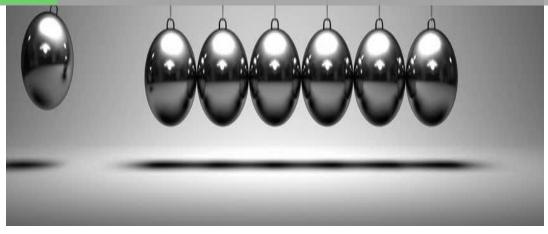




Macro Prudential Supervision of Financial System

Bangladesh Systemic Risk Report (BSRR)



Financial Stability Department
June 2024



Bangladesh Systemic Risk Report (BSRR)

June 2024

Advisor

Nurun Nahar Deputy Governor

Editors

- 1. Rup Ratan Pine, Executive Director
- 2. Dipti Rani Hazra, Director (FSD)

Co-editors

- 1. Subash Chandra Das, Additional Director
- 2. Anjuman Ara Akhtar, Joint Director
- 3. Shantanu Biswas, Joint Director
- 4. Mst. Shahida Kamrun, Deputy Director
- 5. Shafkat Mahmud, Assistant Director

Data Support

- 1. Banking Regulation and Policy Department
- 2. Department of Off-site Supervision
- 3. Department of Financial Institutions and Markets
- 4. Debt Management Department
- 5. Statistics Department

[•] This dashboard is based on data and information available as of end-June 2024, unless stated otherwise.

[•] This dashboard can be accessed through internet at https://www.bb.org.bd/en/index.php/publication/publictn/1/70

Table of Contents

List of acronyms	
Bangladesh Systemic Risk Report: An Overview	
1. Macro risk	1
1.1 Current and forecasted real GDP growth	1
1.2 Current account balance-to-GDP ratio	1
1.3 Aggregate debt-to-GDP ratio	2
1.4 Government debt-to-GDP ratio	2
1.5 Government deficit-to-GDP ratio	3
1.6 Household debt-to-gross national disposable income ratio	3
1.7 Non-financial Corporation (NFC) debt-to-GDP ratio	4
2. Credit risk	5
2.1 Annual Growth rate of banks' loans to households	5
2.2 Annual Growth rate of NBDCs' loans to households	5
2.3 Growth of banks' loans to private non-financial corporations (NFC)	6
2.4 Growth of NBDCs' loans to private non-financial corporations (NFC)	6
2.5 Provision maintenance ratio of banks	7
2.6 Provision maintenance ratio of FCs	7
2.7 Changes in banks' interest rates for housing loans	8
3. Funding and liquidity risk	g
3.1 Bangladesh Bank's liquidity support to banks	9
3.2 Banks' advance-to-deposit ratio (ADR)	9
3.3 Maturity profile of government's outstanding debt securities	10
3.4 Subordinated debt	11
3.5Banks' LCR and NSFR	11
4. Market risk	12
4.1 Equity indices	12
4.2 Price/earnings (P/E) ratio	12
4.3 Weighted average call money market rates	13
4.4 Scheduled banks' weighted average interest rate on deposits and advances	13
4.5 Weighted average exchange rate (USD to BDT)	14
5. Profitability and solvency risk	15
5.1 Banks' profitability indicators	15
5.2 Banks' solvency indicators	16

5.3 FCs' profitability indicators	17
5.4 FCs' solvency indicators	18
6. Inter-linkages	19
6.1 Growth of banks' credit (gross) to government	19
6.2 Growth of NBDCs' credit (gross) to government	19
6.3 Growth of banks' loans to housing sector	20
6.4 Growth of FCs' loans to housing sector	20
6.5 Banks' loans to counterpart sectors	21
6.6 NBDCs' loans to counterpart sectors	21
6.7 Banks' cross-border claim (Foreign Assets)	22
7. Structural risk	23
7.1 Banking sector size	23
7.2 Banking sector leverage	24
7.3 Finance Companies' (FCs) sector size	24
7.4 Finance Companies' (FCs) sector leverage	25
Annex to Bangladesh Systemic Risk Dashboard	26

List of acronyms

ADR Advance-to-Deposit Ratio

BB Bangladesh Bank

BRPD Banking Regulation and Policy Department
DFIM Department of Financial Institutions and Markets

DMD Debt Management Department
DOS Department of Off-site Supervision

DSE Dhaka Stock Exchange DSEX DSE Broad Index

FCBs Foreign Commercial Banks

FCs Finance Companies

FSD Financial Stability Department

FY Fiscal Year

GDP Gross Domestic Product

GNDI Gross National Disposable Income

GOB Government of the People's Republic of Bangladesh

H1 First half of a calendar year
H2 Second half of a calendar year
IMF International Monetary Fund
LCR Liquidity Coverage Ratio

LHS Left Hand Side

NBDC Non-bank Depository Corporation

NFCs Non-financial Corporations

NII Net Interest Income
NPL Non-performing Loan
NSFR Net Stable Funding Ratio
OBU Off-shore Banking Unit
PCBs Private Commercial Banks

PD Primary Dealer
P/E ratio Price/Earnings Ratio
RHS Right Hand Side
ROA Return on Assets
ROE Return on Equity
RWA Risk-weighted Assets

SOCBs State-owned Commercial Banks

SBs Specialized Banks T-bill Treasury Bill T-bond Treasury Bond

TOI Total Operating Income

Y-o-Y Year-on-year

Bangladesh Systemic Risk Report: An Overview

The real GDP growth rate of Bangladesh increased slightly in FY24 to 5.82%, up from 5.78% of the previous year, driven by expansions in services, industry, and agriculture, alongside easing inflation and modest export growth aligned with EU recovery. The current account balance (CAB) saw a moderate decline, largely due to import levels surpassing exports and remittances. Additionally, the aggregate debt-to-GDP ratio (including and excluding grants) and the government deficit-to-GDP ratio both declined; likewise, government debt-to-GDP ratio decreased minimally in FY24 compared to that of FY23. However, in the first half of 2024, a slowdown was observed in both the household debt-to-Gross National Disposable Income (GNDI) ratio and the NFC debt-to-GDP ratio.

During the first half of 2024, household loan portfolios for both banks and NBDCs demonstrated a downward trend. Banks' loans to Non-Financial Corporations (NFCs) rose slightly, while NBDCs' loans to private NFCs declined considerably in a negative direction. Apart from this, both the LCR and the NSFR of the banking sector remained well above the required level in H1 of 2024, supported by Bangladesh Bank through facilities mainly Repo, Assured Liquidity Support (ALS) options. The banking sector's advance-deposit ratio (ADR) fell from December 2023 by 18 basis points to 80.20% by end-June 2024.

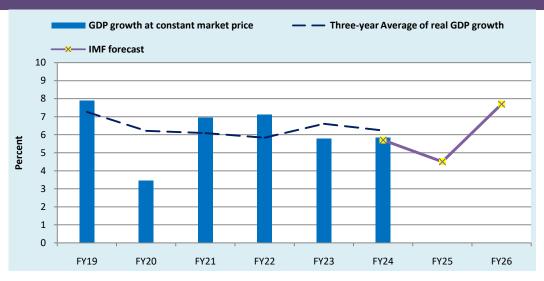
Banks' Treasury bonds with a remaining maturity of over 5 years and up to 10 years held the largest portion of total share, while the remaining maturity of more than 15 years represented the least at end-June 2024. Treasury bills with up to 91 days maturity held the major part of the short-term Government securities. Additionally, outstanding Shari'ah- based SUKUK bonds and Special-Purpose Treasury Bonds stood at BDT 190 billion and BDT 393 billion, respectively. Moreover, in stock market, both the equity indices and the market P/E ratio of the Dhaka Stock Exchange (DSE) declined. On the other hand, the average call money borrowing rates, as well as the weighted average interest rates on banks' loans and deposits, rose significantly in the review period. The exchange rate of Bangladesh Taka (BDT) further depreciated notably against the USD at end-June 2024.

The banking sector's gross non-performing loan (NPL) ratio rose significantly, leading to lower profitability and reduced ROA and ROE. The Tier-1 capital-to- risk-weighted-assets (RWA) ratio declined slightly, with a similar trend in FCs' NPL ratio, affecting negatively to their growth of overall profit and Tier-1 capital to RWA ratio of the FCs sector. At the end of June 2024, provision maintenance ratios for banks and FCs were 78.27% and 88.10%, respectively.

At the end of June 2024, credit growth to the government by banks fell, while NBDCs' credit increased. Annual growth in banks' credit to the commercial and residential housing sectors slowed down, alongside with this, FCs credit to the housing sector experienced a further decline. Moreover, both banks' and NBDCs' loans to counterpart sectors exhibited a progressive escalation in terms of volume with NFCs receiving the lion's share of total disbursement. Banks' cross-border claim accelerated significantly in the review period. On the other hand, assets-to-nominal GDP ratios for both domestic and foreign banks decreased notably at end-June 2024 compared to those of end-December 2023, same as for FCs. The banking sector's leverage ratio (Tier-1 capital to total exposure in line with Basel III) fell moderately, likewise FCs' leverage ratio (capital to assets) decreased substantially.

1. Macro risk

1.1 Current and forecasted real GDP growth

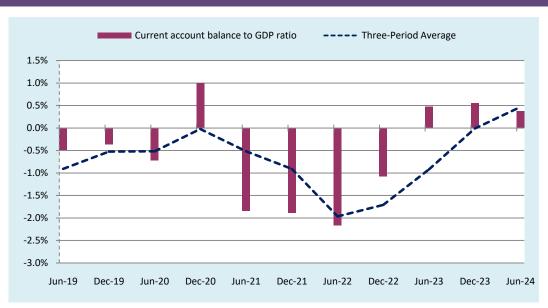


Notes: 1) The base year is 2015-16. 2) GDP growth is shown for fiscal years.

Source: Monthly Economic Trends, Statistics Department, BB; IMF's World Economic Outlook, April 2024 and October 2024.

The real GDP growth increased slightly from 5.78 percent in FY23 to 5.82 percent in FY24.

1.2 Current account balance-to-GDP ratio



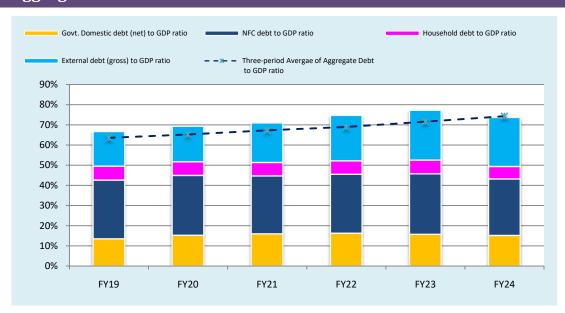
Notes: 1) Data for December-2023 is revised. 2) Provisional data is used for June-2024. 3) June based GDP data is used for December in calculating the concerned ratio.

Source: Monthly Economic Trends, Statistics Department, BB.

The current account balance-to-GDP ratio decreased with a positive figure during the first half of the year 2024 compared to that of the second half of 2023.

1. Macro risk-Cont'd.

1.3 Aggregate debt-to-GDP ratio

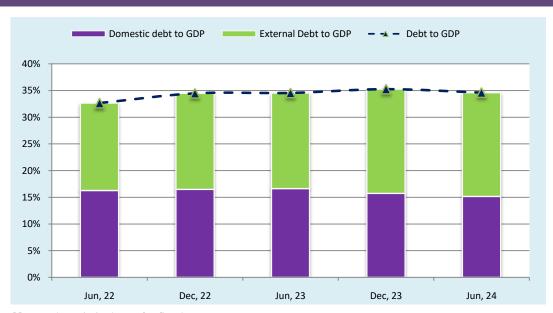


Notes: 1) Because of unavailability of half yearly data of GDP, aggregate debt-to-GDP ratio is shown only for fiscal years. 2) Aggregate debt includes both domestic and external debt position. 3) Domestic debt refers to the claims on government (net), households, and non-financial corporation (NFC) by depository corporations.

Sources: Monthly Economic Trends, Statistics Department, BB; National Summary Data Page (NSDP), BB.

The aggregate debt-to-GDP ratio showed an increasing trend from FY19 to FY23, which decreased slightly in FY24.

1.4 Government debt-to-GDP ratio



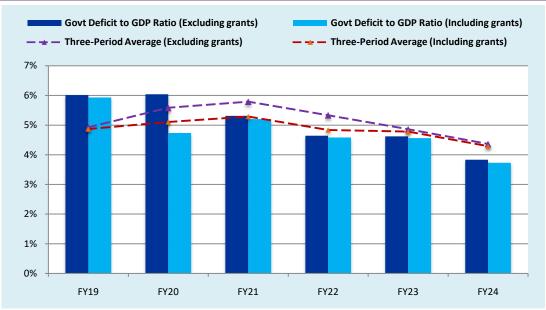
Notes: The ratio is shown for fiscal years.

Sources: Monthly Economic Trends, Statistics Department, BB; National Summary Data Page (NSDP), BB.

Government debt-to-GDP ratio decreased marginally at the end of June 2024, compared to that of end-December 2023.

1. Macro risk-Cont'd.

1.5 Government deficit-to-GDP ratio

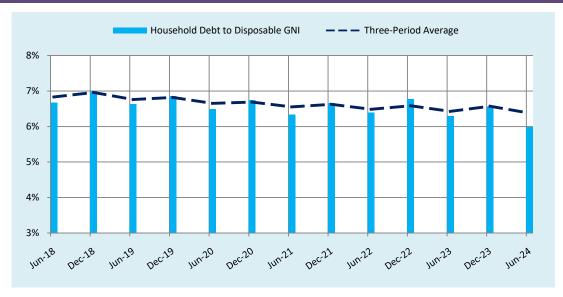


Notes: 1) Government deficit-to-GDP ratio is shown for fiscal years. 2) For FY20 to FY22, GDP is considered as per new base year 2015-16. 3) Data for FY23 is revised.

Source: Monthly Report on Fiscal Position, June-2024 issue, Ministry of Finance, Government of Bangladesh.

Compared to the preceding fiscal year, the Government's Deficit-to-GDP ratio, both including and excluding grants, decreased slightly in FY24.

1.6 Household debt-to-gross national disposable income ratio



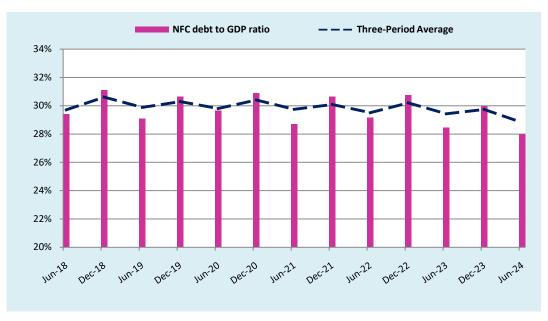
Notes: 1) June-2024 based data is provisional. 2) Dec-2023 based data is revised. 3) June based data of gross national disposable income (GNDI) is used for December in calculating the ratio.4) Before June-2022 data represents Household debt to gross national income ratio.

Sources: Monthly Economic Trends, Statistics Department, BB.

Household debt-to-gross national disposable income (GNDI) ratio declined moderately in June 2024 and came to the lowest position compared to the previous several periods.

1. Macro risk-Cont'd.

1.7 Non-financial Corporation (NFC) debt-to-GDP ratio



Notes: 1) June-2024 based data is provisional. 2) Dec-2023 based data is revised. 3) NFC debt includes debts of both public and private NFCs. 4) June based GDP data is used for December in calculating the ratio. **Sources:** Monthly Economic Trends, Statistics Department, BB.

The ratio of NFCs' debt-to-GDP decreased in the first half of the year 2024 compared to that of the second half of 2023. Notable that, the major part of total NFCs' debt is acquiring by private NFCs' debt.

2. Credit risk

2.1 Annual Growth rate of banks' loans to households

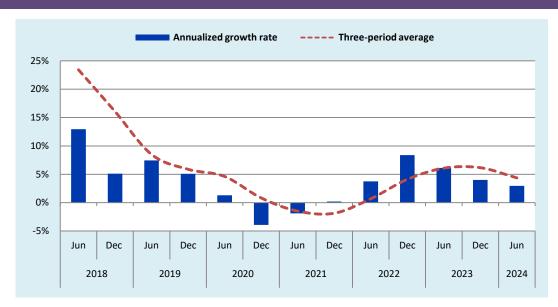


Notes: Loans refer to outstanding loans and advances extended to domestic households (individuals) excluding bills.

Source: Statistics Department, BB.

Banks' credit growth to the household sector declined significantly in this review period and demonstrated a decreasing trend since June 2023.

2.2 Annual Growth rate of NBDCs' loans to households



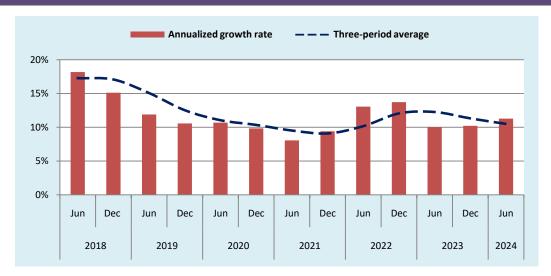
Notes: NBDCs include deposit taking FCs¹, Ansar-VDP Unnayan Bank, Karmasangsthan Bank, Grameen Bank and Bangladesh Samabaya Bank. **Source:** Statistics Department, BB.

Non-bank depository corporations' (NBDCs') loans to the household sector decreased slightly in the first half of the year 2024 compared to that of the second half of the previous year.

¹FCs refers to non-bank finance companies. Out of 35 FCs, 29 are deposit taking FCs.

2. Credit risk-Cont'd.

2.3 Growth of banks' loans to private non-financial corporations (NFC)

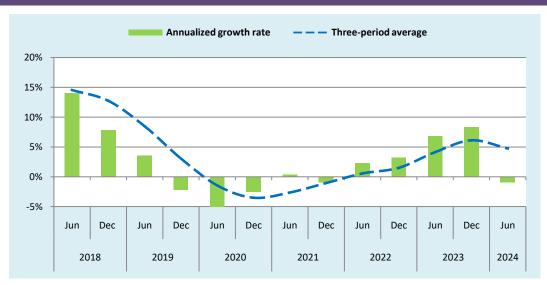


Notes: Loans refer to outstanding loans and advances extended to private NFCs excluding bills.

Source: Statistics Department, BB.

The growth of banks' loan to private NFCs accelerated moderately in June 2024 compared to that of December 2023.

2.4 Growth of NBDCs' loans to private non-financial corporations (NFC)



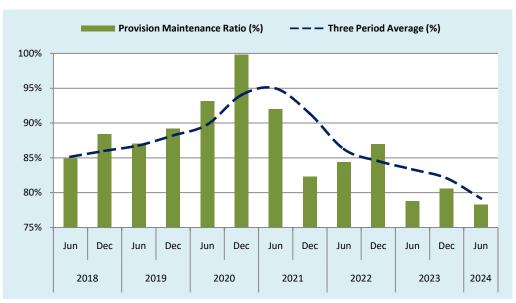
Notes: NFC refers to private NFCs only. NBDCs include deposit taking FCs, Ansar-VDP Unnayan Bank, Karmasangsthan Bank, Grameen Bank, and Bangladesh Samabaya Bank.

Source: Statistics Department, BB.

After showing an upward trend from June 2022 to December 2023, NBDCs' loans growth to private NFCs declined significantly in June 2024.

2. Credit risk-Cont'd.

2.5 Provision maintenance ratio of banks

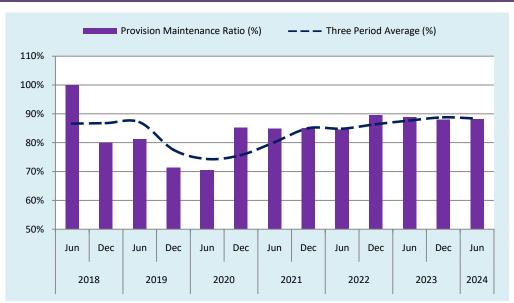


Notes: Provision maintenance ratio refers to maintained provision as a percentage of required provision.

Source: BRPD, BB.

Banks' provision maintenance ratio declined than that of previous period and stood at 78.27 percent at end-June 2024.

2.6 Provision maintenance ratio of FCs



Notes: Data for June 2024 and December 2023 are un-audited.

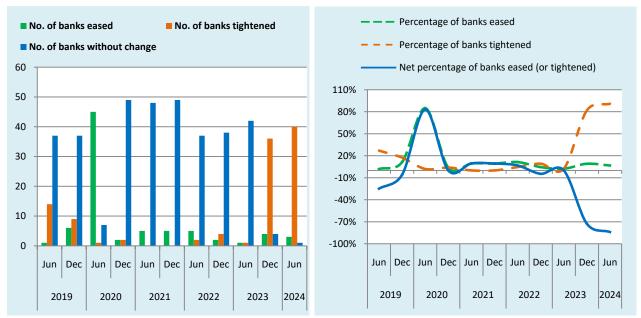
Source: DFIM, BB.

FCs' provision maintenance ratio increased slightly compared to that of preceding period and stood at 88.1 percent at end-June 2024.

2. Credit risk-Cont'd.

2.7 Changes in banks' interest rates for housing loans

- interest rates for housing loans
- a. No. of banks having changes in their b. Percentage of banks having changes in their interest rates for housing loans



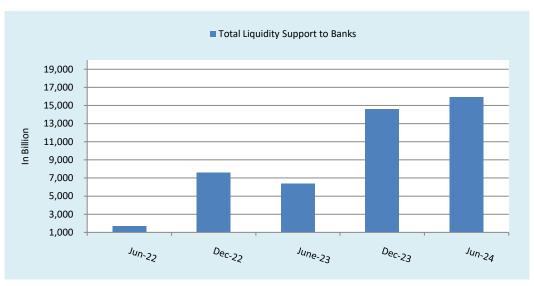
Notes: Changes in banks' announced interest rate for housing loans have been used as a proxy for changes in banks' credit standards. Net percentage change is the difference between the share of banks reporting that interest rates have been eased (decreased) and the share of banks reporting that they have been tightened (increased). A positive net percentage change indicates that a larger proportion of banks have eased credit standards ("net easing"), whereas a negative net percentage change indicates that a larger proportion of banks have tightened credit standards ("net tightening").

Source: Monthly Economic Trends, Statistics Department, BB; and Scheduled bank lending rate, Bangladesh Bank website (https://www.bb.org.bd/en/index.php/financialactivity/interestlending).

At the end of June 2024, 90.9 percent of 44 respondent scheduled banks tightened the interest rates of housing loans, while 6.8 percent of banks eased; the remaining banks kept their rates unchanged.

3. Funding and liquidity risk

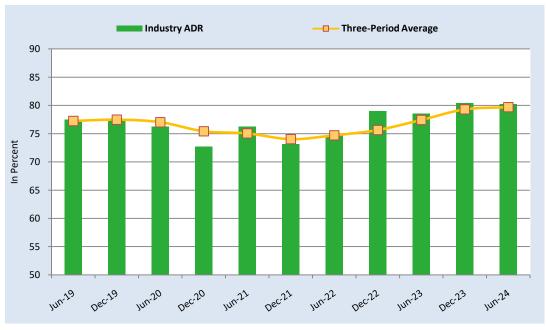
3.1 Bangladesh Bank's liquidity support to banks



Source: DMD, BB.

Bangladesh Bank's total liquidity assistance increased considerably in the review period compared to that of the preceding period.

3.2 Banks' advance-to-deposit ratio (ADR)



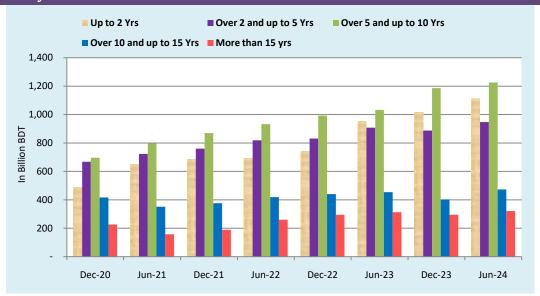
Source: DOS, BB.

At end-June 2024, the industry's Advance-to-Deposit Ratio (ADR) decreased marginally, and stood at 80.20 percent which was 80.38 percent at end-December 2023.

3. Funding and liquidity risk-cont'd.

3.3 Maturity profile of government's outstanding debt securities

a. Treasury Bond

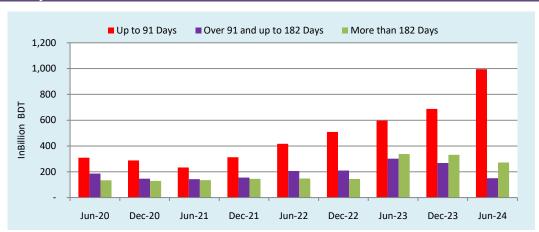


Notes: 1.The maturity profile refers to the residual maturity of long-term and short-term debt securities issued by Government of Bangladesh. Long-term debt securities include government Treasury bond with a maturity of more than 12 months. Data are based on amounts outstanding at the end of the corresponding period. 2. Yrs-Years

Source: DMD, BB.

Treasury bonds with all remaining maturities increased moderately during this review period. The maturity over 5 and up to 10 years remained the largest in terms of volume, whereas the ones with remaining maturity of more than 15 years remained smaller at end-June 2024. Moreover, there were Shari'ah-based SUKUK bonds worth BDT 190.00 billion and Special Purpose Treasury Bonds (SPTB) with various maturities amounting to BDT 393 billion.

b. Treasury Bill



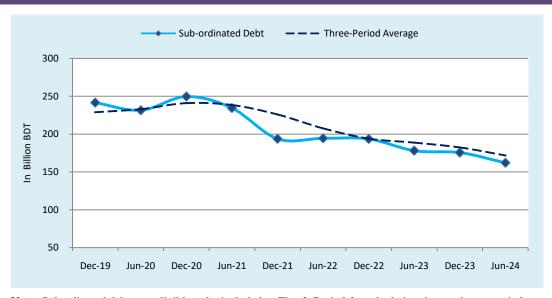
Notes: Short-term debt securities include government Treasury bill with a maximum maturity of 12 months. Data are based on amounts outstanding at the end of the corresponding period.

Source: DMD, BB.

Treasury bills with remaining maturities up to 91 days increased notably and rest of the remaining decreased at end-June 2024 compared to that of the end-December 2023. It is noteworthy that, the remaining maturities up to 91 days remained the largest and over 91 and up to 182 days remained smaller in terms of volume.

3. Funding and liquidity risk-cont'd.

3.4 Subordinated debt

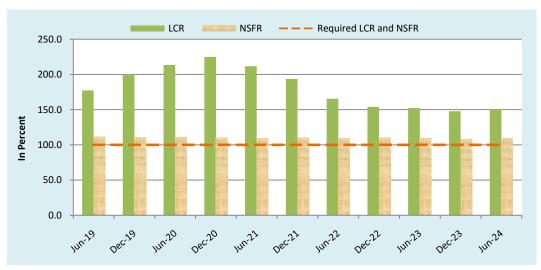


Note: Subordinated debts are eligible to be included as Tier-2 Capital for calculating the regulatory capital as per Basel III Capital Framework.

Source: DOS, BB.

Following a downward trend, Subordinated debt issued by banks decreased further during the review period compared to that of the preceding period.

3.5Banks' LCR and NSFR



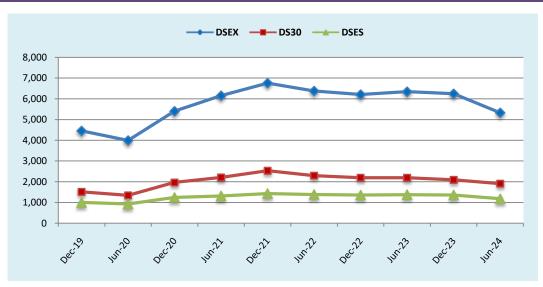
Note: 1) BDBL, BKB, PKB and RAKUB are exempted from maintaining LCR and NSFR. 2) Requirement for LCR is equal or greater than 100 percent and for NSFR, it is above 100 percent in Bangladesh.

Source: DOS, BB.

Liquidity coverage ratio (LCR) and Net stable funding ratio (NSFR) of the banking sector increased at end-June 2024 compared to that of end-December 2023.

4. Market risk

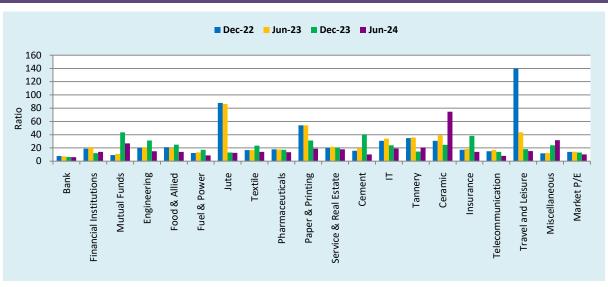
4.1 Equity indices



Source: DSE Website.

DSEX, DS30, and DSES of Dhaka Stock Exchange (DSE), declined further at the end of June 2024 compared to those of end-December 2023.

4.2 Price/earnings (P/E) ratio



Source: DSE Website.

The P/E ratio of 78.95 percent of the listed sectors decreased in the review period compared to that of the preceding period. The market P/E ratio as a whole decreased and stood at 10.22 at end-June 2024, from 13.12 at end-December 2023.

4. Market risk-cont'd.

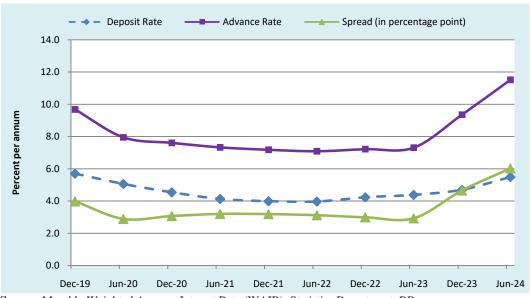
4.3 Weighted average call money market rates



Source: Monthly Economic Trends, Statistics Department, BB.

In accordance with maintaining the existing upward trend, the weighted average call money borrowing rate increased further at end-June 2024compared to that of end-December 2023.

4.4 Scheduled banks' weighted average interest rate on deposits and advances

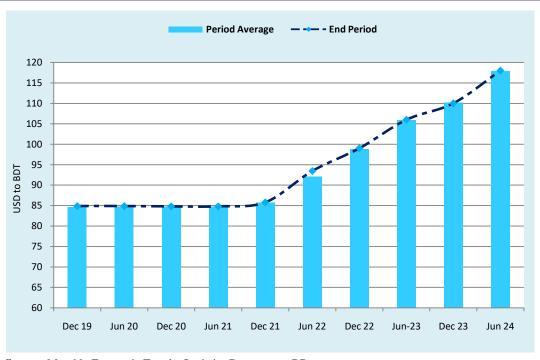


Source: Monthly Weighted Average Interest Rate (WAIR), Statistics Department, BB.

The weighted average interest rate on deposits and advances exhibited an increasing trend since December 2022. The spread increased further by 1.37 percentage points at the end of June 2024 compared to that of end-December 2023.

4. Market risk-cont'd.

4.5 Weighted average exchange rate (USD to BDT)



Source: Monthly Economic Trends, Statistics Department, BB.

Bangladeshi Taka (BDT) depreciated further against US Dollar at end-June 2024 and reached in peak among the last several years, largely due to the unstable global economy, an expanded trade imbalance, low FDI and high cost of imported products/raw materials.

5. Profitability and solvency risk

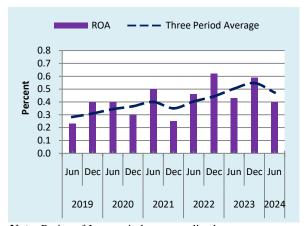
5.1 Banks' profitability indicators

a. Return on equity (ROE)

ROE — — Three Period Average 12 10 8 6 percent 4 2 0 Dec Dec Jun Dec Dec 2024 2019 2020 2021 2022 2023

Note: Ratios of June period are annualized. **Source:** DOS, BB; Computation: FSD, BB.

b. Return on assets (ROA)



Note: Ratios of June period are annualized. **Source:** DOS, BB; Computation: FSD, BB.

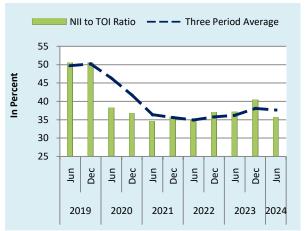
Banks' ROE and ROA both decreased significantly in the first half of the year 2024 compared to that of the second half of 2023.

c. Operating Expense-to- Operating income ratio



Note: Ratio of operating expenses and operating income. **Source:** DOS, BB; Computation: FSD, BB.

d. Net interest income(NII) to total operating income (TOI)ratio



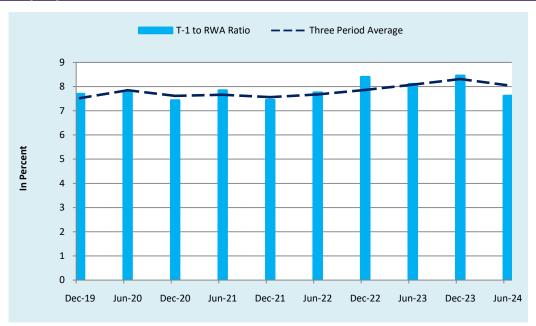
Note: Ratio of net interest income and total operating income. **Source:** DOS, BB; Computation: FSD, BB.

Banks' Operating expense-to- operating income ratio decreased remarkably at end-June 2024 though it was remaining in the peak at end-June 2023 during the last several years. Likewise, banks' net interest income to total operating income ratio also decreased during the same period.

5. Profitability and solvency risk-cont'd.

5.2 Banks' solvency indicators

a. Tier-1 (T-1) to RWA ratio

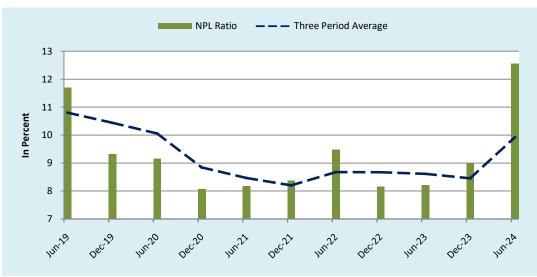


Note: Ratio of Tier-1 capital to total risk-weighted assets.

Source: DOS, BB.

Banks' Tier-1 capital to total risk-weighted asset ratio declined moderately in the review period compared to that of end-December 2023 and stood at 7.61 percent, well above the regulatory requirement of 6.0 percent.

b. Gross non-performing loan (NPL) ratio



Note: Data up to September 2020 contains information without OBU.

Source: BRPD, BB.

Following an upward trend since December 2022, Banks' gross NPL ratio increased remarkably at end-June 2024 in comparison with that of end-December 2023.

5. Profitability and solvency risk-cont'd.

5.3 FCs' profitability indicators

a. Return on assets (ROA)



Note: Data for Dec-23 and June-24 are provisional.

Source: DFIM, BB.

FCs' ROA with a remaining negative position, decreased further at end-June 2024 compared to that of end-December 2024.

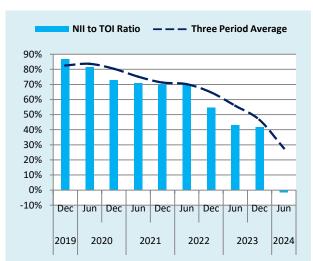
b. Operating Expense-to- operating income ratio



Note: 1) Operating expense to income ratio refers to the ratio of operating expenses and operating income. 2) Dec-23 and June-24 data are provisional.

Source: DFIM, BB.

c. Net interest income(NII) to total operating income (TOI) ratio



Note: 1) Ratio of net interest income and total operating income. 2) Dec-23 and June-24 data are provisional.

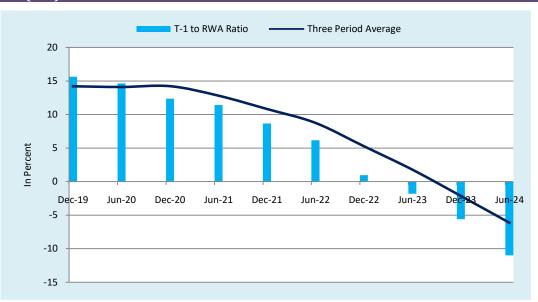
Source: DFIM, BB.

FCs' Operating expense-to-income ratio demonstrated an upward trend since June 2022. Further, it increased significantly at end-June 2024 in comparison with that of end-December 2023. In contrast, net interest income to total operating income ratio decreased notably and remained negative in the review period compared to that of the previous period.

5. Profitability and solvency risk-cont'd.

5.4 FCs' solvency indicators

a. Tier-1 (T-1) to RWA ratio



Note:1) Ratio of Tier-1 (core) capital to total risk-weighted assets; 2) Data for Dec-23 are provisional. **Source**: DFIM, BB.

At the end of June 2024, FCs' Tier-1 capital to RWA ratio expanded in negative direction and stood at -10.98 percent.

b. Gross non-performing loan (NPL) ratio



Note: 1) Ratio of non-performing loans and leases to total loans and leases. 2) Data for June-23 and Dec-23 are provisional.

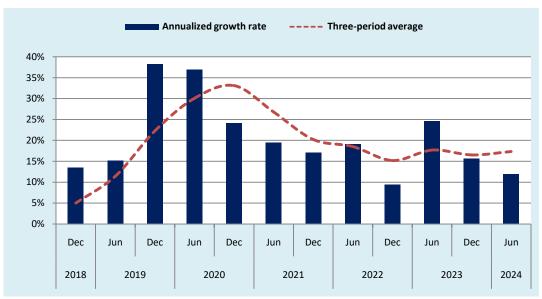
Source: DFIM, BB.

FCs' gross NPL ratio showing a persistent upward trend and it further increased at the end of June 2024 and stood at 33.15 percent from 31.55 percent at end-December 2023.

.

6. Inter-linkages

6.1 Growth of banks' credit (gross) to government

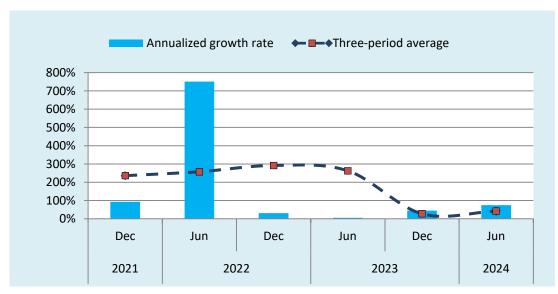


Notes: Credit extended to the government refers to gross amount.

Source: Statistics Department, Bangladesh Bank.

Government borrowings from the banking sector decreased slightly in the review period.

6.2 Growth of NBDCs' credit (gross) to government



Notes: NBDCs include deposit taking FCs, Ansar-VDP Unnayan Bank, Karmasangsthan Bank, Grameen Bank, and Bangladesh Samabaya Bank.

Source: Statistics Department, Bangladesh Bank.

Government borrowings from the NBDCs increased considerably at end-June 2024 compared to that of end-December 2023.

6. Inter-linkages- Cont'd.

6.3 Growth of banks' loans to housing sector

a. Loans to residential housing

10%

5%

0%

Dec

2019

Annualized growth rate — — Three-period average 30% 25% 20% 15%

Jun Dec

2021

Jun Dec

2022

Jun Dec Jun

2023

2024

b. Loans to commercial housing



Notes: Data for Dec-23 and Jun-24 are provisional. 2) Loans refer to outstanding loans and advances excluding bills. 3) Loans to residential housing refer to loans extended to domestic households for house/flat/land purchase and repair/renovation/extension. 4) Loans to commercial housing refer to loans extended to commercial developers/contractors.

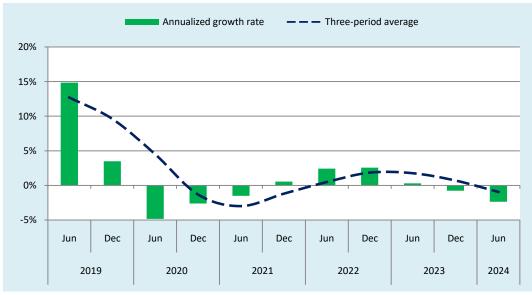
Source: Statistics Department, Bangladesh Bank.

Jun Dec

2020

Loan growth in the residential housing sector and commercial housing sector both declined in the review period compared to that of the preceding period.

6.4 Growth of FCs' loans to housing sector



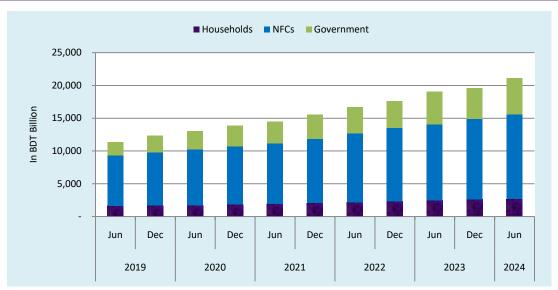
Notes: Data for Dec-23 and June-24 are unaudited.

Source: DFIM, Bangladesh Bank.

FCs' loan growth to the housing sector declined significantly at the end of June 2024 in comparison with that of the end of December 2023.

6. Inter-linkages- Cont'd.

6.5 Banks' loans to counterpart sectors

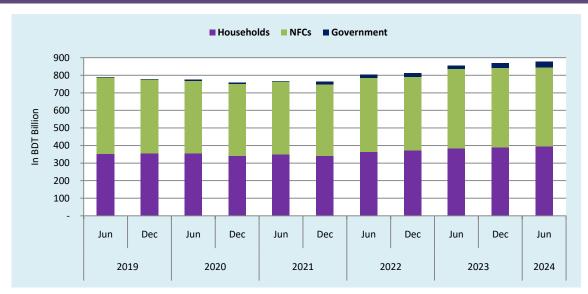


Notes: Loans extended to households and NFCs refer to outstanding loans and advances excluding bills. Loans to government refer to gross amount.

Source: Statistics Department, Bangladesh Bank.

Banks' loans to their major public and private counterpart sectors maintained the continuous increasing trend at the end of June 2024 likewise the preceding period. Loans to NFCs accounted for major part of overall loan portfolio of the banking sector.

6.6 NBDCs' loans to counterpart sectors



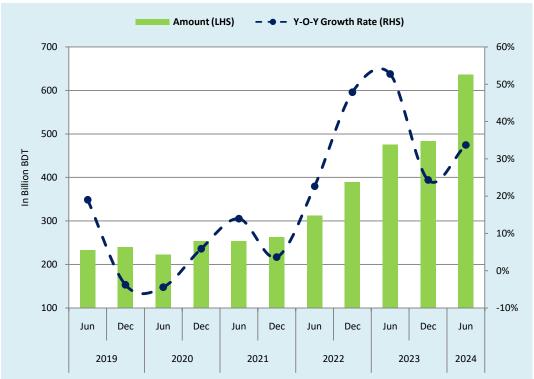
Notes: Loans to government refer to gross amount. NBDCs include deposit taking FCs, Ansar-VDP Unnayan Bank, Karmasangsthan Bank, Grameen Bank and Bangladesh Samabaya Bank.

Source: Statistics Department, Bangladesh Bank.

The growth of NBDCs' loans to counterpart sectors exhibited a rising trend since June 2022. At end-June 2024, the growth increased further compared to that of end-December 2023.

6. Inter-linkages-Cont'd.

6.7 Banks' cross-border claim (Foreign Assets)



Notes: Cross-border claim includes foreign currency notes in hand, balances with banks abroad, bilateral trade credits, wage earners' balance abroad, foreign bills, foreign direct investment, portfolio investment.

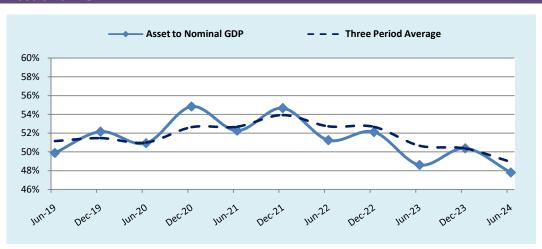
Source: Statistics Department, Bangladesh Bank.

Banks' cross-border claim increased significantly in the first half of the year 2024 in comparison with that of the second half of 2023.

7. Structural risk

7.1 Banking sector size

a. Domestic Banks

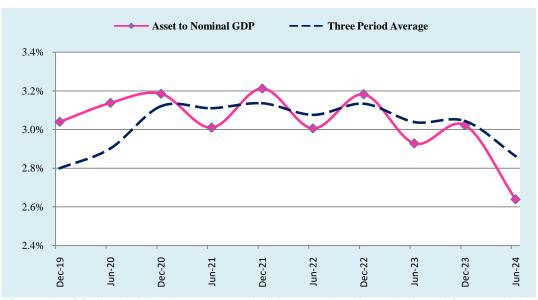


Note: Ratio of domestic banks' total assets to Nominal GDP. June based GDP data is used for December in calculating this ratio.

Source: DOS, BB, and Monthly Economic Trends, BB; computation: FSD, BB.

Domestic banks' total assets to nominal GDP ratio decreased to 47.80 percent at end-June 2024 from 50.38 percent at end-December 2023.

b. Foreign Banks



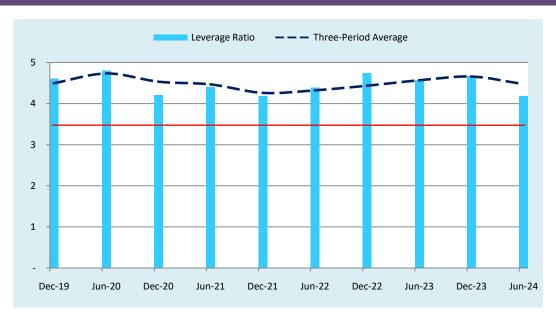
Note: Ratio of foreign banks' total assets to Nominal GDP. June based GDP data is used for December in calculating this ratio.

Source: DOS, BB and Monthly Economic Trends, BB; computation: FSD, BB.

Foreign banks' total assets to nominal GDP ratio decreased in the first half of the year 2024 compared to that of the second half of 2023.

7. Structural risk-cont'd.

7.2 Banking sector leverage



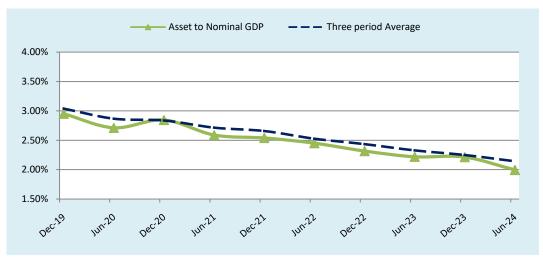
Note: Leverage ratio is defined as the ratio of Tier-1 capital after required deduction to total exposure after required deduction, in line with Basel III.

Source: DOS, BB.

Banking sector's leverage ratio decreased slightly at end-June 2024 compared to that of end-December 2023 and stood at 4.18 percent which was above the regulatory requirement of 3.50 percent for 2024.

7.3 Finance Companies' (FCs) sector size

FCs' assets to nominal GDP



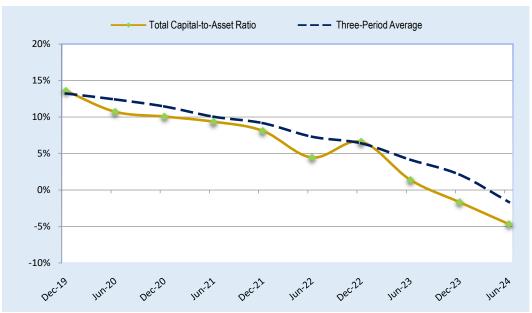
Note: June based GDP data is used for December in calculating this indicator.

Source: DFIM, BB.

Trailing a continuous downward trend since June 2021, FCs' assets to nominal GDP ratio decreased again at the end of June 2024 compared to that of end-December 2023.

7. Structural risk-cont'd.

7.4 Finance Companies' (FCs) sector Leverage



Note: June based GDP data is used for December in calculating this indicator.

Source: DFIM, BB.

Finance companies' leverage, defined as total capital-to-asset ratio, decreased notably in the review period compared to that of the preceding period.

Annex to Bangladesh Systemic Risk Report

1. Macro risk:

1.1 Current and forecasted real GDP growth

Sources: Monthly Economic Trends, Bangladesh Bank and World Economic Outlook Database, IMF.

Current real GDP growth is the latest actual financial year-on-year growth at constant market price. Average of three periods is the three-year moving average of GDP growth rate. Forecasted real GDP growth rate is taken from IMF's World Economic Outlook Database, October, 2024.

1.2 Current account balance-to-GDP ratio

Sources: Monthly Economic Trends, BB.

Current account balance represents the sum of the 6 months' current account balances. GDP is at current market price. Average of three periods is the three-period moving average of current account balance-to-GDP ratio.

1.3 Aggregate Debt-to-GDP ratio

Sources: Monthly Economic Trends, BB and National Summary Data Page (NSDP)-Bangladesh (in BB website).

The aggregate debt as a percentage of GDP represents the sum of the debt-to-GDP ratio of non-financial corporations (NFCs), Government (net), households and external debt (gross).

1.4 Government debt-to-GDP ratio

Sources: Monthly Economic Trends, BB and Quarterly Debt Bulletin (various issues), Finance Division, Ministry of Finance, GOB (Government of the People's Republic of Bangladesh).

Government debt includes both government's domestic debt and external debt. Average of three periods represents three-period moving average of the Public debt-to-GDP ratio.

1.5 Government deficit-to-GDP ratio

Sources: Monthly Report on Fiscal Position, Ministry of Finance, Government of Bangladesh.

The government deficit-to-GDP ratio is shown as both deficits excluding grants and including grants to nominal GDP.

1.6 Household debt-to-gross national disposable income ratio

Sources: Monthly Economic Trends, BB.

Claims on other resident sector have been classified as Household debts. The resident sector has been classified according to the IMF's Monetary and Financial Statistics Manual (MFSM). Claims on resident sector exclude BB and ODCs (other depository corporations). Household debt-to-gross national disposable income ratio represents resident sector loans as a ratio of gross disposable national income over the financial year.

1.7 NFC debt-to-GDP ratio

Sources: Monthly Economic Trends, BB.

Debts of both public non-financial corporations and private non-financial corporations are considered for deriving non-financial corporations' debt. Public non-financial corporations are corporations owned or controlled by the Government that produce goods or services for sale to the public at a significant market price whereas private non-financial corporations encompass corporations and quasi corporations engaging primarily in the production of goods and non-financial services for sale to the public at a significant market price (profit motive).

2. Credit Risk:

2.1 Annual growth rate of banks' loans to households

Source: Statistics Department, Bangladesh Bank.

It refers to loans extended by banks to domestic households (individual customers); it excludes bills purchased and discounted.

2.2 Annual growth rate of NBDCs' loans to households

Source: Statistics Department, Bangladesh Bank.

It refers to loans extended by non-bank depository corporations (NBDCs) to domestic households; NBDCs include depository finance companies (FCs), Ansar-VDP Unnayan Bank, Karmasangsthan Bank, Grameen Bank and Bangladesh Samabaya Bank.

2.3 Annual growth rate of banks' loans to private NFCs

Source: Statistics Department, Bangladesh Bank.

It refers to loans extended by banks to private non-financial corporations (NFCs); it excludes bills discounted and purchased.

2.4 Annual growth rate of NBDCs' loans to private NFCs

Source: Statistics Department, Bangladesh Bank.

It refers to loans extended by NBDCs to private NFCs.

2.5 Provision maintenance ratio of banks

Source: Banking Regulation and Policy Department, Bangladesh Bank.

It refers to the ratio of loan-loss provision maintained by banks against their required provision.

2.6 Provision maintenance ratio of FCs

Source: Department of Financial Institutions and Market, Bangladesh Bank.

It refers to the ratio of loan-loss provision, maintained by FIs, against their required provision.

2.7 Changes in banks' interest rates for housing loans

Source: Monthly Economic Trends, Statistics Department, BB. Bangladesh Bank website (https://www.bb.org.bd/en/index.php/financialactivity/interestlending).

It refers to the net percentage change in credit standards for housing loans by banks; changes in banks' announced interest rate for housing loans have been used as a proxy for changes in banks' credit standards; net percentage change is the difference between the share of banks reporting that interest rates have been tightened (increased) and the share of banks reporting that they have been eased (decreased).

3. Funding and liquidity risk:

3.1 Bangladesh Bank's liquidity support to banks

Sources: Debt Management Department, BB.

Bangladesh Bank's liquidity support comprises Repo, Special Repo (Standing Lending Facility-SLF), Assured Liquidity Support (ALS), Islamic Bank Liquidity Support (IBLF), Mudaraba Liquidity Support (MLS) and newly added two components named Assured Repo against SPTB and SLS (Special Liquidity Support to Shari'ah- based Bank) against SPTB. Repo facilities are provided on an overnight (one-day) or 7, 14 and 28-day basis to the banks and FCs to resolve the temporary liquidity problem as well as to increase the money supply in the economy. BB also provides ALS facilities to the primary dealers (PDs) against government (govt.) securities received from the auction up to 60 days from the date of issuance for the same purpose. Furthermore, BB provides a special liquidity facility under the Special Repo.

3.2 Banks' advance-to-deposit ratio

Sources: Department of Off-site Supervision, BB.

It refers to the ratio between total outstanding loans and total deposits of the banking industry.

3.3 Maturity profile of govt.'s outstanding debt securities (treasury bills, treasury bonds)

Sources: Debt Management Department, BB.

The maturity profile refers to the residual maturity of long-term and short-term debt securities issued by the Government of Bangladesh. Long-term debt includes government Treasury bond with a maturity of more than 12 months. Short-term debt includes government Treasury bill with a maximum maturity of 12 months. Data are based on amounts outstanding at the end of the corresponding year or month.

3.4 Subordinated debt

Sources: Department of Off-site Supervision, BB.

The subordinated debt refers to the debt instruments which will be subordinated to deposits and other liabilities of the banks. It implies that the claims of the subordinated debt holders will be junior to the claims of the depositors and the other creditors.

3.5 Banks' LCR and NSFR

Sources: Department of Off-site Supervision, BB.

LCR refers to liquidity coverage ratio while NSFR refers to net stable funding ratio. These two liquidity indicators were introduced in Bangladesh in 2015 under Basel III framework. The minimum standard for LCR is greater than or equal to 100 percent and for NSFR it is greater than 100 percent.

4. Market risk:

4.1 Equity indices

Sources: Dhaka Stock Exchange Website (http://www.dsebd.org)

The equity indices displayed are DSEX, DSE30 and DSES of Dhaka Stock Exchange (DSE). DSEX is considered as the benchmark general index of the market as it shows the exact price movement of the listed companies. As for DSE30, 30 companies based on profitability, market capitalization and share size were selected while the companies are changed every six months on the basis of performance. DSES index is launched for people and institutions willing to invest in Shari'ah-compliant securities and products.

4.2 Price/earnings ratio

Sources: Dhaka Stock Exchange Website (http://www.dsebd.org).

This ratio refers to the ratio between market price per share and earnings per share. Sectoral P/E ratio includes P/E ratio of Banks, Financial Institutions, Mutual Funds, Engineering, Food & Allied, Fuel & Power, Jute, Textile, Pharmaceuticals, Paper & Printing, Service & Real Estate, Cement, IT, Tannery, Ceramic, Insurance, Telecommunication, Travel & Leisure and Miscellaneous along with Market P/E.

4.3 Weighted average call money market rates

Source: Monthly Economic Trends, BB.

The indicators reflect the nature of money market and include rate charged against exposures of scheduled banks and FIs with one another.

4.4 Scheduled banks' weighted average interest rate on deposits and advances

Source: Monthly Economic Trends, BB.

The indicators reflect the condition of scheduled banks and show the difference between average rate received from advances and average rate paid on deposits.

4.5 Weighted average exchange rate (USD to BDT)

Source: Monthly Economic Trends, BB.

The indicator reflects the exchange rate movement in BDT per US Dollar.

5. Profitability and solvency risk:

5.1 Banks' profitability indicators

a. Return on equity (ROE)

Source: Department of Off-site Supervision, BB; computation: Financial Stability Department, BB; BB Quarterly.

The indicator is based on the ratio between profit/loss for the period and total equity. Ratios of June period are annualized.

b. Return on assets (ROA)

Source: Department of Off-site Supervision, BB; computation: Financial Stability Department, BB; BB Quarterly.

The indicator is based on ratio between profit/loss for the period and total assets. Ratios of June period are annualized.

c. Operating Expense to operating income ratio

Source: Department of Off-site Supervision, BB; computation: Financial Stability Department, BB.

The indicator is based on the ratio between operating expenses and operating income.

d. Net interest income to total operating income ratio

Source: Department of Off-site Supervision, BB; computation: Financial Stability Department, BB.

The indicator is based on the ratio between net interest income and total operating income.

5.2 Banks' solvency indicators

a. Tier-1 capital to risk-weighted assets ratio

Source: Department of Off-site Supervision, BB.

The indicator is based on the ratio between Tier-1 capital and total risk-weighted assets.

b. Gross non-performing loan (NPL) ratio

Source: Banking Regulation and Policy Department, BB.

The indicator is based on the ratio between non-performing loans and advances to total outstanding loans and advances.

5.3 FCs' profitability indicators

a. Return on assets (ROA)

Source: Department of Financial Institutions and Market, BB.

The indicator is based on ratio between profit/loss after tax and provision for the period and total assets at the end of the corresponding period.

b. Operating Expense to operating income ratio

Source: Department of Financial Institutions and Markets, BB.

The indicator is based on the ratio between FCs' operating expenses and operating income.

c. Net interest income to total operating income ratio

Source: Department of Financial Institutions and Markets, BB.

The indicator is based on the ratio between FCs' net interest income and total operating income.

5.4 FCs' solvency indicators

a. Tier-1 capital to risk-weighted assets ratio

Source: Department of Financial Institutions and Markets, BB.

The indicator is based on the ratio between Tier-1 capital (core capital) and total risk-weighted assets.

b. Gross non-performing loan (NPL) ratio

Source: Department of Financial Institutions and Markets, BB.

The indicator is based on the ratio between non-performing loans and leases to total loans and leases.

6. Inter-linkages:

6.1 Growth of banks' credit (gross) to Government

Source: Statistics Department, Bangladesh Bank.

It refers to the growth in gross loan amount extended by banks to the Government.

6.2 Growth of NBDCs' credit (gross) to Government

Source: Statistics Department, Bangladesh Bank.

It refers to the growth in gross loan amount extended by NBDCs to the Government.

6.3 Growth of banks' loans to housing sector

Source: Statistics Department, Bangladesh Bank.

Loans to residential housing refers to loans extended by banks for residential housing in urban and rural areas, house renovation/repairing/extension, flat and land purchase; loans to commercial housing refers to loans extended by banks for commercial building and housing by developers/contractors.

6.4 Growth of FCs' loans to housing sector

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

It refers to the growth in loans extended by FCs for both residential and commercial purposes.

6.5 Banks' loans to counterpart sector

Source: Statistics Department, Bangladesh Bank.

It refers to loans extended by banks to their three major institutional counterparts namely NFCs (both private and public), households and government; it excludes bills discounted and purchased.

6.6 NBDCs' loans to counterpart sector

Source: Statistics Department, Bangladesh Bank.

It refers to loans extended by NBDCs to their three major institutional counterparts namely NFCs (both private and public), households and government.

6.7 Banks' cross-border claims

Source: Statistics Department, Bangladesh Bank.

Cross-border claims of banks include foreign currency notes in hand, balances with banks abroad, bilateral trade credits, wage earners' balance abroad, foreign bills, foreign direct investments, portfolio investments and advances to non-residents; claims that are granted or extended to non-residents are referred to as cross-border claims on an "immediate borrower" basis i.e. claims allocated to the actual non-resident borrowers with whom the original risk lies; it differs from "ultimate risk" basis which refers to claims allocated to the non-resident guarantors (of the non-resident borrower) with whom the final risk lies. For more details, see "Guidelines to the international consolidated banking statistics" available at http://www.bis.org/statistics/consbankstatsguide old.pdf.

7. Structural risk:

7.1 Banking sector size

a. Domestic Banks

Source: Department of Off-site Supervision, BB and Monthly Economic Trends, BB; computation: Financial Stability Department, BB.

The indicator is based on the ratio of total assets of domestic scheduled banks to nominal GDP; domestic scheduled banks include all scheduled banks except foreign commercial banks.

b. Foreign Banks

Source: Department of Off-site Supervision, BB and Monthly Economic Trends, BB; computation: Financial Stability Department, BB.

The indicator is based on the ratio of total assets of foreign commercial banks to nominal GDP.

7.2 Banking sector leverage ratio

Source: Department of Off-site Supervision, BB.

As per the Basel-III accord, this indicator is a ratio of Tier-1 capital after required deduction to total exposure after required deduction of the banking sector. In Bangladesh, up to 2022, the required leverage ratio is 3.0 percent.

7.3 FC sector size

Source: Monthly Economic Trends, Statistics Department, BB and DFIM, BB.

The indicator is based on the ratio of total assets of finance companies (FCs) to nominal GDP.

7.4 FC sector leverage

Source: DFIM, BB.

The indicator is based on the ratio of capital of the FCs sector over its total assets.

-----X------



[•] The report is based on data and information available as of end-June 2024, unless stated otherwise.

[•] The report can be accessed through internet at https://www.bb.org.bd/en/index.php/publication/publictn/1/70.

 $[\]blacksquare \quad \text{Feedback on the report may be sent to gm.fsd@bb.org.bd.}$