higher provision as its NPL increases hence it pressure on, banks' profitability.
- Returns on Assets (RoA) and Returns of Equity (RoE) tend to fall down.
- Higher NPL would also compel the banks to extending their efforts in recovering the loans from those 'bad' borrowers. In this process, the operational expense (for recovery/ litigation) is assumed to go up.

Chart 1 Trends of NPL, RoA, and RoE



*June, 2018.
Source: Department of Off-site Supervision (DOS), BB.

- Vicious cycle: NPL results into economic slowdown as the borrowing firm/individual gradually loses its capability to generate enough earning to pay back the loan. Further injection of money to overcome the crisis is also halted as the borrower is marked as a defaulter in the regulator's record. Eventually, the firm moves into further dire state; and the probability of getting back the money is getting lower for the lending bank.
- Low public confidence: Higher NPL may also lower the public confidence on the bank. In that case, attracting deposit would get even harder which may result the cost of deposit (or borrowing) to increase. Once the cost of fund goes up, the profitability margin tends to shrink.

Consequences of NPL on financial stability

- Due to the irregularity (or stuck) in pay back from the NPLs, there is a strong tendency of sprouting up the liquidity mismatch that results into a higher liquidity risk for the bank.
- With increasing NPLs, Risk-weighted Assets (RWA) would increase; which, in turn, would create pressure on maintaining the regulatory capital adequacy requirement. As the FSR (2017) refers, increase in NPLs would have the most adverse impact on the banking sector's Capital-to-Risk weighted Asset Ratio (CRAR).

- Higher NPL has substantial impact in disturbing the overall resilience of the banking sector through disorienting the combined risk management efforts of the banks. FSR (2017) also reveals that under di¬fferent stress scenarios, banking system finds itself resilient at interest rate, exchange rate and equity price shocks but remains vulnerable with credit defaults (i.e., NPLs), especially default of large borrowers.
- Higher NPLs in one or more banks would expose the risk of contagion (also referred to as systemic risk) to the banking system. Such financial difficulties at one or more banks may easily spill over to a large number of other banks, and subsequently, to the financial system as a whole.
- Moreover, the high level of NPLs would affect the micro (i.e., bank level) and macro (i.e., central bank/monetary authority) strategies in the lending sector, which makes the job of the policymakers even harder.

Bangladesh Bank revised the loan classification and provisioning policy and made it more stringent through Circular No.14 of 2012 in order to comply with the international best practices and Basel core principle and with a view to increasing the stability of the banking sector in the long run. Other relevant policy supports and intense monitoring are also followed for ensuring a better macro-prudential regulatory system in managing the non-performing loans in the banking sector of the country.

and the amount of NPLs has increased in SCBs and PCBs and has decreased in DFIs and FCBs in 2017 as compared to that of the previous year. The amount of NPLs of SCBs, DFIs, PCBs and FCBs Stood at BDT 428.5, 52.4, 389.8 and 22.7 billion respectively at the end of June 2018.

5.15 Table 5.5 shows the aggregate amount of NPLs, the required loan loss provision and the actual provision maintained by the banks from 2010 to 2017. The Table show that in aggregate, the banks continuously failed to maintain the required level of provision against their NPLs from 2010 to 2017. Banks maintained 103.0 percent in 2011. But in the recent years the provision maintenance ratio showed declining trend and in 2017 it stood at 84.7 percent.

5.16 The main reason for the shortfall in provision was the inability of some SCBs and PCBs, including those in the problem bank category due to increase in classified loans, poor quality and inadequacy of collaterals, low profit and provision transfer for write-offs. On the other hand, the FCBs were in a much better position since they were able to keep adequate provisions. A comparative position of loan loss provisions of four types of banks as of end 2016, 2017 and 2018 is shown in Table 5.6.

5.17 In order to rectify an unnecessarily and artificially inflated size of the balance sheet, a uniform guideline for write-off was introduced in 2003. Banks may write off bad/loss loans complying with the conditions covered by the guideline. The total amount of written-off loans by different bank categories is given in Table 5.7.

5.18 Out of 40 PCBs 35 PCBs were able to maintain the required provision at the end of December 2017, but the remaining five banks failed due to their poor asset portfolios and earning levels. The provision maintenance ratios of PCBs and FCBs show its increasing trend, whereas that of SCBs and DFIs show the declining trend in the recent years.

Management Soundness

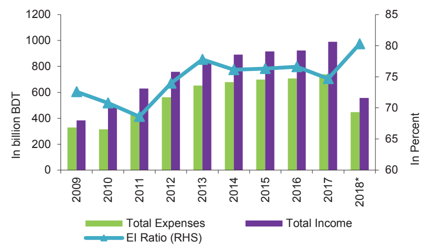
5.19 Sound management is the most important pre-requisite for the strength and growth of any financial institution. The total expenditure to total income, operating expenses to total expenses, earnings and operating expenses per employee and interest rate spread are generally used to determine management soundness. Technical competence and leadership of mid and senior level management, compliance with banking laws and regulations, adequacy, compliance of sound internal policies, ability to plan and respond to consideration to illustrate the quality of management.

5.20 As evident from Table 5.8, the expenditure-income (EI) ratio of the DFIs was the highest among the bank categories in 2017 which was mainly attributable to poor non-interest income and higher operating expenses. However, it decreased from 137.8 percent in 2016 to 124 percent in 2017. The EI ratio of the SCBs was 81.3 percent in 2017, the second highest, which could mainly be attributable to high administrative and operating expenses. In 2017, the EI ratio of PCBs and FCBs was 73.78 percent and 46.55 percent respectively, which slightly increased as compared to the previous year. At the end of June 2018, the EI ratio of SCBs and DFIs stood at 83.9 and 149.9 percent respectively whereas those of PCBs and FCBs stood at 78.4 and 44.3 percent respectively. Chart 5.5 shows the EI ratio in the overall banking industry.

Earnings and Profitability

5.21 Although there are various indicators of earnings and profitability, the most representative and widely used one is return on assets (ROA), which is supplemented by return on equity (ROE) and net interest margin (NIM).

Chart 5.5 Trends in Aggregate Position of Income and Expenditure in the Banking Industry



*Up to 30 June 2018
Source: Department of Off-site Supervision (DOS), Bangladesh Bank.

Table 5.5 Required Provision and Provision Maintained by the Banking Industry

(In billion BDT)

All Banks	2010	2011	2012	2013	2014	2015	2016	2017	End June 2018
Amount of NPLs	227.1	226.4	427.3	405.8	501.6	594.1	621.7	743.0	893.4
Required Provision	149.2	148.2	242.4	252.4	289.6	308.9	362.1	443.0	528.8
Provision maintained	142.3	152.7	189.8	249.8	281.6	266.1	307.4	375.3	448.9
Excess(+)/ shortfall(-)	-6.9	4.6	-52.6	-2.6	-7.9	-42.8	-54.7	-67.7	-79.9
Provision maintenance ratio (%)	95.4	103.0	78.3	99.0	97.2	86.1	84.9	84.7	84.9

Source: Department of Off-site Supervision (DOS), Bangladesh Bank.

5.22 Earnings as measured by ROA and ROE differ within the banking industry. Table 5.9 shows ROA and ROE of four types of banks during 2010-2017. Analysis of these indicators reveals that the ROA of the SCBs and DFIs was less than the industry average. The ROA of SCBs has improved slightly in 2017. PCBs' ROA shows a declining trend during 2011-2012 due to decreased net profit. After 2012 it shows a fluctuating trend. Though FCBs' ROA showed a decreasing trend from 2014, it still remains in strong position.

5.23 Table 5.9 also presents that ROE of the SCBs stood at 3.45 percent in 2017. It has improved as compared to 2016. ROE of DFIs is negative 3.07 percent. Though it has improved from 2016 and it has always been negative in the previous years. ROE of PCBs is 12.01 percent in 2017 and it shows an increasing trend since 2013. ROE of FCBs has been declined since 2014 and it was 11.31 percent in 2017. Trends in aggregate profitability for all banks are given in chart 5.6.

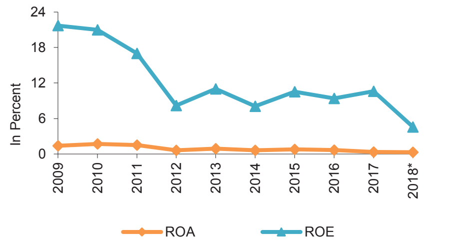
5.24 Table 5.10 shows that Net Interest Margin (NIM) of the banking industry stood at 3.13 percent in 2017 which was 3.27 percent in 2016. The NIM for the SCBs and DFIs inched up where as PCBs and FCBs inched down slightly in 2017 compared to 2016. Analysis of the indicator reveals that NIM for PCB and FCBs were higher than the industry average. NIM for SCBs was negative in 2013, afterwards it showed a mixed trend during 2014-2017. However, NIM for overall banking industry has been significantly high in 2014 afterwards it exhibit a downward trends (Table 5.10). At the end of June 2018, NIM of industry was 3.18 percent.

Liquidity

5.25 Maintaining a sound liquidity position is one of the significant indicators of bank's solvency. Without ensuring adequate liquidity the banking sector will fail to mobilize its resources for earnings profit and they maintain adequate liquidity for ensuring safety and security. The most useful indicators for evaluating the liquidity position in the banking sector are advance-deposit ratio (ADR), interbank call money rate, repo rates, liquidity coverage ratio (LCR) and net stable funding ratio (NSFR).

5.26 Overall advance deposit ratio (ADR) in the banking system moderated to 76.7 percent in Q4FY18 from 77.0 percent in Q3FY18, remaining below the maximum regulatory

Chart 5.6 Trends in Aggregate Profitability in the Banking Industry



*Up to 30 June 2018
Source: Department of Off-site Supervision (DOS), Bangladesh Bank.

Table 5.6 Comparative Position of Provision Adequacy by Types of Banks

(In billion BDT)

Year	Items	SCBs	DFIs	PCBs	FCBs
2016	Required provision	174.0	27.8	144.2	16.0
	Provision maintained	113.2	28.4	149.4	16.4
	Provision maintenance ratio (%)	65.1	102.2	103.6	102.5
2017	Required provision	216.9	26.1	184.3	15.6
	Provision maintained	134.3	26.2	198.2	16.5
	Provision maintenance ratio (%)	61.9	100.4	107.5	105.8
2018 June	Required provision	252.9	25.0	234.6	16.2
	Provision maintained	162.0	27.9	242.0	16.9
	Provision maintenance ratio (%)	64.1	111.6	103.2	104.3

Source: Department of Off-site Supervision (DOS), Bangladesh Bank.

ceiling[1]. Banking sector maintained the LCR much above the minimum requirement of 100 percent throughout FY18, indicating banks had high-quality and liquid asset that would cover the banks cash outflows for a minimum of 30 days. In FY18, banks also maintained the minimum regulatory requirement of holding NSFR that indicates they had enough funding for the whole year in any unfavourable situation.

5.27 Table 5.11 shows that the FCBs have the highest liquidity ratios followed by the SCBs. There is an overall steady trend in the ratio of liquid assets to total assets of the banks during the last few years although the ratio for DFIs is zero as they do not need to maintain SLR.

[1] BB changed ADR in the banking system within a prescribed level to 83.5 percent and 89 percent for conventional and Islamic Shari'ah based banks respectively from January 2018 and instructed banks to bring down the ratio within the prescribed limit by 31 March 2019.

5.28 On the other hand, the scheduled commercial banks have to maintain a CRR (cash reserve ratio) averaging 5.5 percent daily on a biweekly basis against average total demand and time liabilities (ATDTL) of the second preceding month, with an obligation to maintain daily minimum 5.0 percent cash against the same ATDTL held by the bank. The current rate of SLR (statutory liquidity reserve) for conventional banks is 13.0 percent of ATDTL. In case of Islamic Shariah based commercial banks, the rate of SLR is 5.5 percent of their ATDTL. Three banks (two specialized banks and BDBL) are exempted from maintenance of SLR, but they have to maintain the CRR at the stated rate. The banks maintain CRR in cash with Bangladesh Bank. However, they are allowed to hold government approved securities (unencumbered portion) for maintenance of the SLR.

5.29 Banking sector faced liquidity tightening conditions at the beginning of Q4FY18. As liquidity condition tightened, BB reduced Cash Reserve Ratio (CRR) by 100 basis points to 5.5 percent and repo rates by 75 basis points to 6.0 percent with effect from April 2018. This will give banks and financial institutions a scope to recalibrate their liquidity position in case of adverse situation. BB's policy measures led to improvements in liquidity conditions as reflected in the call money rate which came down from 4.56 percent in March to 3.41 percent in June 2018.

CAMELS Rating

5.30 CAMELS rating is a supervisory tool to assess and review the financial soundness of the banking companies. It helps BB to remain always vigilant over the banks and identify those banking companies, which have problems and require close supervision. The previous CAMELS rating guideline has been reviewed by the Department of Off-site Supervision with a view to assessing the banks' soundness more accurately, reflecting the banks' financial condition and management issues more pragmatically, making the guideline more country perspective oriented and making an effort to address good governance issues in the banking sector. The revised CAMELS rating guideline came into effect from 2013. A partial revision has been brought into the guidelines latest in 2016.

Table 5.7 Writing-off Bad Debts by Types of Bank

(In billion BDT)

Bank Types	30 June 2011	30 June 2012	30 June 2013	30 June 2014	30 June 2015	30 June 2016	30 June 2017	31 Dec 2017
SCBs	82.4	72.9	107.2	154.8	210.3	220.4	224.4	226.2
DFIs	32.0	24.5	32.6	34.2	5.6	5.6	5.6	5.6
PCBs	77.1	64.9	109.7	127.7	155.5	189.4	216.7	239.9
FCBs	2.4	2.6	3.7	4.4	5.1	7.2	8.6	10.3
Total	193.9	164.9	253.3	321.1	376.5	423.2	455.3	482.0

Source: Department of Off-site Supervision (DOS), Bangladesh Bank.

Table 5.8 Expenditure-Income Ratio by Type of Banks

(In percent)

Bank types	2010	2011	2012	2013	2014	2015	2016	2017	End June 2018
SCBs	80.7	62.7	73.2	84.1	84.1	84.5	90.2	81.3	83.9
DFIs	87.8	88.6	91.2	94.8	99.5	113.9	137.8	124.0	149.9
PCBs	67.6	71.7	76.0	77.9	75.8	75.5	73.5	73.8	78.4
FCBs	64.7	47.3	49.6	50.4	46.8	47.0	45.7	46.6	44.3
Total	70.8	68.6	74.0	77.8	76.1	76.3	76.6	74.7	80.3

Source: Department of Off-site Supervision (DOS), Bangladesh Bank.

5.31 The revised CAMELS rating guideline has brought not only major changes in ratios or indicators but also modifications in the questionnaire for evaluation of qualitative issues. Basel-III principles related to capital adequacy have also been reflected in the guideline. Along with emphasizing best quality capital, investments in the capital market, the amount of off-balance sheet items in comparison to the capital of the banks, large loan exposures to capital, etc. are considered to calculate capital adequacy rating. HHI (Herfindahl-

Table 5.9 Profitability Ratio by Type of Banks

(In percent)

Bank types	ROA									ROE								
	2010	2011	2012	2013	2014	2015	2016	2017	2018 June	2010	2011	2012	2013	2014	2015	2016	2017	2018 June
SCBs	1.1	1.3	-0.56	0.59	-0.55	-0.04	-0.16	0.21	-0.68	18.4	19.7	-11.87	10.93	-13.46	-1.47	-6.02	3.45	-12.29
DFIs	0.2	0.1	0.06	-0.40	-0.68	-1.15	-2.80	-0.62	-1.62	-3.2	-0.9	-1.06	-5.81	-5.97	-5.79	-13.88	-3.07	-8.44
PCBs	2.1	1.6	0.92	0.95	0.99	1.00	1.03	0.89	0.57	20.9	15.7	10.17	9.76	10.26	10.75	11.09	12.01	8.19
FCBs	2.9	3.2	3.27	2.98	3.38	2.92	2.56	2.24	2.75	17.0	16.6	17.29	16.93	17.67	14.59	13.08	11.31	13.65
Total	1.8	1.5	0.64	0.90	0.64	0.77	0.68	0.74	0.29	21.0	17.0	8.20	11.10	8.09	10.51	9.42	10.60	4.44

Source: Department of Off-site Supervision (DOS), Bangladesh Bank.

Hirschman Index) has been incorporated in the updated CAMELS rating guideline to analyze loan concentration, as a complement to percentages of classified loans and provisioning in the evaluation of asset quality. The amount of loan disbursed to different risk associated sectors has been included as well. SME and Agriculture financing performance rating, Green banking and CSR performance rating, Spread rating are also considered in ‘Management’ part of CAMELS rating. Under this rating system, banking companies are assigned two sets of ratings- (i) performance ratings, based on six individual ratings that address six components of CAMELS (Capital Adequacy, Asset Quality, Management, Earnings, Liquidity and Sensitivity to Market Risk) and (ii) an overall composite rating based on a comprehensive assessment of the overall condition of the banking company. Both ratings are expressed by using a numerical scale of "1" to "5" in ascending order of supervisory concern, "1" representing the best rating, while "5" indicating the worst. Any bank rated 4 or 5, i.e., 'Marginal' or 'Unsatisfactory' under the composite CAMELS rating is generally identified as a problem bank, and the activities of these banks are closely monitored by BB. At present, there are two problem banks, which are under intensive monitoring of BB.

5.32 According to December 2017 based CAMELS Rating, no bank was rated '1' or 'Strong'; the rating of 40 banks was '2' or 'Satisfactory'; rating of 9 banks was '3' or 'Fair'; 7 banks were rated '4' or 'Marginal' and 1 bank received the rating of '5' or 'Unsatisfactory'.

Table 5.10 Net Interest Margin by Type of Bank

(In percent)

Bank types	2011	2012	2013	2014	2015	2016	2017	2018 June
SCBs	3.66	1.18	-0.32	1.96	1.62	1.75	1.98	2.13
DFIs	3.70	2.92	1.98	1.50	1.43	0.76	2.05	0.86
PCBs	3.19	3.06	2.77	4.11	3.85	3.89	3.52	3.52
FCBs	5.57	5.56	3.73	5.98	6.08	4.99	4.35	4.64
Total	3.48	2.79	2.02	3.56	3.28	3.27	3.13	3.18

Source: Department of Off-site Supervision (DOS), Bangladesh Bank.

5.33 BB had introduced Early Warning System (EWS) of supervision in March 2005 to address difficulties faced by the banks in any of the areas of CAMELS. Any bank found to have faced difficulty in any area operation, is brought under early warning category and monitored very closely to help improve its performance. Presently, there is no bank under EWS.

Operations of Banks in Urban and Rural Areas

5.34 As on 30 June 2018, 57 scheduled banks are operating with their 10114 number of branches throughout Bangladesh. The number of rural branches stood at 4890 (48.35 percent of total branches) at the end of June 2018 and the number of branches in urban areas was 5224 (51.65 percent of total branches) during the same period. The number of branches of SCBs is 1981 (52.95 percent) in rural areas and 1760 (47.04 percent) in urban areas. DFIs have

1113 (78.88 percent) branches in rural areas and 298 (21.12 percent) in urban areas. Private commercial banks have 1796 (36.74 percent) branches in rural areas and 3092 (63.26 percent) in urban areas. Foreign commercial banks are operating through 74 urban branches. The share of urban deposits to total deposits of the banking sector was 79.44 percent and the share of rural deposits to total deposits was 20.56 percent at the end of December 2017. On the other hand, the amount of advances given in urban areas constituted 89.41 percent to total advances of the banking industry and the amount of advances disbursed in rural areas represented only about 10.59 percent to total advances of the banking industry at the end of December 2017.

Islamic Banking

5.35 Islamic banking system introduced in Bangladesh in 1983. In FY18, out of 57 banks in Bangladesh, eight PCBs operated as full-fledged Islamic banks and 16 conventional banks (including three FCBs) were involved in Islamic banking through Islamic banking branches. The Islamic banks have continued to show strong growth since its inception, as reflected by the increasing market share of the Islamic banking in terms of assets, financing and deposits of the total banking system. A brief picture of the performance of Islamic banks is given in Table 5.11. Total deposits of the Islamic banks and Islamic banking branches of the conventional banks stood at BDT 2119.5 billion at the end of December 2017 which accounted for 21.08 percent in total deposits (BDT10052.4 billion). Total credit of the Islamic banks and the Islamic banking branches of the conventional banks stood at BDT1958.2 billion at the end of December 2017, which accounted for 24.16 percent to total credit (BDT8106.1 billion) of the banking system of the country (Table 5.12).

Table 5.11 Trends in Liquidity Ratio by Types of Banks

(In percent)

Bank types	2010	2011	2012	2013	2014	2015	2016	2017	2018 June
SCBs	27.2	31.3	29.2	44.3	42.0	41.4	40.0	30.4	31.7
DFIs	21.3	6.9	12.0	15.3	6.6	0.0	0.0	0.0	0.0
PCBs	21.5	23.5	26.3	28.0	28.2	19.7	17.8	14.8	21.5
FCBs	32.1	34.1	37.5	46.2	56.9	51.8	48.2	43.8	46.8
Total	23.0	25.4	27.1	32.5	32.7	26.5	24.9	19.9	23.3

Source: Department of Off-site Supervision (DOS), Bangladesh Bank.

Legal Framework and Prudential Regulations

Risk Based Capital Adequacy (RBCA) for Banks

5.36 To comply with international best practices and improve financial stability, Bangladesh Bank (BB) has commenced implementation of Basel III capital adequacy framework since January 2015 after successful completion of Basel-II in December 2014. Under Pillar-1 (Minimum Capital Requirement) of Basel-III, Risk Weighted Assets (RWA) of banks is calculated against credit risk, market risk, and operational risk. BB announced the Roadmap for implementing Basel III in Bangladesh and issued Guidelines on Risk Based Capital Adequacy (Revised Regulatory Capital Framework for banks in line with Basel III) in 2014.

5.37 Banks were instructed to submit their Capital Adequacy Statements to BB following Basel-III accord from the quarter ended in March 2015. At the end of March 2018, Capital to Risk Weighted Assets Ratio (CRAR) of the banking industry stood at 10.11 percent while Common Equity Tier1 (CET1) was 6.98 percent which fulfilled Basel-III Minimum Capital Adequacy requirements. However, at individual level, out of 57 scheduled banks 10 (ten) and 8 (eight) banks failed to maintain CRAR and CET1 requirements respectively.

5.38 Banks are required to maintain a total capital conservation buffer (CCB) of 2.5 percent (Following the Phase-in-

Table 5.12 Comparative Position of The Islamic Banking Sector (as of end December 2017)

(In billion BDT)

Particulars	Islamic banks		Conventional banks* (Conventional+Islamic)		Islamic banking		All banking secto	
	2017	2016	2017	2016	2017	2016	2017	2016
1	2		3		4=2+3		5	
Number of banks	8	8	16	16	24	24	57	57
Deposits	2019.6	1770.7	99.9	86.6	2119.5	1857.3	9874.9	8933.9
Credits	1860.1	1565.0	98.1	82.0	1958.2	1647.0	8106.1	6739.3
Investment deposit ratio (IDR in %)	87.8	86.3	79.8	84.2	87.7	86.7	75.9	71.9
Liquidity: excess(+)/shortfall(-)**	97.9	113.6	4.8	3.0	102.7	116.6	933.8	1259.5

*Conventional banks which have Islamic banking branches do not maintain SLR individually.
**The head offices of the respective banks maintain a combined SLR and liquidity position.
Source: Department of Off-site Supervision (DOS), Bangladesh Bank.

arrangements), comprised of Common Equity Tier 1 capital, above the regulatory minimum capital requirement of 10%, which has already come into effect since 2016. In 2018 CCB requirement is 1.875 percent. Banks should not distribute profit in case capital level falls below this range. CCB of the banking industry stood at 0.11 percent at the end of March 2018, which didn't fulfil CCB requirements. Besides, at individual level, 18 (eighteen) banks out of 57 scheduled banks failed to maintain CCB requirement during the period (Table 5.12).

5.39 In order to avoid building-up excessive on and off-balance sheet leverage in the banking system, a simple, transparent, non-risk based Leverage Ratio introduced in 2015. In Bangladesh, the minimum requirement of Leverage ratio is 3 percent. Leverage Ratio of the banking industry stood at 4.34 percent at the end of March 2018, which fulfilled the minimum requirement. But, at individual level, 7 (seven) banks out of 57 scheduled banks failed to maintain Leverage Ratio requirement during the period. Instructions mentioned in the RBCA Guidelines are being adopted phase by phase, with full implementation of capital ratios by December 2019. Phase-in-arrangement of minimum capital requirements is depicted in Table 5.13. Under the new capital adequacy framework, all banks are required to maintain the following ratios on an ongoing basis:

i. Common Equity Tier-1 (CET1) of at least 4.5 percent of the total RWA.

ii. Tier-1 capital will be at least 6.0 percent of the total RWA.

iii. Additional Tier-1 capital can be admitted maximum up to 1.5 percent of the total RWA or 33.33 percent of CET-1, whichever is higher.

iv. Minimum CRAR will be at least 10 percent of the total RWA.

v. Tier-2 capital can be admitted maximum up to 4.0 percent of the total RWA or 88.89 percent of CET-1, whichever is higher.

In addition to minimum CRAR, CCB of 2.5 percent of the total RWA is being introduced which has to be maintained in the form of CET-1.

5.40 The Supervisory Review Evaluation Process (SREP) of BB includes dialogue between BB and the bank's Supervisory Review Process (SRP) team, followed by findings/ evaluation of the bank's Internal Capital Adequacy Assessment Process (ICAAP). During the SRP-SREP dialogue, BB reviews and determines any additional capital that would be required for banks on the basis of quantitative as well as qualitative judgment. The first SREP dialogue was initiated in 2011. Afterwards, BB prepared a revised evaluation process document in 2013. Under the process document, BB provided guidance to calculate required capital against residual risk, credit concentration risk, interest rate risk, liquidity risk, reputational risk, settlement risk, strategic risk, appraisal of core risk management practices, environmental & climate change risk and other material risks in a specified format and to submit the same to BB. Information of banks' ICAAP is counter checked with the information available from both on-site inspection and off-site supervisory departments of BB. During the SRP-SREP dialogue, if the bank fails to produce their own ICAAP report backed by proper evidence and rigorous review regarding risk management, the SREP team of BB applies their prudence and also uses the available information from the inspection departments in determining the adequate capital. The process document has been further revised in 2014. On the basis of the revised process document and return format, all banks submitted their ICAAP report based on 31 December 2017.

Table 5.13 Phase-in-Arrangement of Minimum Capital Requirements.

(In Percent)

	2015	2016	2017	2018	2019
Minimum common equity Tier 1 (CET1) capital ratio	4.5	4.5	4.5	4.5	4.5
Capital conservation buffer (CCB)	-	0.625	1.25	1.875	2.5
Minimum CET1 plus CCB	4.5	5.125	5.75	6.375	7.0
Minimum Tier 1 capital ratio	5.5	5.5	6.0	6.0	6.0
Minimum total capital ratio	10.0	10.0	10.0	10.0	10.0
Minimum total capital plus CCB	10.0	10.625	11.25	11.875	12.5
Leverage ratio	3.0	3.0	3.0 readjustment	Migration to pillar-1	

Source: Department of Off-site Supervision (DOS), Bangladesh Bank.

Loan Classification and Loan-Loss Provisions

5.41 BB has changed its policies on loan classification and loan-loss provisions near the end of FY13. BB also introduced and clarified the difference between a "defaulted loan," (which is a legal concept granting the bank the right to take certain actions against the borrower) and a "classified loan," (which is an accounting concept) that implied a certain required level of provisioning for expected losses.

Loan Restructuring

5.42 Large borrowers contribute extensively to the socio-economic development and employment generation of the country, that's why Bangladesh Bank recommended internationally best practiced restructuring policy support for the non-performing large borrowers. And to boost up the loan recovery endeavor of the banks, this large loan restructuring policy was issued on 29 Jan, 2015, which was valid only for those borrowers who applied on or before June 30, 2015 for having 'No Objection Certificate'. According to the policy, following criteria had to be fulfilled to avail the restructuring facility:

1. Loans of a particular borrower or group in a bank, singly or in clubbed together form, shall be eligible for restructuring. Borrower having exposure in multiple banks may also be eligible for loan restructuring by forming a consortium.
2. Minimum outstanding loan amount for restructuring shall be BDT 5.0 billion or above in aggregate, and
3. Banks can provide restructuring facility to a particular loan account only once and the restructured loan shall have a maximum tenure of twelve years for term loan(s); in case of demand and/or continuous loan(s), the tenure shall be maximum six years. However, borrowers indulging in frauds and forgeries will not be eligible for loan restructuring.

5.43 Under the large loan restructuring policy, BDT 145.7 billion has been restructured with the approval of Bangladesh Bank. Respective banks have recovered BDT 1.9 billion as down payment and BDT 23.12 billion as installment from various borrowers up to December 2017.

Corporate Governance in Banks

5.44 BB has undertaken several measures in the recent years to establish corporate governance in the banking sector. These include 'formation of Risk Management Committee at the Board of the banks', 'the constitution of audit committee of the Board', "fit and proper" test for appointment of chief executive officers of PCBs, enhanced disclosure requirements, etc. In continuation of the above reforms, the roles and functions of the board and management have been redefined and clarified with a view to specifying the functions and powers of the management of the bank. In this connection, related clauses of the Bank Company Act 1991 have already been amended.

Supervision of Banks

5.45 With a view to promoting and maintaining soundness, solvency and systematic stability of the financial sector as well as protecting the interest of depositors, Bangladesh Bank (BB) carries out two types of supervision namely (i) off-site supervision and (ii) on-site supervision. Department of Off-site Supervision (DOS) of BB is accountable for conducting off-site supervision on banks as well as rating the banks' financial condition based on the different dimensions.

Off-site Monitoring of Banks

5.46 In recent time, off-site monitoring proved its indispensable requirement in case of supervising any bank. Off-site monitoring continued as a necessary complement to on-site inspection in FY17, with its various tools and procedures for intensive and rapid analysis of the financial health of the banking sector. In continuation of the said endeavours, Department of Off-site Supervision (DOS) has undertaken some innovative initiatives to strengthen banking supervision.

Banking Supervision Specialists (BSSs)

5.47 In order to strengthen and intensify current banking supervision, BB has formed six Banking Supervision Specialist Sections under Department of Off-site Supervision in 2013. Each section is headed by a Banking Supervision Specialist (BSS), at the Deputy General Manager level. Banking Supervision Specialist emphasizes more on analytical works. BSSs work as early signal providers for the banks they are assigned. They maintain extensive familiarity with condition, performance, risks, corporate governance and corporate structure of the concerned banks. They collect executive summary reports of comprehensive inspections carried out by the Departments of Banking Inspection and take actions accordingly. They maintain regular co-ordination with inspection departments to get update on recent supervisory developments. Junior Banking Supervision Specialists monitor treasury functions, capital adequacy, ADR, etc. of the banks. They prepare Diagnostic Review Report (DRR) on audited financial statements and Quick Review Report (QRR) at the required frequency, which focus on major risks existing in the banks and provide possible solutions to problems. They also examine the meeting minutes of the Board of Directors and Executive/Audit Committee of the banks to detect the irregularities and violation of banking laws, circulars, etc. and accordingly, advise the banks to regularize the same so that major financial indicators as well as the internal control systems of the banks get stronger and can achieve shock-resilient capacity.

5.48 Among these six BSSs, one is dedicated to monitor the state-owned commercial banks (SCBs) and the specialized banks while another one is concentrated only on the Islami sharia based banks and problem banks. Currently there is Memorandum of Understanding (MoU) with the SCBs and specialized banks and Directive of Bangladesh Bank (DOBB) with the problem banks. BSSs monitor the progress of (MoU) and DOBB and report the findings/progress of those banks immediately to the concerned senior management. For problem banks, concerned BSS intensively monitors the major financial indicators and managerial operations and takes instant actions if any irregularities found or makes recommendation if there is room for improvement. To improve the standard of credit management and internal control system, BB is monitoring the compliance status of the implementation of Internal Control and Compliance (ICC) Policy of four largest state-owned commercial banks (Sonali Bank Ltd., Janata Bank Ltd., Agrani Bank Ltd. and Rupali Bank Ltd.). The ICC policy is formulated by those SCBs with the approval of the respective BoD. On the other hand, BKB and RAKUB are also being monitored and reviewed under the MoUs. Preparation of MoUs for BKB and RAKUB for FY2018 is currently under process.

Formation of Observer Cell

5.49 In addition to the BSSs, Department of Off-site Supervision (DOS) also formed a new cell named “Observer Cell”, in 2017, to appoint observers for any banks. In order to elevate good corporate governance, endorse proper credit disciplines and most importantly to protect depositors (people) interest, Bangladesh Bank can appoint, if required, an observer in the board of any bank and financial institution according to the Bank Company Act, 1991.

Risk Management Activities of Banks

5.50 Bangladesh Bank (BB) has revised six core risk management guidelines to ensure robustness, efficiency and effectiveness of risk management systems for the banking sector. Besides, the review of the guideline namely ‘Risk Management Guideline for Banks’ issued in 2012 is now in progress to facilitate banks in adopting contemporary methods to identify, measure, monitor and control the risks existing in their institutions.

5.51 Recently, to bring greater expertise and harmonization to risk management activities of all banks and exercise international best practices, the reporting format of risk management activities of banks has been revised and banks submit the report on half yearly basis according to the revised reporting format titled "Comprehensive Risk Management Report (CRMR)" instead of previous one. Various contemporary issues have been incorporated in the CRMR for the quantification of risk management process along with a questionnaire for some qualitative checking of the risk management activities of the banks. Moreover, to monitor the risk management activities more closely, a short reporting format named "Monthly Risk Management Report (MRMR)" has been introduced and banks are submitting those reports to DOS on monthly basis. Based on the CRMR and MRMR submitted by the banks, DOS regularly evaluates the risk management activities of each bank and provides constructive recommendations to improve their conditions. Banks have to execute all the recommendations and submit their compliance reports within a specified period of time. BB also instructed the banks to determine their risk appetite on a yearly basis for all possible measurable risk areas in line with the strategic planning of their bank and to submit the statement to DOS by the end of first quarter of every year after taking board approval. BB analyzes the statements and monitors its implementation status on regular basis.

5.52 BB determines the comprehensive risk management rating of each bank on half yearly basis based on available information in the CRMR, minutes of enterprise risk management committee (ERMC) and board risk management committee (BRMC) meetings, compliance status of BB instructions submitted by banks and other sources. This risk rating carries 15 percent weight in the management component of CAMELS rating. Therefore, a bank's risk management practices will have a significant effect on its CAMELS rating. Besides, a high and critical score of this rating is considered as a negative indicator, along with others, while giving approval/NOC for branch expansion, AD license, dividend declaration, etc. for banks. In 2016, BB revised the process for determining comprehensive risk management rating. According to the rating of December 2017, out of 57 scheduled banks, 18 banks were rated as low risk, 29 as moderate, 8 (eight) as high and the rest 2 (two) as critical-risk category bank.

5.53 BB revised Self- Assessment reporting format in FY 17, which was introduced in 2012 to keep the operational risk at a minimum level by strengthening the internal control and compliance system of a bank. The report is to be signed by MD/CEO and counter signed by the chairman of the audit committee of the board. This report comprises a questionnaire divided into five (5) sections - Internal Control and Compliance (ICC), General Banking and Operation, Loans and Advances, Foreign Exchange Operation, and Information and Communications Technology (ICT) and two statements containing detailed information regarding fraud-forgeries that have been detected within a specific reporting period as well as fraud-forgeries detected and unsettled up to the previous reporting period since the inception of the bank along with the action taken against those incidences. BB has revised the reporting format to make the questions more specific/effective and to ensure accountability of the management regarding their internal control system. The banks submit the report on half-yearly basis. BB analyzes these reports and provides proper instructions to the banks based on the findings. The information provided in the report is also sent to the on-site supervision departments for verification during on-site inspection in the concerned banks.

On-site Inspection of Banks

5.54 As part of Bank's statutory function, currently seven departments of BB namely Department of Banking Inspection-1 (DBI-1), Department of Banking Inspection-2 (DBI-2), Department of Banking Inspection-3 (DBI-3), Department of Banking Inspection-4 (DBI-4), Department of Foreign Exchange Inspection (DFEI), Financial Integrity and Customer Services Department (FICSD) and Bangladesh Financial Intelligence Unit (BFIU) are conducting inspection activities. These seven departments conduct on-site inspection on SCBs, DFIs, PCBs (including banks under Islamic Shariah), FCBs and other institutions including Investment Corporation of Bangladesh (ICB) and money changers. These departments conduct different types of inspection, which may be summarized in three major categories like (i) comprehensive/ regular/traditional inspection; (ii) risk based system check inspection, and (iii) special/ surprise inspection.

5.55 The overall performance of the banks (such as capital adequacy, asset quality, liquidity, earnings, management competence, etc.) is evaluated in a comprehensive inspection. Based on their performance, banks are rated from "1" to "5" scale in ascending order. The on-site inspection departments also monitor implementation of the suggestions or recommendations made in the inspection reports. Inspection is conducted to examine the compliance of the core risk management guidelines on Asset Liability Management, Credit/Investment Risk Management, Internal Control & Compliance, and Information Systems Security issued by Bangladesh Bank. Special/surprise inspections are conducted to investigate complaints received from the depositors, public or institutions.

5.56 The supervision of banks is based on the internationally accepted standards set out by the Basel Committee for Banking Supervision. Under the continuous supervision/surveillance system, the overall financial condition of the banks operating in Bangladesh is monitored throughout the year on the basis of periodic on-site inspections conducted by the concerned departments of BB.

5.57 During FY18, DBI-1 conducted a total of 984 inspections, among which 663 comprehensive inspections and 232 core risk inspections were conducted on 29 banks to review the progress of implementation of the core risk guidelines (asset-liability management, credit risk management, information system security and internal control & compliance) issued by Bangladesh Bank. Head/Country offices of the bank as well as one branch of each bank have been taken under the purview of the core risk inspection. Besides this, DBI-1 also conducts on-site inspection and off-site surveillance on risk areas of banks as determined from Integrated Supervision System (ISS) software and Enterprise Data Warehouse (EDW) Software. DBI-1 attends in the special board meeting of the concerned banks in order to exchange views on the compliance of the inspection report of Head offices. The department also arranges meeting of Supervision Committee bi-monthly basis, presided over by the Deputy Governor, in-charge of supervision, where different policy and operational issues covering supervision are discussed. Under the jurisdiction of DBI-1, the concerned banks are directed to sit in a tri-partite meeting with their Management Committee (MANCOM), inspection team of Bangladesh Bank and external auditors before finalization of the annual financial statements.

5.58 During FY18, DBI-2 conducted a total number of 933 inspections including 883 comprehensive inspections on 06 head offices, 123 big branches and 753 small branches of 06 state-owned Commercial Banks namely Sonali, Janata, Agrani, Rupali, Basic and BDBL. At the same time, a total number of 50 special inspections including 30 Core Risk Inspections were conducted on various branches and Head Offices of the 06 SCBs. The department also conducted comprehensive inspection on the Head office and 04 branches of ICB.

5.59 DBI-3 has to conduct comprehensive inspection on specialized Banks, namely Bangladesh Krishi Bank (BKB), Rajshasi Krishi Unnoyan Bank (RAKUB), Ansar-VDP Unnoyan Bank, Karma-Sangsthan Bank, Grameen Bank, Probashi Kallyan Bank and SME activities of all banks and NBFIs. During FY18, DBI-3 conducted comprehensive inspections on 533 banks branches including 06 Head Offices, 32 big branches, 495 small branches including 212 SME service centers, SME/agriculture branches. In addition, a total number of 4 special inspections were conducted along with 34 inspections by this department during this period.

5.60 DBI-4 is entrusted with the responsibility of supervising the performance of 08 domestic Islamic Banks, 03 NRB banks (established by non-resident Bangladeshis) and 09 Foreign Commercial banks that are operating in the country with special emphasis on regulatory and supervisory compliances. During FY18, DBI-

4 conducted 325 inspections on banks' Head/ country offices and branches. During the period, this department conducted comprehensive inspections on 114 branches and 20 Head/ country offices of banks to examine the books of accounts and related financial documents/records of the banks with a view to evaluating their overall soundness and regulatory compliance status. During the period, DBI-4 also carried out core risk inspections on 20 branches and 20 Head/country offices of banks to review the implementation progress of core risk management guidelines as well as to evaluate and monitor risk management systems of those banks. Moreover, DBI-4 carried out Supervisory Review Evaluation Process (SREP) inspection on 20 branches and 20 Head/ country offices to review the accuracy of the statement of ICAAP of the banks.

5.61 Besides these, DBI-4 conducted Anti money Laundering (AML) inspections on 10 branches of different banks. DBI-4 also conducted quick summary inspection on 97 branches and 11 Head offices (08 Islamic banks and 03 NRB banks). DBI-4 examined asset quality of the banks as of 31st December, 2017 and ensured reflection of the observations of this inspection in the annual financial statement of the banks. This is ensured through exchanging views in tri-partite meeting with concerned banks' management, external auditors and inspection teams before finalization of the financial statement. This department also conducted 24 special inspections on 14 branches and 10 Head/ Country offices. On top of these, DBI-4 regularly monitors compliance and implementation progress of the recommendations made in the inspection report of the bank branches and Head/Country offices.

5.62 Department of Foreign Exchange Inspection (DFEI) conducts inspection on foreign trade financing, treasury functions and foreign exchange risk management of banks, foreign exchange transactions of banks and money changers. In FY18, the department conducted a total of 68 comprehensive inspections on authorized dealer branches of banks, 10 comprehensive inspections on head office and 57 inspections on foreign exchange risk management of banks. The department also conducted 102 special inspections on foreign trade, foreign exchange related irregularities and 64 inspections on money changers.

5.63 BB always strives hard to ensure highest standards for fair banking practices, moral codes and corporate governance in the banking sector. With a view to achieving this objective, Financial Integrity and Customer Services Department (FICSD) of BB has continued its efforts to settle disputes/complaints received from customers successfully. As a part of customer/public awareness initiatives, the department has aimed to increase publicity in the print and electronic media. FICSD has also taken initiatives to settle issues related to frauds in ATM Card, MICR cheque and Mobile banking. FICSD has conducted special inspections on general banking, credit and foreign exchange transaction in various banks throughout the year and several actions were taken accordingly. During FY2017-18, a total number of 5766 complaints were received by the department through the dedicated hot-line numbers, e-mails and traditional letters and among them 5733 complaints were resolved. Resolution rate is 99.42 percent. Besides, a total number of 116 special inspections were carried out on different commercial and specialized banks by this department during the period.

5.64 FICSD has issued "Guideline on customer services and complaint management" in 2014 and banks were instructed to implement that guideline accordingly. FICSD monitors the implementation status by the banks regularly. In order to protect banking customer's rights, recently this department has amended the existing guideline and banks were advised to inform customers in case of changing interest rate on term loan before one month and to allow customers to exit bank without deducting any early settlement fee. No early settlement fee will be deducted in case of adjustment of continuous or demand loan before maturity. FICSD is not only providing services to settle customer complaints, it is also working to increase financial literacy awareness among public, so that they can gain confidence in the financial system.

5.65 Bangladesh Financial Intelligence unit (BFIU) is the central agency of Bangladesh responsible for analyzing Suspicious Transaction Reports (STR), Cash Transaction Reports (CTR) and information related to money laundering (ML) and terrorist financing (TF) received from reporting agencies and other sources, disseminating information/intelligence thereon to relevant law enforcement agencies through executing the power and responsibilities under the provisions of Money Laundering Prevention Act, 2012 and Anti-Terrorism Act, 2009 (including the amendments). BFIU is also entrusted with the responsibility of exchanging information related to ML and TF with its foreign counterparts. The main objectives of BFIU is to establish an effective system for prevention of money laundering, combating financing of terrorism and proliferation of weapons of mass destruction by conducting both on-site and off-site supervision on AML/CFT activities of the reporting agencies in line with the empowerment imposed by section 23(1)(e) of Money Laundering Prevention Act (MLPA) 2012 and section 15(1)(e) of Anti Terrorism Act (ATA) 2009 (including amendments up to 2013) to supervise the activities of banks.

5.66 The BFIU has adopted risk-based approach to supervise the banks more effectively and to comply with FATF recommendations. Basically two types of onsite supervisions are carried out by BFIU, namely i) System Check Inspection and ii) Special Inspection. In FY18 supervisory activities were focused on banking sector and branches that are most vulnerable to money laundering or terrorist financing and are at highest risk of being non-compliant with legislative and regulatory requirements. While implementing risk based approach, BFIU took account of a number of risk factors faced by the branches including sectoral, client, geographical, delivery channel or services/product risks. In order to identify the important risks faced by the banks and to mitigate those risks by choosing the appropriate response, BFIU considered the following four types of risk assessments, namely (i) national risk assessment, (ii) sectoral risk assessment, (iii) risk assessment of the banks by the supervisory body (i. e. BFIU) and (iv) risk assessment prepared by the banks (about its customers, products/services, countries and geographic areas, and distribution channels). AML/CFT system check inspections for branches are conducted on a 6 months cycle to oversee and ensure compliance. During the inspection, AML/CFT risk management procedures of the banks are also examined. Branch inspections include review of capacity of compliance officers, CDD procedures, KYC procedures related to customers, Politically Exposed Persons (PEPs) and influential persons, record keeping, United Nations Security Council Resolution (UNSCR) sanctions monitoring process, STR identification, monitoring and reporting process, KYC procedure of beneficial owner(s) of a account(s), CTR monitoring, KYC for occasional/walk-in or one off customers transactions, transaction monitoring process, self-assessment and Independent Testing Procedures, Quarterly AML/CFT meeting, training records. BFIU has conducted system check inspections in 40 head offices and 54 branches of 56 banks during FY18.

5.67 BFIU continues its effort to create awareness among the officials of different reporting organizations and thus encourages the reporting organizations to conduct a number of training programs for their officials. Besides, it has arranged workshops for other law enforcing agencies. Apart from these, BFIU has been maintaining continued engagement with all concerned international bodies to boost up international efforts in this arena. Upto June,2018 BFIU has signed 60 Memorandum of Understanding (MoU) to exchange information related to ML/TF with FIUs of other countries, among which 9 MoU have been signed in FY18.

Financial Stability and Macro Prudential Supervision

5.68 Financial Stability Department (FSD) is working relentlessly to build up a stable macro prudential framework that would shield the financial system from any adverse movement in the downturn phases of the economic and financial cycles. The department examines, assesses and quantifies plausible financial system risks and vulnerabilities, analyzes their outlook through some indicator as well as model based risk identification and monitoring toolkits. A number of macro prudential supervisory tools has been developed and are being used as early warning indicators. The department also performs some research works on globally recognized contemporary stability issues. Outcomes of the functioning risk assessment tools and research works are shared among supervision and operation related departments of BB to provide them with some important and significant inputs to strengthen the resilience of the overall banking sector.

5.69 An annual Financial Stability Report (FSR) is being published to evaluate the strength of banks and financial institutions (FIs) as a whole and to enhance risk awareness among the stakeholders of financial system. Quarterly Financial Stability Assessment Reports (QFSAR) are also being published to provide the stakeholders with more frequent updates on key trends, risks and fragilities in the financial system of Bangladesh. Besides, Stress tests on banks are being conducted on quarterly basis to gauge the resilience of the banks on standalone basis as well as a whole banking sector to withstand plausible financial shocks. Aggregate stress test results are being published regularly in FSR and QFSAR.

5.70 Financial Projection Model (FPM), a forecasting tool developed under the technical assistance from the World Bank, is used for projecting fluctuations in the financial markets by assuming hypothetical scenarios in the model. The model conducts projections for next 12 (twelve) quarters about various aspects of the banking industry. Historical micro data along with current and expected financial sector and macroeconomic conditions are considered in formulating assumptions and stressed scenarios. It helps improve BB's risk assessment capacity for individual bank. FPM report is being generated on half yearly basis. Another tool named Interbank Transaction Matrix (ITM) is used for monitoring liquidity management of banks and FIs to find out any potential liquidity crisis in the market. ITM report is being generated on quarterly basis. Besides, dynamic analysis of the health of the banks is performed by the Bank Health Index (BHI) and HEAT map semi-annually to perform an analysis of the health of the banks from liquidity, solvency and earning perspective.

5.71 In order to remain vigilant against any adverse effect resulting from the failure of the Domestic Systemically Important Banks (D-SIBs), the department has been continuing to identify D-SIBs semiannually because the impact of the failure of a D-SIB will be significantly greater than that of a non-systemic bank. Besides, a framework for additional supervision mechanism has been developed to supervise the D-SIBs, however, the framework has not been implemented yet. Another structured oversight framework to enhance credit discipline titled 'Central Database for Large Credit (CDLC)' has been developed to oversee the large exposures of Non Financial Corporation (NFC). The database will help identify assets in advance which may cause financial distress. Reports based on the analysis of CDLC are generated quarterly.

5.72 Bangladesh Systemic Risk Dashboard (BSRD) has been developed aiming to provide early warning signs of probable build-up of systemic risk in the financial system. It contains analyses on a set of qualitative and quantitative systemic risk indicators in the financial system of Bangladesh summarizing key risk factors namely macro risk, credit risk, funding and liquidity risk, market risk, profitability and solvency risk along with inter-linkages among them.

5.73 FSD is preparing a Composite Financial Stability Index (CFSI) on half yearly basis to measure overall stability of the Bangladesh Financial System. CFSI integrates eighteen indicators under three sub indices [(Banking Soundness Index (BSI), Financial Vulnerability Index (FVI) and Regional Economic Climate Index (RECI)]. The indicators covers the major soundness indicators of banking sector, financial sector, real sector and external sector to form a single composite indicator which indicates the stability condition of the financial system as well as any buildup of systemic stress.

5.74 Under the framework titled 'Coordinated Supervision framework for Bangladesh Financial System', a Coordination Council Technical Group (CCTG), a forum of financial sector regulators, has been formed to assist the Coordination Council in decision making. The CCTG met three times during 2017-18 with a view to exchanging ideas and information, and promoting cooperation among various regulators of the financial system. Moreover, Financial Stability Council (FSC), an apex body, has been established to avoid buildup of any systemic crisis that may threaten to jeopardize the financial stability of Bangladesh. It includes all the financial sector regulators (e.g., MoF, BB, BSEC, MRA, IDRA, Department of Cooperatives, RJSC etc.) and relevant government agencies such as National Board of Revenue (NBR) headed by the Minister of Finance (MoF). The prime responsibility of the FSC would be to take decision on resolution of domestic systemically important banks/ financial institutions (DSIBFs) which would go beyond the capacity of the individual regulators as well as the Coordination Council (CC).

Table 5.14 The Recent Position of DITF

Particulars	Unaudited figure (as on as on 31 December 2017)	Premium rate*	Coverage Amount
Total fund	64.03 billion BDT	---	Up to BDT 100 thousand (Per bank Per Depositor)
Total investment	10549.98 billion BDT	---	
Insurable deposit to total demand and time liabilities	79.00%	---	
Covered deposit of total insurable deposit	24.43%	---	
Fully insured deposit	88.66%	---	
Sound bank categories	---	0.08%	
Early warning bank categories	---	0.09%	
Problem bank categories	---	0.10%	

* Effective from 2013
Source: Department of Off-site Supervision (DOS), Bangladesh Bank.

Banking Sector Infrastructure for Financial Stability and Risk Management

Deposit Insurance Systems in Bangladesh

5.75 Deposit Insurance Systems (DIS) is a measure to protect bank depositors, especially the small depositors, from losses caused by a bank's inability to pay its debts when owing. The purpose of DIS is to increase market discipline, reduce moral hazard in the financial sector and provide safety nets at the minimum cost to the public in the event of a bank failure.

The direct rationale for deposit insurance is customer protection. The indirect rationale for deposit insurance is to reduce the risk of a systemic crisis, for example, panic withdrawals of deposits from sound banks and breakdown of the payment systems. From a global point of view, deposit insurance provides many benefits and, over the long term, appears to be an essential component of a viable modern banking system.

5.76 In Bangladesh, Deposit Insurance Scheme was first introduced in August, 1984 in the name of "The Bank Deposit Insurance Ordinance 1984". In July 2000, the Ordinance was replaced by an Act passed by Parliament called “Bank Amanat Bima Ain- 2000”. Deposit Insurance systems in Bangladesh are now being administered by the said Act. In accordance with the Act, Bangladesh Bank (BB) is authorized to carry out a fund called Deposit Insurance Trust Fund (DITF). The Board of Directors of BB acts as the Trustee Board for the DITF. The DITF is now being administered and managed under the guidance of the Trustee Board. In addition, Bangladesh Bank is a member of International Association of Deposit Insurers (IADI). The recent position of DITF is shown in Table 5.13.

5.77 The deposit insurance function in Bangladesh is limited to a pay-box function. It does not have any involvement in the supervision of its member banks and no role in the resolution of failed banks. In accordance with the “Bank Amanat Bima Ain- 2000”- the main functions are: collecting premium from all scheduled banks on half-yearly basis (30 June/31 December) and investing in the Government Securities and the income derived from such investments is also credited to the DITF account for further investment. In case of winding up of an insured bank, as per said act, BB will pay to every depositor of that bank an amount equal to his/her deposits not exceeding BDT one hundred thousand.

5.78 To enhance the effectiveness of market discipline, BB has adopted a system of risk based deposit insurance premium rates applicable for all the banks effective from the half year January-June, 2007. From 2013, the premium rate has been increased. Moreover, proposal for the amendment of the current act to “Amanat Surakkha Ain” has already been sent to Ministry of Finance, which is now under consideration of MoF. Along with the banking systems BB has also taken initiative to bring the NBFIs under the umbrella of DIS and increase the coverage limit in the amended act. At present, a software named Information for Deposit Insurance Premium Assessment (IDIPA) has been introduced for the automation of premium calculation process and online submission of premium assessment information.

5.79 The effectiveness of DIS in reducing systemic risk would be increased if the public is well aware of its existence and scope. With this end of view, BB has already issued a circular regarding public awareness and more information are available in the Bangladesh Bank website so that the public might be informed on an ongoing basis about the benefits and limitations of the DIS.

Activities of Credit Information Bureau

5.80 Credit Information Bureau (CIB) was set up in Bangladesh Bank (BB) on 18 August 1992 with the objective of minimizing the extent of default loans. CIB has been providing its online services since 19 July, 2011. The Online system of CIB is playing an important role to maintain a risk free lending procedure in banking industry. At present CIB online services are providing through New CIB Online solution software, which was developed by BB's internal resources and started its live operation on 01 October, 2015. It eliminated vendor dependency as well as reduced huge cost, which was incurred for maintaining the previous online system. With the adoption of highly sophisticated ICT facilities the performance of the CIB services has been improved significantly in terms of efficiency and quality. It has also appreciably reduced the time and physical movement for the banks/NBFIs in submission of credit information and CIB report generation process, which ultimately make the loan processing activity faster.

5.81 The CIB database consists of detailed credit information in respect of borrowers, co-borrowers and guarantors. CIB database includes credit information of borrowers having outstanding amount of BDT 50,000 & above and defaulted credit card information having outstanding amount of BDT 10,000 & above. The total number of borrowers was 1,794,703 at the end of April, 2018 while it was 1,274,612 during the same period of previous year. This number recorded an increase of around 41 percent comparing with the same of previous year. The Total number of classified borrowers in Banks/FIs was 240,660 at the end of April, 2018 which was approximately 13 percent higher compared to the same period of last year. In April, 2017 the number was 212,845.

5.82 The total outstanding amount of loans and advances of the banking and non-banking Financial Institution stood at BDT 922,576 crore (including BLW amount) in April, 2018 which recorded an increase of around 19 percent compared to the same period of last year. In April, 2017 the amount was BDT 775,269 crore. Furthermore, total classified outstanding amount recorded an increase of around 25 percent in April, 2018 over the same period of last year. The classified amount was BDT 140,480 crore in April, 2018 while it was BDT 112,027 crore in April, 2017. Moreover from May 2018, CIB started to include credit information of borrowers having outstanding balance of BDT 1 and above of loans & advances. The total recorded number of borrowers in May, 2018 was 1,832,166, which was 2 percent higher than the previous month (April, 2018). Besides, Credit Information Bureau of Bangladesh Bank has undertaken several initiatives with a view to increasing the score of 'Depth of Credit Information Index', which is a part of 'Getting Credit' of Doing Business Report prepared by World Bank. The initiatives are noted below:

i) Strengthen and make the existing CIB of Bangladesh Bank more informative by-

a) Fine tune the newly developed CIB Online System;

b) Increase credit history showed in CIB Report of a borrower to 24 months from 12 months;

ii) Develop Collateral/Security Information System to prepare a collateral/Security database of Immovable assets.

Memorandum of Understanding (MoU) has been signed on 08 August 2017 between Microcredit Regulatory Authority (MRA) and Bangladesh Bank to establish Credit Information Bureau for Micro Finance Institutions (MF-CIB).