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2011

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Bangladesh Bank

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Financial Stability Department
Bangladesh Bank

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BANGLADESH BANK

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Governor's Message

Financial stability refers to the resilience of the financial system to unanticipated adverse shocks, which enables the continued smooth functioning of the financial intermediation process. It is gaining increasing importance in the policy formulation, implementation and supervision areas of Bangladesh Bank (BB). BB employs a variety of macroprudential tools and actions in addition to microprudential measures for maintaining financial stability. Publishing the Financial Stability Report on a periodic interval is one way through which BB conveys its assessment about financial stability.

This is the second issue of the Financial Stability Report. It outlines the risks which affect individual institutions or the financial system as a whole that could eventually disrupt the economy of Bangladesh. The report outlines the major trends in the banking industry with respect to their impact on financial stability, taking into account the fact that banks are at the hub of the credit intermediation process between savers and investors and provide critical services to different stakeholders, and that the strength and resilience of the industry is the foundation for sustainable economic growth. This report also reveals trends in the growth and development of non-bank financial institutions (NBFIs), considering their importance in financial stability. Although macroprudential supervision is a practice still under development in much of the world, it is noteworthy that in recent months BB has issued revised risk management guidelines for banks and stress testing guidelines for NBFIs; published the first issue of the Financial Stability Report, created the Financial Stability Department, and initiated the implementation of two of the Basel III liquidity framework metrics with a view to addressing systemic risks and increasing the resilience of the financial system to withstand different endogenous and exogenous shocks. More work is needed, even in the advanced industrialized economies, and BB is committed to putting in place a regime of macroprudential supervision that tailors the best and the most relevant tools and practices available to meet the needs of our growing economy and financial sector.

I hope that the key participants of the financial system and other stakeholders, inside and outside Bangladesh, will get important insights from the Report that could heighten risk awareness among them and better understand the financial sector's preparedness to withstand and adapt to possible shocks.

Dr. Atiur Rahman
Governor

Deputy Governor's Message

The global financial meltdown, commencing in August 2007, caused considerable pain and expense for a major part of the world. The efficacy of policy tools and their applications in managing systemic crises were challenged. These almost inevitably compelled the policy makers and financial sector supervisors to revisit their policy choices. A good number of them is now placing emphasis on maintaining systemic stability.

Bangladesh, though, suffered little from the crisis, but in no way can it remain complacent, as the chance of future vulnerabilities can never be ignored. With financial systems becoming more and more complex and the global financial system being more interconnected, such apprehension is plausible and understandable.

Macroprudential approaches to maintaining financial stability, as complement to their microprudential counterparts, are gaining increasing importance. Needless to say, a financial system is deemed to be stable if it fulfills its functions and is able to withstand the shocks to which it is exposed.

Bangladesh Bank, taking into account the actions of a number of advanced countries as well as its developing peers, commenced publishing the financial stability report on a periodic interval. This is the second issue; the first one was published in October 2011.The major motivations behind this report are creating risk awareness among the stakeholders, informing them of ongoing vulnerabilities in the financial system as well as preparing them to withstand and adapt to plausible shocks, both endogenous and exogenous.

This report places increased emphasis on identifying and analyzing the risk and fragilities in the financial system of Bangladesh in addition to revealing major trends and developments in the financial sector. It provides early warnings to different economic agents of the perils of unplanned growth and unpredictable policy shifts. It also reveals the developments in the macroeconomic and external environment.

I hope that all the stakeholders will get important insights from the report, which will pave their way toward building a more resilient and prospective macroeconomic environment in the country. I also hope that every entity within the financial system will benefit from the report and will be able to contribute to the maintenance and enhancement of financial stability of Bangladesh.

We must all look forward and work towards building a stronger financial system that will reinforce the Bangladesh economy against an uncertain world and lift the fortunes of Bangladesh.

Lastly, I would like to thank the officials of different levels who made the endeavor of publishing this report a success.

Shitangshu Kumer Sur Chowdhury
Deputy Governor

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Acronyms

ACU	Asian Clearing Union
ATM	Automated Teller Machine
BACH	Bangladesh Automated Clearing House
BACPS	Bangladesh Automated Cheque Processing Systems
BB	Bangladesh Bank
BBS	Bangladesh Bureau of Statistics
BCBS	Basel Committee on Banking Supervision
BDBL	Bangladesh Development Bank Limited
BDT	Bangladeshi Taka
CAR	Capital Adequacy Ratio
CBS	Core Banking Solution
CDBL	Central Depository Bangladesh Limited
CDR	Credit Deposit Ratio
CPI	Consumer Price Index
CR	Credit Risk
CRC	Credit Rating Company
CRR	Cash Reserve Requirement
CSE	Chittagong Stock Exchange
CY	Calendar Year
DFID	Department for International Development (UK)
DSE	Dhaka Stock Exchange
ECAI	External Credit Assessment Institutions
EDW	Enterprise Data Warehouse
FC	Foreign Currency
FI	Financial Institution
FY	Fiscal Year
GDP	Gross Domestic Product
HBFC	House Building Finance Corporation
HHI	Herfindal–Hirchman Index
HV	High Value
ICB	Investment Corporation of Bangladesh
IDR	Investment Deposit Ratio (for Islamic banks)
IMF	International Monetary Fund
IRR	Interest Rate Risk
IT	Information Technology
M2	Broad Money
MCR	Minimum Capital Requirement
MR	Market Risk
NBFI	Non-Bank Financial Institutions

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

Chapter 1 Overview

Bangladesh financial system consists of banks, non-bank financial institutions, specialized financial institutions, insurance companies, stock exchanges, micro finance institutions and cooperative banks with their regulatory and supervisory authorities. There were no significant changes in the structure of the financial system of Bangladesh during CY11.

Banking sector

Underpinned by strong macroeconomic fundamentals, the banking sector balance sheet size reached to BDT 5874.9 billion as of end-December 2011. It grew significantly in CY11 compared to the previous year. The growth was broad-based as most of the income-earning assets registered a positive growth. The share of loans and advances was the largest among asset items: the major portion of the banking sector assets was deployed in loans and advances.

Compared with other countries, the banking sector was not concentrated, which contributed to financial sector stability in CY11. The concentration ratios of the top 5 banks and top 10 banks within the total assets were not much higher. On the other hand, a moderate concentration was recorded in the loan distribution across sectors.

The banking sector's classified loans ratio slightly declined in CY11 compared to that of the previous year. The bulk of classified loans were bad. The adverse effect on bank balance sheets arising out of high classified loans remained a major concern for the monetary authority. Pertinently, classified loans were widely shared by banks. Additionally, a considerable amount of adversely classified loans were written off from the books during the year and there was a notable provision surplus at end-December 2011.

Deposits were the largest source of external funds in the banking sector, accounting for a lion's share of the total liabilities as at end-December 2011. The major portion of the deposits was urban; total deposits were dominated by term deposits which is good for financial stability.

A significant portion of banking sector deposits is insured under the deposit insurance scheme. The percentage of insured monetary amount of deposits slightly increased in CY11, though the number of large depositors increased. The percentage of depositors that were fully insured decreased somewhat, but still indicated a comprehensive safety net for small depositors, who make up the vast majority of total depositors.

Interest rate spreads have on average slightly increased in December 2011 from that in January 2011. They continue to remain high for Foreign Commercial Banks (FCBs), whose average spreads are almost double than that of other banks, necessitating closer monitoring and actions to further reduce these spreads.

Banking sector operating profits increased notably in CY11; however, the net profit decreased considerably. Banking sector return on assets and return on equity dropped parallel to the declining net profit. This drop in aggregate profitability was widespread throughout the system- meaning many banks had a drop in profitability, though a good number of banks did manage to go against this trend. Net interest margin recorded a slight decline which adversely

affected the banking sector's profitability. Asset turnover ratio recorded a slight decline, which along with the fall in the net interest margin was instrumental in the decrease in profitability ratios.

Banking sector non-interest expenses to total income increased marginally in CY11, attributable to proportionate decrease in total operating income compared to operating expenses. Deposit and lending rates recorded a significant increase during January 2011 to December 2011, despite persistent efforts of BB to encourage the banks to reduce the overall level of interest rates to reasonable levels to facilitate investment and growth. The spread between advance and deposit rates also increased, which indicates the persistence of a high spread during CY11.

The banking industry became increasingly compliant with the Basel II capital adequacy framework. The major portion of the banks (91 percent) was able to maintain the minimum required capital adequacy ratio (CAR). A lion's share of the banking assets was with the CAR compliant banks, which could be treated as an indicator of financial soundness of the banking industry. What is more, most of banks maintained the minimum tier-I ratio, indicating that banks are becoming increasingly compliant with the purest capital ratio commensurate with the regulatory requirement in CY11. This trend also implies improvement in the financial soundness of the banks as well. However, in terms of a cross-country scenario Bangladesh still has a long way to go, as the industry CAR of the country is still far below than that of some South Asian countries, namely India, Sri Lanka and Pakistan.

Free capital of the banking industry was in a rising trend during the last couple of years implying that the amount of capital available to absorb losses was in an increasing trend. While a majority of the banks maintained a leverage ratio (equity/total assets, not risk-weighted) higher than 5 percent in CY11, the distribution of the leverage ratio indicates that there is still further room for the banks to improve their financial soundness in terms of this indicator.

The interbank money market faced liquidity stress throughout the CY11 that was carried over from CY10. This was due to high government borrowings and a slower rate of increase in savings from the households due to high inflationary pressure. However, activities quickly returned to a business-as-usual situation with supportive measures taken by the BB and prudent policies of the financial institutions. The recent stress condition of the interbank market suggests that banks need to monitor their asset-liability mismatch closely while making financing decisions.

The banking sector credit-deposit ratio (CDR) demonstrated a surge at the beginning of CY11, in response to which BB initiated moral suasion for cooling off a high CDR and emphasizing a smooth flow of loans to the most priority sectors of the economy. The overall CDR at end-December 2011 was at a tolerable level, but investment in the call money market increased dramatically, indicating some sort of imprudence in the liquidity management of the banks with possible spillover problems in the interbank market.

Banks maintained a notable surplus in the Statutory Liquidity Ratio (SLR) as of end December 2011. BB's instruction to increase the Cash Reserve Ratio (CRR) and SLR in

December 2010 along with rising import payment and diversion of cash to the stock market created some temporary pressures in the liquidity market and led to heating of the interbank liquidity market. However, consequent interventions of BB let the situation return to normalcy.

High credit growth in CY11was inseparable from mounting credit risk, as reflected by non-performing bank loans. The share of RWA assigned to credit risk was the dominant portion of the RWA of the banking system. Credit risk remained the same in terms of its share to total risk, but market risk declined slightly compared to those of the previous year. A considerable degree of volatility in domestic financial markets during CY11 contributed to the increase in market risk for banks, notwithstanding BB's stringent prudential requirements on various market risk exposures.

The first important source of market risk was interest rate risk, which was primarily driven by banks' investments in securities and adverse movement in security prices. The second important source of market risk was exchange rate risk, driven primarily by banks' investments in foreign exchange dealings and adverse movement in exchange rates, in addition to the direct exposure arising from foreign exchange placements in different exchange markets. The third important source of market risk was equity price risk, which was primarily driven by banks' investments in equities and adverse movement in equity prices, in addition to the indirect exposure from the quantum of bank loans collateralized by shares.

Banks were constrained not to hold shares in excess of 10 percent of their total liabilities in CY11. In terms of banks' liabilities, at the end of December 2011, the aggregate exposure was 3.3 percent as against the ceiling and no bank had its exposure in excess of the 10 percent.

The share of RWA assigned to operational risk accounted for a smaller part (only 9 percent) of the total RWA of the banking system. Lack of sophisticated techniques and insufficient data on actual loss events aggravated the challenges faced by the BB and banks for managing operational risks. Although banks are maintaining capital for operational risk according to the basic indicator approach under Basel II, the difficulty of going from a series of isolated, infrequent operational incidents to a comprehensive capital charge is a source of concern for both the banking sector and the central bank.

Credit ratings have served as an informational tool to facilitate the predictions of the investors that certain debt would be repaid by the obligor. The SEC so far has permitted 8 companies for operating as a Credit Rating Company.

The risk absorbing capacity of banks was found to be high at end December 2011 as suggested by the results of stress tests. The first round stress test results indicate that the banking industry is resilient when minor shocks are applied. Results also suggest that credit risk is the most dominant risk factor in terms of its impact on CAR. The banking industry was found to be fairly resilient in the face of various market risk shocks namely interest rate, exchange rate and equity price movements. The CAR of none of the banks would be impacted under the market risk shocks except for the 4 banks with their pre-shock CARs already below 10 percent. The combined application of credit and market shock results in a

minor decline in overall CAR. It is noteworthy that a liquidity shock was found to have a substantial impact on the banking sector.

Islamic banks

Islamic banks in the banking sector demonstrated a remarkable growth in CY11. The expansion of the Islamic banking network was also impressive. As a proportion of the overall banking industry, the combined share of Islamic banks (excluding Islamic banking branches/windows of conventional banks) was around 16 percent in assets, 18 percent in investments (loans), 17 percent in deposits, 13 percent in equity and 16 percent in liabilities as of end-December 2011.

The key financial indicators reflect a healthy financial position and intense potential for future expansion of Islamic banks. Islamic banks managed healthy earnings in the form of profit income, which is a major contributor to their profitability. During CY11, Islamic banks contributed around 15 percent of the total profit of the banking industry. The profit income to total assets ratio of Islamic banks was slightly lower than that of the industry average. On the other hand, the non-profit income to total assets ratio was slightly lower than 2 percent as compared to the industrial average, representing comparatively lower income from off-balance sheet items. Return on assets (ROA) of the Islamic banking industry was slightly lower than that of the overall banking industry while the return on equity (ROE) was slightly higher, as the earnings of Islamic banks became higher compared to their equity position. This may reflect the slightly lower capitalization of the Islamic banks in the aggregate, because of the negative equity of one problematic Islamic bank under a reconstruction scheme of Bangladesh Bank.

Islamic banks complied with their SLR requirements in CY11. The investment-deposit ratio (IDR) of full-fledged Islamic banks was somewhat above the recommended maximum level of 90 percent. Given the minimum capital requirement (MCR) of 10 percent under the Basel-II accord for CY11, the significantly higher capital adequacy ratios (CARs) of 5 Islamic banks indicate both the financial strength and proper compliance of MCR of the banks. The stronger capital base ensures that Islamic banks are prepared to meet various kinds of shocks, if so arose.

Islamic banks' classified investments (loans) to total investments ratio showed a relatively good position as compared with the overall banking industry in CY11. The onslaught of classified investments hit the conventional banks harder than the Islamic banks in CY11.

Non-bank financial institution (NBFI)

The non-bank financial institutions (NBFIs) sector represents one of the most important parts of the financial system in Bangladesh. In CY11, banks were one of the major sources of funding of the NBFIs, either directly or indirectly. Banks were also major investors in bonds/debentures issued by NBFIs.

NBFIs' capital and assets increased considerably in CY11 compared to that of the previous year. The rise in capital reflects a healthy financial base of the NBFIs. In CY11, a major portion of NBFI funds was deployed in term financing. Additionally, there was no provision shortfall against non-performing assets among the NBFIs during the year.

NBFIs' after-tax profits showed a continuous growth over the last 3 years; major portion of income was generated from term finance while interest on deposits was the major outlay in total expenses. On the other hand, profitability ratios (ROA and ROE) have shown a decreasing trend over the last 3 years due to a relatively higher growth in the amount of total assets and shareholders' equity compared to the increase in after-tax profits. Furthermore, as of December 2011, the NBFIs were compliant with CRR and SLR.

Sensitivity analyses on the NBFIs, based on 31 December 2011 data, reveal that the sector is resilient when minor shocks are applied; the industry CARs do not fall below the minimum required level in response to some specific shocks or an overall combined shock at 'minor shock' level.

Capital Market

The capital market faced some stress situations in CY11. The Dhaka Stock Exchange (DSE) general index dropped by 57.9 percent during the 02 January to 29 December 2011; however, it showed an increasing trend over the last two months of 2011.

During CY11, market capitalization was highest on 02 January 2011 and dropped to the lowest on 15 November 2011. The price earnings ratio (P/E) of DSE, depicting the relationship between market valuation of a company's shares and the earnings of the company recorded a significant decline in December 2011 compared to that in December 2010 due to a substantial price correction in the market. The weighted average P/E ratio of the banking sector was slightly lower than that of the financial institutions.

Capital market capitalization, as measured by the Herfindahl-Hirschman Index, was not too heavily concentrated in a few sectors at end-December 2011. However, the financial sector (including banks, financial institutions, insurance and mutual funds) accounted for nearly half of total market capitalization, while the manufacturing sector accounted for almost a one-fourth share as of end-December 2011. Banks held the highest share of total market capitalization. The short-term higher profit of the financial sector, combined with the continuing need of the growing sector for additional capital, convinced investors to invest more heavily in the financial sector than in real sectors.

In CY11, DSE turnover reached the highest peak in July 2011, and turned down to the lowest in December 2011. The financial sector dominated the total DSE turnover in December 2011. Banks' turnover was the highest in the overall sector.

Throughout the year 2011, the capital market was in a bearish trend due to a massive price correction that was started in December 2010. The Government of Bangladesh, Ministry of Finance, Bangladesh Bank, Securities and Exchange Commission, Dhaka Stock Exchange, Chittagong Stock Exchange, Investment Corporation of Bangladesh, and other stakeholders

have taken various steps to bring back the stability of the market, which led to a positive trend in the market at end-December 2011.

The payment and settlement systems remained resilient and continued to operate smoothly throughout the CY11, contributing to the stability of the financial system. The Bangladesh Automated Clearing House (BACH) started automated cheque clearing from 07 October 2010. All the 7 clearing regions in major cities, namely Chittagong, Rajshahi, Khulna, Bogra, Rangpur, Barisal and Sylhet, have been connected with the Dhaka Clearing House from 25 October 2011. Almost 90 percent of all the clearing instruments are now being processed through the automated clearing house. It is noteworthy that processing of both high value (HV) and regular value (RV) items increased considerably in CY11 compared to that of the previous year. In the mean time, Electronic Fund Transfer (EFT) has been introduced which facilitates the banks to make bulk payments instantly, using less paper and manpower. The Bangladesh Electronic Funds Transfer Network (BEFTN) started with credit transactions in 28 February 2011 and began offering debit transactions from 15 September 2011.

The initiation of mobile banking is one of the most noteworthy advancements in banking. In CY11, 18 banks got approval for Mobile Financial Services (MFS) of which 13 have already started offering these services. Bangladesh Post Office also introduced 'post e-pay' service on 05 September 2011 in its 1968 branches with the help of the mobile operators' countrywide network. At present, 3 telecom companies are permitted for mobile-commerce related transactions. These include utility (water, gas and electricity) bill payments, purchasing train tickets and match tickets.

Most of the commercial banks are now using their own Core Banking Solution (CBS) which has made banking faster and efficient. 85 percent of the banks provided full or partial online banking services in CY11. Usage of plastic money has also been increased in daily life transactions.

An increasing trend of electronic banking operations was recorded in CY11. The amount of transactions using ATMs, ATM/debit cards and credit cards also recorded a notable increase. Internet banking transactions increased even more impressively as both individual and corporate customers have become more interested in internet banking.

The banking sector experienced remarkable progress in automation during the last several years. Examples included: establishment of an Enterprise Data Warehouse (under process) aimed at discontinuing hard copy forms of statement submission, analysing banking sector's performance, conducting scenario analysis and stress tests, carrying out macroeconomic research, etc., within the shortest possible time, creating an automated Credit Information Bureau (CIB) service to provide the scheduled banks/FIs credit related information about prospective and existing borrowers, a Letter of Credit (L/C) monitoring system to preserve and use of all necessary information regarding L/Cs by the banks through the BB website; using an online export monitoring system to monitor exports of Bangladesh; and creating an e-Returns service to submit electronic returns using predefined templates for the purpose of macroeconomic analysis through related BB departments.

The inauguration of internet trading in both of the bourses (DSE & CSE) in the country was the most significant advancement for the capital market in the last several years.

Development in the Financial System

BB initiated two Basel III- liquidity standards, namely the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR) to the banks as a reporting requirement in 2011. An introductory period is continuing and will last for no more than one year. BB, in the mean time, conducted its first round of Quantitative Impact Study (QIS) of these two liquidity ratios on the basis of banks' data of May 2012; the next QIS will be conducted in September 2012. BB is expecting implementation of these ratios as a regulatory mandate at the 100 percent minimum on or before the beginning of January 2014. In the process of customizing these standards, some components and "run-off factors" of these two liquidity ratios have been reviewed by BB in the country context and rationalized accordingly.

In light of global economic turmoil and considering the rapidly-growing and evolving financial sector in Bangladesh, BB established the Financial Stability Department (FSD) with a view to examine the stability of the Bangladesh financial system through macro-prudential analysis, assess and quantify financial system risks and vulnerabilities, design and conduct stress-testing exercises, oversee the means of payments and settlement systems operating in the country, monitor developments in the insurance sector, as well as capital markets participants, recommend macroprudential regulation and engage in macroprudential oversight, thereby strengthening the macro prudential framework of the country.

BB has also initiated a process to adopt a tailor-made Financial Projection Model (FPM), under the technical assistance from the World Bank, to improve its risk assessment framework in individual banks and the banking system as a whole.

In the context of an extremely challenging first decade of the 21st century for the financial services industry in many parts of the world, BB issued separate comprehensive risk management guidelines for banks and instructed them to follow the same to manage various risks in a more prudent manner.

BB created a new department titled "Deposit Insurance Department" for exclusively expediting the issues of implementing an effective deposit insurance system in Bangladesh in accordance with international best practices. A Deposit Insurance Trust Fund (DITF) has been created for providing limited protection (not exceeding Taka 100,000) to a small depositor in case of winding up of any bank. BB has already advised the banks to bring the deposit insurance scheme (DIS) to the notice of the public through displaying key information about it on their display board. In addition, BB is working to introduce this system to the NBFIs as well and proposed to the concerned ministries to make it more risk-based and more expansive in coverage.

Bangladesh's National Parliament passed two insurance laws on 03 March 2010 in a bid to further strengthen the regulatory framework of the insurance industry and make the industry operationally vibrant. A regulatory body in the name 'Insurance Development & Regulatory Authority,' (IDRA) under the Insurance Development and Regulatory Authority Act 2010, has been established to make the insurance industry a premier financial services provider in the

country by promoting efficient corporate governance, by meeting the evolving aspirations of the society, and by serving all segments of the business community and general population for high economic growth.

Finally, BB issued stress testing guidelines for NBFIs to provide a structured way of assessing the vulnerabilities of financial institutions to extreme but plausible market conditions. It is expected that these guidelines would enable institutions to accurately assess risk and define the risk appetite of the organization and also provide critical information to senior management for decisions on capital buffers and contingency planning.

Chapter 2 Macroeconomic Developments in CY11

Notwithstanding the presence of shocks to global financial stability, particularly heavy public debt burdens and weak growth prospects in a number of advanced economies and the risk of sharp reversals in the emerging markets, the economy of Bangladesh continued to demonstrate considerable resilience during FY11. According to the Bangladesh Bureau of Statistics (BBS)'s provisional estimate, real GDP grew by 6.7 percent, which is 0.6 percentage points higher than the 6.1 percent growth recorded in FY10, attributable to 8.2 percent, 6.6 percent and 5.0 percent growths in the industry, services and agriculture sector respectively. The service sector alone contributed around 50 percent of GDP, while the contributions of the industry and agriculture sectors were nearly 30 percent and 20 percent respectively.

The increasing trend in annual average inflation started from November 2009 and continued till the end of FY11, with the exception of a slight decrease in December 2010. Measured on a 12-month average basis, inflation stood at 8.8 percent in FY11, an increase from 7.3 percent in FY10. The higher inflation was mainly driven by higher food prices, a continuous rise in international commodity prices including fuel and fertilisers, growing demand caused by the global economic recovery, higher-than-targeted money supply growth and Taka depreciation. It is noteworthy that though CPI (general) inflation, both 12-month average and point to point, demonstrated a notable increase in FY11, an opposing trend was evidenced in food and non-food inflation; the annual average and as well as point to point food inflation rose significantly while average non-food inflation showed a decreasing trend in FY11.

Both exports and imports maintained a robust growth with a widening trade deficit in FY11; exports recorded a 44 percent growth in FY11 compared with the previous fiscal year. Apparels (woven garments and knitwear products) continued to occupy an overwhelming (about 75 percent) share of the export basket. Though tea, terry towel and petroleum by-product recorded a negative growth of about 43.9 percent, 23.5 percent and 13.4 percent respectively, all other major exportable items increased significantly. A substantial growth of export of Raw jute (82.0 percent), Knitwear (46.3 percent), Footwear (45.9 percent), Woven garments (40.2 percent), Jute goods (28.1 percent) and Leather (31.7 percent) contributed to a notable increase in the growth of merchandise exports. On the other hand, merchandise imports (fob) increased by BDT 679.4 billion (or 45.9 percent) in FY11 to BDT 2159.0 billion. Imports (c&f) as a percentage of GDP increased by 6.1 percentage points from 21.3 percent in FY10 to 27.4 percent in FY11.

As a result, the trade deficit widened from BDT 356.6 billion in FY10 to BDT 521.5 billion in FY11 (a 46.2 percent increase), attributable to relatively larger expansion in import expenditure compared with the increase in export earnings. The deficit on the services account also widened by BDT 85.4 billion to BDT 170.7 billion in FY11 from BDT 85.3 billion in the previous year. On the contrary, the deficit on the income accounts narrowed down slightly to BDT 96.4 billion in FY11 from BDT 102.7 billion in FY10. Current transfers increased substantially. Wage earners' remittance inflows that more than made up

for trade deficit in recent years decelerated to a 6.0 percent growth rate in FY11, from a 13.4 percent growth rate in FY10. As a result of all of these changes, the current account surplus narrowed from BDT 257.6 billion in FY10 to BDT 70.8 billion in FY11. Expressed as a percentage of GDP, the current account balance stood at 0.9 percent in FY11 against 3.7 percent in FY10. The nominal current account surplus was more than completely offset by a high and increasing financial account deficit, leading the Balance of Payments to a record deficit of BDT 65.8 billion in FY11. The weakness in net capital account inflows was due to a sharp decline in government's net external borrowings and to the private sector's tendency of leaning heavily on domestic savings for financing investments rather than at least partly accessing foreign debt or equity for this purpose. The resultant depletion in the overall Balance of Payments created depreciation pressure on the Taka, in reversal of the preceding year's trend.

On a more positive note, the terms of trade improved marginally by 0.5 percent in FY11 over FY10 due to the significant increase in export prices over import prices. Both the export price index and import price index have increased by 7.3 percent and 6.7 percent respectively exerting a net upswing in export prices due to increased demand in the international market in CY10 with the gradual recovery of the global economy.

Despite the quantitative easing in the US economy, worries about debt crisis and austerity plans of the euro-zone and downgrading of sovereign rating of a number of euro-zone economies by major rating agencies, Bangladesh Bank was able to maintain stability in retaining foreign exchange reserves. The net international reserves remained above USD 10.0 billion while the world economy has been trying to overcome the global recession. Pertinently, the current foreign exchange reserve is sufficient to meet four months' import obligations.

Official foreign aid disbursement decreased by 20 percent to USD 1.8[P] billion in FY11 from USD 2.2 billion received in FY10. Within this category, food aid disbursements stood at USD 82 million, a 13.4 percent decline from USD 93 million in FY10. The disbursement of project assistance stood at USD 1695 million in FY11, a 26.2 percent decline from USD 2140 million of FY10. No commodity aid was received in FY11 as in the preceding year. Total outstanding official external debt as of 30 June 2011 was USD 21.4 billion (19.2 percent of GDP in FY11) against USD 20.3 billion as of 30 June 2010 (20.3 percent of GDP in FY10).

Government borrowing from the banking system, mostly in long-dated bonds, escalated in FY11 due to a sharp decline in foreign financing and non-bank domestic financing. The secondary market in longer dated treasury bonds still being very limited, banks and non-bank financial institutions holding primary dealership in Treasury bond faced additional liquidity pressure with the increasing volumes of these bonds in their holdings.

Broad money (M2) growth was 21.4 percent in FY11, which is marginally lower than the 22.4 percent growth recorded in FY10. The growth in broad money was mainly driven by higher growth in net domestic assets. Net domestic assets of the banking system increased by

[P] =Provisional.

25.0 percent in FY11, resulting from 28.4 percent growth in domestic credit against the target of 18.8 percent and previous year's growth of 17.6 percent.

For the rest of CY11 (i.e. July – December 2011), monetary policy was more restrained. Policies were selectively chosen discouraging growth of credit in wasteful, unproductive and high risk uses, while ensuring adequate credit flows in all productive pursuits in manufacturing, agriculture, trade and other services. As a result reserve money growth and broad money growth at 15.4 percent and 17.7 percent respectively were below the July Monetary Policy Statement levels.

BB's financial inclusion drive continued spearheading a widening of credit access for underserved productive sectors, while day to day market interventions infusing Taka and USD liquidity provided the minimum needed to keep market functioning steadily without excess volatility. BB initiated the gradual phasing out of lending interest caps to restore full interest rate flexibility, while closely monitoring rates of interest and charges/fees on banking services from the competition and consumer protection viewpoints.

Overall, the domestic macroeconomic environment was favourable and contributed notably to maintaining financial system stability.

Chapter 3 Banking Sector

3. 1 Financial system of Bangladesh

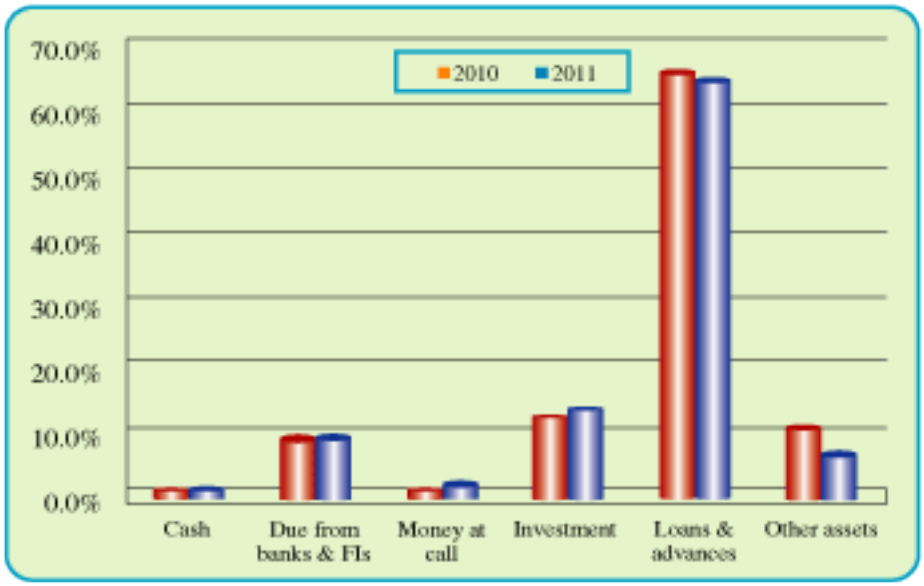
The financial system of Bangladesh consists of Bangladesh Bank (BB) as the central bank, 4 state-owned commercial banks, 4 government-owned specialized banks, 30 domestic private commercial banks, 9 foreign commercial banks, 4 Non-scheduled banks and 31 non-bank financial institutions. The financial system also embraces Investment Corporation of Bangladesh (ICB), House Building Finance Corporation (HBFC), Securities and Exchange Commission (SEC) as the regulator of the capital markets, 2 stock exchanges, 62 insurance companies, Insurance Development & Regulatory Authority (IDRA) as regulator of insurance sector, 599 registered[1] micro-credit organizations, and the Micro-credit Regulatory Authority (MRA) as regulator of micro finance institutions and co-operative banks. The banking sector is the dominant sector in the financial system of Bangladesh. The regulatory and supervisory arrangements for these entities are well defined, with strong legal underpinnings.

There were no significant changes in the structure of the financial system of Bangladesh during CY11. However, Bangladesh Bank approved license applications of 9 new banks.

3. 2 Asset structure of the banking sector

Underpinned by strong macroeconomic fundamentals, the banking sector balance sheet size grew by 21 percent compared with end-December 2010 and reached to BDT 5874.9 billion as of end-December 2011. The growth was broad-based as most of the income-earning assets registered a positive growth.

Chart 3. 1 Banking sector asset structure: end-December

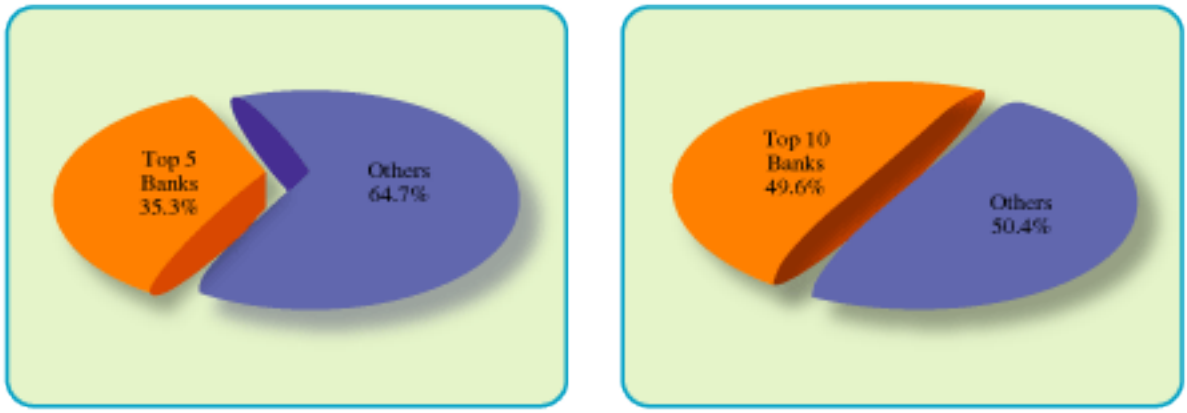


Source: compilation of aggregate balance sheet of banking industry

[1] As of October 2011, refer to BB website Micro Finance Institutions (MFIs)

The share of loans and advances is the largest share among asset items, but it decreased by 1.3 percentage points in CY11, while the share of investment in government and other securities increased by 1.4 percentage points. The share of balance with BB and other banks & FIs increased by 0.2 percentage points and the share of investment in call money market increased by 1.3 percentage points at end-December 2011 compared with end-December 2010. Of the banking sector assets, 64.5 percent were deployed in loans and advances during CY11. The share of other assets decreased by 1.9 percentage points, implying less investments in IT infrastructure and branch expansion & renovation during CY11.

Chart 3. 2 Top 5 and Top 10 banks based on asset size



Source: compilation of aggregate balance sheet of banking industry

Compared with other countries, the banking sector is not concentrated, which contributes to financial sector stability. The concentration ratios of the top 5 banks and top 10 banks within the total assets were only 35.3 percent and 49.6 percent respectively at end-December 2011. Among the top 10 banks, 3 are state-owned commercial banks, 5 are domestic private commercial banks, 1 is a specialized development bank and the remaining one is a foreign commercial bank.

3. 3 Concentration of Assets in the Banking sector

It is evident from the calculated Herfindahl-Hirschman Index (HHI) of 1670 points that there is only a moderate concentration in the banking system's loan distribution. The data also reveals that banking sector loans are concentrated in a few sectors in CY11. In particular, large and medium scale industries shows a 31 percent concentration of the total loan portfolio, followed by the two other economic purposes of wholesale and retail trade and import financing with a share of 18 and 13 percent respectively. However, the calculated level of HHI provides an early warning for the Bangladesh banking system as it is closer to the upper limit of moderate concentration, i.e., HHI of 1800.

Box 1 Sector-wise loans concentration (CY11)

(In Billion Taka)

Sl.	Sector	Amount	% of Total	HHI*
1	Agriculture	179.6	5	25
2	Fishing/Pisciculture	16.0	0	0
3	Forestry & Logging	0.2	0	0
4	Large & Medium Scale Industries	1093.6	31	961
5	Small Scale & Cottage Industries	48.1	1	1
6	Service Industries	84.6	2	4
7	Construction (Housing Societies & Companies)	92.3	3	9
8	Construction (Urban Housing)	100.3	3	9
9	Construction (Rural Housing)	7.5	0	0
10	Road Construction/Repairing	25.7	1	1
11	Construction (Apartment/House Renovation)	19.3	1	1
12	Other Constructions	40.2	1	1
13	Water Works	1.0	0	0
14	Sanitary Services	0.0	0	0
15	Road Transport	19.2	1	1
16	Water Transport	19.4	1	1
17	Air Transport	3.9	0	0
18	Public Utilities	29.3	1	1
19	Warehousing	2.0	0	0
20	Cold Storage	7.3	0	0
21	Wholesale & Retail Trade	644.9	18	324
22	Procurement by Government	3.2	0	0
23	Export Financing	141.2	4	16
24	Import Financing	466.0	13	169
25	Lease Financing	33.7	1	1
26	Leasing	19.3	1	1
27	Miscellaneous	407.4	12	144
	Total Loans & Advances**	3505.2	100	1670

* *HHI = Herfindal–Hirchman Index*

** *Total loans & advances excluding bills payable*

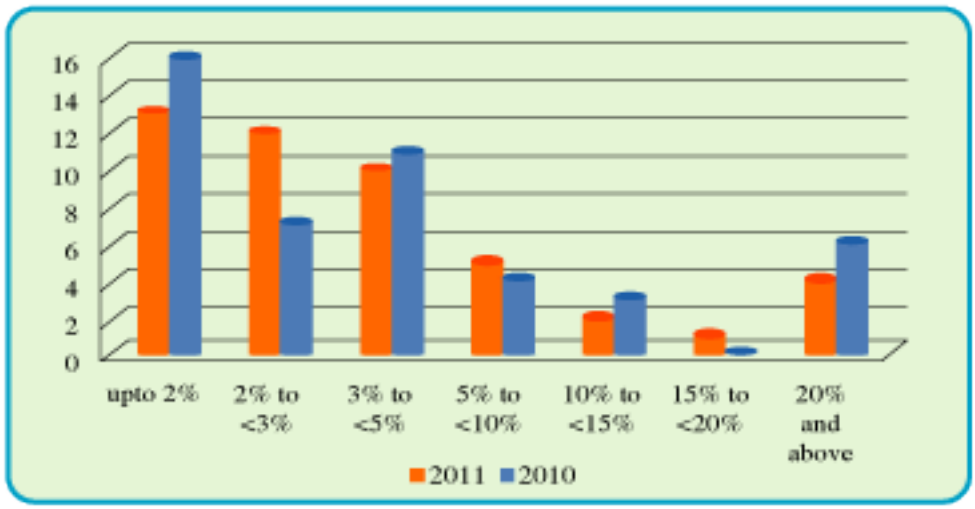
Source: Schedule Bank Statistics, January-March, 2012, Bangladesh Bank.

3. 4 Banking sector classified loans, provisioning & write off

Classified loans[2] emanated from the deterioration in the quality of the loan portfolios which is expected to transpire due to the rapid credit expansion in recent years. However, the classified loans of the banking sector actually fell to 6.2 percent from 7.1 percent, a decrease by 0. 9 percentage points at end-December 2011 compared with end-December 2010.

[2] *Classified loans are those loans which are classified as `Sub-Standard', 'Doubtful' or `Bad/Loss' as per BRPD circular # 05, dated 05.06.2006.*

Chart 3. 3 Distribution of banks by classified loans to total loans ratio: end-December

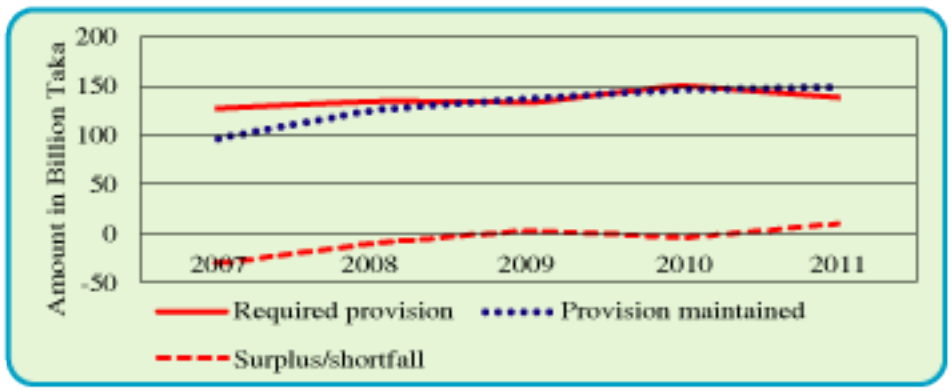


Source: Banking Regulation and Policy Department, Bangladesh Bank

Bank-wise information indicates that banking sector classified loans were widely shared by banks. The distribution of banks based on their classified loans to total loans ratio indicates that the number of banks with double-digit values of classified loans to loan ratios is 7 in CY11 and that was two more than CY10. Moreover, 4 banks have their classified loans to loans ratio over 20 percent. Notably, the classified loans to total loans ratios of 4 state-owned commercial banks ranged between 5 percent and 18 percent. Out of 9 foreign banks, 7 are below 4 percent, 1 is below 5 percent and 1 is above 10 percent at end of CY11. All private commercial banks' classified loans to total loans ratios are below 6 percent, except for 2 problem banks.

The high amount of classified loans to total loans ratio has strong implications for overall financial performance of the banks. High volumes of classified loans required banks to create cumulative provisions amounting to BDT 148.9 billion as at end of CY11, which is BDT 2.1 billion higher than that of the previous year. This increase in provisions did not keep up with the rise in classified loans consequently; the provisions to classified loans ratio shifted down slightly to 63.8 percent by the end of CY11, compared with 65.1 percent a year back.

Chart 3. 4 Banking sector loan loss provisions: end December

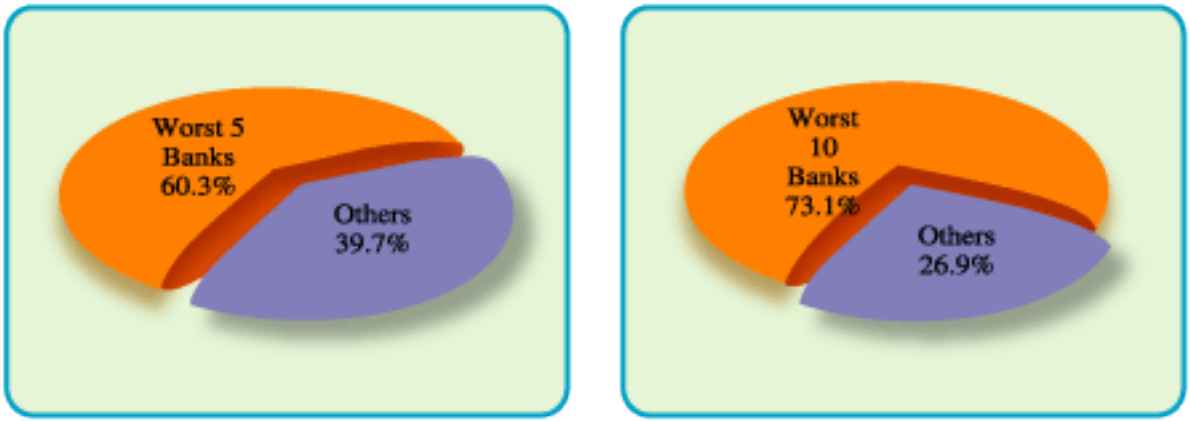


Source: Banking Regulation and Policy Department, Bangladesh Bank

The provision surplus in the banking sector has increased to BDT 9.6 billion as of end-December 2011 from a shortfall of BDT 30.1 billion in CY2007. Except for one specialized commercial bank and 2 domestic private commercial banks, all other banks have maintained a significant provision surplus, reflected in a net surplus in the banking sector in CY11. All of the banks have shown strong resilience to the early headwinds of credit risk.

As per the central bank's regulations, scheduled banks are allowed to write off loans adversely classified for more than 5 years. A total of BDT 18.8 billion adversely classified loans were written off from the books in CY11. The cumulative written off loans since 29 December 2004 amounted to BDT 208.3 billion as of end-December 2011.

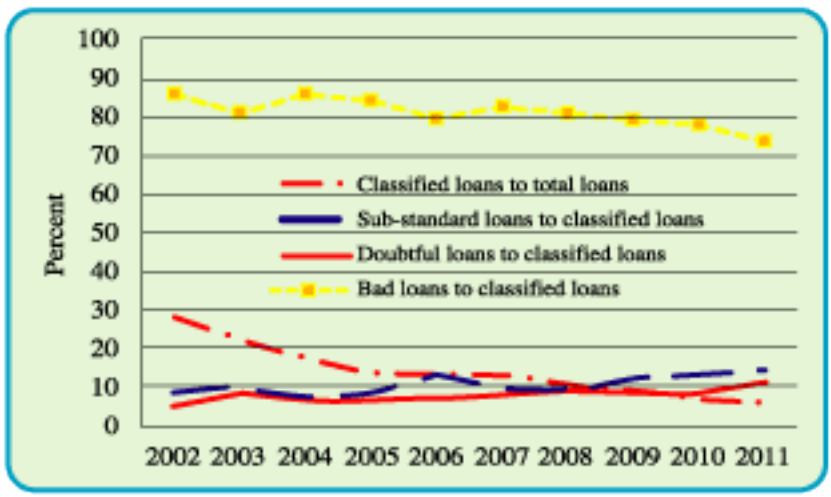
Chart 3. 5 Worst 5 and Worst 10 banks based on NPL



Source: Banking Regulation and Policy Department, Bangladesh Bank

Classified loan concentration ratios[3] of the worst 5 banks and worst 10 banks are 60.3 percent and 73.1 percent respectively at end-December 2011. Among the worst 10 banks, 4 are state-owned commercial banks, 4 are domestic private commercial bank, and 2 are specialized development banks. The classified loans in the state-owned commercial banks are higher due to the nature of their operations (lack of efficiency in fund management and politically motivated lending).

Chart 3. 6 Year-wise classified loans ratios of the banking sector: end-December

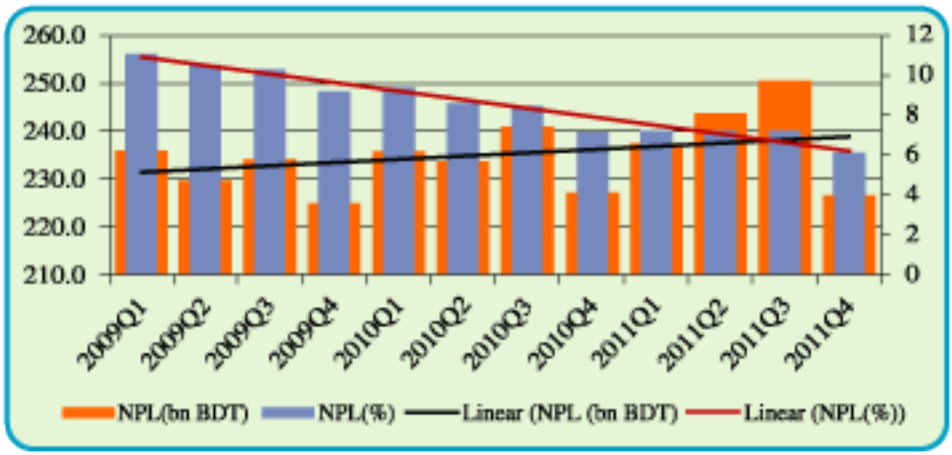


Source: Banking Regulation and Policy Department, Bangladesh Bank

[3] See *Table: XXVIII in Appendix for details*

The classified loans to total loans ratio has decreased to 6.2 percent in CY11 from 7.1 percent in CY10. The bulk of classified loans were bad loans. Although the ratio of bad loans to total classified loans ratio decreased to 73.8 percent in CY11 from 86.1 percent in CY10, significant inferior asset quality still exists within the banking sector. It is to note that the NPL ratio is declining not because classified loans are decreasing, but because the overall loan portfolio is expanding rapidly.

Chart 3. 7 NPL and NPL ratio during 2009-2011



Source: Banking Regulation and Policy Department, Bangladesh Bank

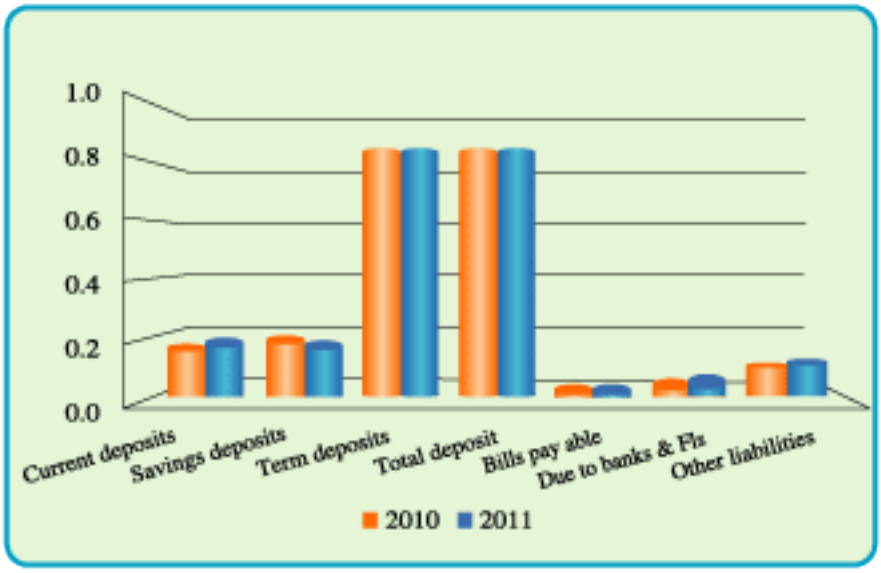
The adverse effect on bank balance sheets arising out of high classified loans is a major concern for the monetary authority. Bangladesh Bank's recent directives to the banks to take precautions while extending loans to high risk sectors and prioritize loans to productive sectors, in conjunction with the government's enactment of laws prohibiting loan defaulters to take part in elections and similar other measures should help to further improve the classified loans situation in the country[4].

3. 5 Liability structure of the banking sector

Deposits are the largest source of external funds in the banking sector. The share of total deposits was 85.5 percent of the total liabilities as at end-December 2011. Total banking sector deposits were composed of 86.6 percent urban and 13.4 percent rural deposits in CY11.

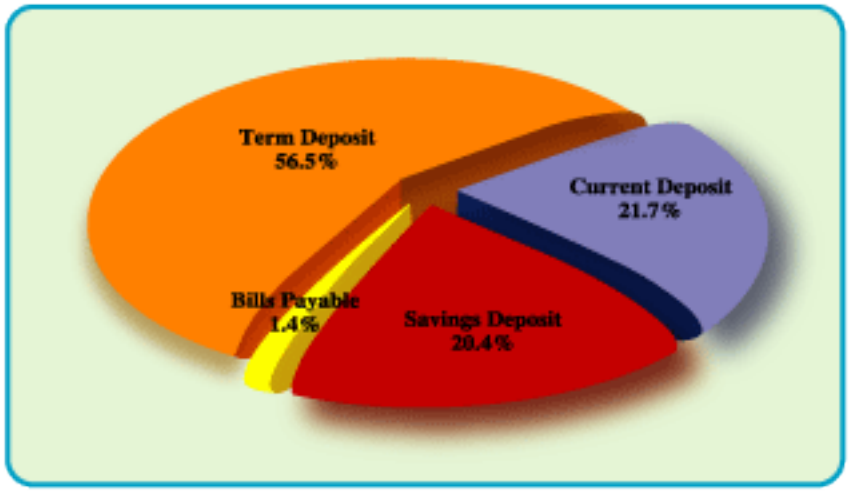
[4] BB has made its loan classification/provisioning policy more strict through BRPD circular No. 7 of 2012. Its effect will be to increase the stability of the banking sector even though it will cause a one-time jump in the reported level of classified loans.

Chart 3. 8 Banking sector liability structure: end-December 2011



Source: compilation of aggregate balance sheet of banking industry

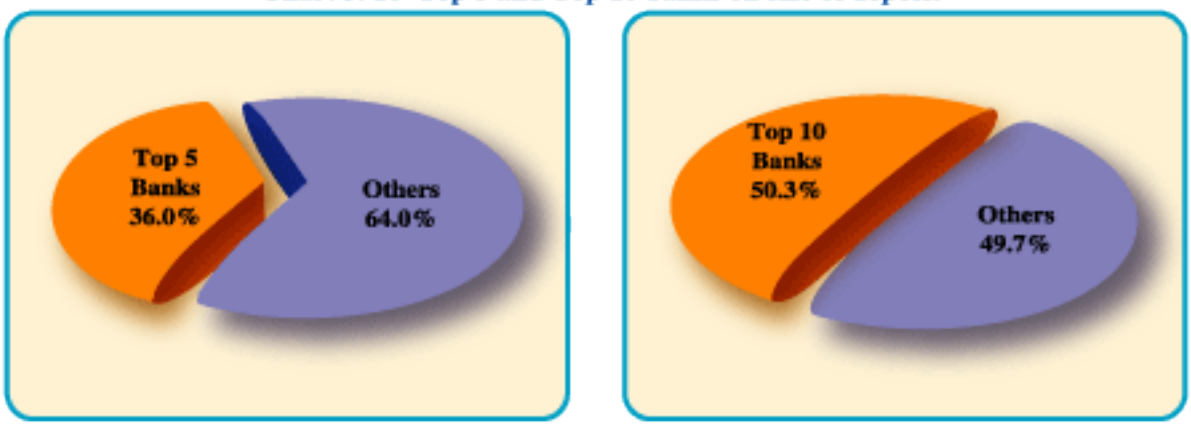
Chart 3. 9 Banking sector deposit structure by types of account: CY 2011



Source: compilation of aggregate balance sheet of banking industry

As of end-December 2011, deposits increased by 21.2 percent and borrowing from other banks & FIs increased by 41.6 percent, whereas other liabilities increased by 10.4 percent compared with end-December 2010. The share of term deposits was 56.5 percent of total deposits, whereas, the share of savings deposits and current deposits were 20.4 percent and 21.7 percent respectively of total deposits at end-December 2011. Overall, the deposit structure shows a greater reliance on term deposits, which is good for the financial stability.

Chart 3. 10 Top 5 and Top 10 banks on size of deposit

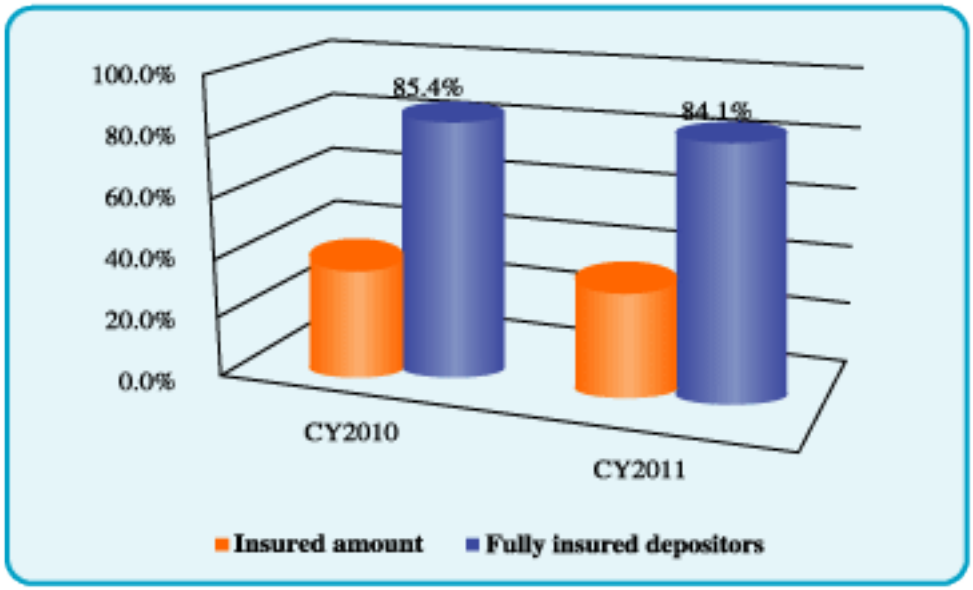


Source: compilation of aggregate balance sheet of banking industry

The concentration ratios of the top 5 banks and top 10 banks within total deposits are 36.0 percent and 50.3 percent respectively at end-December 2011. Among the top 10 banks, 3 are state-owned commercial banks, 5 are domestic private commercial banks, 1 is a specialized development bank and 1 is a foreign commercial bank.

3. 6 Banking sector deposit safety net

Chart 3. 11 Safety net on banking sector deposits



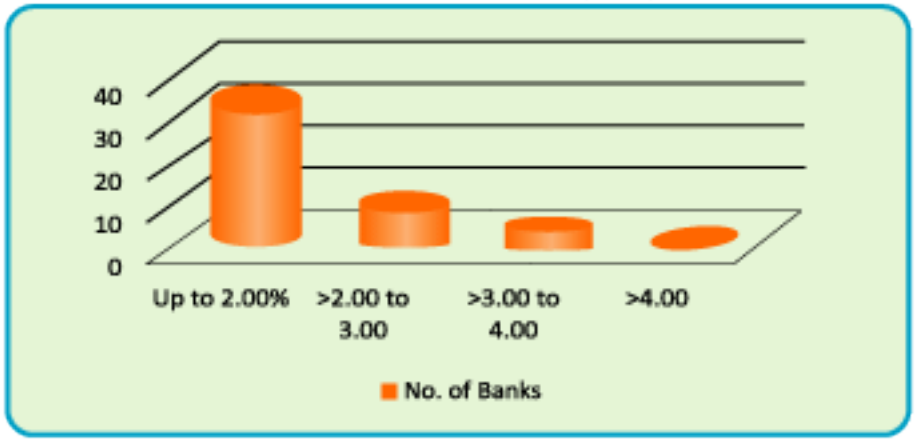
Source: Deposit Insurance Department, Bangladesh Bank

The deposit insurance system aims at minimizing the risk of loss of depositors' funds with banks. The present coverage of the deposits is BDT 100 thousand per depositor per bank. The percentage of insured monetary amount of deposits increased from 34.4 percent in CY10 to 34.9 percent in CY11 as the number of large depositors (balance more than BDT 260 thousand) increased in CY11. However, the percentage of depositors that are fully insured decreased somewhat from 85.4 percent in CY10 to 84.1 percent in CY11, still indicating a comprehensive safety net for small depositors, who make up the vast majority of total depositors.

3. 7 Banking sector profitability

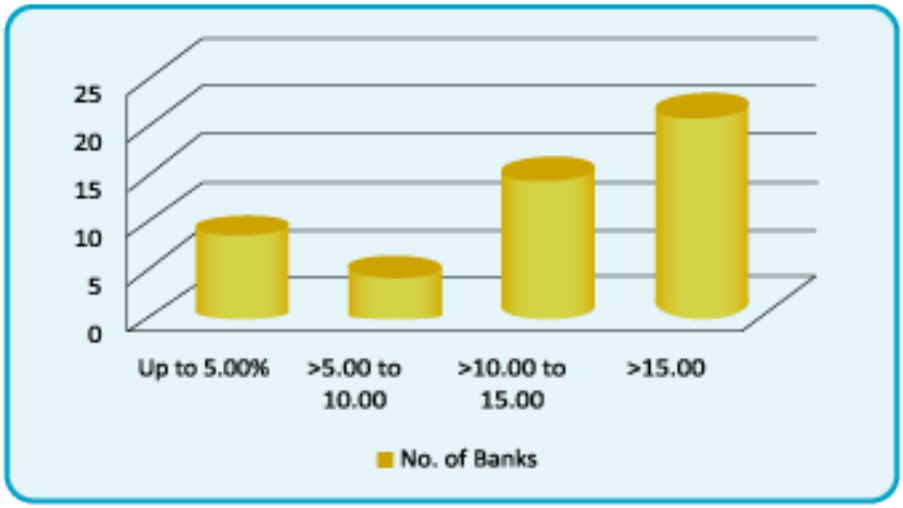
Banking sector operating profit increased by 9.3 percent from BDT 170.9 billion in CY10 to BDT 186.8 billion in CY11. The net profit decreased by 9.7 percent from BDT 83.3 billion in CY10 to BDT 75.2 billion in CY11. Accordingly, banking sector Return on Assets (ROA) and Return on Equity (ROE) dropped parallel to the declining net profit in CY11. ROA and ROE decreased by 40 basis points and 560 basis points in CY11, reaching levels of 1.3 percent and 14.3 percent respectively. This drop in aggregate banking sector profitability was widespread throughout the system - meaning many banks had a drop in profitability. Still, 14 banks managed to go against this trend and have been able to increase their profitability in terms of ROA.

Chart 3. 12 Sector return on assets (ROA): CY 2011



Source: compilation of aggregate profit and loss account of banking industry

Chart 3. 13 Banking sector return on equity (ROE): CY 2011

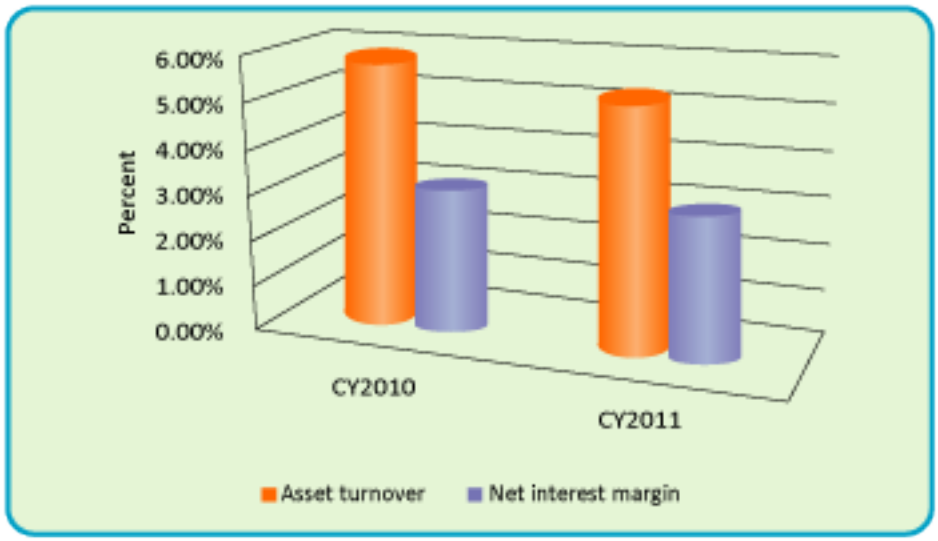


Source: compilation of aggregate profit and loss account of banking industry

Net interest margin (NIM) remained relatively stable in CY11 compared to that of CY10. The NIM decreased[5] slightly by 7 basis point from 3.05 percent in CY10 to 2.98 percent in CY11 which may have only a negligible adverse effect on the banking sector's profitability.

[5] It is possible, although not frequently observed, for NIM to decrease and spread to increase over the same reporting period. Net interest income, the numerator of NIM, is affected not only by the spread, but also by the

Chart 3. 14 Banking sector asset turnover and net interest margin (NIM)

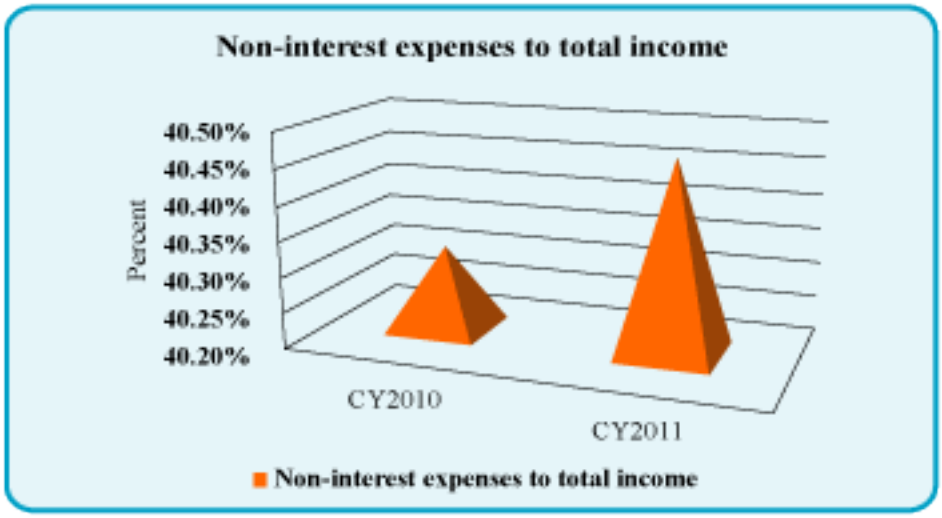


Asset Turnover = (Net Interest Income + Non-Interest Income) / Total Assets
Net Interest Margin = Net Interest Income / Gross Earning Assets
Net Interest Income = Interest Income – Interest Expense

Source: compilation of aggregate profit and loss account of banking industry

The fall in asset turnover ratio and net interest margin were instrumental in the decrease in profitability ratios. While the asset turnover ratio was 5.9 percent in CY10, it went down to 5.3 percent in CY11.

Chart 3. 15 Banking sector non-interest expenses to total income



Total Income = Net Interest Income + Non- interest Income

Source: compilation of aggregate profit and loss account of banking industry

The non-interest expenses to total income increased by 0.2 percentage points from 40.3 percent in CY10 to 40.5 percent in CY11, attributable to proportionate decrease in total operating income compared to operating expenses.

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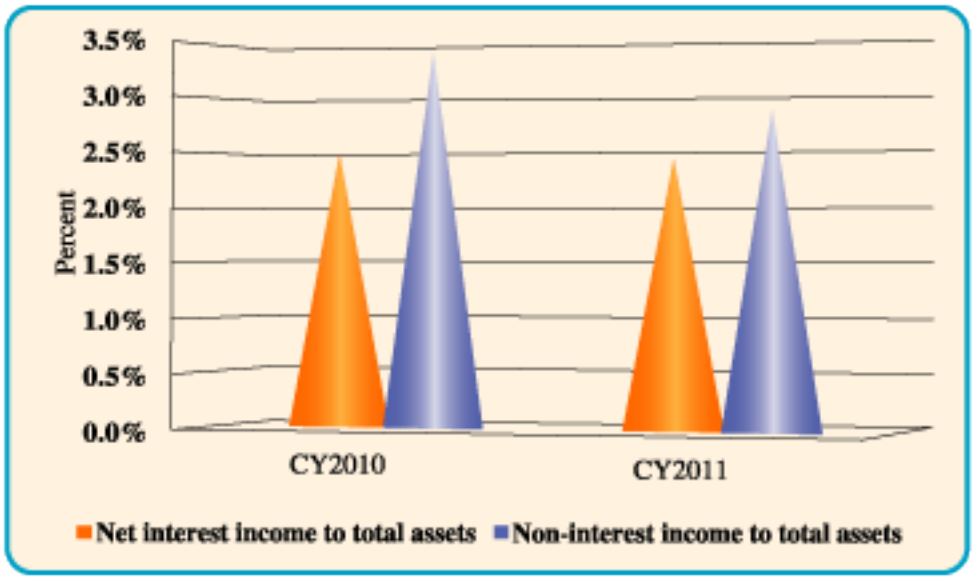
relationship between interest-earning assets and interest-bearing liabilities. If interest-bearing liabilities are growing faster than interest-earning assets, net interest income may grow slowly or even decline, even if the yield on those assets increases relative to the yield on those liabilities.

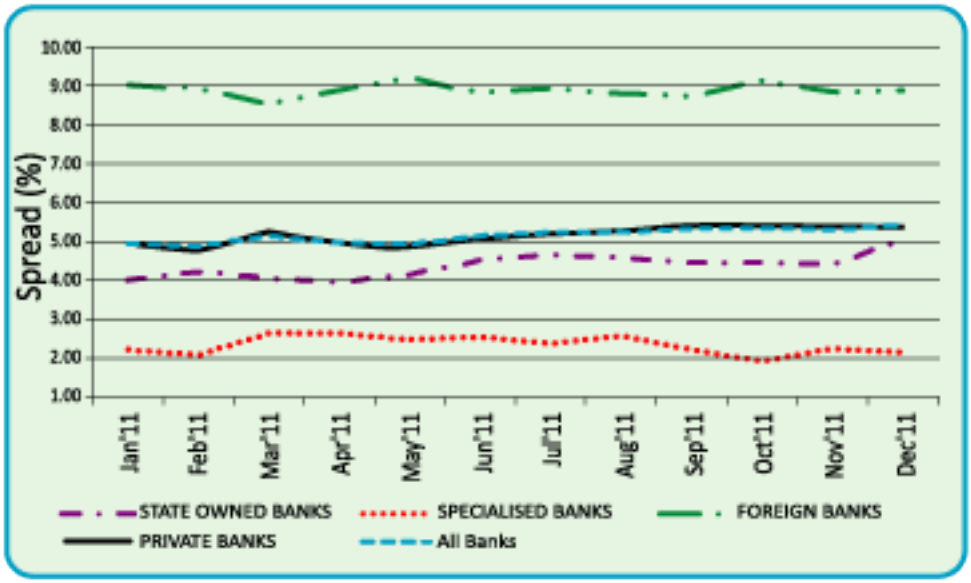
Chart 3. 16 Banking sector income by sources



Source: compilation of aggregate profit and loss account of banking industry

The ratio of net-interest income to total assets decreased slightly by 3 basis points from 2.50 percent in CY10 to 2.47 percent in CY11, and the ratio of non-interest income to total assets decreased by 53 basis points from 3.40 percent in CY10 to 2.87 percent in CY11.

Chart 3. 17 Banking sector monthly weighted average interest rate & spread



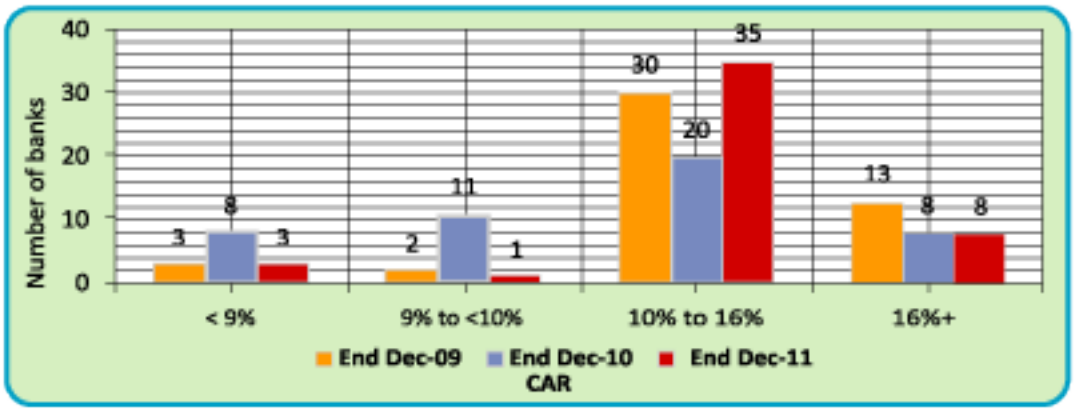
Source: Various issues of Economic Trends

Interest rate spreads have on average increased – from 4.9 percent in January to 5.5 percent in December 2011. They continue to remain high for Foreign Commercial Banks (FCBs), whose average spreads are almost double than that of the average of other banks. This necessitates closer monitoring and actions to further reduce these spreads.

3. 8 Capital adequacy

Scheduled banks in Bangladesh are becoming increasingly compliant with the Basel II capital adequacy framework. It is evident from Chart 3.18 that 91 percent of banks were able to maintain the minimum required CAR of 10 percent at end December 2011. It is mentionable that at end December 2010, only 83 percent banks fulfilled the lower requirement of minimum CAR of 9 percent.

Chart 3. 18 Capital adequacy ratio of the banking sector

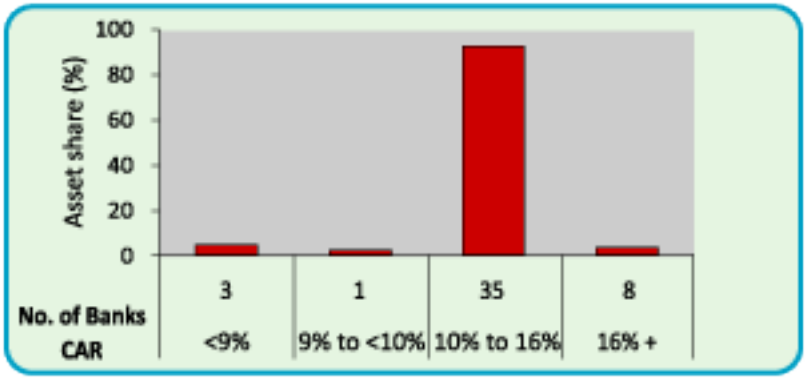


Source: Department of Offsite Supervision, Bangladesh Bank

On the other hand, as evident from Chart 3.19, a lion's share of the banking assets was concentrated in the banks, outside the non-compliant CAR group. Pertinently, 35 banks' CARs were within the range of 10-16 percent and their assets accounted for nearly 92 percent of the total banking industry's assets as of end December 2011. Indeed, a notable number of banks maintained a CAR of 10 percent or higher, which could be treated as an indicator of financial soundness of the banking industry.

It is noteworthy that banks having a capital adequacy ratio below the regulatory requirement and lying in the 'problem bank category' are asked to make up the shortfall by increasing their paid up capital. On the other hands, banks not lying in the stated category, but still capital-deficient, are instructed to make up the capital shortfall in any manner possible, and in some cases are asked to submit their capital plans and comply with the submitted plan within some set deadline.

Chart 3. 19 Asset Share of Banks based on CAR in CY11

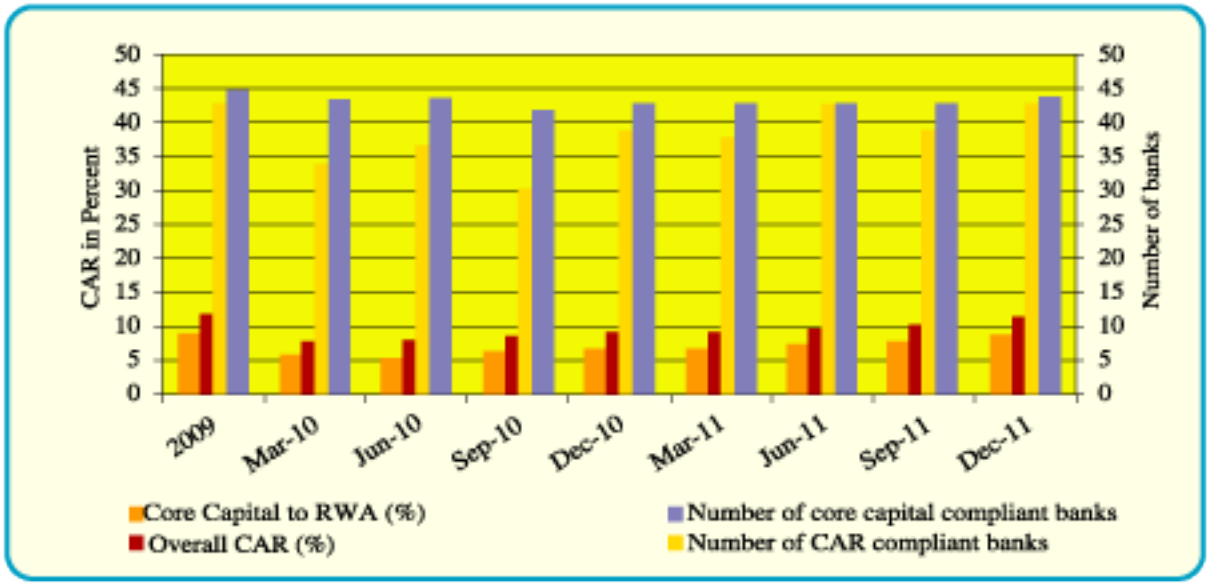


Source: Department of Offsite Supervision, Bangladesh Bank

The banking sector demonstrated a moderate level of soundness throughout CY11, as evident from movement of CAR and core capital in CY11 (Chart 3.20). For instance at end Dec-2010, the capital adequacy of the banking industry was 9.3 percent; the same stood at 11.4 percent at end December 2011.

What is more, Tier-I ratios were 6.9 percent, 7.4 percent, 7.9 percent, and 8.8 percent in the first, second, third and fourth quarters of CY11 respectively. This implies that the banks are becoming increasingly compliant in the Tier-1 ratio (i.e. the purest capital ratio) commensurate with the regulatory requirement in CY11. This trend also implies improvement in the financial soundness of the banks as well.

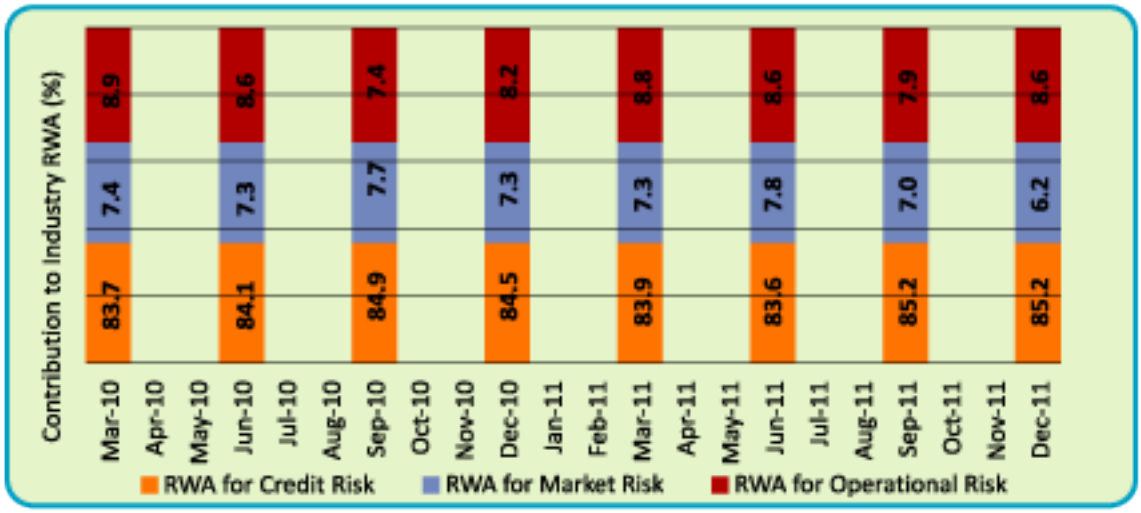
Chart 3. 20 Tier-1 ratio and overall CAR of the banking industry



Source: Department of Offsite Supervision, Bangladesh Bank

As of end December 2011, under the Basel-II capital adequacy framework, risk weighted assets arising from credit risk accounted for by nearly 85 percent of the total industry risk weighted assets, and the next positions were held by operational and market risks respectively. Since the credit risk accounted for the lion's share of the banking industry's risk weighted assets, credit quality matters a lot here. Encouragingly, during the last couple of years, the non-performing loan (NPL) ratio has been in a downward trend.

Chart 3. 21 Distribution of risk weighted assets (RWA) in CY11



Source: Department of Offsite Supervision, Bangladesh Bank

When a cross-country scenario is taken into account (Table 3.1), Bangladesh has a long way to go, as the industry CAR of Bangladesh is still far below than that of some South Asian countries namely India, Sri Lanka and Pakistan.

Table 3. 1 International comparison of capital adequacy indicators

Countries	CAR (%)		
	2009	2010	2011
India	14.0*	14.6*	13.5***
Pakistan	14.0	14.0	14.1**
Sri Lanka	16.1	14.9	14.5***
Bangladesh	11.7	9.3	11.4

Source: RBI, SBP, CBSL, BB

as of end March, **as of end June, * as of end September*

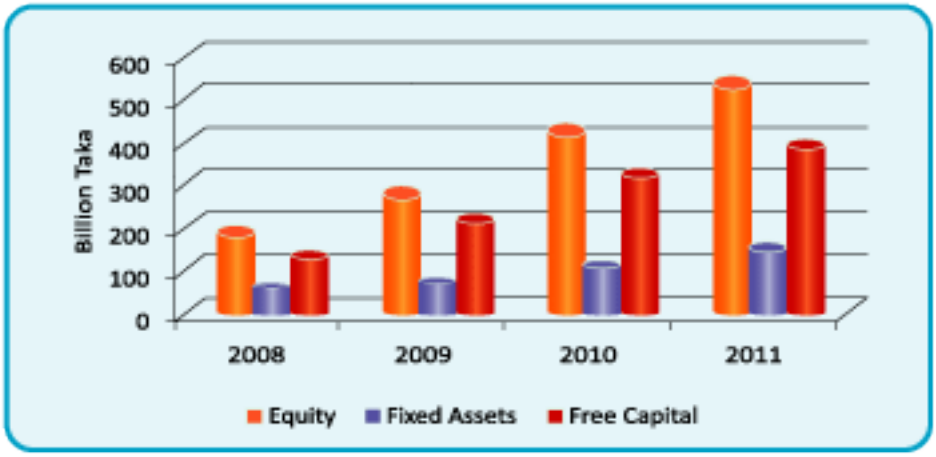
3. 9 Capital regulations issued by BB in CY11

Through BRPD Circular No. 09, dated 16 November 2011, BB provided "Mapping of External Credit Assessment Institutions' (ECAIs) rating scales with Bangladesh Bank (BB) rating Grade". In February 2011, BB issued "Process Document for SRP-SREP Dialogue on ICAAP".

3. 10 Free capital

Apart from capital adequacy, the free capital of banks, defined by equity minus fixed assets could also serve as a financial soundness indicator, especially in the event of any shock. As seen in Chart 3.22, free capital of the banking industry was in a rising trend during CY08 to CY11 implying that the amount of capital available to absorb losses was in an increasing trend.

Chart 3. 22 Equity & free capital of the banking industry

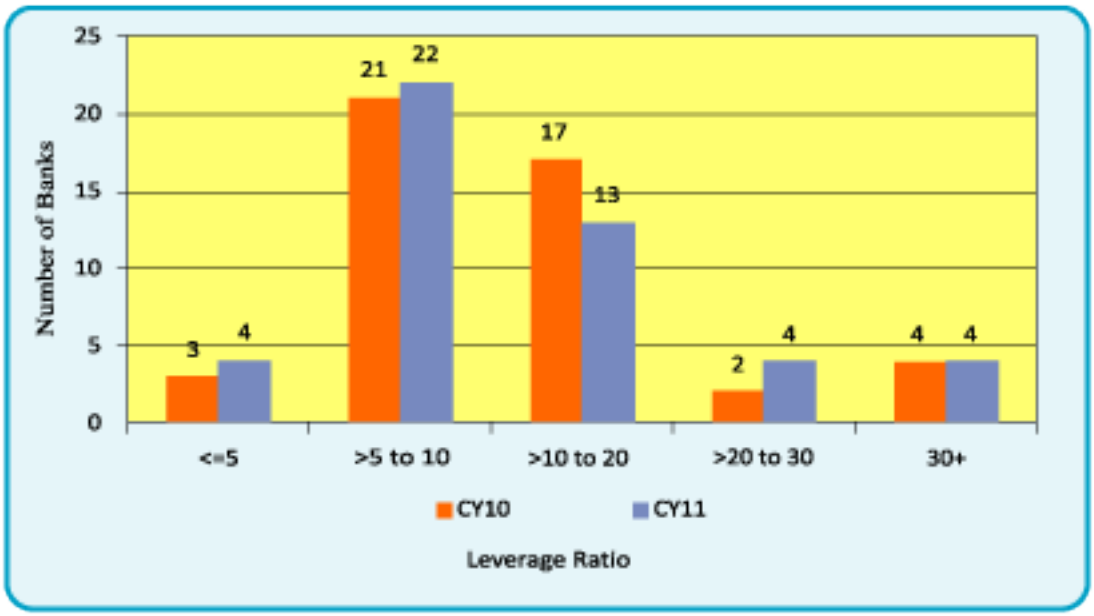


Source: Department of Offsite Supervision, Bangladesh Bank

3. 11 Leverage ratio

A majority of the banks maintained a leverage ratio (equity/total assets, not risk-weighted) higher than 5 percent in CY11. As evident from Chart 3.23, out of 47 banks, 43 had a leverage ratio higher than 5 percent. Out of these, 22 banks had a leverage ratio higher than 5 percent but less than 10 percent, and 21 banks' leverage ratios were higher than 10 percent. The distribution of the leverage ratio suggests that there is still further room for the banks to improve their financial soundness in terms of this indicator.

Chart 3. 23 Leverage ratio of banks as of end CY10 and CY11



Source: Department of Offsite Supervision, Bangladesh Bank

3. 12 Banking sector liquidity

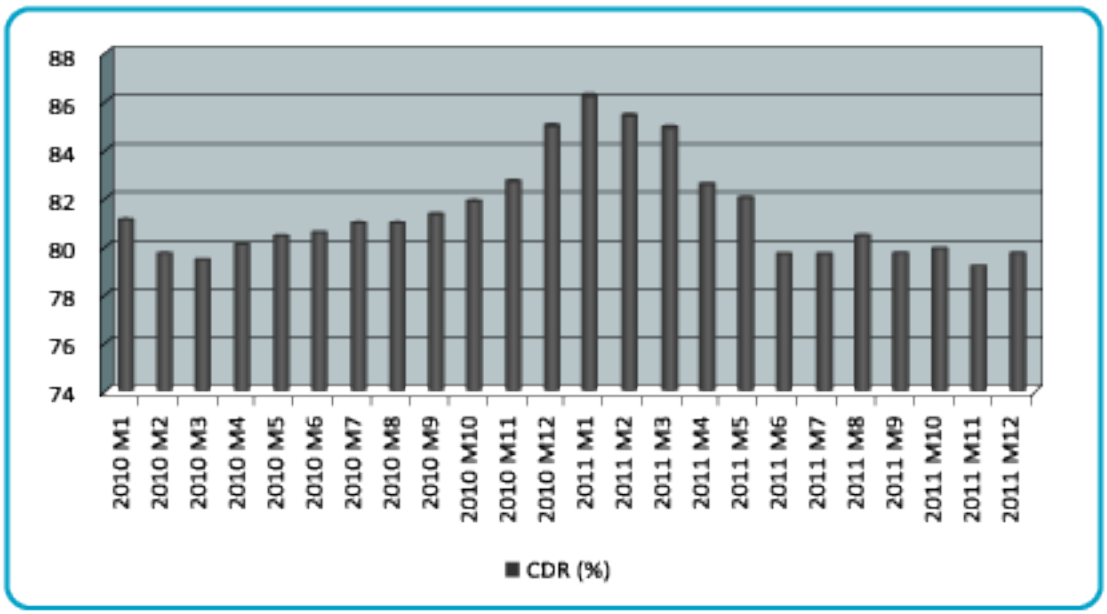
Deposits are the main sources of funding for the banking sector, with capital, reserves and borrowings constituting a small portion thereof. Banks mainly use funds to provide loans and invest in debt and equity securities. The credit deposit ratio is therefore, a useful indicator of a bank's liquidity adequacy.

The interbank money market faced liquidity stress throughout the CY 11 that started from CY10. This was due to high government borrowings and slower rate of increase in savings from the households due to high inflationary pressure. However, activities quickly returned to a business-as-usual situation with supportive measures taken by the BB and prudent policies of the financial institutions. The recent stress condition of the interbank market, though, suggests that banks need to monitor their asset-liability mismatch closely while making financing decisions.

In CY11, the amount of government bonds held by banks was BDT 662.1 billion (11.3 percent of banking assets), up from BDT 490.8 billion (10.1 percent of banking assets) in CY 10. This indicates an increasing trend in government borrowing through bonds from the banking system.

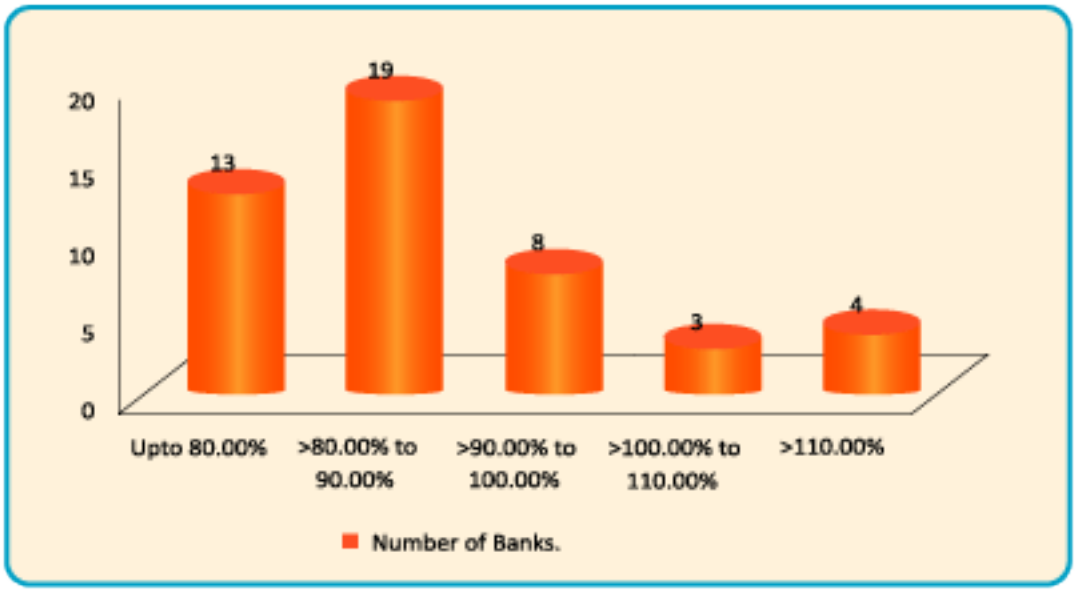
The banking sector credit-deposit ratio (CDR) demonstrated a surge at the beginning of CY11 (chart 3.24), after which BB started its moral suasion for cooling off the high CDR with a smooth flow of loans to the most priority sectors of the economy. It is noteworthy that banks were instructed in February 2011 to maintain their CDR within a certain level (for conventional banks up to 85 percent and for Islamic shariah based banks up to 90 percent) by June 2011.

Chart 3. 24 Banking sector monthly CDR during 2010-11



Source: Department of Offsite Supervision, Bangladesh Bank

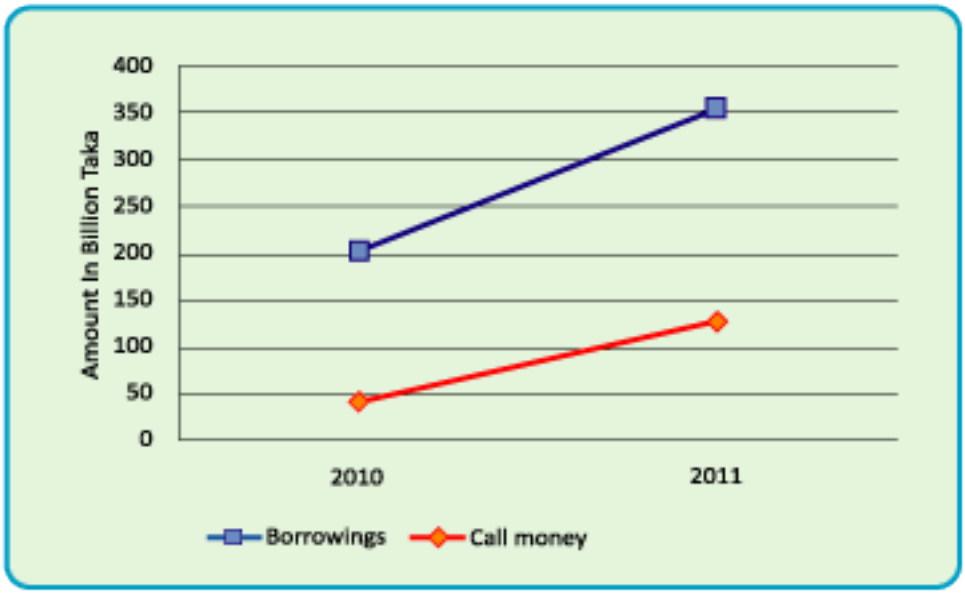
Chart 3. 25 Banking sector credit-deposit ratio: end-December 2011



Source: Various issues of Schedule Bank Statistics, Bangladesh Bank.

The data on credit-deposit ratio of individual banks reveal that the CDRs of 13 banks remain within 80 percent, 19 banks are between 80-90 percent, 8 banks are between 90-100 percent, 3 banks are between 100-110 percent and 4 banks are above 110 percent in CY11.

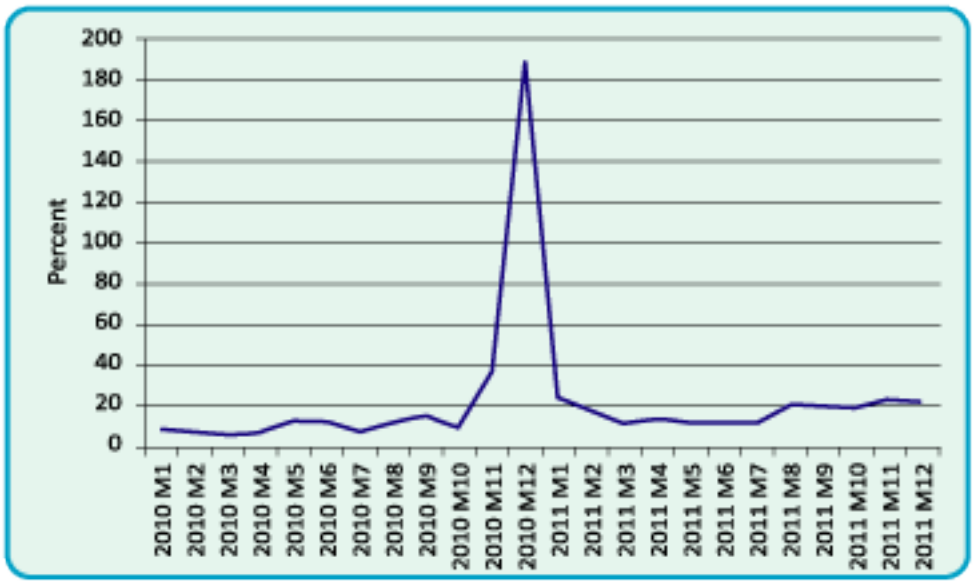
Chart 3. 26 Banking sector call money investment & borrowings



Source: compilation of balance sheets of the banks

The overall CDR at end-December 2011 was at a tolerable level, but investment in call money market increased dramatically by 191.5 percent (Chart 3.27) while, borrowings from call money market increased by 41.5 percent in CY11 compared to that in CY10. This indicates some sort of imprudence in the liquidity management of the banks and might create problem in interbank market because liquidity is an important element of financial stability/instability.

Chart 3. 27 Banking sector call money borrowings rate



Source: Economic Trends, July 2012, Bangladesh Bank

BB's instruction to increase the Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR) in December 2010, along with rising import payments and diversion of cash to the stock market, created some temporary pressures in the liquidity market and led to a heating-up of the interbank liquidity market. However, consequent interventions of Bangladesh Bank let the situation return to normalcy. Some notable actions were instructing banks to submit a structure liquidity profile, instructing banks to reduce their CDR/ADR, and keeping the loan growth lower than the deposit growth of the banks.

The Statutory Liquidity Requirement (SLR) for conventional scheduled banks (except specialized banks) was 19.0 percent and for Islamic banks was 11.5 percent as of end-December 2011. Three specialized banks were exempted from maintaining SLR. Total SLR maintained by the banking sector was BDT 1085.2 billion against requirement of BDT 726.7 billion, showing an excess of BDT 385.5 billion as of end-December 2011. The average SLR maintained by the banking sector was 30.3 percent of total demand & time liabilities.

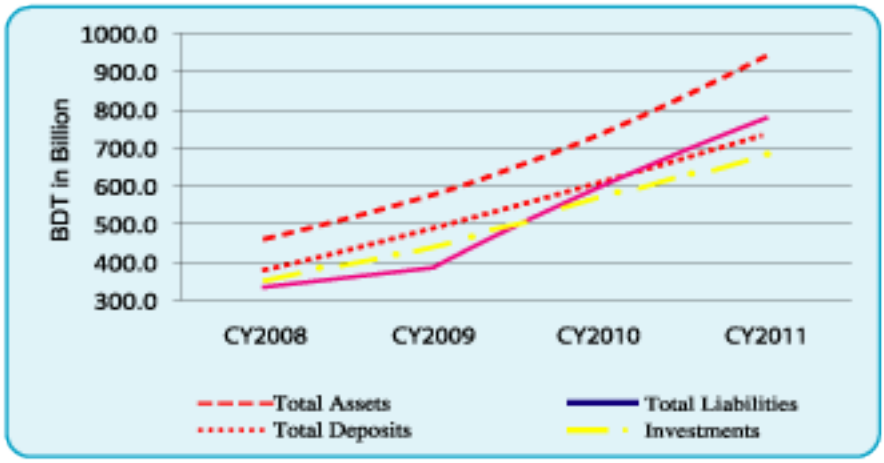
3. 13 Islamic banking

Bangladesh's banking system has embraced a traditional interest-based system since its inception in 1972. Islami Bank Bangladesh Limited was the first bank that introduced Shariah based banking in Bangladesh in 1983. Since then Islamic banking has been growing progressively together with the conventional banks. Currently, 7 banks are operating as full-fledged Islamic banks with 681 branches, and 18 conventional banks are doing Islamic banking through setting up of 20 Islamic banking branches and 32 Islamic banking windows. Islamic banks are now not only focusing on the conventional Shariah products but also investing in the SMEs, microfinance and agriculture sectors.

3.13.1 Growth of Islamic banking

Islamic banks in the banking sector showed a remarkable growth in CY11. The ongoing expansion of the Islamic banking network is also impressive.

Chart 3. 28 Growth of Islamic banking: end-December



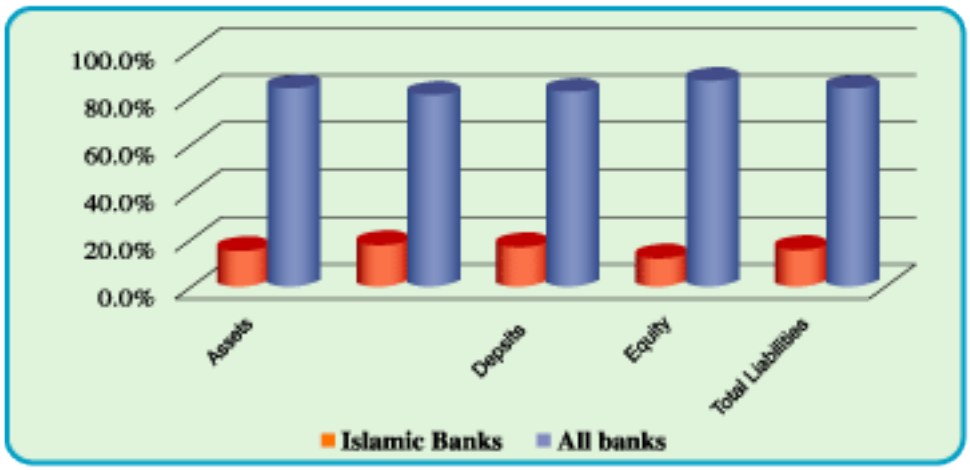
Note: Excluding Islamic banking branches/windows of conventional banks.

Islamic banks' asset base grew by 25.8 percent; deposits grew by 25.8 percent; investments (loans & advances) grew by 21.4 percent and shareholders' equity grew by 20.8 percent in CY11 compared with CY10. But, net profit also showed a decline of 16.8 percent in CY11 compared with CY10.

3.13.2 Market share of Islamic banks

As a proportion of the overall banking industry, the combined share of Islamic banks (excluding Islamic banking branches/windows of conventional banks) is 15.7 percent in assets, 18.4 percent in investments (loans), 16.2 percent in deposits, 12.5 percent in equity and 16.0 percent in liabilities as of end-December 2011. Moving on to the composition of liabilities, the share of deposits in total liabilities at 89.4 percent suggests that like the conventional banking industry, deposits were Islamic banks' main source of financing their assets.

Chart 3. 29 Market share of Islamic banks and the banking sector in CY11

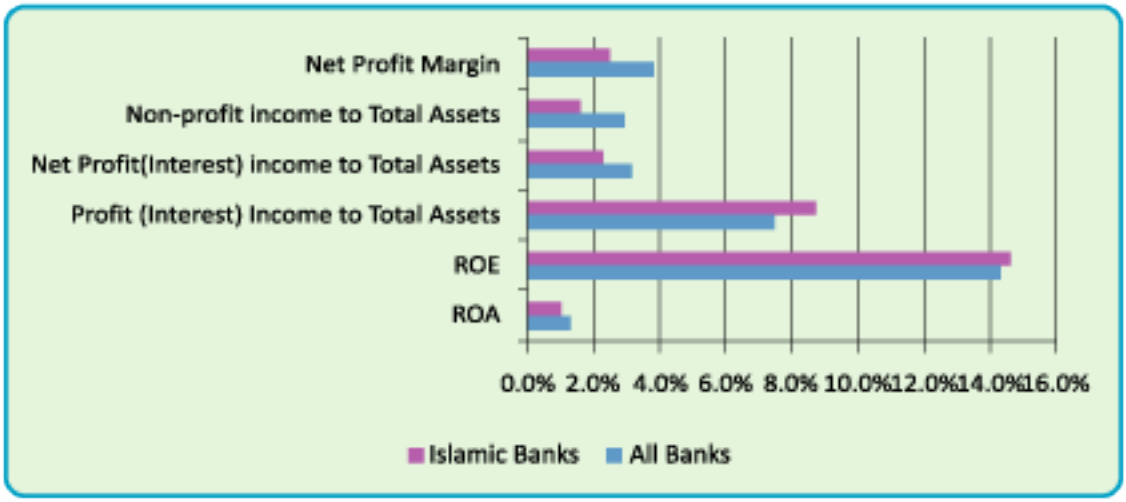


Source: compilation of aggregate balance sheet of banking industry

3.13.3 Profitability of Islamic banks

The key financial indicators reflect a healthy financial position and intense potential for future expansion of Islamic banks. Islamic banks managed healthy earnings in the form of profit income, which is a major contributor to their profitability.

Chart 3. 30 Selected income ratios of Islamic banks & the banking sector



Net profit margin = net profit income/ Gross earning assets

Gross earning assets = Balance with other banks & FIs + Investment in securities + Loans & advances

Source: compilation of aggregate balance sheet of banking industry

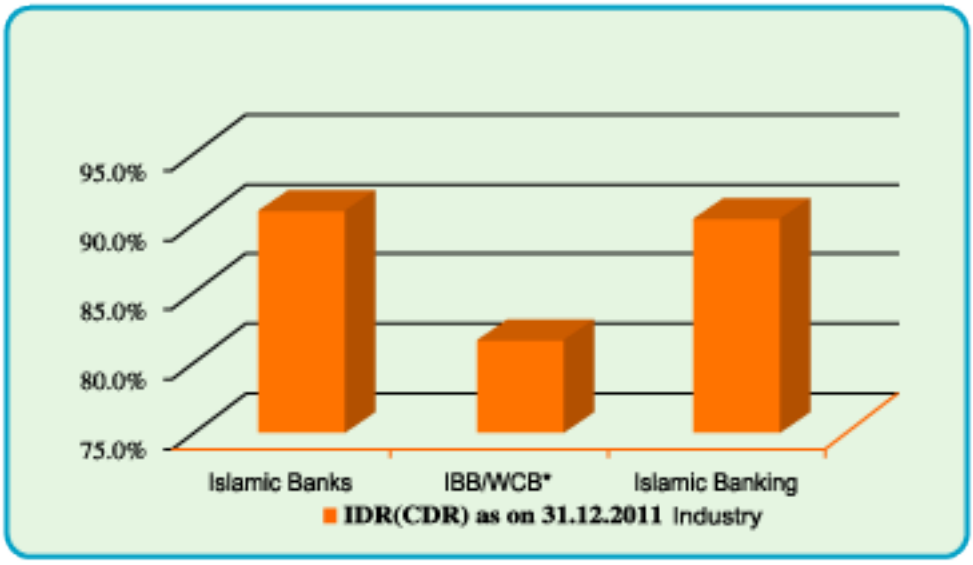
During CY11, Islamic banks contributed 14.8 percent profit to the industry. The profit income[6] to total assets ratio of Islamic banks reached at 8.7 percent, which is slightly higher than that of the industry average of 7.5 percent. On the other hand, the non-profit income to total assets ratio was only 1.6 percent as compared to the industrial average of 2.9 percent, representing comparatively lower income from Off-balance Sheet (OBS) items. Consequently, the ROA of the Islamic banking industry is lower at 1.0 percent compared with the overall banking industry of 1.3 percent in CY11. On the other hand, ROE of Islamic banking industry stands at 14.6 percent, slightly higher than that of the overall banking industry ROE of 14.3 percent in CY11 as the earnings of Islamic banks became higher compared to their equity position. This may reflect the slightly lower capitalization of the Islamic banks in the aggregate, because of the negative equity of one problematic Islamic bank under a Reconstruction Scheme of Bangladesh Bank in 2007.

3.13.4 Islamic banks' liquidity

In recognition of the low volume of Shariah-compliant SLR eligible instruments available in the marketplace, Bangladesh Bank has generally maintained concessionary SLR requirements for Islamic banks in comparison with other conventional banks. Islamic banks comply with their SLR requirements at 11.5 percent of total demand and time liabilities.

[6] For Islamic Shariah based banks profit income means income (interest) from investment (loans and advances).

Chart 3. 31 IDR (CDR) of Islamic banking & the overall banking sector



*Islamic Banking Branches/ Windows of Conventional Banks

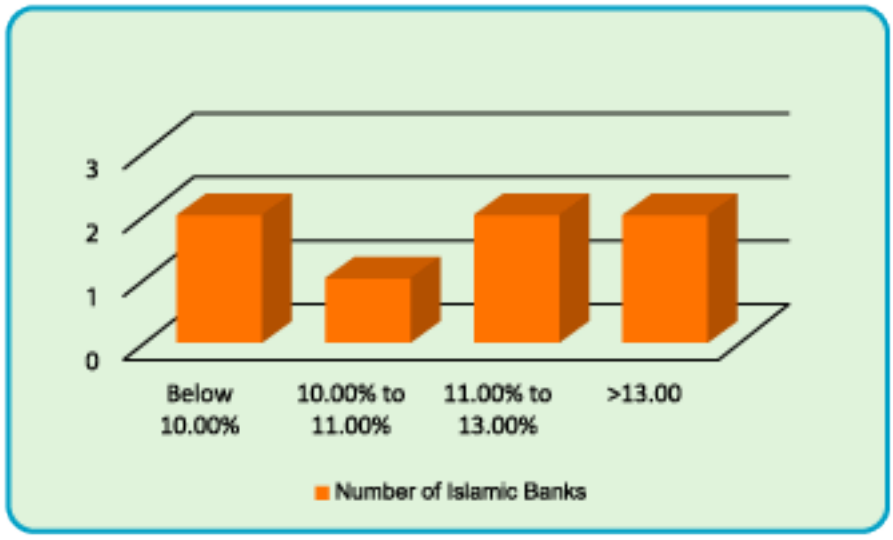
Source: compilation of aggregate balance sheet of banking industry

The Investment-Deposit Ratio (IDR) of full-fledged Islamic banks is 90.8 percent as of end-December 2011, a slight increase from 90.2 percent at the end of 2010 and somewhat above the recommended maximum level of 90 percent. However, the IDR of conventional banks having Islamic banking branches/windows reached only to 81.4 percent as of end-December 2011, a dramatic fall from 110.9 percent as on end-December 2010. The high IDR of Islamic banking branches/windows of conventional banks in the previous year was due to providing investment (credit) by taking inter-bank borrowings (among Islamic banks). Since there are limited sources of Shariah-compliant funds, Islamic banks can borrow funds either from the Islamic inter-bank money market or from the "Islami Investment Bond's Fund" issued by the Bangladesh Government.

3.13.5 Islamic banks' capital adequacy

Given the minimum capital requirement (MCR) of 10 percent under the Basel-II accord for CY11, the significantly higher CARs of 5 Islamic banks in the banking sector indicate both the financial strength and ample compliance of minimum capital requirements (MCR). The stronger capital base ensures that Islamic banks are well equipped to meet various kinds of shocks, if and when they arise. However, one Islamic bank has failed to attain required CAR for uneven growth in assets and one bank's CAR turned to negative on account of a historical huge cumulative loss and provision shortfall and changes in its ownership within a short span of time.

Chart 3. 32 Capital adequacy ratio of Islamic banks

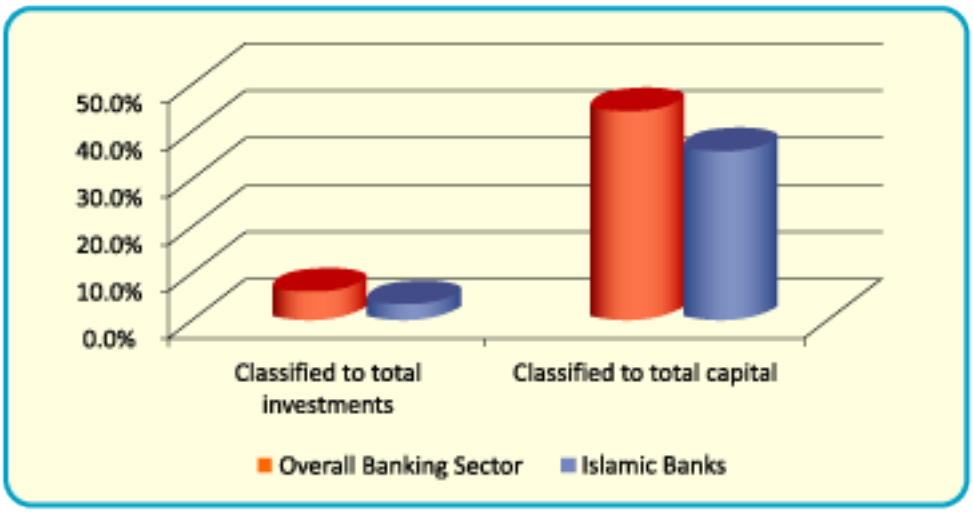


Note: Excluding Islamic banking branches/windows of conventional bank

3.13.6 Classified investment of Islamic banks

Islamic banks' classified investments to total investments ratio of 3.4 percent showed a relatively better position as compared with 6.2 percent for the overall banking industry in CY11. The classified investment to capital ratio of 36.0 percent for Islamic banks as compared with 44.3 percent for the overall banking industry indicates that the onslaught of classified investments (loans) hit the conventional banks harder than the Islamic banks in CY11.

Chart 3. 33 Classified investment (loans) of Islamic banks and the banking industry in CY11



Note: Excluding Islamic banking branches/windows of conventional banks

4. 1 Credit risk structure in Bangladesh

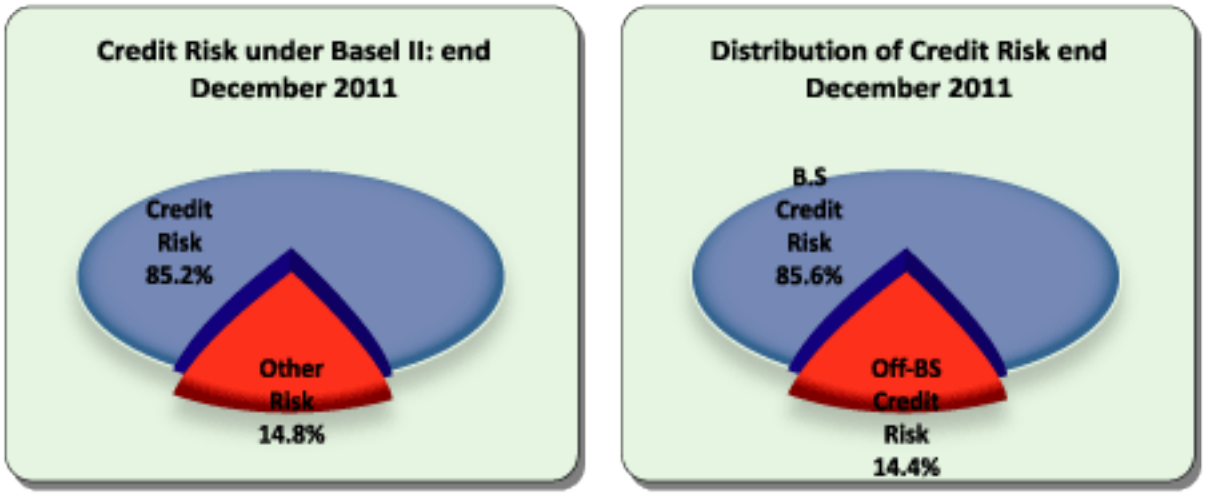
High credit growth, same as in the previous year, was inseparable from mounting credit risk, as reflected by non-performing bank loans (refer to chapter 3). Data for end December 2011 indicates that the share of risk weighted assets (RWA) assigned to credit risk is 85 percent of the total RWA of the banking system, whereas the RWA associated with market risk and operational risk are only 6 and 9 percent respectively. Data reveals that credit risk has remained the same share of total risk, but market risk has declined by 1 percentage point while operational risk has increased by 1 percentage point, compared with that of the previous year. Given the capital adequacy ratio of the banking sector at 11.35 percent, the banks' capital charge for credit risk is BDT 4022.86 billion. The top 5 banks' credit risk accounted for slightly over a quarter of aggregate credit risk while the top 10 banks' possess a bit more than half. This risk is mostly concentrated in the banking book.

Table 4. 1 Credit risk in the banking system

Banks	Credit Risk as percentage of Industry Credit Risk	Credit risk as percentage of overall industry risk
Top 5 Banks	26.9%	22.9%
Top 10 Banks	50.5%	37.8%

Source: Calculation: Financial Stability Department, Bangladesh Bank.

Chart 4. 1 Credit risk structure

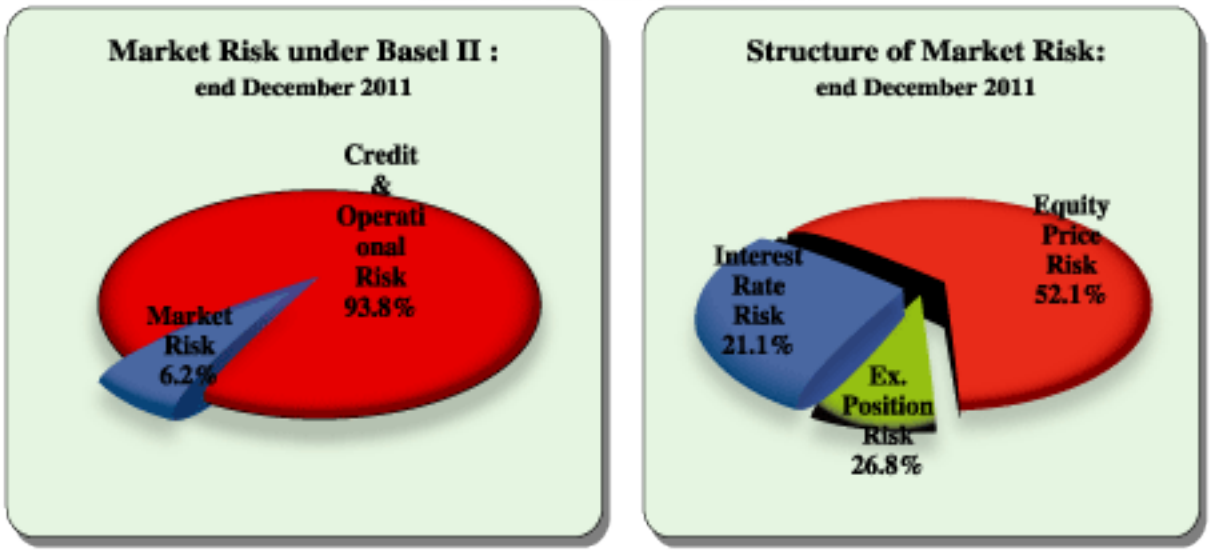


Source: Calculation: Financial Stability Department, Bangladesh Bank.

4. 2 Structure of market risk under Basel II

A considerable degree of volatility in domestic financial markets during CY11 contributed to the increase in market risk for banks. However, its impact on their financial performance is likely to be well-contained, given BB's stringent prudential requirements on various market risk exposures. The direct impact of three major components of market risk including interest rate risk, exchange rate risk and equity price risk is analyzed in the following section:

Chart 4. 2 Market risk structure



Source: Calculation: Financial Stability Department, Bangladesh Bank.

4. 3 Interest rate risk

Data as of end December 2011 indicates that the share of risk weighted assets (RWA) assigned to interest rate risk is only 1.3 percent of total risk weighted assets in the banking system, whereas the RWA related to overall market risk is 6 percent. The banks' capital charge for interest rate risk is BDT 6.2 billion at end December 2011. Only 5 banks (11 percent of the industry) contain almost 50 percent of industry interest rate risk and 37 banks (79 percent of the industry) materially contain no or insignificant interest rate risk. It is noteworthy that three state-owned banks and two private banks are ranked as the top 5 in capital charge for interest rate risk in the banking system.

Table 4. 2 Interest rate risk in the banking system

Banks	Interest rate risk	Share in market risk	Share in overall risk
Top 5 Banks	43.4%	9.1%	0.6%
Top 10 Banks	67.6%	14.3%	0.9%

Source: Calculation: Financial Stability Department, Bangladesh Bank.

4. 4 Exchange rate risk

The second important source of market risk is exchange rate risk, which is primarily driven by banks' investments in foreign exchange dealings and adverse movement in exchange rates, in addition to the direct exposure arising from foreign exchange placements in different exchange markets. Data as of end December 2011 indicates that the share of risk weighted assets (RWA) assigned to exchange rate risk is less than 2 percent of total risk weighted assets in the banking system, whereas it is 26.8 percent of the market risk. The banks' capital charge for exchange rate risk is BDT 7.8 billion. However, only 10 banks contain almost 82 percent of industry exchange rate risk and 37 banks (79 percent of the industry) contains the remaining 28 percent of exchange rate risk in the banking system. In particular, three state-owned banks and two private banks represented themselves in the top ranked positions with regard to exchange rate risk.

Table 4. 3 Exchange rate risk in the banking system

Banks	Exchange rate risk	Share in market risk	Share in overall risk
Top 5 Banks	71.1%	19.0%	1.2%
Top 10 Banks	81.8%	21.9%	1.4%

Source: Calculation: Financial Stability Department, Bangladesh Bank.

4. 5 Equity price risk

The third important source of market risk is equity price risk, which is primarily driven by banks' investments in equities and adverse movement in equity prices, in addition to the indirect exposure from the quantum of bank loans collateralized by shares. The Dhaka Stock Exchange (DSE) showed mixed trends in CY11, with the General Index reaching a high of 6459.62 in July and low of 5036.50 in October[7].

Insofar as banks' investment in shares is concerned, the overall exposure of such investments is capped by section 26(2) of Bank Company Act, 1991. Specifically, the total holdings of banks in shares cannot exceed 10.0 percent of their total liabilities. In terms of banks' liabilities, at the end of December 2011, the aggregate exposure is 3.3 percent as against the ceiling of 10.0 percent. Bank-wise information indicates that no bank has its exposure in excess of the 10 percent.

[7]Major Economic Indicators: Monthly Update, Volume 06/2012 June 2012, Bangladesh Bank.

Table 4. 4 Equity price risk in the banking system

Banks	Equity price risk	Share in market risk	Share in overall risk
Top 5 Banks	37.8%	19.7%	1.2%
Top 10 Banks	50.9%	26.5%	1.6%

Source: Calculation: Financial Stability Department, Bangladesh Bank.

Data as of end December 2011 indicate that the share of risk weighted assets (RWA) assigned to equity price risk is a bit higher than 3 percent of total risk weighted assets in the banking system, whereas it is 52.1 percent of the market risk. The banks' capital charge for equity price risk is BDT 15.2 billion at end December 2011. The ten top banks contain more than 50 percent of industry equity price risk and 37 (79 percent of the industry) banks materially contain the remaining 50 percent risk from the movement of equity prices. Three state owned commercial bank and two private commercial banks are ranked in the top 5 for equity price risk.

4. 6 Operational risk

Operational risk has always been important for the banking system due to the strong role of customers' confidence in the banking business. Its importance has been increased manifold over the last two decades.

Increasing evidences[8] of trade fraud, cheque fraud, credit card fraud or forged documents with involvement of the staff of the banks and a knowledge gap of the officials contributed to the rise of operational risk in the banks. Cheque fraud scams in the past forced several private commercial banks to suffer severe financial losses, and, in recent past, the inland bill purchase (IBP) fraud in the State-owned Commercial Banks (SCBs) caused high losses in those banks and exposed them as a threat to the banking system in Bangladesh. Thus, several internal controls to contain operational risk, such as audit trail, transaction monitoring, presence of 'maker-checker' process, verification of a transaction instruction or large debits through subsequent calls as well as recording of the conversation or relevant indemnities held, and a 'go and see' process are gaining importance for sustaining the banking system in Bangladesh. Nonexistence of proper process guidelines for risk management and noncompliance of those set guidelines are creating undesired losses in banks. A robust control environment through a clear demarcation between the transaction processors and the transaction approvers may help the banks to get rid of such type of operational risks. Otherwise the maintained capital for the operational risk through the basic indicator approach of Basel II may not be sufficient to save a bank from such type of adversities as are currently happening in the banking system of Bangladesh.

In practice, it is quite difficult to predict disruptions to the continuity of business and associated losses. However, this is not to articulate that such events cannot be dealt with appropriately. Efforts can be exerted to identify key operational risk indicators and put in place potential safeguards to minimize the occurrence of unforeseen events.

[8] Internal control in commercial banks: Mamun Rashid, Financial Express VOL 20 NO 257 REGD NO DA 1589 | Dhaka, Tuesday June 12 2012.

Table 4. 5 Operational risk (OR) under Basel II basic indicator approach

Banks	Share in Industry OR	Share in industry overall risk
Top 5 Banks (11%)	30.6%	2.6%
Top 10 Banks (21%)	48.2%	4.2%

Source: Calculation: Financial Stability Department, Bangladesh Bank.

Data as of end December 2011 indicates that the share of risk weighted assets (RWA) assigned to operational risk is 9 percent of the total risk weighted assets of the banking system, whereas the RWA related to market risk is 6 percent. Given the capital adequacy ratio of the banking sector at 11.35 percent, the banks' capital charge for operational risk is BDT 40.8 billion at end December 2011. However, only 10 banks (21 percent of the industry) contain almost 50 percent of industry operational risk and the remaining 37 (79 percent of the industry) banks contain the remaining 50 percent of operational risk.

In sum, although banks are maintaining capital for operational risk according to the basic indicator approach under Basel II, the difficulty of going from a series of isolated, infrequent operational incidents to a comprehensive capital charge is a source of concern for both the banking sector and the central bank. Lack of sophisticated techniques and insufficient data on actual loss events may aggravate the challenges faced by the regulator and banks for managing operational risks. In addition to imposing this capital charge for operational risk under the Basel II requirement, the BB also monitors the gravity of threats stemming from lapses in banks' internal control environments. Banks are, for this purpose, advised to follow the core risk guidelines on 'Internal Control and Compliance'. Moreover, banks are instructed to charge capital on the 15 different sources of risk those banks usually face under Pillar 2 of the Basel II process document. The Supervisory Review Process (SRP) and Supervisory Review Evaluation Process (SREP) dialogue under SRP of Basel II confirmed the banks' need for additional capital that will ensure adequate capital of banks, considering all the material risks considered under the SRP.

4. 7 Credit rating companies (CRCs)

Credit rating is an informational tool to facilitate the predictions of the investors that certain debt would be repaid by the obligor. Ratings are imperative to ensure the safety and soundness of the financial system. Banking regulators, under the Basel II agreement of the Basel Committee on Banking Supervision (BCBS), can allow banks to use credit ratings from certain approved credit rating companies (called 'External Credit Assessment Institutions', ECAIs) when calculating their capital requirements. Regulators use credit ratings of entities and exposures for regulatory purposes. In Bangladesh, the Securities and Exchange Commission (SEC) enacted the Credit Rating Companies Rules to establish the mandatory rating process for some type of issues and debt instruments. Apart from this as per Bangladesh Insurance Law, insurance companies are also bound to do the rating annually. The SEC so far has permitted the following 8 companies for operating as a Credit Rating Company.

Table 4. 6 Commencement of credit rating agencies in Bangladesh

Sl. No.	Rating Agency	Year of Inception
1.	Credit Rating Information and Services Ltd (CRISL)	1995
2.	Credit Rating Agency of Bangladesh Ltd. (CRAB)	2003
3.	Emerging Credit Rating Ltd. (ECRL)	2009
4.	National Credit Rating Ltd. (NCRL)	2010
5.	ARGUS Credit Rating Services Ltd.	2011
6.	WASO Credit Rating Company (BD) Limited	2012
7.	Alpha Credit Rating Limited	2012
8.	The Bangladesh Rating Agency Limited	2012

Source: website of the respective rating companies.

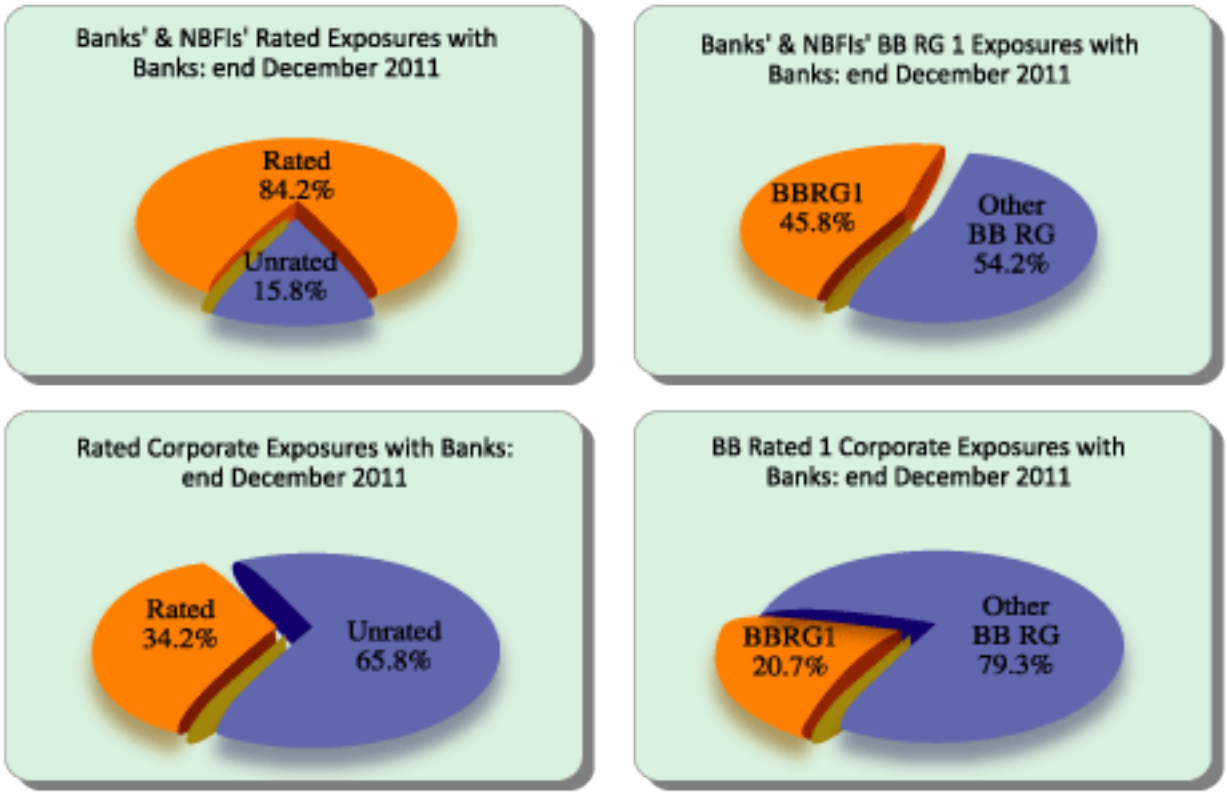
The history of credit rating in Bangladesh is not very old, and in fact this industry is in the nascent and budding stages. Under the Credit Rating Companies Rules, 1996, all issues of debt securities or public issue of shares (including rights shares) at a premium shall require a credit rating. Thus, banks and FIs listed in the stock market need to be rated. Moreover, banks and FIs can use these ratings of the corporate securities as a benchmark of measuring risk under the adopted frameworks of Basel II. The credit rating business, however, at some point and under some circumstances, may put at risk the stability of the entire financial system (Vincentelli, 2007)[9]. Rating Agencies have grown rapidly in the last couple of years, but the existing oligopoly nature of this industry may present risks to the market. Under both the Basel II standardized approach and SEC regulations, not just any credit rating agency (CRA)'s ratings can be used for regulatory purposes. The Basel II guidelines, for example, describe certain criteria that bank regulators should look to when permitting the ratings from a particular CRA to be used. These include "objectivity," "independence," "transparency," and others. Bangladesh Bank as a banking regulator has issued its own discussion papers in 2010 on this subject, to further define how these terms will be used in practice. Time

[9]Vincentelli, Ignacio (2007), Credit Rating Agencies and Financial Stability, Working Paper Series, Social Science Research Network.

probably has come to review the rules and regulations of credit rating agencies, in the scenario of mushroom growth of the rating agencies, to contain the potential threats to the Bangladesh financial system as experienced by the developed countries.

Though rating agencies have been implicitly playing as a quasi-regulatory role, they are for-profit entities and their incentives may be misaligned with regulatory objectives. Conflicts of interest often arise because the rating companies are paid by the entities issuing the securities or extending exposures- an arrangement that has come under fire as a disincentive for the agencies to be vigilant on behalf of investors. Moreover, the quality of the rating also depends on the quality and integrity of the persons and institutions that rate others.

Chart 4. 3 Exposure rating status in Bangladesh



Source: Calculation: Financial Stability Department, Bangladesh Bank.

The scheduled banks have exposures both to banks and Non-bank financial institutions (NBFIs) and to non-financial corporations. Exposure to financial institutions tends to be rated, as shown in the upper left quadrant of Chart 4.3. However, since the concept of external credit assessment is quite new and few in Bangladesh, a very low percentage of nonfinancial corporate exposures have been rated, as shown in the lower left quadrant. For both financial and nonfinancial exposures, a relatively small percentage of the exposures have received the best credit rating, as shown in the upper right and lower right quadrants. Though nearly fifty percent of rated banks' exposures carried the best credit rating (BB rating grade 1)[10], only one fifth of the rated corporate exposures carried the best rating.

[10]Bangladesh Bank mapped the rating of the credit rating agencies into 6 levels from 1 to 6 grades where 1 is the best and 6 the worst.

Chapter 5 Stress Testing

In order to understand and appreciate the risks the banking industry is exposed to, ensure the soundness and sustainability of the banking industry and make the banks more shock resilient, guidelines on stress testing were issued in April 2010 (and updated in February 2011). Banks have been advised to carry out stress testing in line with the issued guidelines on a quarterly basis. Through these stress tests, the impact of a number of risk scenarios, namely credit risk, interest rate risk, exchange rate risk, equity price risk and liquidity risk related shocks, and a combination of those, on the capital adequacy ratio (CAR) of the banks is evaluated. The first round of results indicates that the banking industry is resilient when minor shocks are applied. Bangladesh Bank has a plan to evaluate the results more rigorously in the coming quarters.

5. 1 Resilience of the banking sector

The analysis of the different risk factors and the risk-absorbing capacity of the banking industry under stressed situations indicate that the risk absorbing capacity of banks was high at end December 2011. This part examines the resilience of the banking system by assessing the impact of the plausible threat of worsening in asset quality in terms of banks' capital base and sensitivity analysis.

The amount of net NPLs (NPLs adjusted for provisions and interest suspense) is a key indicator in measuring the potential risks to banks' solvency positions. Banks' net NPLs fell sharply to Tk. 24.59 billion at end December 2011, against Tk. 31.58 billion in the previous year, a decrease of 22 percent on year on year basis. Compared with 7.5 percent in December 2010, the net NPLs to capital ratio improved to 4.5 percent by the end of December 2011. Bank wise information reveals that in 2011, 2 banks, with a share of 3.3 percent in industry assets, have recorded an overall negative NPL to capital ratio. In fact, 28 banks, with a 79.1 percent share in total assets, materially contained no NPL. Moreover, 16 banks, with 23.6 percent share in total assets, posted a net NPL to capital ratio in the range of 0.4 to 13.7 percent, other than one specialized bank. (This specialized bank does not pose any systemic risk as it is working as a specialized bank in the field of agriculture in the northern part of Bangladesh.) It is expected that these banks can reasonably manage the potential shock of the net NPLs on their respective capital base. All this information suggests that a few banks with a small market share in the industry are facing the threat of erosion of their capital base; however banks with a dominant share in the sector have the capacity to absorb loss emanating from a further deterioration in asset quality.

To test the resilience of the banking sector based on the single-factor sensitivity analysis, Bangladesh Bank conducted stress tests with three major risk factors i.e. credit risk, market risk and liquidity risk. The magnitude of shock in the risk factors is driven by the historical volatility in each variable and an analysis of future movement based on hypothetical scenarios. Specific shocks used in the analysis are summarized in Box 2. Under each scenario, the after shock CAR is compared with the minimum required CAR of 10 percent at end 2011 to assess banks' resilience towards specific shocks set with explicit and implicit assumptions. The results are based on the unaudited data for end December 2011. These results are not forecasts of expected outcomes, since the scenarios have been designed as "what if" situations under plausible but extreme assumptions.

Box 2 Banks' Aggregate Stress Test Result

(As on 31 December 2011)

Shocks	Impact on CAR	After Shock CAR
Credit Risk		
CR-1: 5% of performing loans directly downgraded to bad/loss category, 50% downward shift in the NPLs categories and 10% decline in the forced sale value of mortgaged collateral.	(1.28%)	10.07%
CR-2: 10% of performing loans directly downgraded to bad/loss category, 80% downward shift in the NPLs categories and 20% decline in the forced sale value of mortgaged collateral.	(4.54%)	6.81%
CR-3: 15% of performing loans directly downgraded to bad/loss category, 100% downward shift in the NPLs categories and 40% decline in the forced sale value of mortgaged collateral.	(8.66%)	2.69%
Market Risk:		
Interest Rate Risk		
IR - 1: An increase in interest rates by 100 basis points.	(0.03%)	11.32%
IR - 2: An increase in interest rates by 200 basis points.	(0.06%)	11.29%
IR - 3: An increase in interest rates by 300 basis points.	(0.09%)	11.26%
Exchange Rate Risk		
ER - 1: Depreciation/Appreciation of Exchange Rate by 5%.	(0.02%)	11.33%
ER - 2: Depreciation/Appreciation of Exchange Rate by 10%.	(0.04%)	11.31%
ER - 3: Depreciation/Appreciation of Exchange Rate by 15%.	(0.05%)	11.30%
Equity Price Risk		
EQ - 1: Fall in the equity prices by 10%.	(0.22%)	11.13%
EQ - 2: Fall in the equity prices by 20%.	(0.45%)	10.90%
EQ - 3: Fall in the equity prices by 40%.	(0.90%)	10.45%
Combined Shocks: Market & Credit		
COMBND - 1: CR-1, IR - 1, ER - 1 & EQ - 1	(1.56%)	9.79%
COMBND - 2: CR-2, IR - 2, ER - 2 & EQ - 2	(5.09%)	6.26%
COMBND - 3: CR-3, IR - 3, ER - 3 & EQ - 3	(9.71%)	1.64%
Liquidity Risk		
Shocks	**# of Banks**	**System**
LQ - 1: Liquidity Drain [LD] (Chronic 2% drain of liquidity)	Nil	No
LQ - 2: Liquidity Drain [LD] (Chronic 4% drain of liquidity)	Nil	No
LQ - 3: Liquidity Drain [LD] (Chronic 6% drain of liquidity)	2	No

Source: Calculation: Financial Stability Department, Bangladesh Bank.

Note: Credit Risk and Combined shocks are the aggregation of simple sensitivity result. Chronic drain is considered in excess of normal withdrawal for consecutive 5 days.

The results suggest that credit risk is the most dominant risk factor in terms of its impact on CAR. Amongst the credit shocks, CR1 is the most rigorous, causing the overall CAR of the banking sector to decline to 10.07 percent. While the overall post-shock CAR is above the minimum required benchmark of 10 percent, 11 banks in addition to the 4 banks whose CAR is already below the required level, would experience deterioration in their respective CARs in case of such a scenario. However, the banking industry is fairly resilient in the face or various market risk shocks (interest rate, exchange rate and equity price movements). The CAR of none of the banks would be impacted under the market risk shocks except for the 4 banks with their pre-shock CARs already below 10 percent. The combined application of credit and market shock (COMBND–1) assumes 5 percent of performing loans directly downgraded to bad/loss category, 50 percent downward shift in the NPLs categories and 10 percent decline in the forced sale value of mortgaged collateral, increase in interest rates by 100 basis points, appreciation/depreciation of exchange rate by 5 percent and fall in equity prices by 10 percent, and results in overall CAR declining by 156 bps to 9.79 percent.

In order to assess the resilience of banks towards liquidity risk, a shock on deposits withdrawal by 2, 4 and 6 percent in excess of regular withdrawals for five consecutive days has been assumed. This type of shock would have a substantial impact on the banking sector. At 6 percent withdrawal of deposits, even though the industry shows resilience for 5 consecutive days, 2 private commercial banks show a sign of liquidity stress[11] on the fifth day only at the higher withdrawal rates. Thus, individual banks and the banking sector at a glance are resilient with their liquidity management. However, BB just started to measure and monitors Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) and these are under a trial process. The next issue of FSR may contain the scenario of liquidity of banks and banking industry with extensive analyses of these new Basel III liquidity ratios recently introduced by BB.

[11] Complete dissipation of liquidity

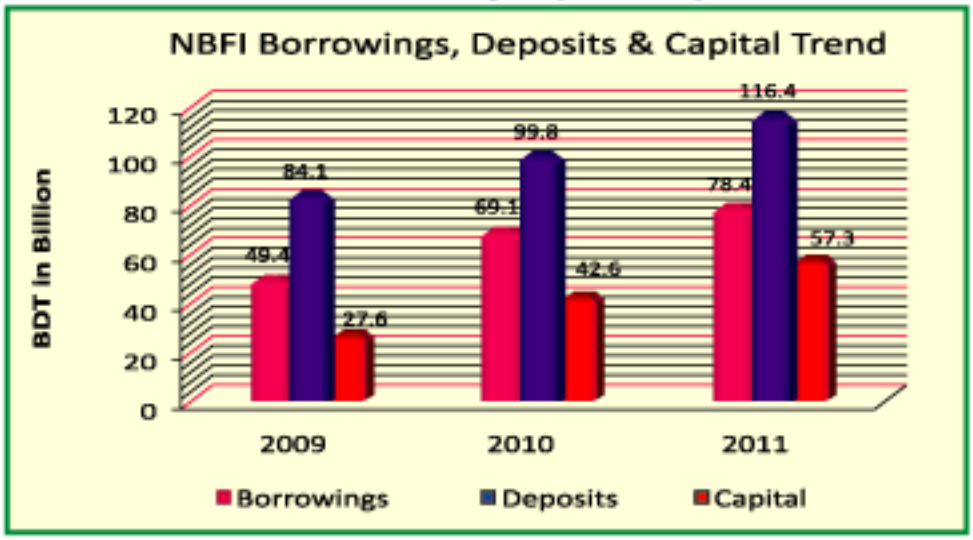
6. 1 Introduction

The non-bank financial institutions (NBFIs) sector represents one of the most important parts of the financial system in Bangladesh. The NBFI sector in Bangladesh consists of development financial institutions, leasing companies, investment companies, merchant banks etc. The financing modes of the NBFIs are long term in nature. At present, 31 NBFIs are operating their business across the country, of which 3 are government owned, 18 are private owned local companies, and the remaining 10 are established under joint venture with foreign participation. As of 31 December 2011, a total of 161 branches of NBFIs were operating in the country.

6. 2 Funding sources

The major funding sources of NBFIs are capital, term deposits, credit facilities from banks and other NBFIs, call money, bonds and securitization. NBFIs are allowed to mobilize term deposits only of tenor not less than 6 months. However, banks are one of the major sources of funds either directly or indirectly. Banks are also major investors in bonds/debentures issued by NBFIs.

Chart 6. 1 NBFIs borrowings, deposits & capital trend



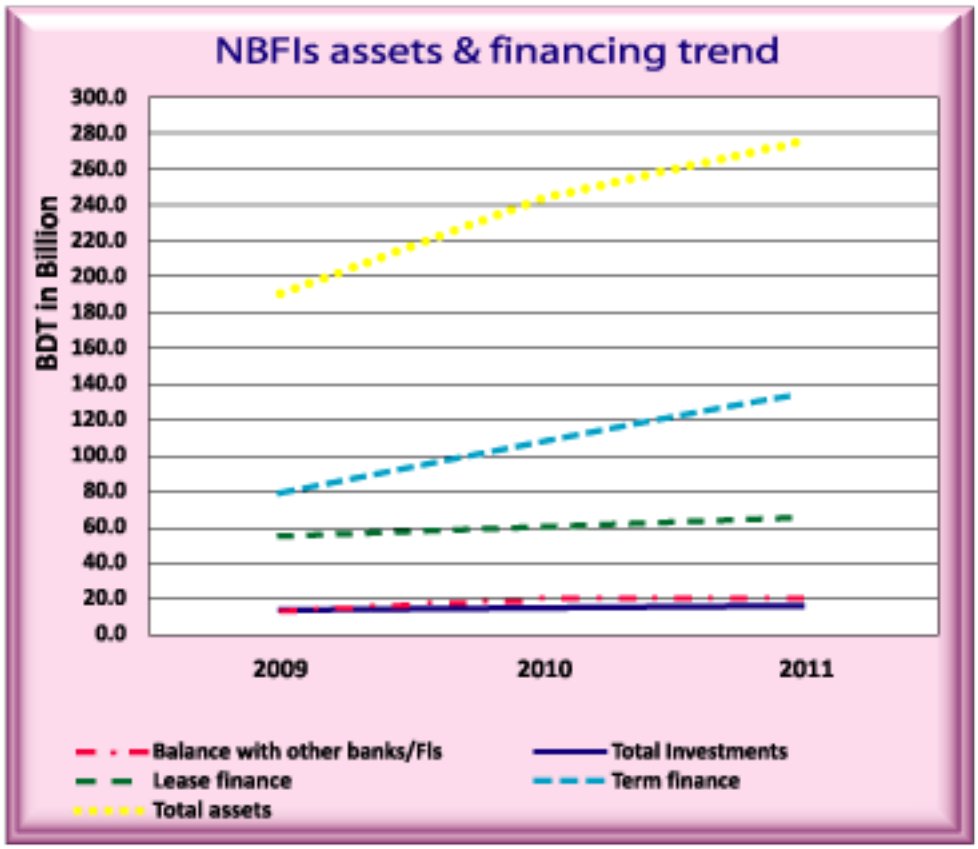
Source: Department of Financial Institutions & Markets, BB.

It is to be mentioned that the borrowings, deposits and capital of NBFIs increased by 13.5 percent, 16.6 percent and 34.5 percent respectively in CY11 compared with those of the previous year. The trend of increasing capital shows a healthy financial base of the NBFIs.

6. 3 Assets and financing

NBFIs' total assets increased by 13.5 percent in CY11 compared with CY10. The size of the total assets of this sector represented 3.5 percent relative to GDP (at current prices, BDT 7874.6 billion in FY10-11) and 4.7 percent of the total assets of the overall banking sector in CY11.

Chart 6. 2 NBFIs assets & financing trend



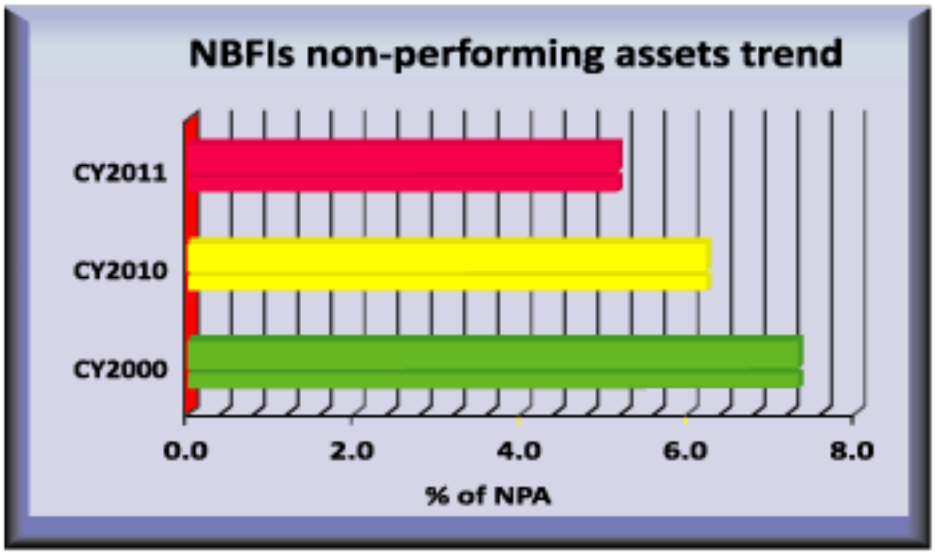
Source: Department of Financial Institutions & Markets, BB.

The major portion of NBFI funds were deployed in term financing which was 48.8 percent of the total assets in CY11. The volume of term financing increased by 23.4 percent in CY11 compared with CY10. Lease finance, balance with other banks/FIs and total investments comprised 23.6 percent, 7.3 percent and 6 percent respectively of the total assets in CY11.

6. 4 Non-performing assets & provisioning

Non-performing Assets (NPA) of NBFIs came down by 1.9 percent or BDT 0.2 billion in CY11 compared with the previous year. The total NPA represented 5.2 percent of total loans in CY11, down from 7.3 percent in CY09.

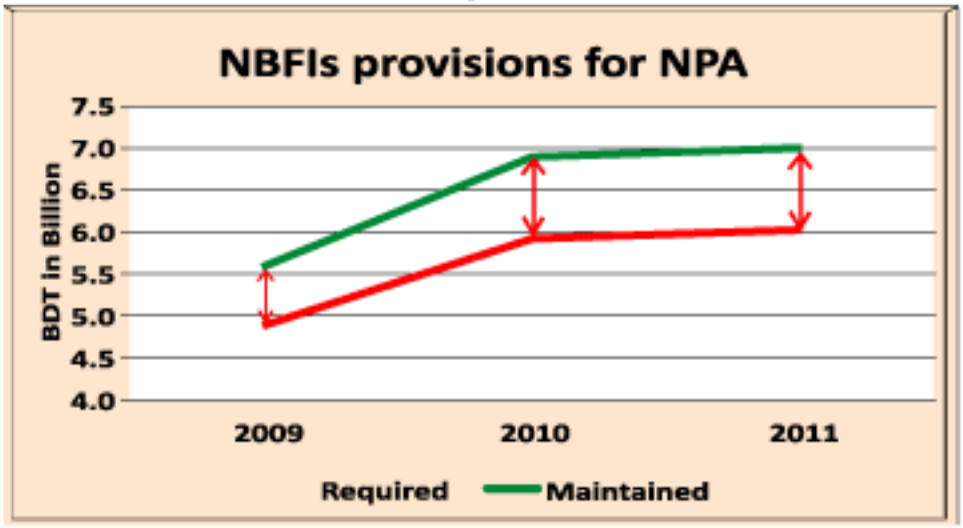
Chart 6. 3 NBFIs non-performing assets trend



Source: Department of Financial Institutions & Markets, BB.

During CY11 an amount of BDT 7.0 billion NPA provisions had been maintained against a requirement of BDT 6.0 billion.

Chart 6. 4 NBFIs provisions for NPA

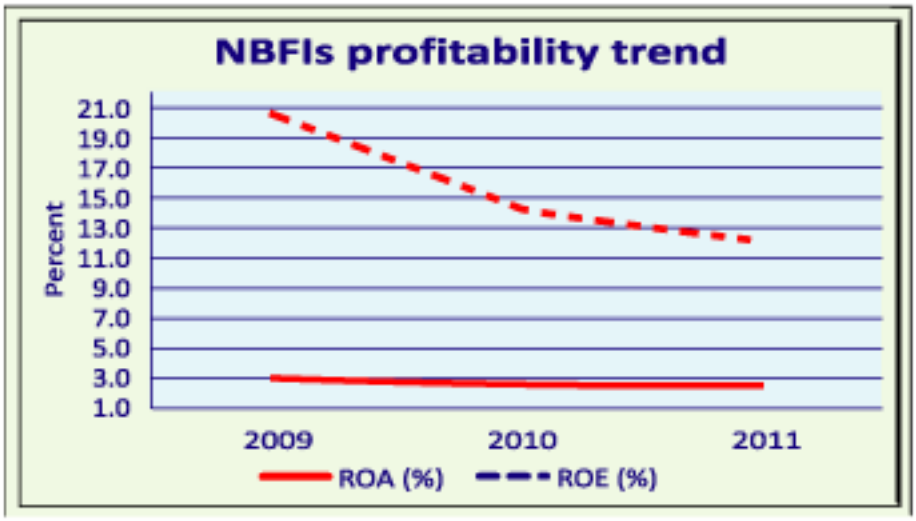


Source: Department of Financial Institutions & Markets, BB.

6. 5 Profitability

NBFIs' after-tax profits have shown continuous growth over the last 3 years. The major portion of income was generated from term finance. Interest on deposits was the major outlay of total expenses. Consequently, total operating income consisted mostly of net interest income. However, as the amount of total assets and shareholders' equity has increased proportionately more than that of the after-tax profits, the ROA and ROE has showed a decreasing trend over the last 3 years.

Chart 6. 5 NBFIs profitability trend



Source: Department of Financial Institutions & Markets, BB.

Aggregate ROA decreased by 0.5 percentage points and ROE decreased by 8.4 percentage points in CY11 compared with CY09. During CY09-11, aggregate shareholders' equity increased by 107.6 percent and total assets increased by 45.6 percent. On the other hand, aggregate after-tax profits increased only by 25 percent during CY09-11. As a consequence, the profitability ratios of the NBFIs have shown a decreasing trend. However, if profits decline due to deterioration in asset quality, increase in provisions, etc., it will be a challenge to this sector to maintain its existing ROA and ROE level in future.

6. 6 Liquidity

NBFIs who take term deposits have to maintain a statutory liquidity requirement (SLR) of 5 percent of their total liabilities, inclusive of an average 2.5 percent cash reserve ratio (CRR) of their total term deposits. NBFIs operating without taking term deposits have to maintain SLR of 2.5 percent and are exempted from maintaining CRR.

As of December 2011, an aggregate 2.9 percent CRR and 13.1 percent SLR were maintained by the NBFIs. Balances with other banks and FIs, call money investment, investment in government securities and any other assets approved by BB are considered as components of SLR. For this reason, the SLR maintained by the NBFIs was higher than the required amount.

6. 7 NBFI sector resilience

Micro stress-testing (sensitivity analysis) exercise was conducted on NBFIs in CY11. Through stress testing exercises, the impact of risk scenarios, specifically credit risk, interest rate risk, equity price risk and liquidity risk related shocks, and a combination of those, on the capital adequacy ratio (CAR) of the NBFIs is evaluated. The results, based on 31 December 2011 data, reveal that the NBFI sector is resilient when minor shocks are applied. Aggregate stress test results specifying different shocks at minor shock level are summarized in Box 1.

Box 3 NBFIs' Aggregate Stress Test Result

(As on 31 December 2011)

Shock Levels (Minor)	CAR before shock (%)	Change in CAR (%)	CAR after shock (%)
1. Performing loans directly downgraded to B/L: Sector concentration (1 sector)	18.3	(0.6)	17.7
2. Performing loans directly downgraded to B/L: Sector concentration (2 sectors)	18.3	(0.4)	17.9
3. Increase in NPL due to default of top 10 loan borrowers	18.3	(0.7)	17.6
4. Negative shift in NPL categories	18.3	(0.5)	17.8
5. Decrease in the FSV of the collateral	18.3	(0.4)	17.9
6. Interest rate	18.3	1.8	20.1
7. Equity shock	18.3	(0.2)	18.1
8. Combined credit shocks	18.3	(2.0)	16.3
9. Combined all shocks	18.3	(2.5)	15.8

The CAR after shock is compared with the minimum required CAR of 10 percent. The above results reveals that the industry CAR does not fall below the minimum required level due to any of the above specific shocks or overall combined shock at 'minor shock' level . However, considering individually, 1 NBFI becomes non-resilient in 'minor shock' level, 5 NBFIs become non-resilient in 'moderate shock' level and 8 NBFIs become non-resilient in 'major shock' level based on end-December 2011 data.

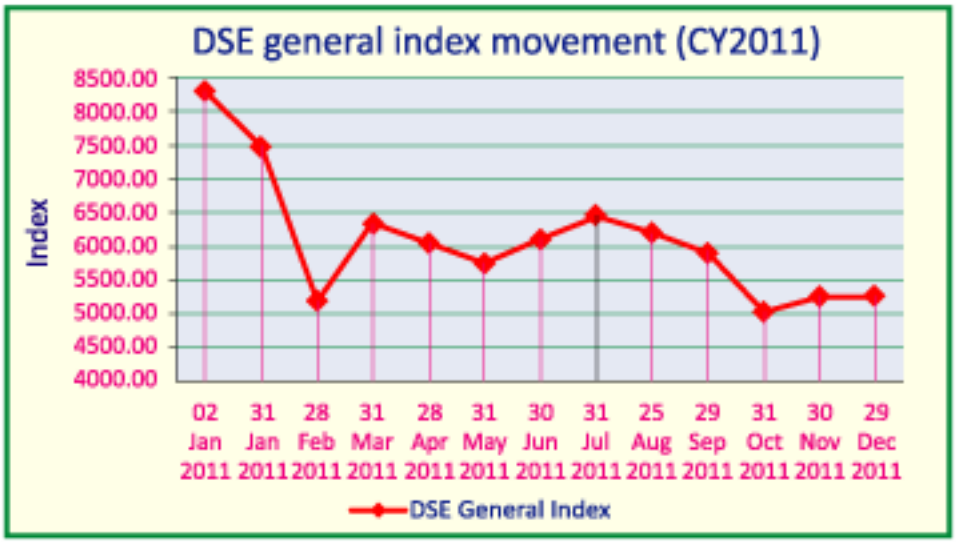
7. 1 Market size

There are 2 stock exchanges in Bangladesh- Dhaka Stock Exchange Limited (DSE) and Chittagong Stock Exchange Limited (CSE). DSE is the country's prime bourse considering its ample contribution to the capital market. A total of 180 listed companies out of 232 increased their paid-up capital during CY2011 through issuing either bonus or rights shares. Besides, a total of 14 companies floated IPOs in CY2011. As a consequence, the total issued capital at DSE climbed to BDT 878.9 billion on 29 December 2011 from BDT 871.4 billion on 30 December 2010.Up to December 2011, 8 commercial banks had established both merchant banks and brokerage houses and 22 commercial banks had established merchant banks as subsidiaries. Therefore, the total number of merchant banks/brokerage houses established by the commercial banks reached to 38 with aggregate equity of BDT 29.8 billion.

7. 2 DSE general index movement

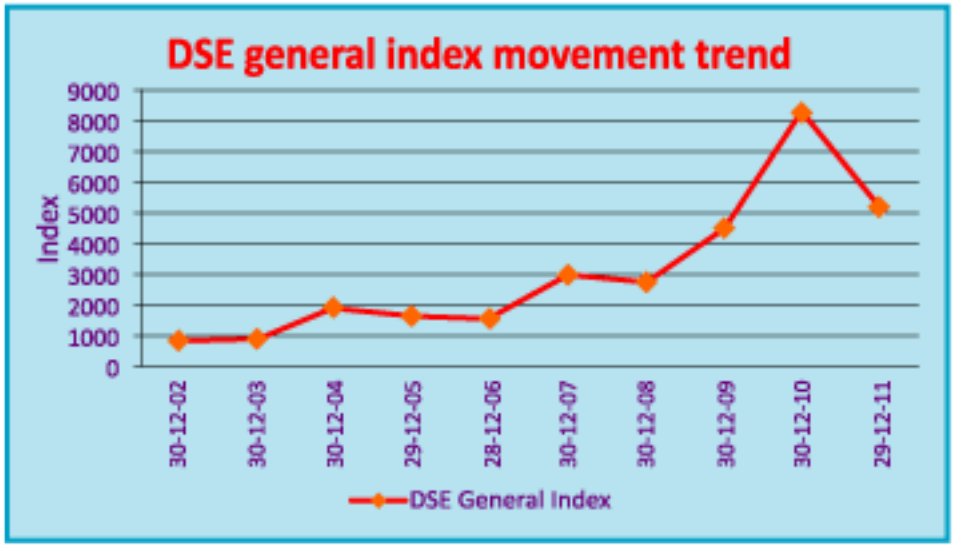
The DSE general index was 8304.6 on 02 January 2011, which was the highest level during the year, and dropped to 4649.3 on 15 November 2011, which was the lowest. From 02 January to 29 December 2011, the general index decreased by 57.9 percent. However, it showed an increasing trend over the last two months of 2011.

Chart 7. 1 DSE general index movement (CY 2011)



Date Source: Monthly Review, December 2011, Vol. 26, No. 12, Dhaka Stock Exchange Limited

Chart 7. 2 DSE general index movement trend

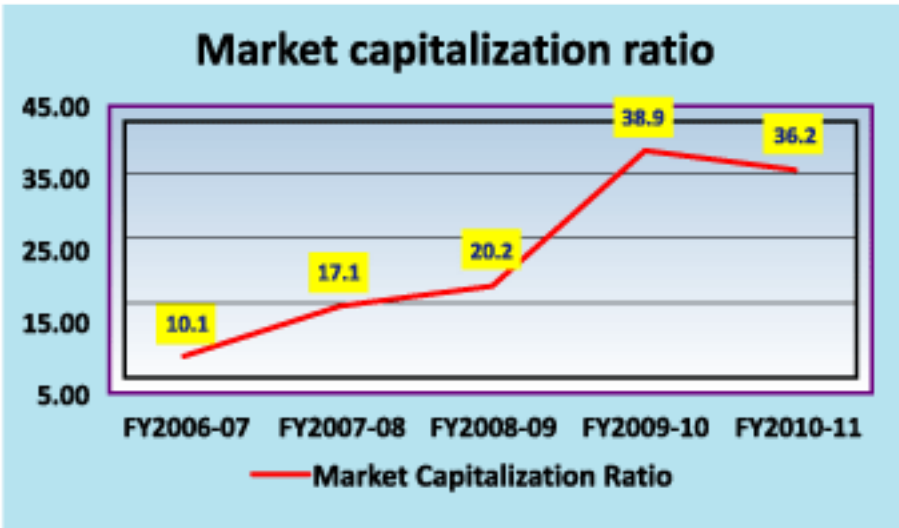


Date Source: www.dsebd.org

7. 3 Market capitalization

In FY 2006-07, total market capitalization of DSE was BDT 475.9 billion and increased to BDT 2853.9 billion in FY 2010-11. The growth rate has recently slowed, however, in FY 2009-10, the total market capitalization increased rapidly and stood at BDT 2700.7 billion which was117.6 percent higher than that of the previous fiscal year. However, total market capitalization increased by only 5.7 percent in FY 2010-11. During CY2011, Market capitalization reached a record high of BDT 3513.3 billion on 02 January 2011 and dropped to a record low of BDT 2373.7 billion on 15 November 2011.

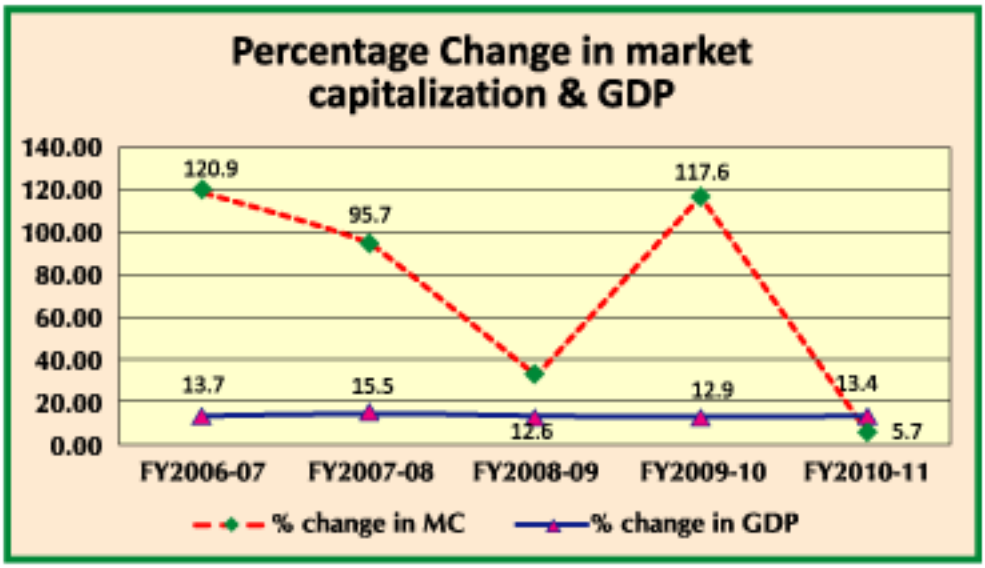
Chart 7. 3 Market capitalization ratio



Data Source: Monthly Review, December 2011, Vol. 26, No. 12, Dhaka Stock Exchange Limited
Monthly Economic Trends, June 2012, Statistics Department, Bangladesh Bank

The market capitalization ratio is the value of listed shares divided by GDP. This ratio is used as a measure of stock market size. In FY2006-07, the market capitalization ratio was 10.1 percent and reached to 38.9 percent in FY2009-10 showing an increasing trend. However, it turned down to 36.2 percent in FY2010-11, after having almost doubled in the previous fiscal year.

Chart 7. 4 Percentage change in market capitalization & GDP



Data Source: Monthly Review, December 2011, Vol. 26, No. 12, Dhaka Stock Exchange Limited
Monthly Economic Trends, June 2012, Statistics Department, Bangladesh Bank

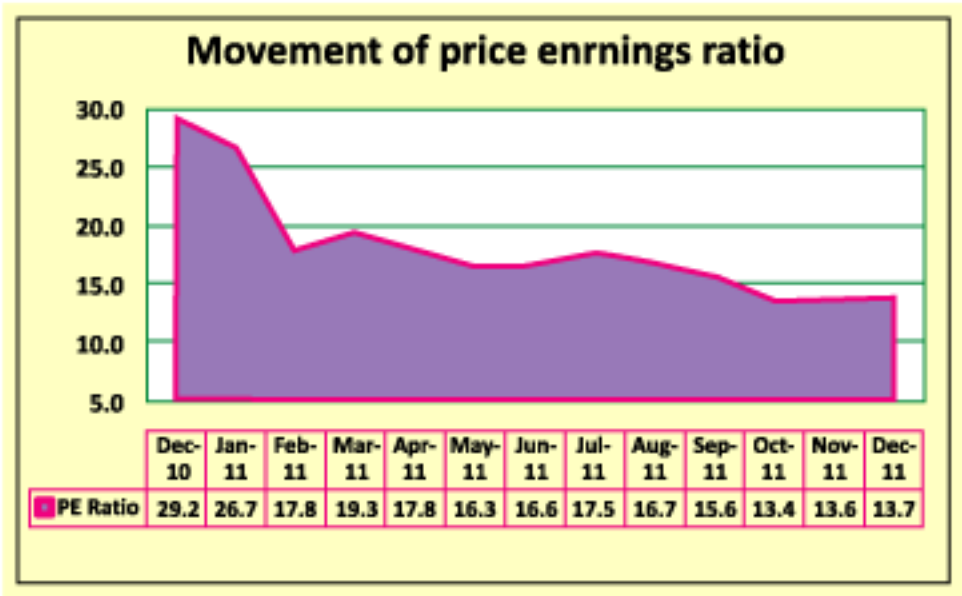
GDP growth and market capitalization growth have not displayed any significant correlation over last 5 fiscal years. For most of that time, market capitalization growth has far outstripped GDP growth, and has been more unstable. The percentage change in GDP at current prices has shown an almost flat trend, while the percentage change in market capitalization showed an irregular trend. In FY 2006-07, the percentage change of market capitalization was 120.9 whereas the percentage change of GDP at current price was only13.7 percent. However, in FY 2010-11, the percentage change of market capitalization was only 5.7 percent, whereas the percentage change of GDP at current prices was 13.4 percent.

A company's profit and financial strength is rarely reflected in the market capitalization in Bangladesh. Market capitalization mostly varies due to demand of a company's share in the secondary market as most of the small investors make investment based on grapevine information.

7. 4 Price earnings ratio

The P/E ratio depicts the relationship between market valuation of a company's shares and the earnings of the company. The overall weighted average P/E ratio of DSE was 29.2 in December 2010 and decreased to13.7 in December 2011 due to substantial price correction in the market. A sector-wise evaluation shows that the highest P/E ratio of 42.2 was observed for the paper and printing sector in December 2011. The weighted average P/E ratio of the banking sector was 10.5 whereas financial institutions' was 12.15 in December 2011.

Chart 7. 5 Movement of price earnings ratio



	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11
PE Ratio	29.2	26.7	17.8	19.3	17.8	16.3	16.6	17.5	16.7	15.6	13.4	13.6	13.7

Data Source: Monthly Review, December 2011, Vol. 26, No. 12, Dhaka Stock Exchange Limited

7. 5 DSE sector-wise performance

The table below lists sector-wise market capitalization, and measures concentration with a Herfindahl-Hirschman Index (HHI) that currently scores 1,528 points. Generally, a market with a HHI score between 1000 and 1800 points is considered to be moderately concentrated. The scenario reveals that capital market capitalization was not too heavily concentrated in a few sectors at end-December 2011. However, the financial sector (including banks, financial institutions, insurance and mutual funds) holds a 48.6 percent share of total market capitalization, while the manufacturing sector holds only a 24.2 percent share as of end-December 2011. Banks hold a 32.3 percent share of total market capitalization, which was the highest among all sectors. The short-term higher profit of the financial sector, combined with the continuing need of the growing sector for additional capital, convinced investors to invest more heavily in the financial sector than in real sectors.

Box 4 Sector-wise market capitalization

(For the month of December 2011)				
Sl.	**Sector**	**Amount in Billion BDT**	**% of Total**	**HHI**
1	Banks	664.0	32.3	1,024
2	Financial institutions	190.4	9.3	81
3	Insurance	111.0	5.4	25
4	Mutual funds	33.0	1.6	4
5	Foods	56.3	2.7	9
6	Pharmaceuticals	169.8	8.3	64
7	Textile	56.3	2.7	9
8	Engineering	101.9	5.0	25
9	Ceramics	29.0	1.4	1
10	Cement	69.9	3.4	9
11	Other manufacturing	15.4	0.7	1
12	Fuel & power	238.5	11.6	144
13	Service & real estate	14.5	0.7	1
14	IT	4.1	0.2	0
15	Telecommunication	220.8	10.7	121
16	Travel & leisure	11.0	0.5	1
17	Miscellaneous	69.6	3.4	9
	Total	**2,055.5**	**100.0**	**1,528**

Data Source: Monthly Review, December 2011, Vol. 26, No. 12, Dhaka Stock Exchange Limited

7. 6 DSE monthly turnover

During CY2011, DSE turnover reached the highest peak with BDT 298.2 billion in July, and turned down to the lowest trough with BDT 61.5 billion in December. The daily average turnover was BDT 18.4 billion in December 2010, which significantly decreased to BDT 3.2 billion in December 2011. The financial sector dominated with 46.4 percent of the total DSE turnover in December 2011. Banks' turnover was 29.6 percent, which was the highest in the overall sector. Among the other sectors, the manufacturing sector contributed 33.3 percent to the total turnover, with textile remaining on the top (8.3 percent) of this sector. The service & miscellaneous sector contributed 20.3 percent to the total turnover, with fuel & power remaining on the top (8.3 percent) of this sector.

Chart 7. 6 DSE monthly turnover

Data Source: Monthly Review, December 2011, Vol. 26, No. 12, Dhaka Stock Exchange Limited

7. 7 Overall market scenario

By the end of 2010, the capital markets of Bangladesh appeared to be well overvalued and overheated as the institutional as well as retail investors entered in the capital markets with increasing enthusiasm and confidence. Consequently, demand for the securities in both the primary and secondary markets increased substantially. However, the supply of securities could not be increased at the same pace. As a result, prices of the securities in the secondary market soared to a record high and so did the index. In December 2010, the market was in a receding trend with decline in daily turnover coupled with substantial price correction and significant volatility from time to time. This market correction traumatized the general investors' confidence. Throughout the year 2011, the market was in a bearish trend due to the massive price correction which had started in December 2010.

The Government of Bangladesh (GoB), Ministry of Finance (MoF), Bangladesh Bank (BB), Securities and Exchange Commission (SEC), DSE, CSE, Investment Corporation of Bangladesh (ICB), and other stakeholders have taken various steps to bring back the stability of the market. As a result, the market was showing a positive trend at end-December 2011.

Chapter 8 Financial Infrastructure

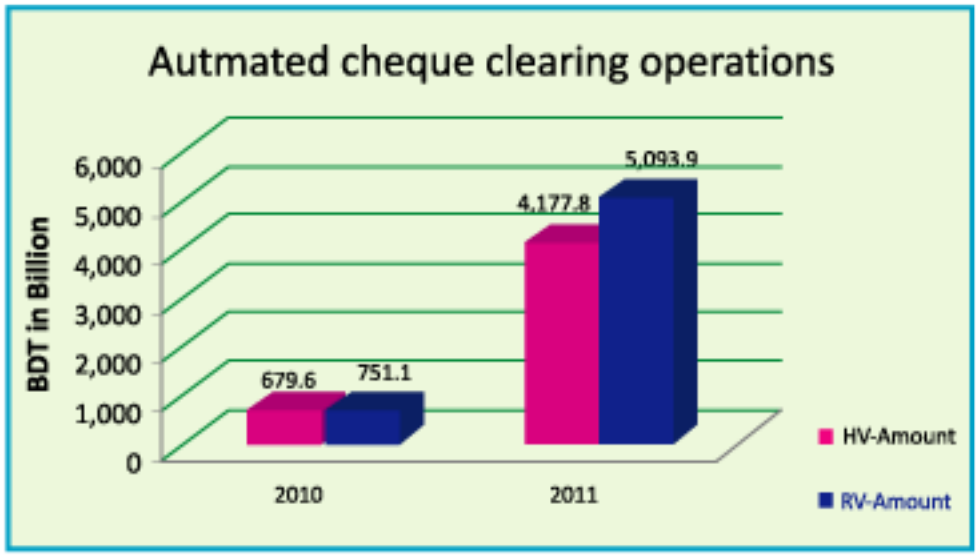
8. 1 Payments and settlement system

The payment and settlement systems in Bangladesh remained resilient and continued to operate smoothly throughout CY2011, contributing to the stability of the financial system.

8. 2 Automated cheque clearing

The Bangladesh Automated Clearing House (BACH) started automated cheque clearing from 07 October 2010 by replacing the ancient manual clearing system with automation, which allows inter-bank cheques and similar type instruments to be settled instantly. All the 7 clearing regions in major cities (Chittagong, Rajshahi, Khulna, Bogra, Rangpur, Barisal and Sylhet) have been connected with the Dhaka Clearing House from 25 October 2011. Almost 90 percent of all the clearing instruments are now being processed through the automated clearing house.

Chart 8. 1 Automated cheque clearing operations



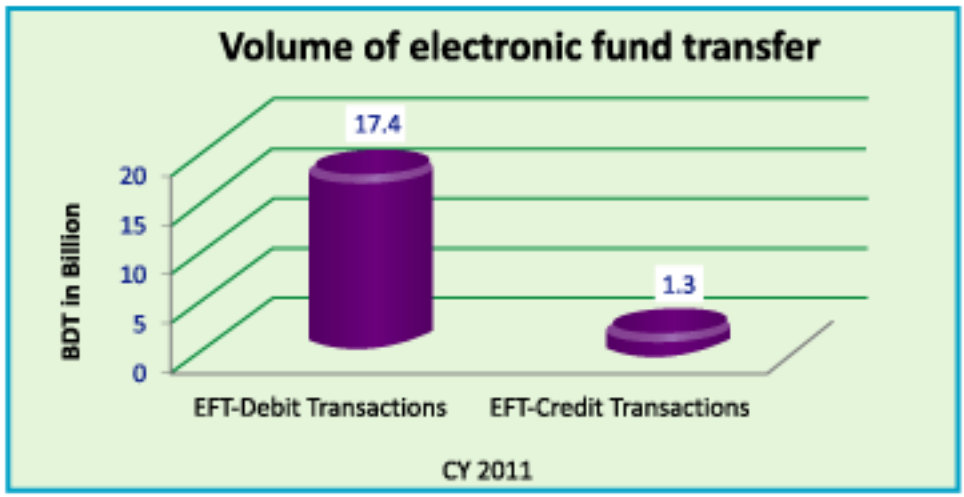
Source: Department of Currency Management & Payment Systems, BB.

Under the automated cheque processing system, two types of clearing are processed–high value (HV) and regular value (RV). Instruments of BDT 0.5 million and above are processed under HV clearing. Year 2010 shows a low volume of transaction as it was started only from October 2010. However, about 0.7 million HV items of BDT 4177.8 billion and 17.9 million RV items of BDT 5093.9 billion were processed through the automated clearing house in 2011.

8. 3 Electronic fund transfer

Electronic Fund Transfer (EFT) has been introduced which facilitates the banks to make bulk payments instantly, using less paper and manpower. The Bangladesh Electronic Funds Transfer Network (BEFTN) started with credit transactions in 28 February 2011 and began offering debit transactions from 15 September 2011. On average, approximately 200,000 EFT-credit and 2,000 EFT-debit transactions are processed per month.

Chart 8. 2 Volume of electronic fund transfer



Source: Financial Stability Department, BB.

The total amount of EFT-credit transactions was approximately BDT 17.4 billion and EFT-debit transaction was approximately BDT 1.3 billion in CY11.

8. 4 Mobile financial services

The initiation of mobile banking is one of the most noteworthy advancements in banking. Through this system, franchises of banks through mobile operators can provide banking service to even the remotest corner of the country. During CY11, 18 banks got approval for Mobile Financial Services (MFS) of which 13 have already started offering these services. The remaining 5 banks are in the process of starting MFS.

A private commercial bank's subsidiary named 'bKash' got approval for facilitating mobile financial services, and launched its operation from 21 July 2011. Bangladesh Post Office also introduced 'post e-pay' service in 05 September 2011 in its 1968 branches with the help of the mobile operators' countrywide network.

The "Guidelines on Mobile Financial Services for the Banks" was published in September 2011 and was amended on 20 December 2011.

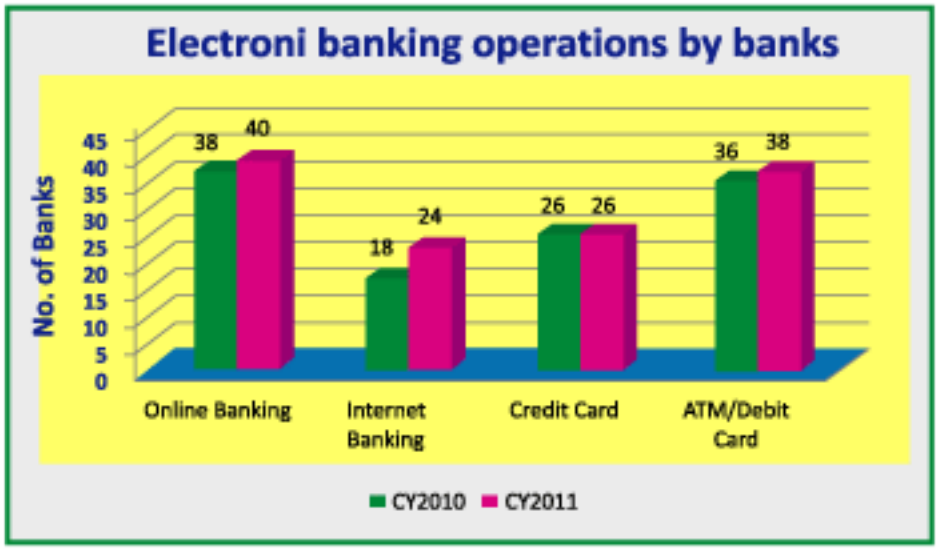
8. 5 M-commerce

At present, 3 telecom companies have got permission for m-commerce (Mobile-Commerce) related transactions. Approximately 425,000 utility (water, gas and electricity) bill payments were transacted using m-commerce. Additionally, approximately 12,000 train tickets and 15,000 match tickets were sold via m-commerce.

8. 6 Electronic banking operations

Most of the commercial banks are now using their own Core Banking Solution which has made banking faster and efficient. Out of 47 scheduled banks, 40 banks provided full or partial online banking services in CY11. Usage of plastic money has also been increased in daily life transactions.

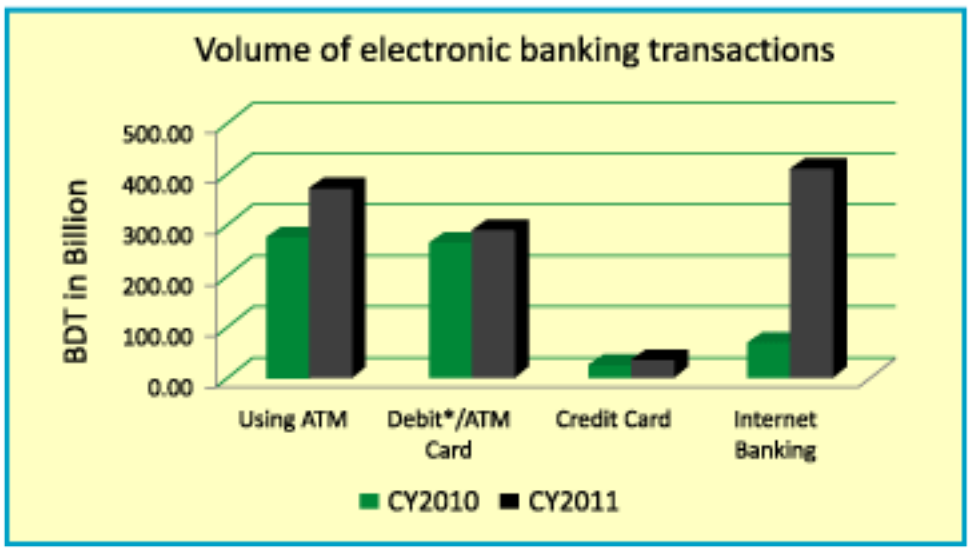
Chart 8. 3 Number of banks providing electronic banking facility



Source: Financial Stability Department, BB.

The above chart shows the increasing trend of electronic banking operations during CY11. The number of banks providing credit card services remained unchanged during CY11. However, the number of own Automated Teller Machines (ATM) showed a hefty increase from 2071 in CY10 to 3530 in CY11.

Chart 8. 4 Volume of electronic banking transactions



** Some banks use the word 'Debit Card' as a synonym of ATM card.*

Source: Financial Stability Department, BB.

The amount of transactions using ATMs, ATM/debit cards and credit cards increased by 34.9 percent, 10.1 percent and 34.6 percent respectively in CY11. However, internet banking transactions increased even more impressively by 479.7 percent as both individual and corporate customers have become more interested in internet banking.

8. 7 Central depository system

The Central Depository Bangladesh Limited (CDBL) provides services to the Bangladesh capital market, covering settlement of trades on stock exchanges as well as settlement of Over the Counter (OTC) transactions in treasury bills and government bonds issued by the central bank. At present, there are 313 full service depository participants (DP), 04 Exchange DPs, 51 Custody DPs and 44 Treasury DPs.

8. 8 Other information on technological developments in the financial system

The banking sector experienced a remarkable progress of automation during the last several years. The central bank's pro-active and forward-looking approach has promoted a numbers of automation initiatives in the banking sector. The establishment of the Enterprise Data Warehouse (under process) will bring the whole banking sector under a single network through which data sharing, reporting and supervision will enter a new horizon.

To create a disciplined environment for borrowing, an automated Credit Information Bureau (CIB) service has been introduced to provide the scheduled banks/FIs credit related information about prospective and existing borrowers. Banks/FIs now furnish credit information to the CIB database and can access credit reports from CIB online any time around the year.

A Letter of Credit (L/C) monitoring system has been introduced for preservation and use of all necessary information regarding L/Cs by the banks through the BB website. This system allows the authorized users of banks to upload and download their L/C information. An online export monitoring system is used to monitor exports of Bangladesh. Through this service, banks and authorized dealers (AD) branches of banks issue their export reports.

The e-Returns service has also been introduced which is an online portal service for scheduled banks to submit electronic returns using a predefined template for the purpose of macroeconomic analysis by related BB departments.

The introduction of internet trading in both of the bourses (DSE & CSE) in the country is the most significant advancement for the capital market in the last several years. Finally, Micro Finance Institutions (MFI) submit their reports to their regulator through the Online Report Submission Tools designed for MFIs.

9. 1 Basel III new liquidity standards

Bangladesh Bank initiated two new Basel III-inspired liquidity standards to the banks as a reporting requirement in 2011. These two standards are the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR). Reporting on data on the LCR is monthly, and data on the NSFR is quarterly. An introductory period is continuing and will last for no more than one year. When the introductory period expires, compliance with the standards will become mandatory, either moving immediately to full implementation of the 100 percent minimum or phasing it in, depending on the calculated outcomes of the banks during the introductory period. The Department of Off-Site Supervision (DOS) will rank-order the banks by their reported values for each standard, and, on the basis of those values, a target date and phase-in period for reaching the 100 percent minimum will be developed. BB, in the mean time, conducted its first Quantitative Impact Study (QIS) of these two liquidity ratios on the basis of banks' data of May 2012 and the next QIS will be conducted on September 2012 data. BB is confident, based on the result of first QIS conducted in May 2012, of the feasibility of implementing these ratios as regulatory compliance at the 100 percent minimum on or before the beginning of January 2014. However, some of the components and "run-off factor" of these two liquidity ratios have been reviewed by BB in the country context and rationalized accordingly. BB is also taking other initiatives to enhance banks' capacity of maintaining their liquidity to achieve the goal of 100 percent compliance of the Basel III recommendations within the targeted time line. In the phase of implementation, banks with very low values for each standard may be put on a liquidity "watch list" and targeted on-site examinations may be conducted to determine the quality of the banks' liquidity management.

9. 2 Formation of the Financial Stability Department (FSD)

In light of global economic turmoil and in considering the rapidly-growing and evolving financial sector in Bangladesh, Bangladesh Bank decided to establish the Financial Stability Department (FSD), which started functioning from June 2012.

The Department will examine the stability of the Bangladesh financial system through macro-prudential analysis. It will assess and quantify financial system risks and vulnerabilities, analyze their outlook and make appropriate policy recommendations for safeguarding financial stability. It may also design and conduct stress-testing exercises in order to assess the resilience of the banking system and the potential repercussions on the real economy. It will oversee the means of payments and settlement systems operating in Bangladesh aiming at ensuring their reliability and efficiency and, in particular, the containment of systemic risk. Furthermore, it will monitor developments in the insurance sector, as well as capital markets participants such as securities firms and collective investment firms, which are not supervised by BB. It will focus on the existing analysis of financial stability and on stress testing of the financial system. In addition, it will recommend macroprudential regulation and engage in macroprudential oversight, which are focused on analyzing, assessing and mitigating systemic risk. Finally, the purpose of FSD will be to strengthen the macro prudential framework of the country.

9. 3 Adoption of the Financial Projection Model

Bangladesh Bank (BB) intends to adopt a tailor-made Financial Projection Model (FPM) under the technical assistance from the World Bank to improve its risk assessment framework for individual banks. BB would, therefore, like to assess the risks posed by banks in the system by using the FPM to carry out scenario analyses of the banks to determine their true conditions and resilience to pressures, the impact of liquidity squeeze on their viability and the likelihood of a contagion in case one of them fails. Later, this FPM would be expanded to include all the FIs in the system. The main objectives of this tool is to assess the strengths and weaknesses of individual banks in the system based on hypothetical scenarios focusing on the banks, to perform comprehensive scenario analyses to identify risks and take policy measures accordingly; and improve BB`s risk assessment capacity for individual banks by incorporating FPM into the supervisory risk assessment processes.

9. 4 Risk Management Guidelines for banks

In the context of an extremely challenging first decade of the 21st century for the financial services industry in many parts of the world, BB has issued a separate comprehensive risk management guidelines for banks and scheduled banks are instructed to follow these new guidelines to manage various risks in a prudent manner. Unlike the global perspective, banks of Bangladesh in the financial services industry are facing various challenges attributable to increased competition and expansion of their diversified business network.

These guidelines are a supplement to, and not a substitute for, guidelines in six core areas already issued. This document promotes an integrated, bank-wide approach to risk management that may propel banks in Bangladesh to the forefront among banks in this region in adopting contemporary methods to identify, measure, monitor, and control risks throughout their institutions. The most innovative parts of these guidelines are risk governance and capital planning.

It is evident from the global facts that credit institutions (including banks), securities firms, insurance companies, money service providers, foreign exchange dealers, and other kinds of financial institutions in many parts of the world faced increasing competition, volatility in interest rates, exchange rates, and share prices, asset price bubbles, deep recessions, sudden deteriorations in credit quality, and unpredictable changes in the legal and regulatory framework. Most financial institutions were able to cope with these challenges, but a great many, including some very large and well-known institutions, were not. However, scheduled banks in Bangladesh are also facing challenges in the second decade of the present century. Although we have fortunately been spared some of the worst upheavals that have occurred in other countries, the need to be constantly vigilant is still upon us. World-class risk management is a costly endeavour for Bangladeshi banks, but the costs of being caught unaware or unprepared for unexpected, unfavourable changes in the banking environment, from wherever these changes may come, would be far higher.

9. 5 Deposit insurance in Bangladesh

Bangladesh Bank has created a new department for exclusively expediting the issues of implementing an effective deposit insurance system in Bangladesh, in accordance with international best practices. It is considered as one of the leading components of a financial system safety net that is meant to promote financial stability.

In Bangladesh, deposit insurance has a long history. The deposit insurance scheme (DIS) was introduced in Bangladesh in August 1984 to act as a safety net for the depositors, aiming at minimizing the risks of loss of depositors' funds with banks. All the commercial banks, including foreign banks and the specialized banks operating in Bangladesh, are members of this scheme, as mandated under Article 4 of Bank Deposit Insurance Act 2000.

The direct rationale for the deposit insurance is customer protection. The indirect rationale for deposit insurance is that it reduces the risks of systemic crisis, involving, for example, panic withdrawals of deposits from sound banks and breakdown of the payments system. A Deposit Insurance Trust Fund (DITF) has also been created for providing limited protection (not exceeding Taka 100,000) to a small depositor in case of winding up of any bank. The Board of Directors of Bangladesh Bank is the Trustee Board for the DITF. Bangladesh Bank has adopted a system of risk based deposit insurance premium rates applicable for all scheduled banks effective from the half year January-June 2007. According to a new instruction regarding premium rates, problem banks are required to pay 0.09 percent and private banks other than the problem banks and state owned commercial banks are required to pay 0.07 percent where the monetary coverage of the deposits is Taka 100,000 per depositor per bank. With this end in view, BB has already advised the banks to bring DIS to the notice of the public through displaying key information about it on their display board. In addition to this, BB is working to introduce this system to the Non-Bank Financial Institutions (NBFIs), and proposed to the concerned ministries to make it more risk-based and more expansive in coverage. Pertinently, the Ministry of Finance (MoF) can approve the premium rates at their own discretions, however, new laws or the amendments of existing laws will be required to enhance the coverage as well as inclusion of NBFIs under the safety net program of deposit insurance system.

9. 6 Insurance Development & Regulatory Authority (IDRA)

Bangladesh's National Parliament passed two insurance laws on 03 March 2010 in a bid to further strengthen the regulatory framework of the insurance industry and make the industry operationally vibrant. The Insurance Act 2010, one of these, said the sector needs to be managed properly and be strengthened by reducing business risks; local and international insurance laws need to be harmonized considering the socio-economic aspect of the country; and the interests of policy holders and other beneficiaries need to be protected. A regulatory body in the name 'Insurance Development & Regulatory Authority,' under the Insurance Development and Regulatory Authority Act 2010, has been established to make the insurance industry as a premier financial services provider in the country by promoting efficient corporate governance, by meeting the evolving aspirations of the society, and by serving all

segments of the business community and general population for high economic growth. The mission of IDRA is to protect the interest of the policy holders and other stakeholders under insurance policy, supervise and regulate the insurance industry effectively, and ensure orderly and systematic growth of the insurance industry. Currently 62 insurance companies are regulated under the comprehensive laws and guidelines and supervising by IDRA.

9. 7 Stress Testing Guidelines for Non-Bank Financial Institutions

Stress Testing guidelines for NBFIs have been issued by Bangladesh Bank (BB) in 2012 to provide a structured way of assessing the vulnerabilities of financial institutions to extreme but plausible market conditions. These guidelines enable institutions to accurately assess risk and define the risk appetite of the organization and also provide critical information to senior management for decisions on capital buffers and contingency planning. Earlier in 2010, BB, considering the importance and complexity of banking and leasing business, issued general guidelines on stress testing for both Banks and FIs. The new stress testing guidelines for NBFIs have preliminary been based on simple sensitivity analysis using four different risk factors namely; Interest rate, Credit, Equity prices, and Liquidity. A simple maturity gap analysis to measure 'Interest rate risk' has been introduced and 'Duration GAP analysis' has been made simplified through these guidelines. Moreover, a VaR analysis also has been incorporated to measure the potential losses of FIs. These guidelines also incorporated the Insolvency Ratio (IR) and Stress Testing Rating.

In the stress test rating system, each FI will be categorized in either the Green, Yellow or Red zone based on the Weighted Average Resilience (WAR), scaled in rating 1 to 5 of which 1 fall in Green, 2 and 3 in Yellow, and 4 and 5 in Red Zone, on the three level shock scenarios. Insolvency ratio, percentage towards insolvency, on the other hand, will also be scaled in 1 to 5 grades the same manner after computing the Weighted Insolvency Ratio (WIR) from the three shock levels depending on the farness from insolvency[12]. Moreover, overall financial strength and resilience of an NBFI will be identified plotting its achieved rating in the WAR-WIR Matrix. WAR and WIR of the particular FI will be used to determine its adequate capital requirement and will have an impact on its CAMELS rating.

9. 8 Enterprise data warehouse

BB has commenced implementation of an Enterprise Data Warehouse (EDW) from late 2009 with a view to discontinuing hard copy forms of statement submission, analysing banking sector's performance, conducting scenario analysis and stress tests, carrying out macroeconomic research etc. within the shortest possible time. Banks have already been instructed to submit a number of existing statements in rationalized input templates through a web portal. Pertinently, under EDW, data/information submitted by banks and financial institutions, is being be stored in a centralised database. Submission of data/information by the banks in the stated manner is already saving a considerable amount of time and effort.

BB has already begun preparation of different prudential reports from EDW. In the near future, some important reports namely, reports on risk based capital adequacy of banks in line with Basel II, liquidity, loan classification and provisioning, profit and loss of banks, loans written-off etc. will be generated from EDW. It is expected that in the near future, assisted by the EDW, BB will be in a position to assess banking sector's performance more promptly, which will contribute to maintaining/enhancing financial stability of Bangladesh.

[12] See Guidelines on Stress Testing for NBFIs, 2012 of Bangladesh Bank for details.

Appendix

Table I Banking Sector Aggregate Balance Sheet

Particulars	Amount in Billion BDT				Change (%)	
	2008	2009	2010	2011	2009 to 10	2010 to 11
Property & Assets:						
Cash in Hand (including FC)	35.3	37.4	52.0	59.7	39.3	14.8
Balance with BB & SB (including FC)	196.9	256.6	300.6	399.5	17.2	32.9
Balance with other Banks & FIs	109.0	140.5	146.6	155.9	4.4	6.3
Money at Call & Short Notice	330	49.7	43.9	128.1	(11.6)	191.8
Investments:						
Government	398.1	532.2	490.8	662.1	(7.8)	34.9
Others	32.1	44.1	98.5	131.3	123.6	33.3
Total	430.3	576.1	589.3	793.4	2.3	34.6
Loans & Advances:						
Loans, CC, OD etc.	2002.3	2361.6	2973.4	3525.0	25.9	18.6
Bills purchased & Disct.	129.5	131.6	225.3	267.5	71.1	18.7
Total	2131.8	2493.2	3198.6	3792.5	28.3	18.6
Fixed Assets	51.1	61.3	101.7	143.7	65.7	41.2
Other Assets	302.6	316.2	421.1	401.0	33.2	(4.8)
Non-banking Assets	0.93	1.1	1.1	1.2	1.8	9.1
Total Assets	3290.9	3932.2	4855.0	5874.9	23.5	21.0
Liabilities:						
Borrowings from other Banks/FIs/Agents	120.2	122.0	159.8	226.3	31.0	41.6
Deposits & Other Accounts:						
Current Deposit	442.6	544.3	712.7	992.9	31.0	39.3
Bills Payable	42.9	48.7	59.8	65.3	23.0	9.2
Savings Deposit	586.3	731.7	852.4	933.7	16.5	9.5
Fixed/Term Deposit	1537.1	1805.9	2156.7	2583.2	19.4	19.8
Total	2608.9	3130.6	3781.6	4575.1	20.8	21.0
Other Liabilities	381.0	406.9	494.8	546.4	21.6	10.4
Total Liabilities	3110.0	3659.5	4436.2	5347.8	21.2	20.5
Capital/Shareholder's Equity	180.8	272.7	418.7	527.1	53.6	25.9
Total Liabilities & Shareholder's Equity	3290.9	3932.2	4855.0	5874.9	23.5	21.0
Off-balance Sheet Items	834.2	911.6	1985.8	1814.6	117.8	(8.6)

Table II Banking Sector Aggregate Share of Assets

(Amount in billion BDT)

Particulars	2009	% of Total Assets	2010	% of Total Assets	2011	% of Total Assets
Property & Assets:						
Cash in Hand (including FC)	37.4	1.0	52.0	1.1	59.7	1.0
Balance with BB & SB (including FC)	256.6	6.5	300.6	6.2	399.5	6.8
Balance with other Banks & FIs	140.5	3.6	146.6	3.0	155.9	2.7
Money at Call & Short Notice	49.7	1.3	43.9	0.9	128.1	2.2
Investments:						
Government	532.2	13.5	490.8	10.1	662.1	11.3
Others	44.1	1.1	98.5	2.1	131.3	2.2
Total	576.1	14.7	589.3	12.1	793.4	13.5
Loans & Advances:						
Loans, CC, OD etc.	2361.6	60.1	2973.4	61.2	3525.0	60.0
Bills purchased & Discounted	131.6	3463.4	225.2	4.6	267.5	4.6
Total	2493.2		3198.6	65.9	3792.5	64.6
Fixed Assets	61.4	1.6	101.7	2.1	143.6	2.4
Other Assets	316.3	8.1	421.1	8.7	401.0	6.8
Non-banking Assets	1.1	0.1	1.1	0.1	1.2	0.0
Total Assets	3932.2	100.0	4855.0	100.0	5874.9	100.0

Table III Banking Sector Aggregate Share of Liabilities

(Amount in billion BDT)

Particulars	2009	% of Total Liabilities	2010	% of Total Liabilities	2011	% of Total Liabilities
Liabilities:						
Borrowings from other Banks/FIs/Agents	121.9	3.3	159.8	3.6	226.3	3.9
Deposits & Other Accounts:						
Current Deposit	544.3	14.9	712.7	16.1	992.9	16.9
Bills Payable	48.7	1.3	59.8	1.4	65.3	1.1
Savings Deposit	731.8	20.0	852.4	19.2	933.7	15.9
Fixed/Term Deposit	1805.9	49.4	2156.7	48.6	2583.2	44.0
Total	3130.6	85.6	3781.6	85.3	4575.1	77.9
Other Liabilities	406.9	11.1	494.9	11.3	546.4	9.3
Total Liabilities	3659.5	100.0	4436.3	100.0	5347.8	91.0
Capital/Shareholder's Equity	272.7	7.5	418.8	9.4	527.1	9.0
Total Liabilities & Shareholder's Equity	3932.2	-	4855.0	-	5874.9	-

Table IV Banking Sector Aggregate Income Statement

	Amount in Billion BDT				Change (%)	
	2008	2009	2010	2011	2009 to 2010	20010 to 2011
Interest Income	227.7	271.2	321.8	442.8	18.6	37.6
Less: Interest Expense	156.8	186.8	200.2	297.5	7.1	48.6
Net Interest Income	70.8	84.4	121.5	145.3	43.9	19.6
Non-Interest/Investment Income	96.5	118.4	164.9	168.5	39.1	2.2
Total Income	167.4	202.9	286.4	313.8	41.1	9.6
Operating Expenses	63.0	86.6	115.5	127.0	33.2	10.0
Profit before Provision	104.4	116.2	170.9	186.8	47.0	9.3
Total Provision	24.2	26.1	35.6	44.7	36.1	25.6
Profit before Taxes	80.1	90.1	135.3	142.1	50.2	5.0
Provision for Taxation	40.8	35.9	52.0	66.9	44.7	28.7
Profit after Taxation/Net Profit	39.3	54.1	83.3	75.2	53.8	(9.7)

Table V Banking Sector Assets, Deposits & NPL Concentration (CY11)

(Amount in billion BDT)

Assets	Top 5 banks	Other banks	Top 10 banks	Other banks
Amount	**2073.6**	**3801.3**	**2912.2**	**2962.7**
Share (%)	**35.3%**	**64.7%**	**49.6%**	**50.4%**
Deposit	**Top 5 banks**	**Other banks**	**Top 10 banks**	**Other banks**
Amount	**1625.5**	**2884.3**	**2269.7**	**2240.1**
Share (%)	**36.0%**	**64.0%**	**50.3%**	**49.7%**

Table VI Banking Sector Loan Loss Provisions

(Amount in billion BDT)

Year	Required provision	Provision maintained	Surplus/(shortfall)
2005	88.3	42.5	-45.8
2006	106.1	52.9	-53.1
2007	127.1	97.0	-30.1
2008	136.1	126.2	-9.9
2009	134.7	137.8	3.1
2010	150.8	146.8	-3.9
2011	139.3	148.9	9.6

Table VII Banking Sector Year-wise Classified Loans Ratios

(Figure in percentage)

Year	Classified loans to total loans	Sub-standard loans to classified loans	Doubtful loans to classified loans	Bad loans to classified loans
2001	31.5	5.6	5.9	88.5
2002	28.1	8.7	5.3	86.1
2003	22.1	10.2	8.8	80.9
2004	17.6	7.2	6.6	86.2
2005	13.6	8.7	6.9	84.4
2006	13.2	13.1	7.2	79.7
2007	13.2	9.8	7.5	82.7
2008	10.8	9.4	9.4	81.1
2009	9.2	12.2	8.4	79.4
2010	7.1	13.4	8.4	78.1
2011	6.2	14.7	11.5	73.8

Table VIII Banking Sector Deposits Breakdown (CY11)

(Amount in billion BDT)

Items	Amount	% of Total Deposit
Current deposits	992.9	21.7
Bills payable	65.3	1.4
Savings deposits	933.7	20.4
Term deposits	2583.2	56.5
Total deposit	4575.1	100.0

Table IX Banking Sector Call Money Investment & Borrowing

Items	CY09	CY10	% of Change	CY11	% of Change
Borrowings	121.9	159.8	30.9%	226.2	41.6%
Call money	49.7	43.9	-11.6%	128.1	191.8%

Table X Banking Sector Selected Ratios

Ratio	CY09	CY10	CY11
ROA	1.4	1.7	1.3
ROE	19.9	19.9	14.3
Net Interest Margin	2.6	3.1	3.0
Asset Turnover	4.2	5.9	5.3
Interest Income to Total Assets	6.9	6.6	7.5
Net- Interest Income to Total Assets	2.2	2.5	2.5
Non-Interest Income to Total Assets	3.0	3.4	2.9
Non-interest expense to Total Income	42.7	40.3	40.5
Capital Adequacy Ratio	11.7	9.3	11.3
Classified Loans to Total Loans	9.2	7.1	6.2
Classified Loans to Capital	79.7	54.8	43.6
Provision to Classified Loans	61.3	65.1	63.8

Table XI Banking Sector ROA & ROE (CY11)

ROA	Number of Banks	ROE	Number of Banks
Up to 2.0%	34	Up to 5.0%	8
> 2.0 to 3.0	10	> 5.0 to 10.0	4
>3.0 to 4.0	3	>10.0 to 15.0	14
>4.0	0	>15.0	21

Table XII Banking Sector Year-wise CDR

Year	Deposits (Excluding Inter-bank)	Credits (Excluding Inter-bank)	Credit-Deposit Ratio
2006	1829.3	1394.6	76.24%
2007	2116.1	1600.2	75.62%
2008	2527.6	1963.9	77.70%
2009	3042.8	2334.8	76.73%
2010	3689.2	2958.8	80.20%
2011	4509.8	3792.5	84.09%

Table XIII Banking Sector CDR in CY11

Range	Number of Banks
Up to 80.00%	13
> 80.00% to 90.00%	19
> 90.00% to 100.00%	8
>100.00% to 110.00%	3
>110.00%	4
Total	47

Table XIV Banking Sector Year-wise Deposit & Advance Rate

Year	Bank Rate	Deposit Rate	Advance Rate	Spread
2005	5.00	5.9	11.25	5.35
2006	5.00	6.99	12.6	5.61
2007	5.00	6.84	12.78	5.95
2008	5.00	7.09	12.4	5.32
2009	5.00	6.29	11.51	5.22
2010	5.00	6.08	11.34	5.26
2011	5.00	7.52	13.03	5.51

Table XV Banking Sector Month-wise Deposit & Advance Rate

Month	Deposit rate	Advance rate	Spread
Jan-11	6.39	11.34	4.95
Feb-11	6.54	11.41	4.87
Mar-11	6.81	11.95	5.14
Apr-11	7.06	12.02	4.96
May-11	7.24	12.17	4.93
Jun-11	7.27	12.42	5.15
Jul-11	7.32	12.55	5.23
Aug-11	7.40	12.63	5.23
Sep-11	7.42	12.74	5.32
Oct-11	7.46	12.80	5.34
Nov-11	7.53	12.83	5.30
Dec-11	7.52	13.03	5.51

Table XVI Islamic Banks Aggregate Balance Sheet

	Amount in Billion BDT				Change(%) 2009 to 10	Change(%) 2010 to 11
	2008	2009	2010	2011		
Property & Assets:						
Cash in Hand (including FC)	4.9	4.1	7.3	9.3	47.3	27.4
Balance with BB & SB (including FC)	42.7	57.9	64.1	77.3	10.6	20.6
Balance with other Banks & FIs	26.7	14.9	13.4	33.2	(10.1)	147.8
Money at Call & Short Notice	0.0	14.5	19.4	24.8	33.3	27.8
Investments:						
Government	14.7	18.8	21.2	26.9	13.0	26.9
Others	1.2	3.4	6.6	15.9	95.6	140.9
Total	15.9	22.2	27.8	42.8	25.6	54.0
Investments & Advances:						
Investments & Advances	330.5	414.5	527.8	644.9	27.4	22.2
Bills Purchased & Discounted	25.6	27.6	46.3	52.3	67.8	13.0
Total	356.1	442.0	574.1	697.2	29.9	21.4
Fixed Assets	6.5	10.3	12.1	14.3	17.9	18.2
Other Assets	11.7	9.3	15.4	24.3	65.9	57.8
Non-banking Assets	0.0	0.0	0.0	0.0	0.0	0.0
Total Assets	464.5	576.0	733.6	923.2	27.4	25.8
Liabilities:						
Borrowings from other Banks/FIs/Agents	12.8	15.1	21.4	31.1	41.9	45.3
Deposits & Other Accounts:						
Current Deposit	37.6	58.7	86.8	241.1	47.9	177.8
Bills Payable	4.6	5.4	6.8	7.0	26.0	2.9
Savings Deposit	91.0	115.5	136.4	181.9	18.2	33.4
Fixed/Term Deposit	253.9	311.5	387.1	346.1	24.3	(10.6)
Total	387.1	491.0	617.1	776.1	25.7	25.8
Other Liabilities	37.8	32.7	40.4	49.9	23.6	23.5
Total Liabilities	437.7	538.7	678.9	857.1	26.0	26.2
Capital/Shareholder's Equity	26.8	37.2	54.7	66.1	46.7	20.8
Total Liabilities & Shareholder's Equity	464.5	576.0	733.6	923.2	27.4	25.8
Off-balance Sheet Items	115.7	138.4	241.1	255.8	74.1	6.1

Table XVII Islamic Banks Aggregate Income Statement

	Amount in Billion BDT				Change (%) 2009 to 10	Change (%) 2010 to 11
	2008	2009	2010	2011		
Profit Income	40.26	46.97	55.07	80.7	17.25	46.5
Less: Profit Expenses	27.21	31.49	35.12	52.2	11.53	48.6
Net Profit Income	13.05	15.48	19.95	28.5	28.88	42.9
Non-Profit/Investment Income	10.28	10.27	17.94	15.1	74.68	(15.8)
Total Income	23.33	25.75	37.89	43.6	47.15	15.1
Operating Expenses	7.48	9.27	13.04	15.9	40.67	21.9
Profit before Provision	15.85	16.48	24.85	27.7	50.79	11.5
Total Provision	3.83	5.50	6.32	6.9	14.91	9.2
Profit before Taxes	12.02	10.98	18.53	20.8	68.76	12.3
Provision for Taxation	6.26	5.27	6.86	11.1	30.17	61.8
Profit after Taxation/Net Profit	5.76	5.71	11.66	9.7	104.20	(16.8)

Table XVIII Share of Islamic Banks in the Banking Sector (CY11)

(Amount in billion BDT)

Particulars	All Banks	Islamic Banks	% of overall banking Industry
Property & Assets:			
Cash in hand	57.7	9.3	16.1
Due from BB & other banks/FIs	683.5	135.3	19.8
Investments in securities	793.4	42.7	5.4
Investments (Loans & advances)	3792.5	697.0	18.4
Other Assets	546.0	38.6	7.1
Total Assets	5874.9	923.2	15.7
Liabilities:			
Due to financial institutions	226.2	31.2	13.8
Total deposits	4801.3	776.1	16.2
Other liabilities	546.5	49.8	9.1
Total Liabilities	5347.8	857.1	16.0
Capital/Shareholder's Equity	527.1	66.1	12.5
Total Liabilities & Shareholder's Equity	5874.9	923.2	15.7
Off-balance Sheet Items	1814.6	255.8	14.1

Table XIX Market Share of Islamic Banks and Conventional Banks (CY11)

Particulars	Islamic Banks	Conventional Banks
Assets	16.1%	83.9%
Investments (Loans)	19.7%	80.3%
Deposits	16.6%	83.4%
Capital/Shareholder's Equity	14.6%	85.4%
Total Liabilities	16.5%	83.5%

Table XX Selected Ratios of Islamic Banks and the Banking Sector (CY11)

Ratio	Overall Banking Sector	Islamic Banking Sector
ROA	1.3	1.0
ROE	14.3	14.6
Net Profit Margin	3.8	2.5
Profit (Interest) Income to Total Assets	7.5	8.7
Net-profit (Interest) Income to Total Assets	3.1	2.3
Non-Profit (Interest) Income to Total Assets	2.9	1.6
Investment (Credit)-Deposit Ratio	84.1	90.2
Capital Adequacy Ratio	11.3	9.1
Classified Investment (Credits) to Investments	6,2	3.4
Classified Investment (Credits) to Capital	44.3	31.0

Table XXI Islamic Banks' Capital Adequacy Ratio (CY11)

CAR	Number of Islamic Banks
Below 10.00%	2
10.00% to 11.00%	1
11.00% to 13.00%	2
>13.00	2
Total	**7**

Table XXII Islamic Banking Sector Investment-Deposit Ratio (as of 31.12.2011)

(Amount in billion BDT)

Items	Islamic Banks	Islamic Branches/Windows	Islamic Banking Sector
Deposits (Excluding Interbank)	769.8	49.0	818.8
Credits (Excluding Interbank)	698.9	39.9	738.8
IDR	90.8%	81.4%	90.2%

Table XXIII NBFIs' Aggregate Balance Sheet, Income Statement & Some Financial Indicators

(BDT in Billion)

Items	CY09	CY10	CY11
Property & Assets:			
Cash in hand	0.03	0.01	0.02
Balance with other banks and FIs	12.5	19.9	20.2
Money at call & short notice	0.000	0.004	0.003
Investment in government securities	2.3	3.1	3.0
Other investments	11.3	13.6	13.7
Lease finance	54.5	59.8	65.1
Term finance	79.3	109.2	134.8
Fixed assets	6.2	7.6	4.6
Other assets	15.1	18.0	21.3
Total assets	**189.9**	**243.6**	**276.4**
Liabilities:			
Borrowing from other banks and FIs	49.4	69.1	78.4
Deposits	84.1	99.8	116.4
Other liabilities	23.4	32.5	33.5
Total liabilities	155.7	193.8	223.1
Shareholders' equity (Capital)	27.6	42.6	57.3
Total liabilities and shareholders' equity	**189.9**	**243.6**	**276.4**
Income Statement:			
Interest Income	18.9	22.1	28.5
Less: Interest Expense	(12.9)	(14.6)	(19.8)
Net Interest Income	6.0	7.5	8.7
Investment Income	2.5	7.2	2.7
Add: Commission, exchange and brokerage	0.5	1.3	0.5
Add: Other Operating Income	2.2	3.9	2.9
Non-Interest income	5.2	12.4	6.0
Total Operating Income (Net II + Non-II)	11.3	19.9	14.7
Operating expenses	2.2	7.9	3.5
Profit before provisions	**9.1**	**11.9**	**11.2**
Total provisions	1.3	2.0	1.2
Profit before taxes	**7.8**	**9.9**	**10.0**
Tax Provisions	2.2	3.8	3.1
Net profit after taxes	**5.6**	**6.1**	**7.0**
ROA (percent)	3.0	2.5	2.5
ROE (percent)	20.5	14.4	12.1
NIM (percent)	4.0	4.4	3.4
Cost of deposits & borrowings (percent)	9.6	9.7	10.9
Average spread (percent)	4.4	6.1	6.8
Non-performing loans	9.8	10.5	10.3
Loan loss provisions (required)	4.9	5.9	6.0
Loan loss provisions (maintained)	5.6	6.9	7.0
Loan loss provisions (surplus)	**0.6**	**1.0**	**0.9**
No. of government-owned NBFIs	1	1	3
No. of local NBFIs	18	18	18
No. of NBFIs under foreign joint venture	10	10	10
Total no. of NBFIs	**29**	**29**	**31**
No. of branches	88	108	161

Data source: Department of Financial Institutions & Markets, BB.

*** Some data of CY 2009 & 2010 may differ from previous publication as the above data is audited data.***

Table XXIV NBFIs' Liquidity Position

(Amount in billion BDT)

Items		31 December 2011
Total liabilities	(For SLR Calculation)	107.2
Total term deposits	(For CRR Calculation)	78.8
Industry CRR (required)	(@ 2.5%)	2.0
Industry CRR (maintained)		2.2
Industry SLR (required)	(@ 5.0%)	5.4
Industry SLR (maintained)		14.1

Table XXV DSE General Index (last trading day of the month)

Date	DSE general index
02 Jan 2011	8304.6
31 Jan 2011	7484.2
28 Feb 2011	5203.1
31 Mar 2011	6352.1
28 Apr 2011	6050.9
31 May 2011	5758.3
30 Jun 2011	6117.2
31 Jul 2011	6459.6
25 Aug 2011	6212.0
29 Sep 2011	5910.2
31 Oct 2011	5036.5
30 Nov 2011	5268.6
29 Dec 2011	5257.6

Table XXVI Month-wise Capital Market Performance

(Amount in billion BDT)

Month	P/E ratio	Issued capital of all listed securities	Monthly turnover	Market capitalization
Dec-10	29.2	664.2	387.2	1903.2
Jan-11	26.7	703.1	187.0	3267.4
Feb-11	17.8	719.3	114.9	2413.1
Mar-11	19.3	737.9	217.1	2855.3
Apr-11	17.8	778.5	156.3	2772.2
May-11	16.3	796.1	92.6	2688.1
Jun-11	16.6	806.8	134.7	2853.9
Jul-11	17.5	825.7	298.2	3032.7
Aug-11	16.7	843.1	88.6	2957.9
Sep-11	15.6	847.4	70.6	2833.2
Oct-11	13.4	861.8	70.0	2525.4
Nov-11	13.6	871.4	69.5	2624.1
Dec-11	13.7	878.9	61.5	2616.7

Table XXVII Capital Market Ratios & Changes

FY	Market capitalization ratio	Market capitalization to investment ratio	P/E ratio	% change in market capitalization	% change in GDP
2006-07	10.1	41.2	17.3	120.9	13.7
2007-08	17.1	70.5	22.8	95.7	15.5
2008-09	20.2	82.8	18.4	33.3	12.6
2009-10	38.9	159.3	24.1	117.6	12.9
2010-11	36.2	146.5	16.6	5.7	13.4

Table XXVIII Sector-wise Contribution of Capital Market

(For the month December 2011)

Sector	% of market capitalization	% of market turnover	P/E ratio
Financial sector			
Banks	32.3	29.6	10.5
Financial institutions	9.3	6.7	12.2
Insurance	5.4	7.3	20.4
Mutual funds	1.6	2.7	6.2
Sector total	**48.6**	**46.3**	-
Manufacturing sector			
Foods	2.7	3.8	16.4
Pharmaceuticals	8.3	6.4	22.5
Textile	2.7	8.3	22.7
Engineering	5.0	7.6	26.4
Ceramics	1.4	3.3	30.2
Cement	3.4	3.1	21.6
Paper & printing	0.04	0.02	42.2
Tannery	0.7	0.6	15.6
Jute	0.04	0.2	32.6
Sector total	**24.3**	**33.3**	-
Service & miscellaneous			
Fuel & power	11.6	8.3	14.0
IT	0.2	1.1	38.9
Telecommunication	10.7	2.2	20.6
Service & real estate	0.7	1.3	25.8
Travel & leisure	0.5	3.0	23.0
Miscellaneous	3.4	4.5	8.0
Sector total	**27.1**	**20.4**	-
Market total	**100.0**	**100.0**	**13.7**

Table XXIX Automated Cheque Clearing

Item	CY10		CY11	
	Number *(in thousands)*	BDT in billion	Number *(in thousands)*	BDT in billion
High value (HV)	82	679.6	3123	751.1
Regular value (RV)	742	4177.8	17954	5093.9

Table XXX Electronic Banking Operations

Item	CY10	CY11
No. of banks providing online banking services	38	40
No. of banks providing internet banking services	18	24
No. of banks providing ATM/Debit card services	36	38
No. of banks providing credit card services	26	26
No. of Automated Teller Machines (ATM)	2071	3530
EFT-debit transactions (BDT in Billion)	-	17.4
EFT-credit transactions (BDT in Billion)	-	1.3
Transactions using automated teller machine (BDT in Billion)	281.6	379.9
Transactions using ATM/debit card (BDT in Billion)	270.9	298.2
Transactions using credit card (BDT in Billion)	31.4	42.3
Transactions using internet banking services (BDT in Billion)	72.1	418.2

Table XXXI Classified Loan Concentration Ratio (CY11)

(Amount in billion BDT)

	Concentration	
	Amount of NPL	% of Total
Worst* 5 Banks	140.8	60.3%
Rest 42 Banks	92.7	39.7%
Banking Sector (47 Banks)	233.5	100.0%
Worst* 10 Banks	170.8	73.1%
Rest 37 Banks	62.7	26.8%
Banking Sector (47 Banks)	233.5	100.0%

**Worst banks are the ones having highest amount of NPL in the total banking sector*

Note: *Worst 10 banks include 4 state-owned commercial banks, 4 domestic private commercial banks and 2 specialized development banks.*