BANGLADESH BANK

Central Bank of Bangladesh

Macro Prudential Supervision of Financial System

Bangladesh Systemic Risk Dashboard (BSRD)

Financial Stability Department

December 2023

DISCLAIMER: The risk dashboard is a set of quantitative indicators and not an early-warning system. The indicators should not be treated as the basis for any mechanical form of inference.

Bangladesh Systemic Risk Dashboard (BSRD)

December 2023

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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-December 2023, unless stated otherwise.*
- *This dashboard can be accessed through internet at https://www.bb.org.bd/en/index.php/publication/publictn/1/70*

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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
FIs	Financial Institutions
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 Dashboard: An Overview

The real GDP growth rate of Bangladesh stood at 5.78 percent in FY23, moderately declining from 7.10 percent of the previous fiscal year. The decline in growth could partly be attributed to the shrinkage in world economy; still, the growth appears to be on track to attain upper middle income status by 2031. Current account balance (CAB) increased positively in the review period, attributable to considerable decline in imports with notable level of exports and inward wage earners' remittance. Government deficit-to-GDP ratio decreased slightly; however, public debt-to-GDP ratio demonstrated an upward trend in FY23 in comparison with that of FY22. Two other macroeconomic indicators, namely household debt-to-Gross National Disposable Income (GNDI) ratio and the NFC debt-to-GDP ratio, increased slightly in the second half (H2) of 2023.

Annual growth rate of loans from banks and NBDCs to household decreased slightly. On the other hand, growth of banks' loans to Non-Financial Corporations (NFCs) and NBDCs' loans to private NFCs increased in the review period compared to those of the preceding period. Besides, both the LCR and the NSFR of the banking sector remained well above the required level in H2 of 2023, though Bangladesh Bank provided considerable liquidity support to the sector through the arrangements of assured liquidity support (ALS), Repo, and special Repo facilities. In the review period, the ADR for the banking industry increased by 1.87 percentage points and stood at 80.38 percent, compared to that of the previous period.

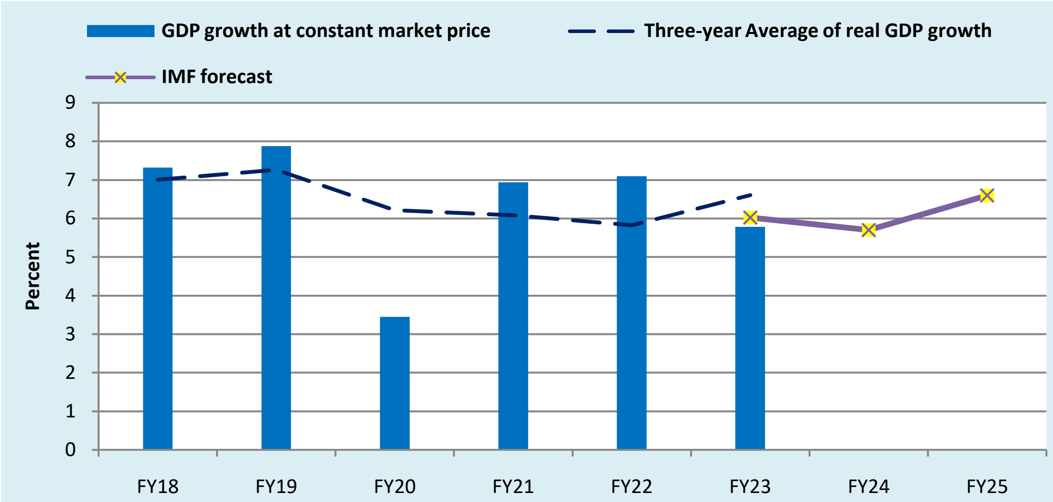
Banks' Treasury bonds with a remaining maturity of over 5 years and up to 10 years accounted for the largest volume of the sector's overall holding of government securities, whereas the smallest was maintained by the ones with a remaining maturity of more than 15 years at end-December 2023. Additionally, treasury bills with remaining maturities of up to 91 days maintained the largest volume. Moreover, there was Shari'ah-based SUKUK bonds with an outstanding of BDT 180.0 billion and Special-Purpose Treasury Bonds (SPTB) of different maturities with BDT 27.13 billion. The equity indices of DSE declined and the market P/E ratio decreased as well during H2 of 2023 compared to that of H1 of 2023. The average call money borrowing rate increased significantly and the weighted average interest rate on banks' advances and deposits also increased considerably in the review period. The exchange rate of Bangladesh Taka (BDT) in relation to the US dollar (USD) recorded moderate depreciation.

Gross NPL ratio of the banking sector increased slightly at end-December 2023 compared to that of end-June 2023. Nevertheless, the key profitability indicators of the sector, ROA and ROE, recorded notable improvement. Also, Tier-1 capital to risk-weighted-assets (RWA) ratio increased slightly during this period. On the other hand, FIs' NPL ratio exhibited an increasing trend, which appeared to have created contractionary impact on the industry's growth of overall profit and Tier-1 capital to RWA ratio of the FIs sector. At end-December 2023, the provision maintenance ratios of banks and FIs were 80.53 percent and 88.0 percent respectively.

During the review period, growth of banks and NBDCs' credits to the Government declined. At end-December 2023, annualized growth of banks' credit to the commercial housing sector stimulated, while the same to the residential housing sector decelerated compared to those of the preceding period. FIs' credit to the housing sector fell at end-December 2023. Moreover, consistent growth in terms of volume was observed both in banks and NBDCs' loans to counterpart sectors. It is noteworthy that, NFCs availed the lion's share in both cases. Banks' cross-border claim increased slightly in the review period. Assets-to-nominal GDP ratios for both domestic and foreign banks increased somewhat as well at end-December 2023 compared to those of the preceding period. On the contrary, FIs' assets-to-nominal GDP ratio recorded minor decrease. At the end of December 2023, banks' leverage ratio, defined as Tier-1 capital to total exposure in line with Basel-III, crept up moderately, while the leverage ratio of FIs, defined as assets to capital, recorded a marked decline.

1. Macro risk

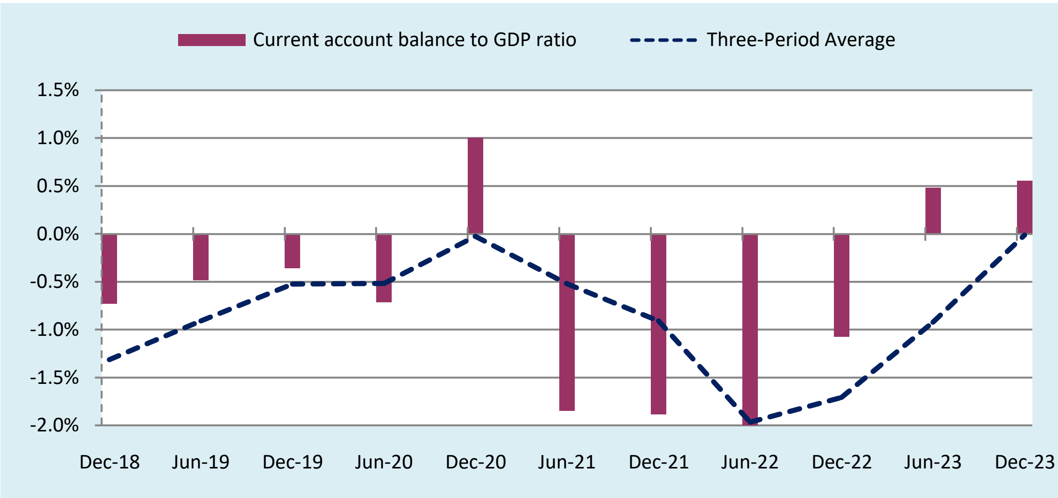
1.1 Current and forecasted real GDP growth



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, October 2023 and April 2024.

The real GDP growth stood at 5.78 percent in FY23, which was 7.10 percent in FY22. According to the IMF's projections, growth may decrease further in FY24 from the growth level of FY23.

1.2 Current account balance-to-GDP ratio

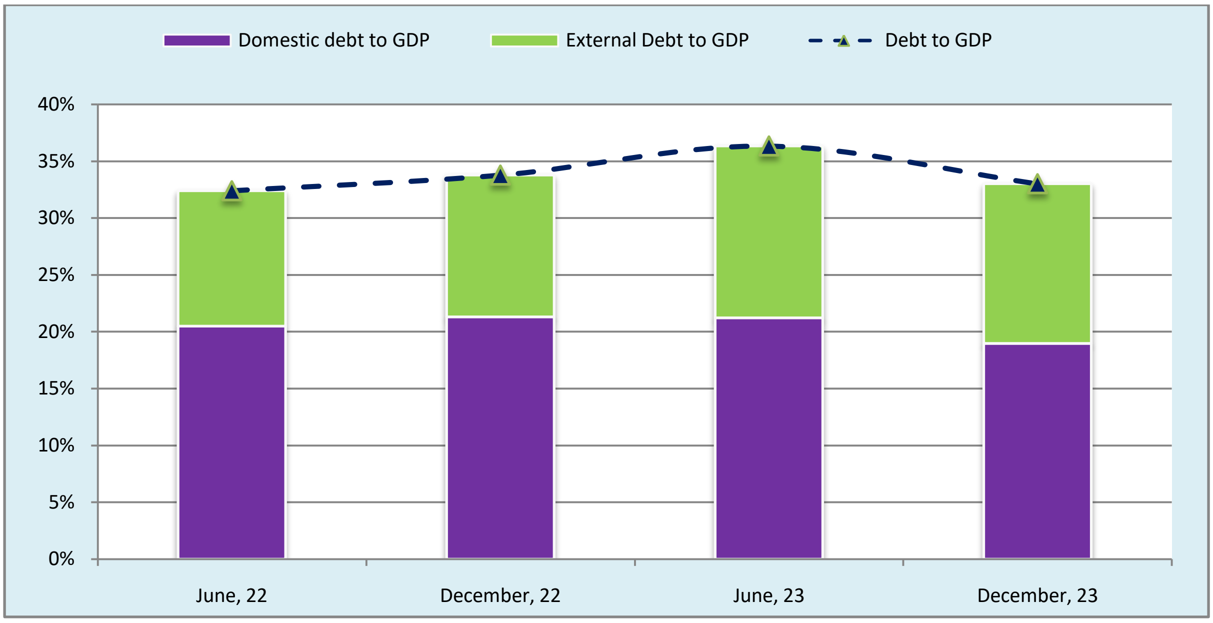


Notes: 1) Data for June-2023 is revised. 2) Provisional data is used for December-2023. 3) June based GDP data is used for December in calculating the concerned ratio.
Source: Monthly Economic Trends, Statistics Department, BB.

The current account balance-to-GDP ratio exhibited an increase in the positive direction during the second half of the year 2023 compared to that of the first half.

1. Macro risk–Cont'd.

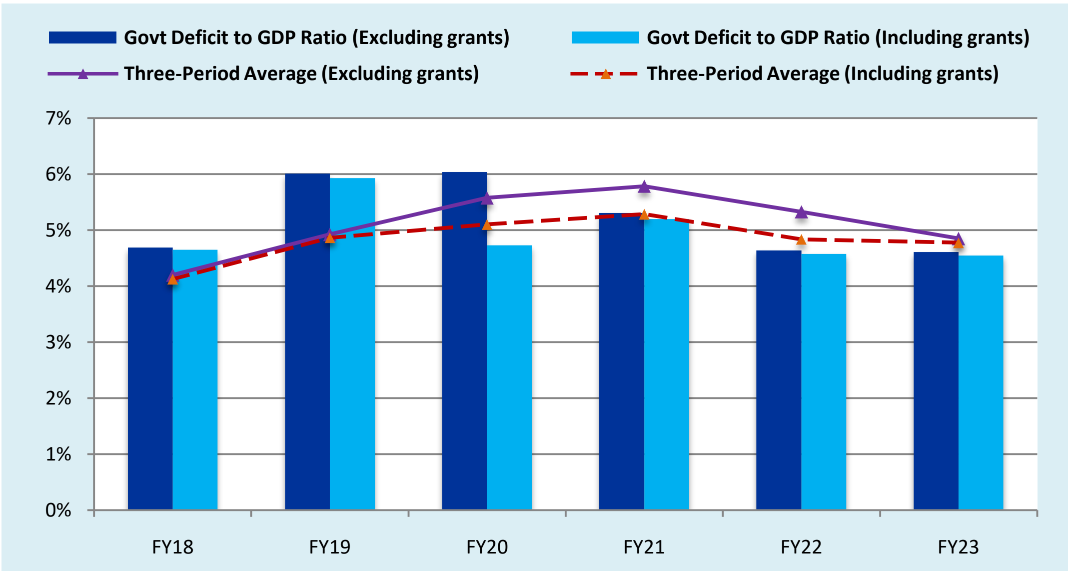
1.3 Public debt-to-GDP ratio



Notes: 1) The ratio is shown for fiscal years.
Source: Monthly Economic Trends, Statistics Department, BB; and Quarterly Debt Bulletin, Finance Division, Ministry of Finance, GOB.

At the end of December 2023, public debt-to-GDP ratio decreased moderately compared to that of previous period.

1.4 Government deficit-to-GDP ratio

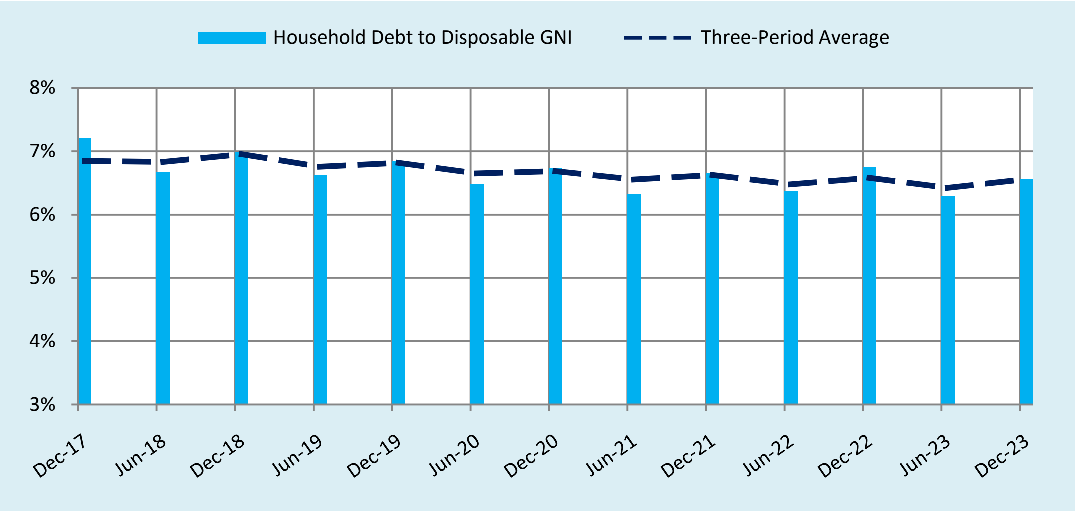


Notes: 1) Government deficit-to-GDP ratio is shown for fiscal years. 2) For FY20 to FY22, GDP is considered as per new base year 2015-16. 3) Data for FY23 is revised.
Source: Monthly Report on Fiscal Position, December-2023 issue, Ministry of Finance, Government of Bangladesh.

The government deficit-to-GDP ratio, both including and excluding grants, decreased slightly in FY23, compared to that of the preceding fiscal year.

1. Macro risk–Cont'd.

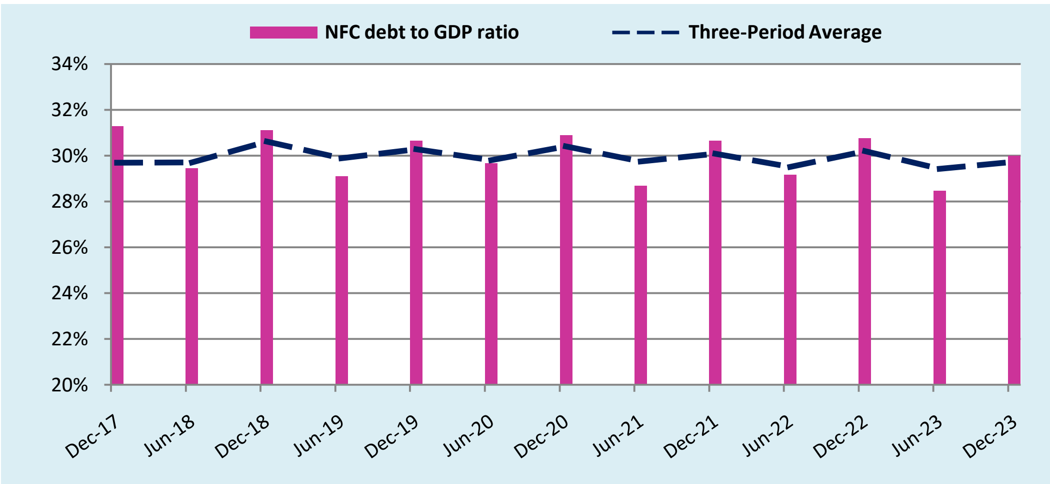
1.5 Household debt-to-gross national disposable income ratio



Notes: 1) Dec-2023 based data is provisional. 2) Jun-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.

The ratio of household debt-to-gross national disposable income (GNDI) increased in December 2023 compared to that of June 2023, though it was slightly lower than the position of December 2022.

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

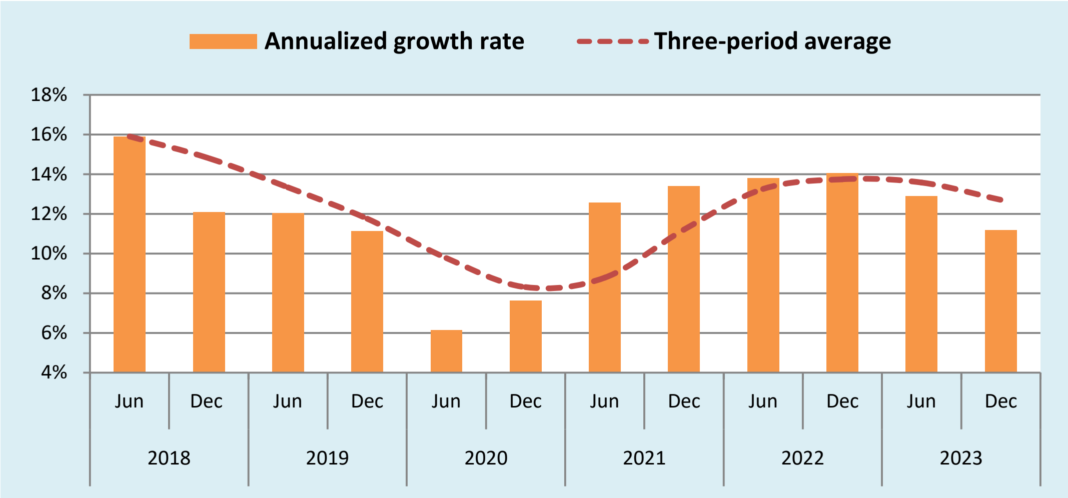


Notes: 1) Dec-2023 based data is provisional. 2) June-2023 based data is revised. 3) NFC debt includes debts of both public and private NFCs. 4) June based GDP data is used for December in calculating the ratio.
Sources: Monthly Economic Trends, Statistics Department, BB.

The NFCs' debt-to-GDP ratio increased in the second half of 2023 compared to that of the first half of the year. It is note-worthy that private NFCs' debt accounted for the major part of total NFCs' debt.

2. Credit risk

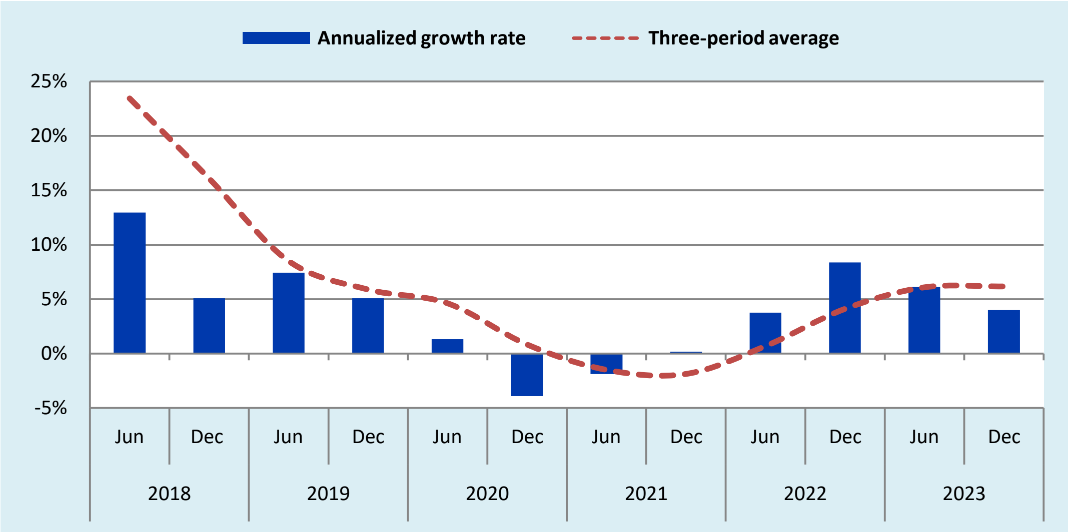
2.1 Annual Growth rate of banks' loans to households



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 decreased further in the review period, in contrast to an overall upward trend recorded from December 2020 to December 2022.

2.2 Annual Growth rate of NBDCs' loans to households



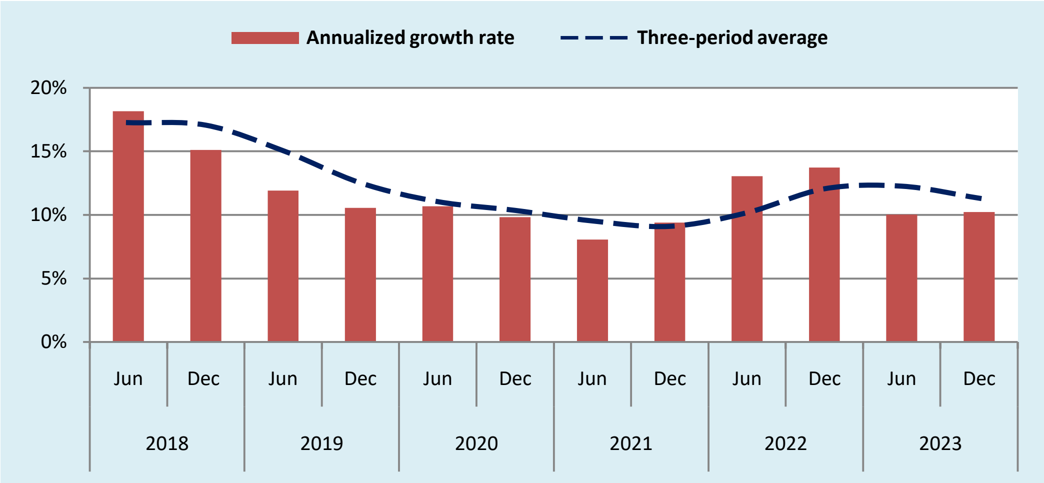
Notes: NBDCs include deposit taking FIs[1], Ansar-VDP Unnayan Bank, Karmasangsthan Bank, Grameen Bank and Bangladesh Samabaya Bank.
Source: Statistics Department, BB.

After showing an upward trend in the half years ended June 2022 and December 2022, the growth of non-bank depository corporations' (NBDCs') loans to the household sector exhibited a downward trend. It is noteworthy that in December 2023, the growth was lower than that of June 2023.

[1]FIs refer to non-bank financial institutions. Out of 35 FIs, 29 are deposit taking FIs.

2. Credit risk–Cont'd.

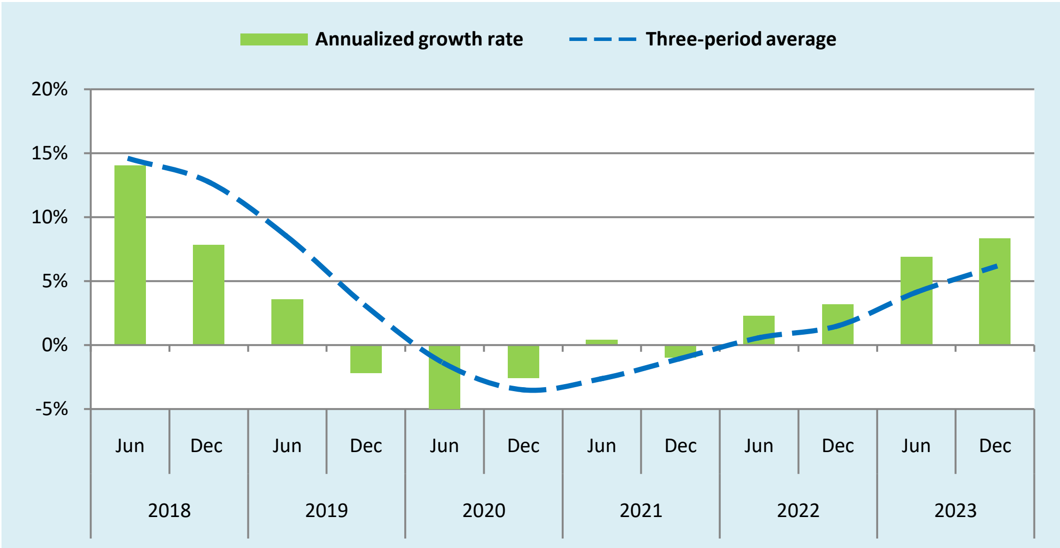
2.3 Growth of banks' loans to private non-financial corporations (NFC)



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 increased slightly in December 2023 compared to that of June 2023.

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

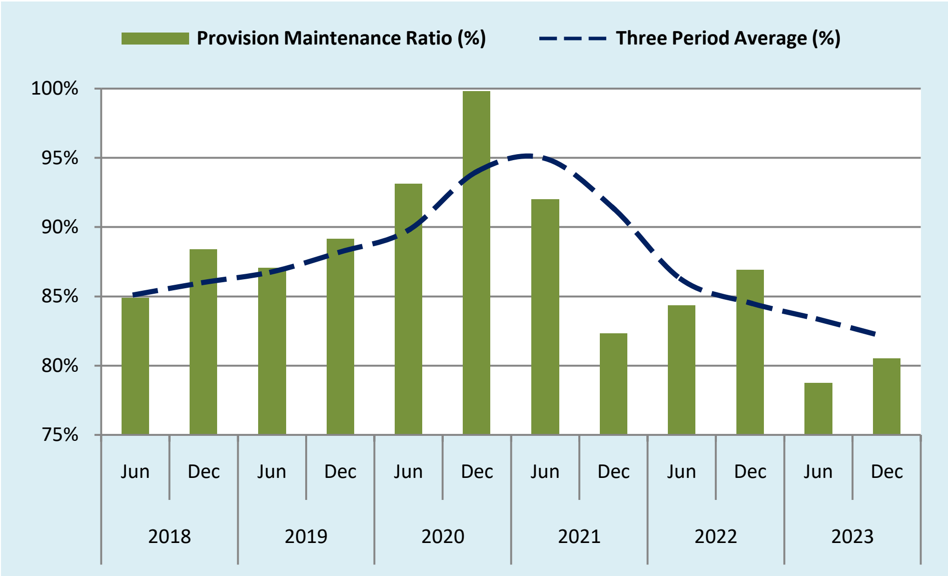


Notes: NFC refers to private NFCs only. NBDCs include deposit taking FIs, Ansar-VDP Unnayan Bank, Karmasangsthan Bank, Grameen Bank, and Bangladesh Samabaya Bank.
Source: Statistics Department, BB.

After December 2021, NBDCs' loans to private NFCs growth started to show an upward trend. In December 2023, the growth increased significantly compared to that of the preceding period.

2. Credit risk–Cont'd.

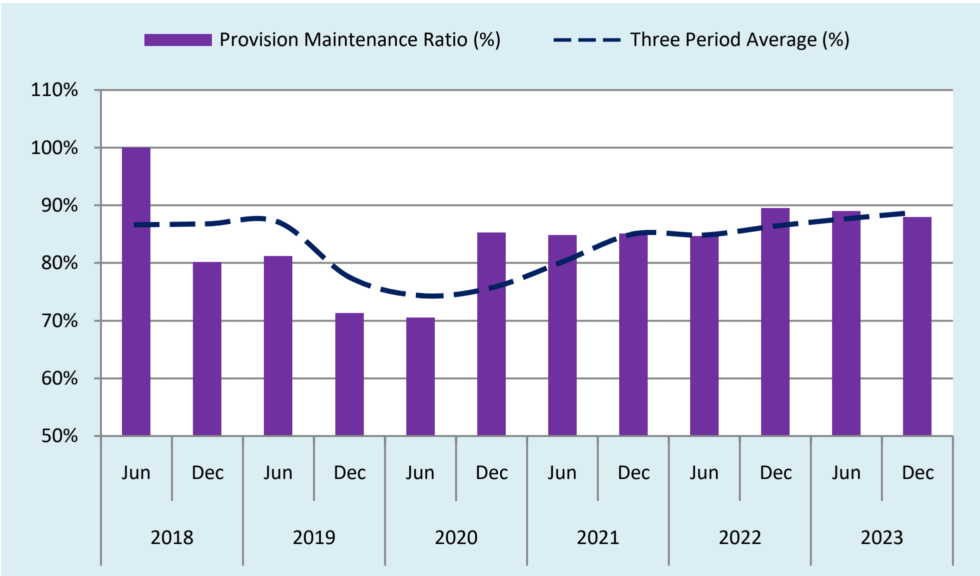
2.5 Provision maintenance ratio of banks



Notes: Provision maintenance ratio refers to maintained provision as a percentage of required provision.
Source: BRPD, BB.

At end-December 2023, banks' provision maintenance ratio stood at 80.53 percent, which is slightly higher than that of end-June 2023.

2.6 Provision maintenance ratio of FIs



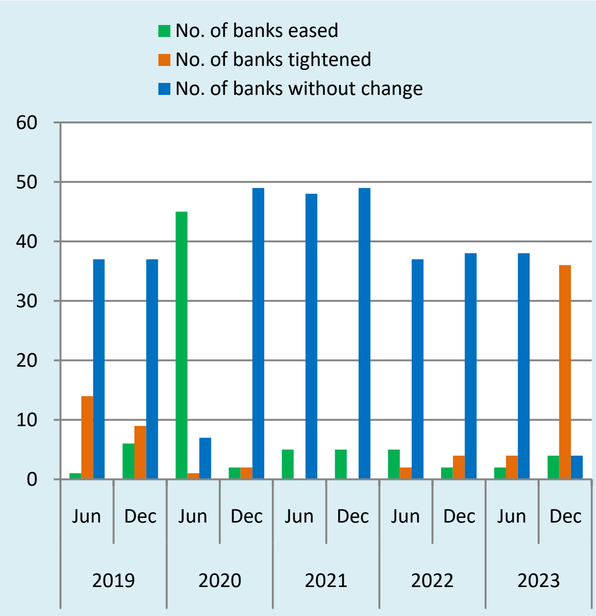
Notes: Data for June 2023 and December 2023 are un-audited.
Source: DFIM, BB.

At end-December 2023, FIs' provision maintenance ratio decreased slightly compared to that of the preceding period and stood at 88.0 percent.

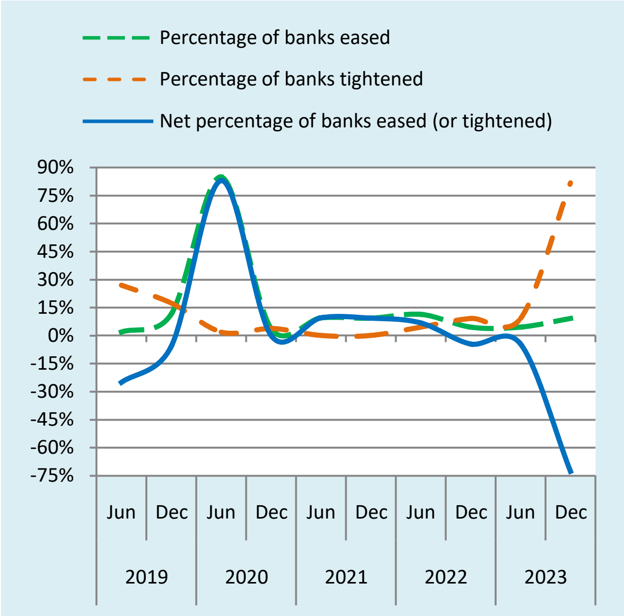
2. Credit risk–Cont'd.

2.7 Changes in banks' interest rates for housing loans

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



b. Percentage of banks having changes in their interest rates for housing loans

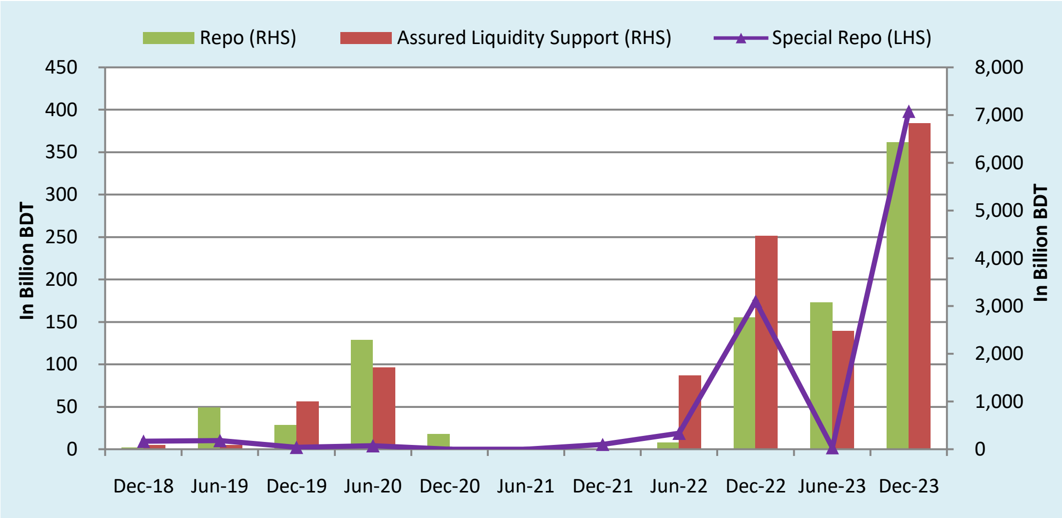


Notes: Changes in banks' announced interest rate for housing loans have been used as a proxy for changes in banks' credit standards. Net percentage change is the difference between the share of banks reporting that interest rates have been eased (decreased) and the share of banks reporting that they 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).

During the second half of 2023, 9.1 percent of 44 respondent scheduled banks eased the interest rates of housing loans, while 81.8 percent of banks tightened; the remaining banks kept their rates unchanged. As a result, net tightening was observed during this period.

3. Funding and liquidity risk

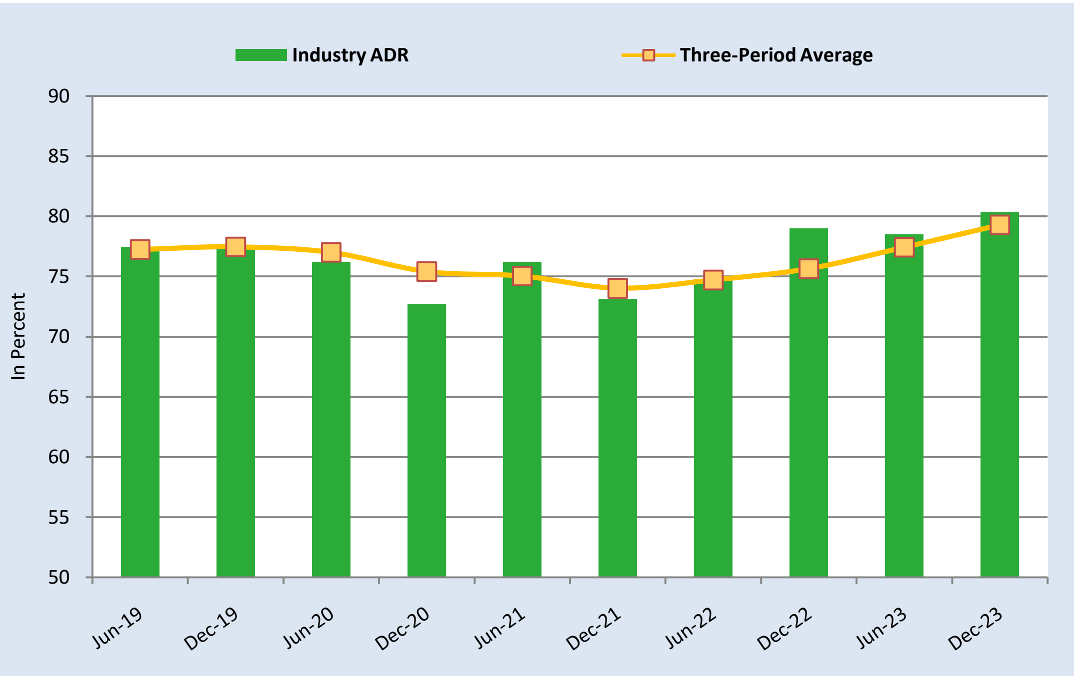
3.1 Bangladesh Bank's liquidity support to banks



Source: DMD, BB.

After a significant contraction of Bangladesh Bank's liquidity assistance in the form of Special Repo in June 2023 it expanded notably during the review period. Likewise, Repo and Assured Liquidity Support also increased considerably in the review period compared to that of the first half of the year.

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



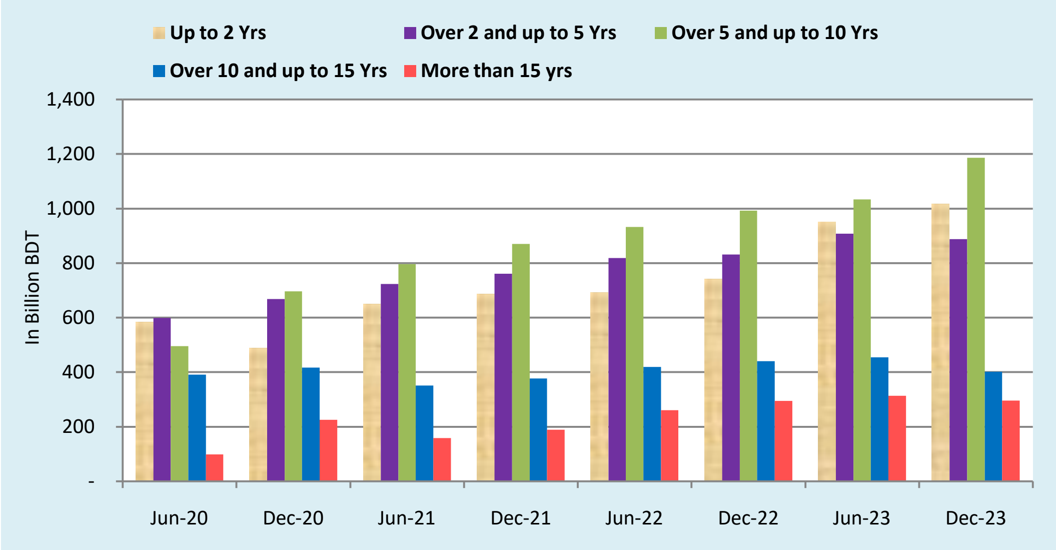
Source: DOS, BB.

The industry Advance-to-Deposit Ratio (ADR) increased slightly, and stood at 80.38 percent at end-December 2023, which was 78.51 percent at end-June 2023.

3. Funding and liquidity risk–cont'd.

3.3 Maturity profile of government's outstanding debt securities

a. Treasury Bond

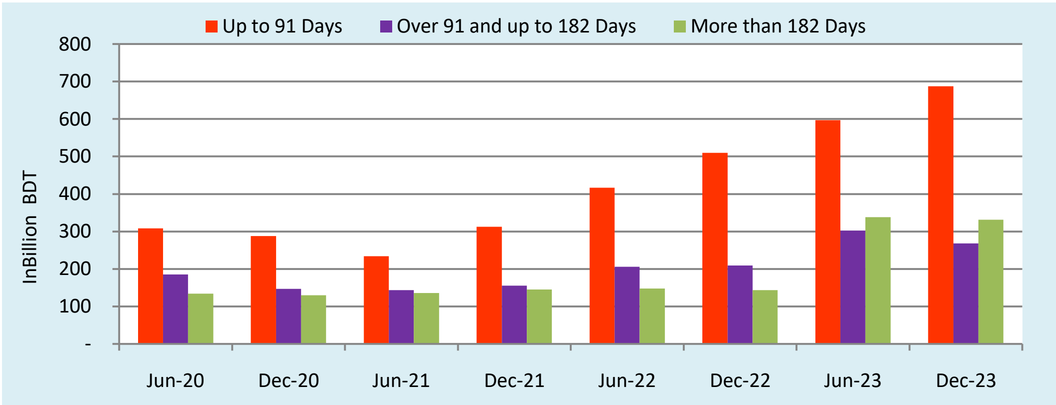


Notes: 1. The maturity profile refers to the residual maturity of long-term and short-term debt securities issued by Government of Bangladesh. Long-term debt securities include government Treasury bond with a maturity of more than 12 months. Data are based on amounts outstanding at the end of the corresponding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

Source: DMD, BB.

Treasury bonds with a remaining 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 the smallest at end-December 2023. Moreover, maturity up to 2 years, and over 5 and up to 10 years increased and the rest decreased during the review period compared to that of the preceding period. Additionally, there were Shari'ah-based SUKUK bonds worth BDT 180.00 billion and Special Purpose Treasury Bonds (SPTB) with various maturities amounting to BDT 27.13 billion.

b. Treasury Bill



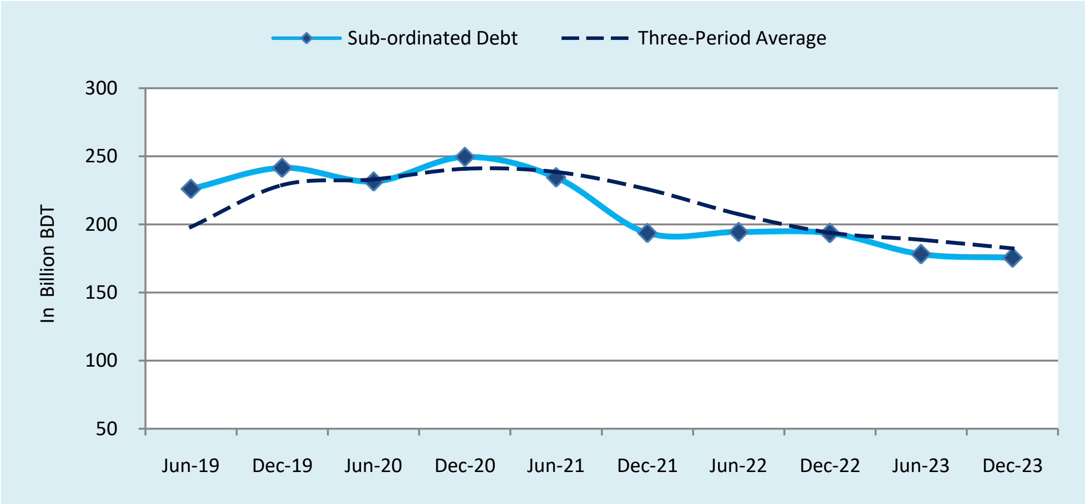
Notes: Short-term debt securities include government Treasury bill with a maximum maturity of 12 months. Data are based on amounts outstanding at the end of the corresponding period.

Source: DMD, BB.

Treasury bills with remaining maturities up to 91 days remained the largest and over 91 and up to 182 days remained the smallest in terms of volume. The outstanding of the remaining maturities up to 91 days increased and the remaining decreased at end-December 2023 compared to the position of end-June 2023.

3. Funding and liquidity risk–cont'd.

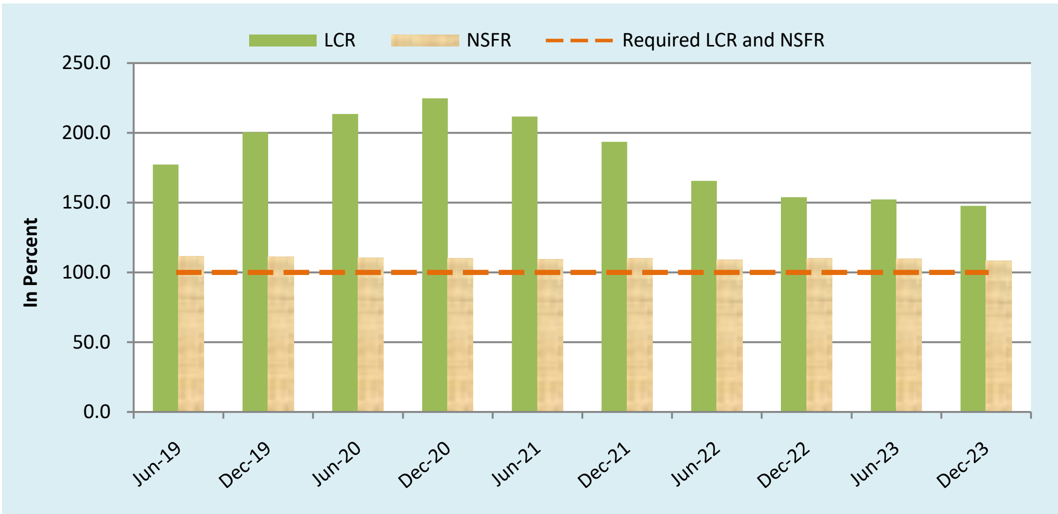
3.4 Subordinated debt



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.

Subordinated debt issued by banks exhibited a declining trend after December 2021. Further, the growth declined slightly at the end of December 2023 compared to that of end-June 2023.

3.5 Banks' LCR and NSFR

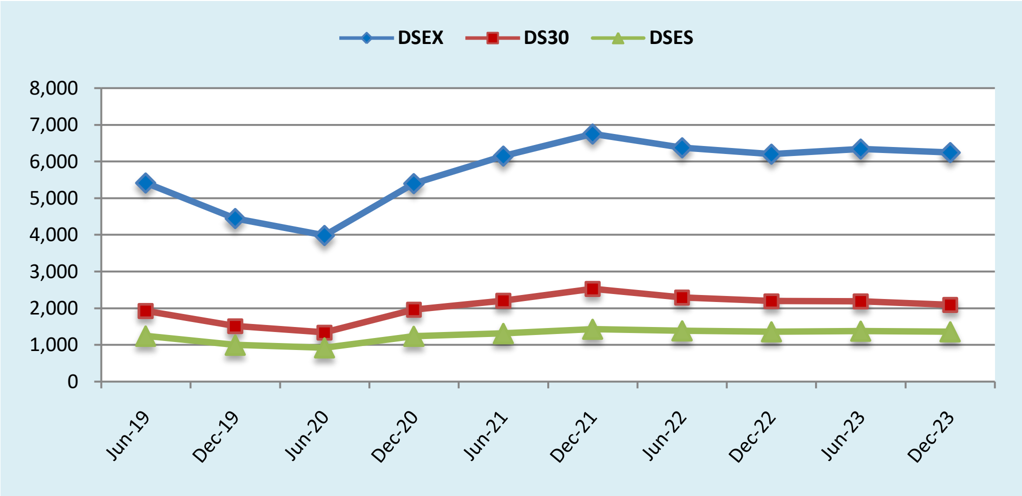


Note: 1) BDBL, BKB, PKB and RAKUB are exempted from maintaining LCR and NSFR. 2) Requirement for LCR is equal or greater than 100 percent and for NSFR, it is above 100 percent in Bangladesh.
Source: DOS, BB.

Liquidity coverage ratio (LCR) of the banking sector demonstrated a minor decline in the review period compared to that of the preceding period. It was still much higher than the minimum requirement in the review period. Net stable funding ratio (NSFR) also decreased slightly and stood at around 108 percent against the benchmark of 'above 100 percent'.

4. Market risk

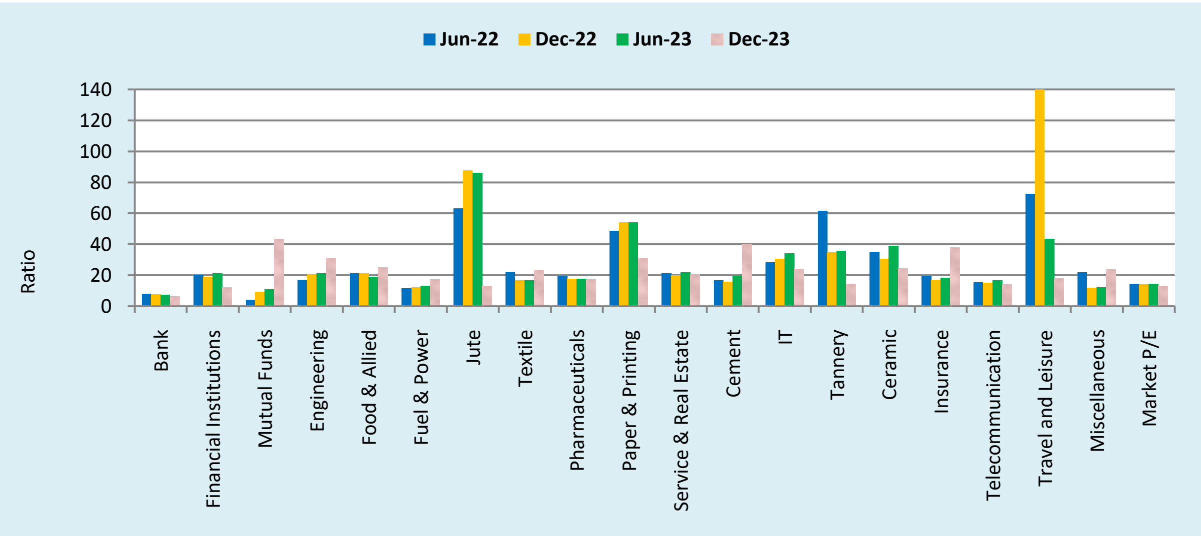
4.1 Equity indices



Source: DSE Website.

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

4.2 Price/earnings (P/E) ratio

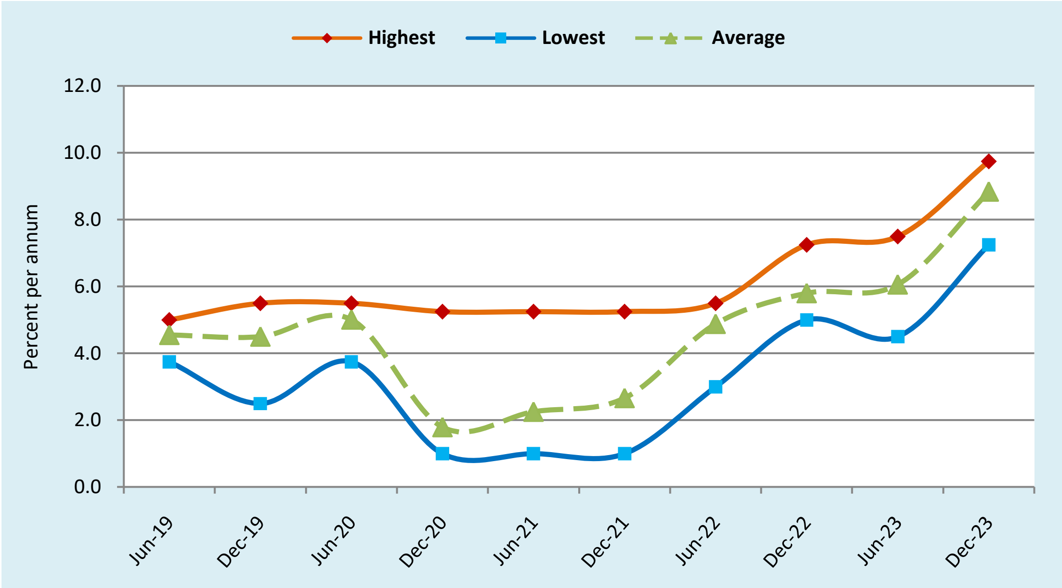


Source: DSE Website.

The P/E ratio of 42.11 percent of the listed sectors increased in the review period, as opposed to the drop in the ratio of present listed sectors in the preceding period. The market P/E ratio as a whole slightly decreased and stood at 13.12 at end-December 2023, from 14.34 at end-June 2023.

4. Market risk–cont'd.

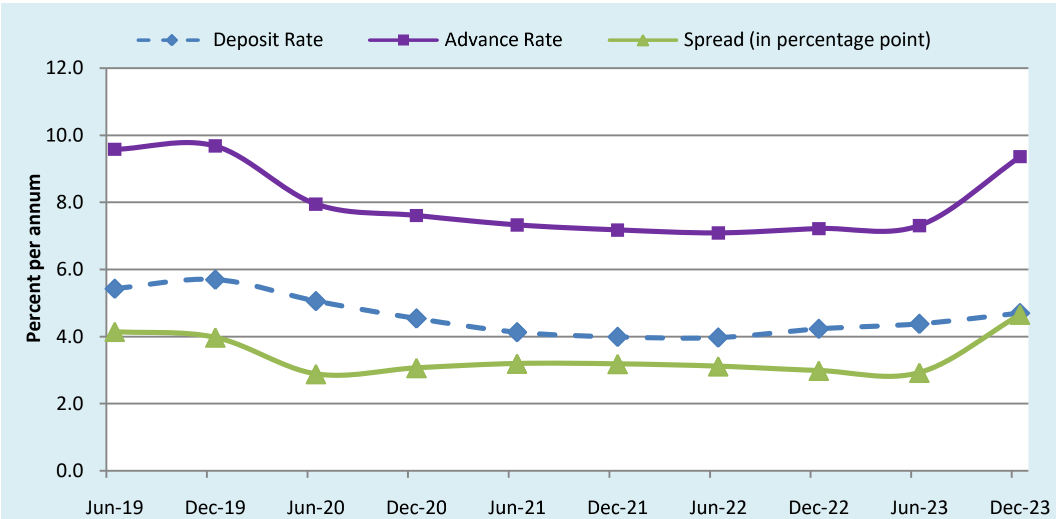
4.3 Weighted average call money market rates



Source: Monthly Economic Trends, Statistics Department, BB.

The weighted average call money borrowing rate has started to show upward trend since December 2020 and it increased further at end-December 2023 compared to that of end-June 2023.

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

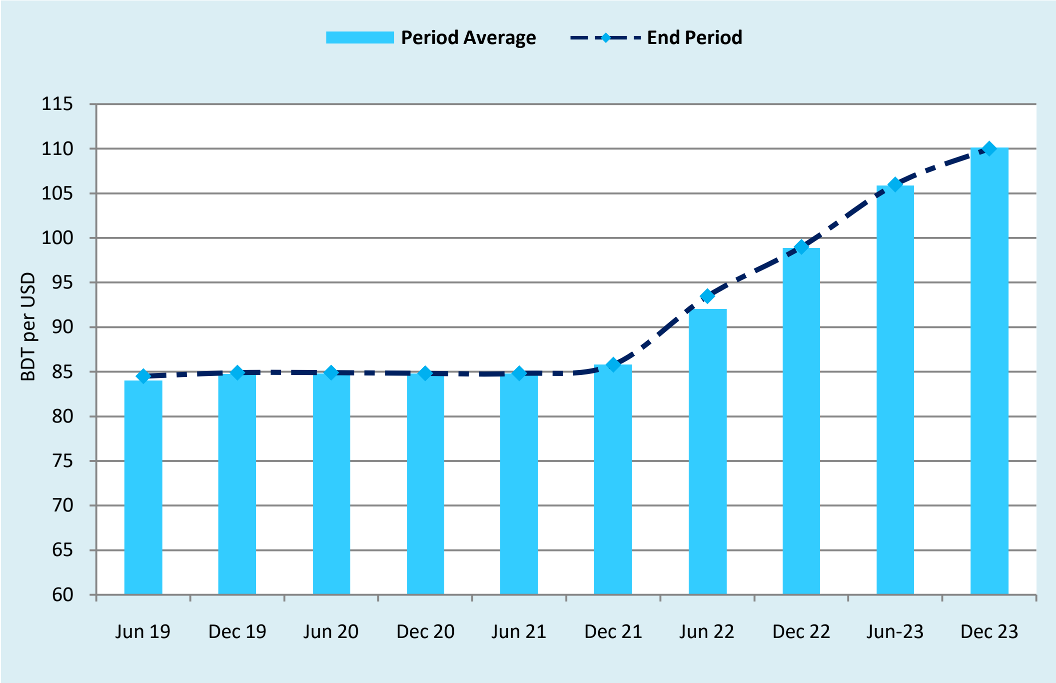


Source: Monthly Weighted Average Interest Rate (WAIR), Statistics Department, BB.

Following an upward trend, the weighted average interest rate on deposits and advances increased in this review period, though there was a downward trend from December 2019 to June 2022. Pertinently, the spread expanded by 1.73 percentage points in the second half of 2023 compared to that of the first half of the year.

4. Market risk–cont'd.

4.5 Weighted average exchange rate (BDT/USD)



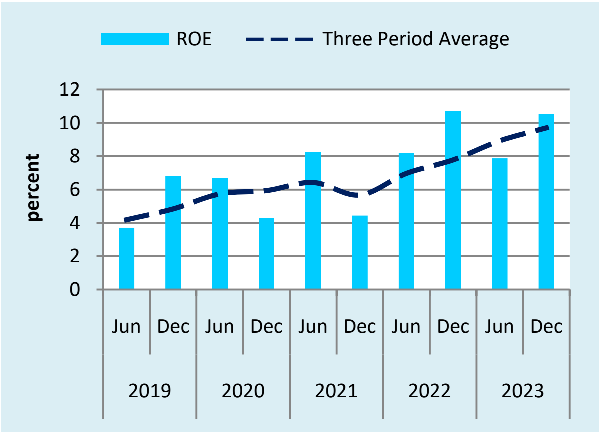
Source: Monthly Economic Trends, Statistics Department, BB.

Bangladesh Taka (BDT) depreciated further against US Dollar at end-December 2023, unlike the stable trend in the preceding several years, largely due to the worldwide economic downturn, a widening trade deficit, slow growth in FDI inflow and high cost of imported products/raw materials.

5. Profitability and solvency risk

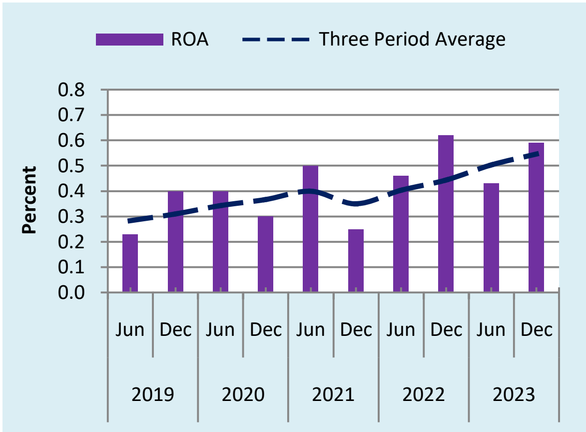
5.1 Banks' profitability indicators

a. Return on equity (ROE)



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

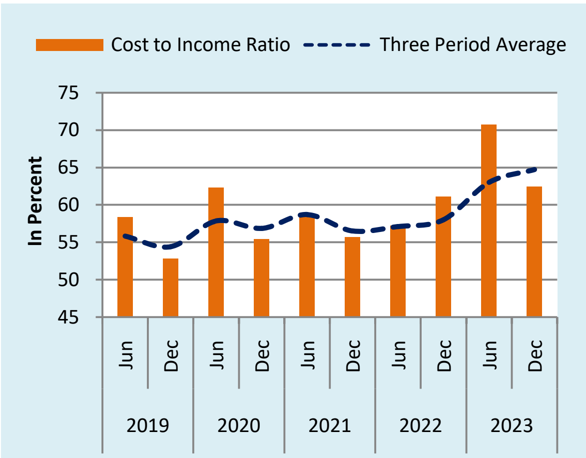
b. Return on assets (ROA)



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

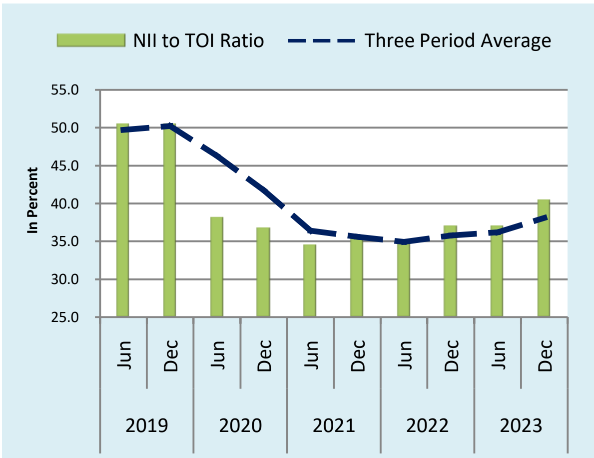
Banks' ROE and ROA both increased moderately in the second half of 2023 compared to that of the first half of the year.

c. Cost-to-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



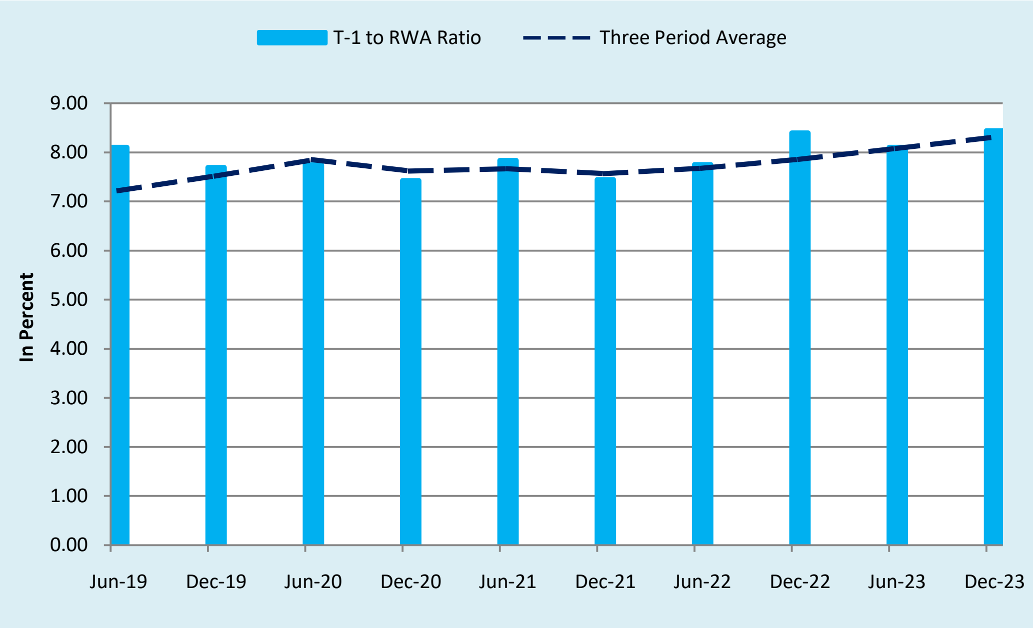
Note: Ratio of net interest income and total operating income.
Source: DOS, BB; Computation: FSD, BB.

After reaching the peak at end-June 2023 during the last five years, banks' cost-to-income ratio decreased notably at end-December 2023. In contrast, banks' net interest income to total operating income ratio increased during the same period.

5. Profitability and solvency risk–cont'd.

5.2 Banks' solvency indicators

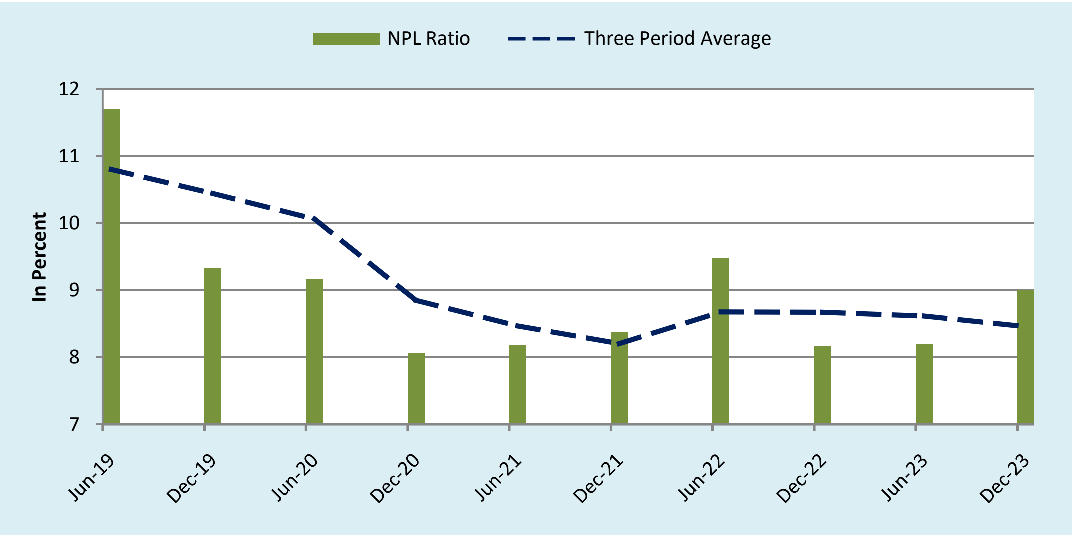
a. Tier-1 (T-1) to RWA ratio



Note: Ratio of Tier-1 capital to total risk-weighted assets.
Source: DOS, BB.

Banks' Tier-1 capital to total risk-weighted assets ratio increased slightly at end-December 2023 from the position of end-June 2023 and stood at 8.44 percent, well above the regulatory requirement of 6.0 percent.

b. Gross non-performing loan (NPL) ratio



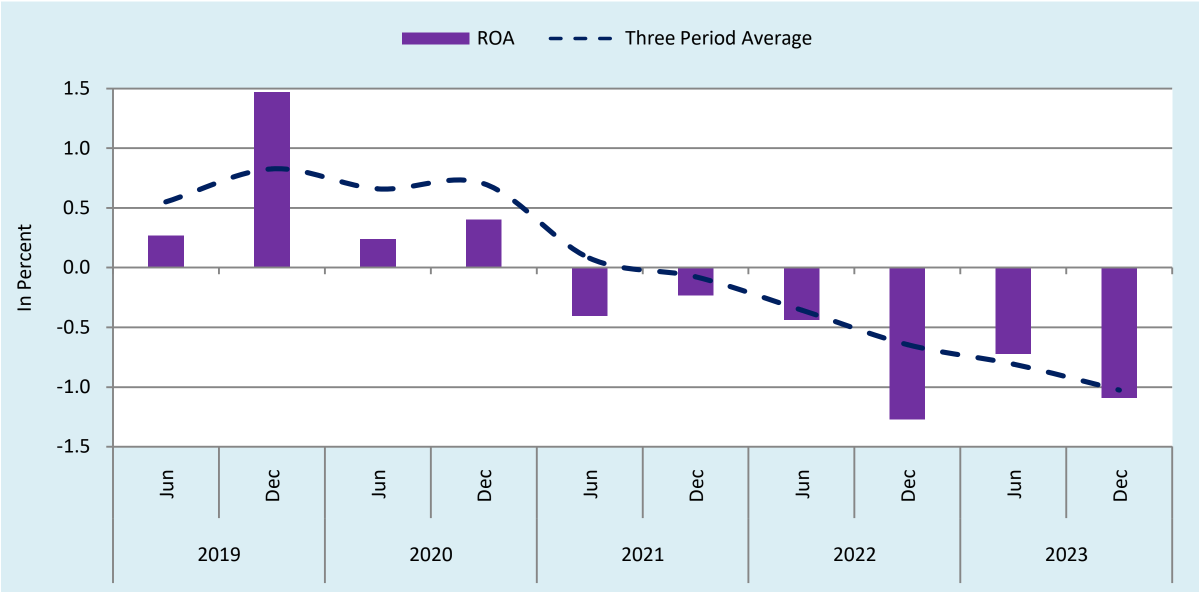
Note: Data up to September 2020 contains information without OBU.
Source: BRPD, BB.

Banks' gross NPL ratio increased notably at end-December 2023 in comparison with that of end-June 2023 and end-December 2022.

5. Profitability and solvency risk–cont'd.

5.3 FIs' profitability indicators

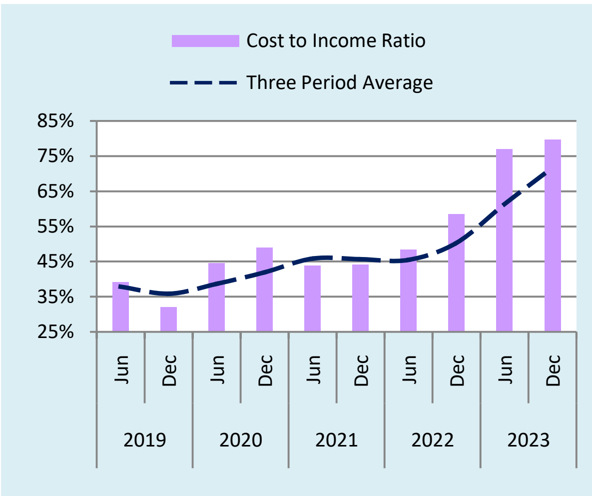
a. Return on assets (ROA)



Note: Data for June-23 and Dec-23 are provisional.
Source: DFIM, BB.

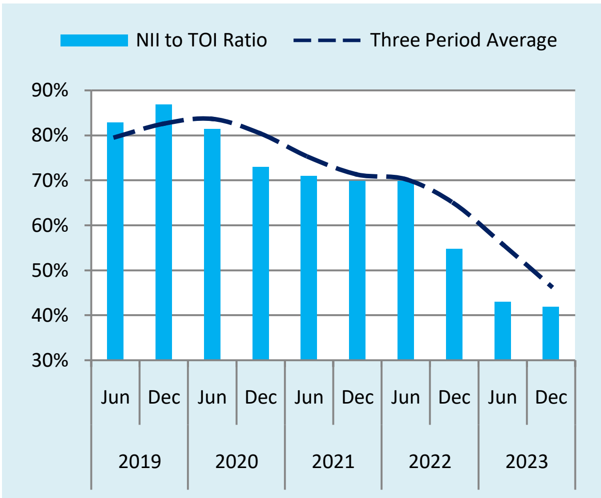
FIs' ROA remained negative and decreased considerably at end-December 2023 compared to that of end-June 2023.

b. Cost-to-income ratio



Note: 1) Cost to income ratio refers to the ratio of operating expenses and operating income. 2) June-23 and Dec-23 data are provisional.
Source: DFIM, BB.

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



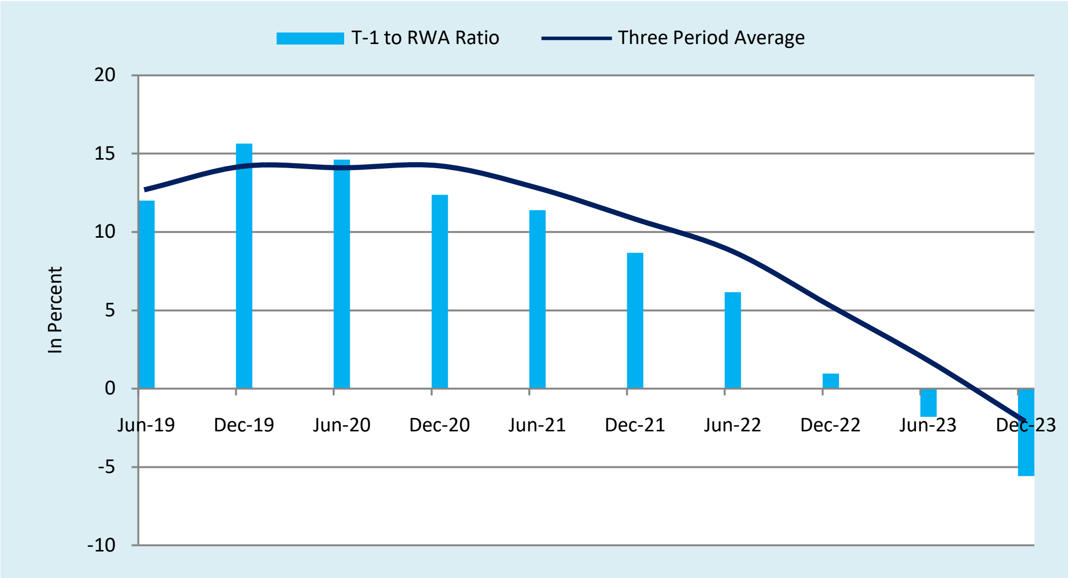
Note: 1) Ratio of net interest income and total operating income. 2) June-23 and Dec-23 data are provisional.
Source: DFIM, BB.

FIs' cost-to-income ratio increased slightly at end-December 2023 in comparison with that of the previous period. Contrary to that, net interest income to total operating income ratio decreased notably in the review period compared to that of end-June 2023.

5. Profitability and solvency risk–cont'd.

5.4 FIs' solvency indicators

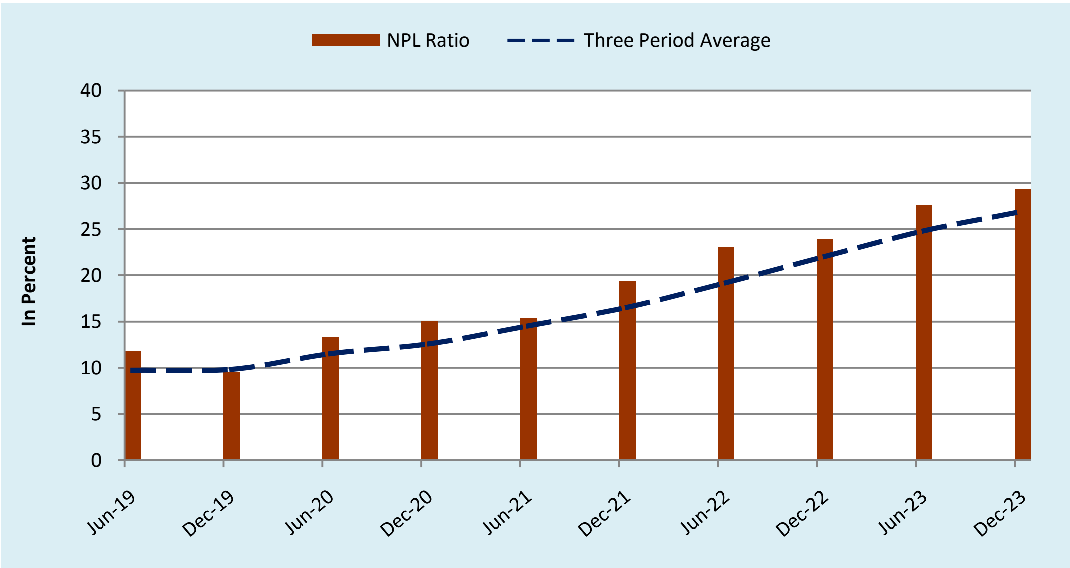
a. Tier-1 (T-1) to RWA ratio



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

FIs' Tier-1 capital to RWA ratio stood at -5.59 percent at end-December 2023. However, the ratio would leap to -0.27 percent, if one distressed FI was excluded from FIs' list.

b. Gross non-performing loan (NPL) ratio

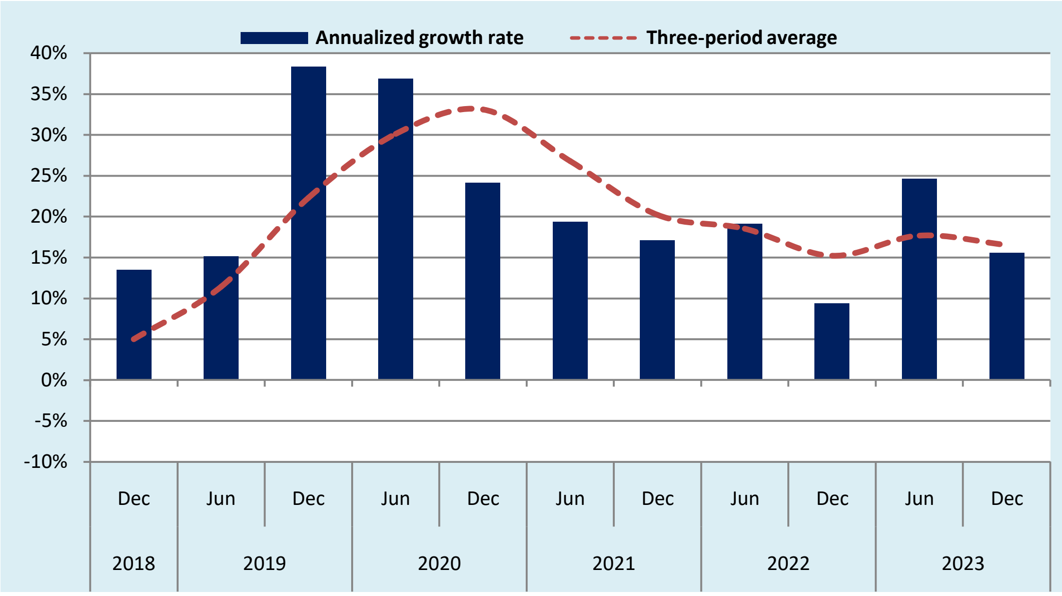


Note: 1) Ratio of non-performing loans and leases to total loans and leases. 2) Data for June-23 and Dec-23 are provisional.
Source: DFIM, BB.

FIs' gross NPL ratio increased moderately at the end of December 2023 and stood at 29.32 percent from 27.65 percent at end-June 2023.

6. Inter-linkages

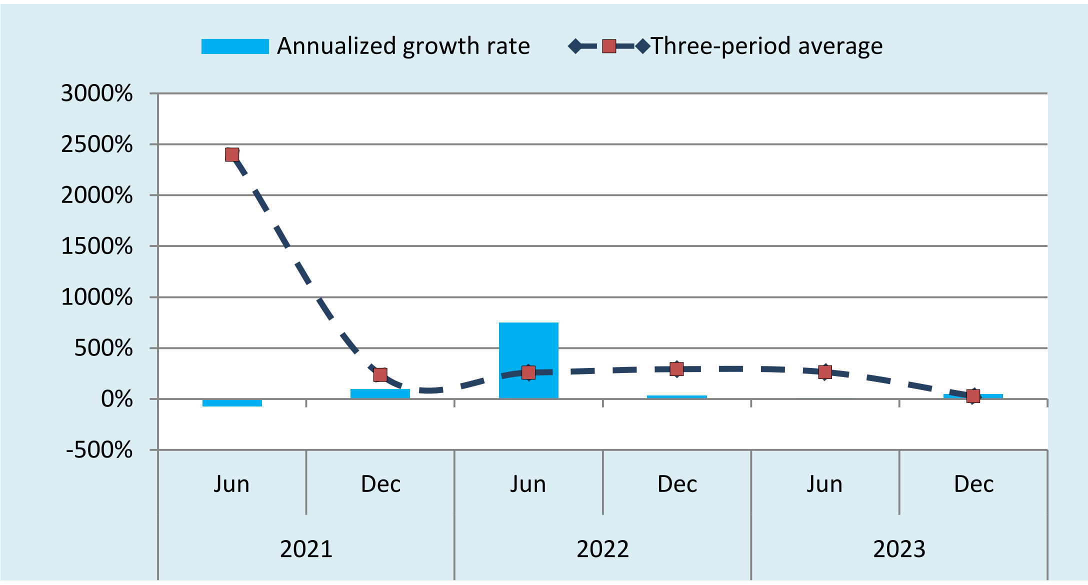
6.1 Growth of banks' credit (gross) to government



Notes: Credit extended to the government refers to gross amount.
Source: Statistics Department, Bangladesh Bank.

After upswing at end-June 2023 the growth rate of Government borrowings from the banking sector declined significantly in the review period. However, the growth rate rose considerably at end-December2023 compared to the position of end-December 2022.

6.2 Growth of NBDCs' credit (gross) to government



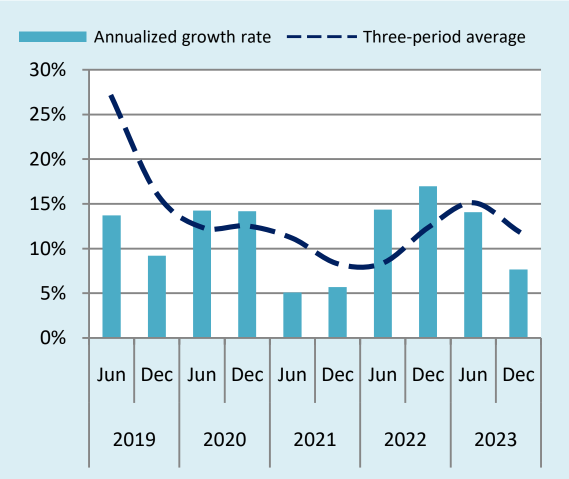
Notes: NBDCs include deposit taking FIs, Ansar-VDP Unnayan Bank, Karmasangsthan Bank, Grameen Bank, and Bangladesh Samabaya Bank.
Source: Statistics Department, Bangladesh Bank.

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

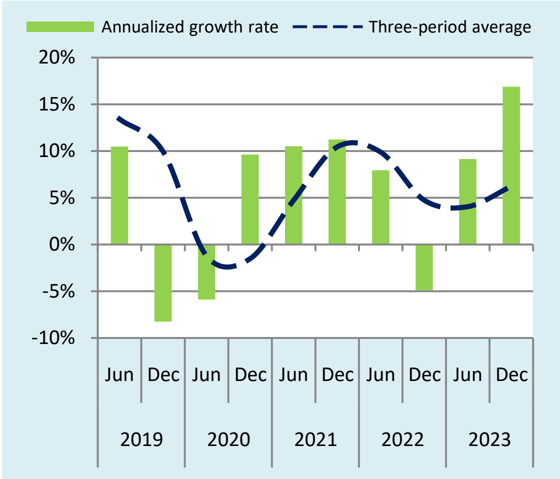
6. Inter-linkages– Cont'd.

6.3 Growth of banks' loans to housing sector

a. Loans to residential housing



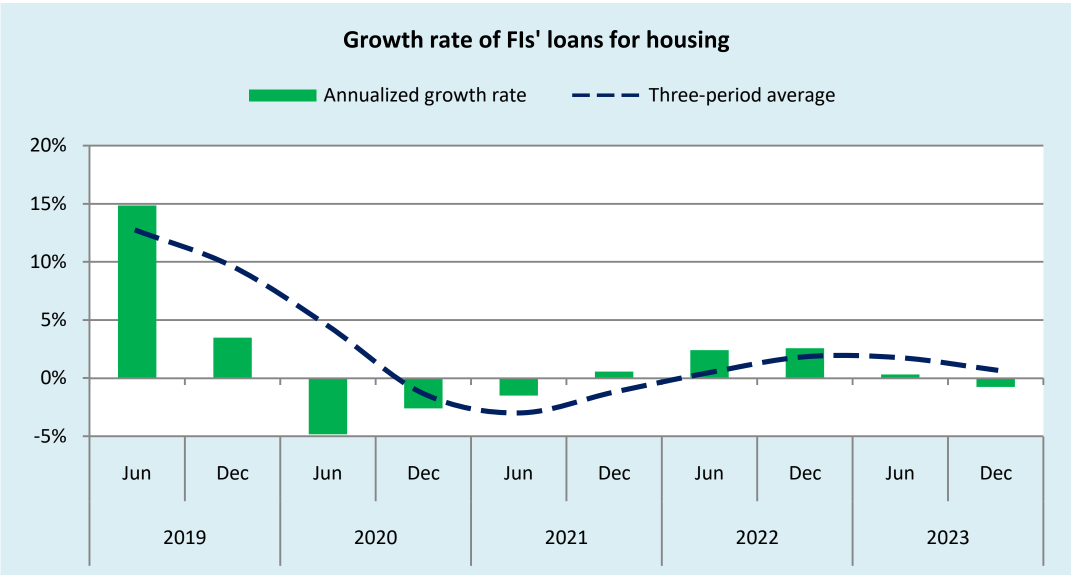
b. Loans to commercial housing



Notes: Data for Jun-23 and Dec-23 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.

Loan growth in the residential housing sector declined considerably at end-December 2023; whereas, loan growth in the commercial housing sector increased considerably compared to that of the preceding period.

6.4 Growth of FIs' loans to housing sector

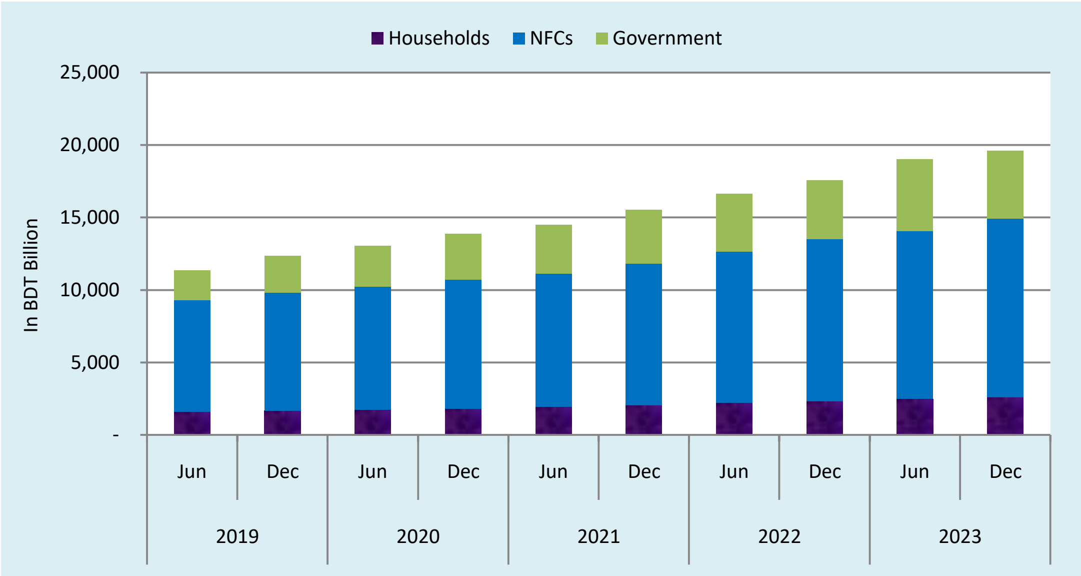


Notes: Data for June-23 and Dec-23 are unaudited.
Source: DFIM, Bangladesh Bank.

After the positive growth since December 2021 to June 2023, FIs' loan growth to the housing sector decreased significantly and became negative at the end of December 2023.

6. Inter-linkages– Cont'd.

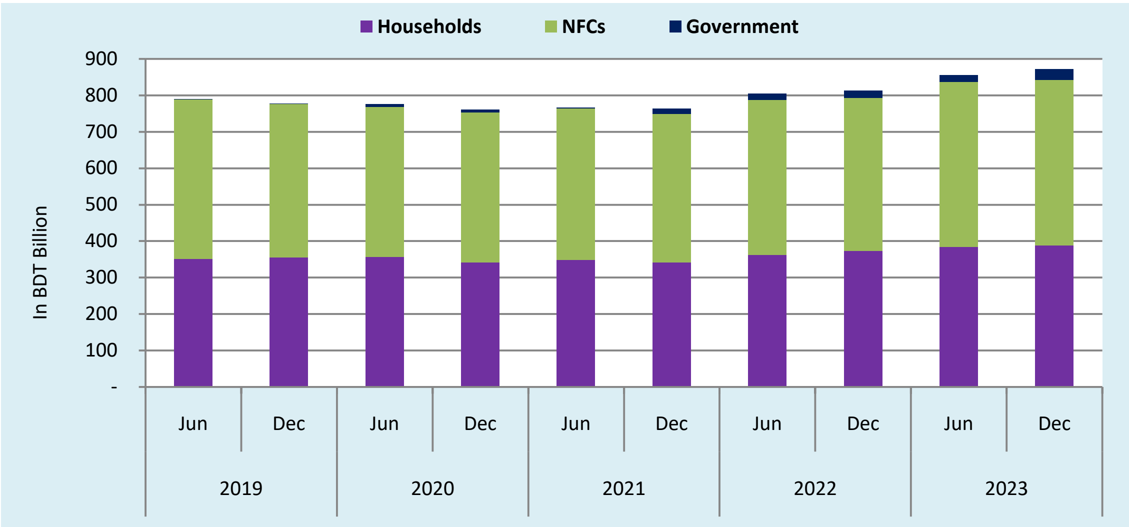
6.5 Banks' loans to counterpart sectors



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 continued to demonstrate a rising trend during the last several periods including the review period. Loans to NFCs accounted for major part of overall loan portfolio of the banking sector.

6.6 NBDCs' loans to counterpart sectors

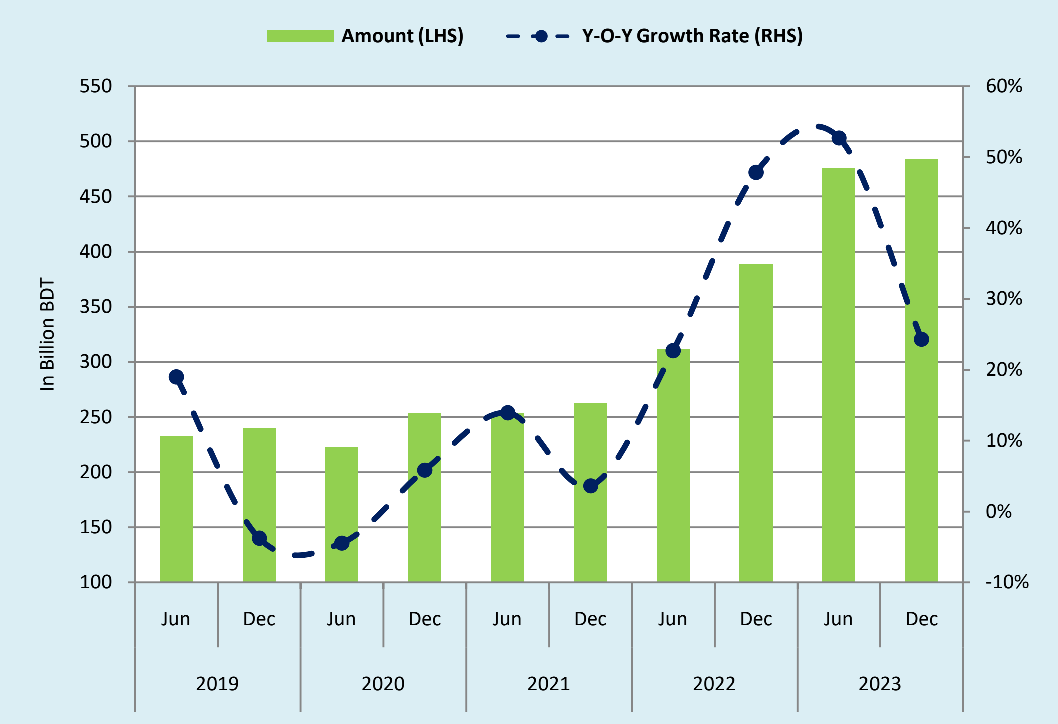


Notes: Loans to government refer to gross amount. NBDCs include deposit taking FIs, Ansar-VDP Unnayan Bank, Karmasangsthan Bank, Grameen Bank and Bangladesh Samabaya Bank.
Source: Statistics Department, Bangladesh Bank.

At end-December 2023, the growth of NBDCs' loans to counterpart sectors increased further, largely due to surge in loans to NFCs compared to that in the previous period.

6. Inter-linkages– Cont'd.

6.7 Banks' cross-border claim (Foreign Assets)



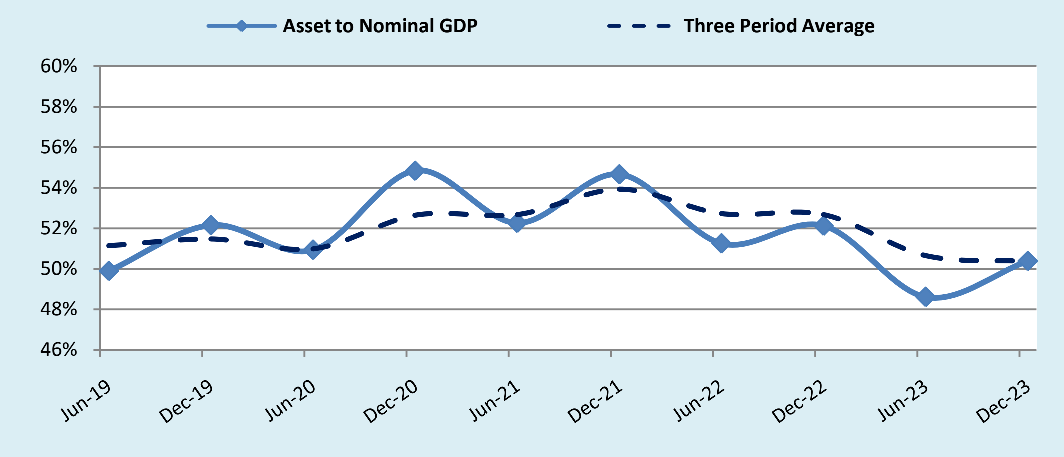
Notes: Cross-border claim includes foreign currency notes in hand, balances with banks abroad, bilateral trade credits, wage earners' balance abroad, foreign bills, foreign direct investment, portfolio investment.
Source: Statistics Department, Bangladesh Bank.

Trailing continued upward trend after December 2021, banks' cross-border claim increased slightly in the review period.

7. Structural risk

7.1 Banking sector size

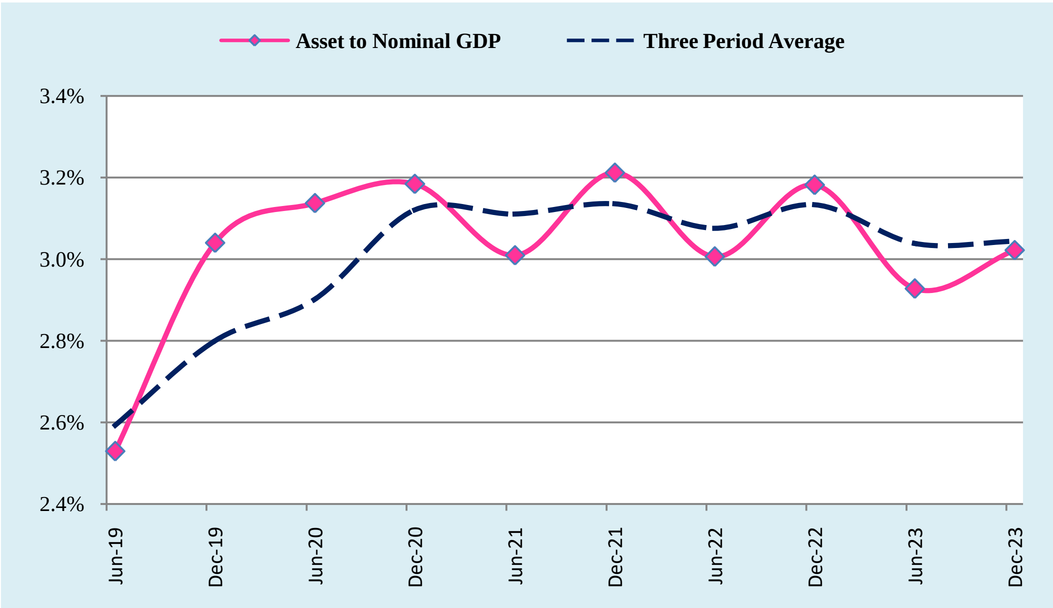
a. Domestic Banks



Note: 1) June 2023 data is revised. 2) 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 increased slightly and stood at 50.38 percent at the end of December 2023 from 48.61 percent at the end of June 2023.

b. Foreign Banks

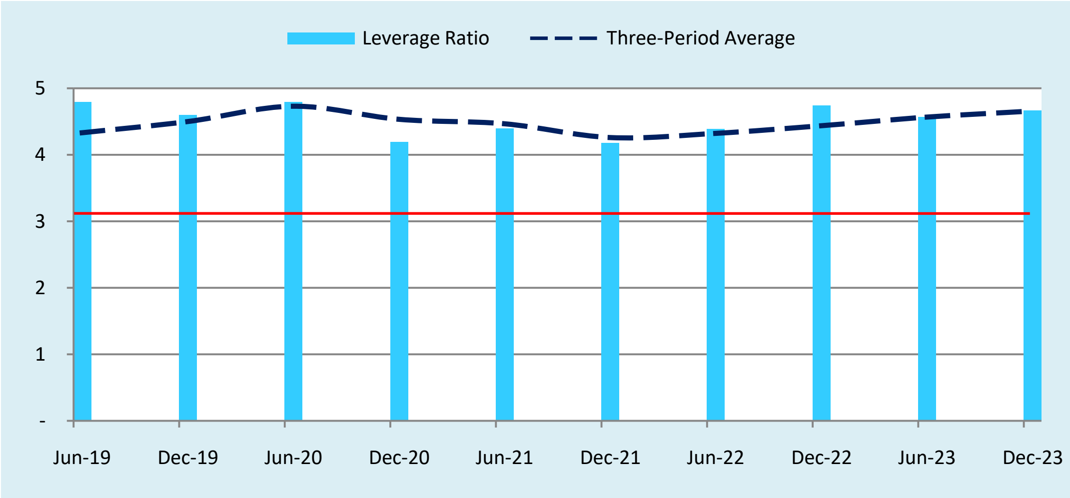


Note: 1) June 2023 data is revised. 2) Ratio of foreign banks' total assets to Nominal GDP. June based GDP data is used for December in calculating this ratio.
Source: DOS, BB and Monthly Economic Trends, BB; computation: FSD, BB.

In the review period, foreign banks' total assets to nominal GDP ratio increased moderately compared to the position of the preceding period.

7. Structural risk–cont'd.

7.2 Banking sector leverage

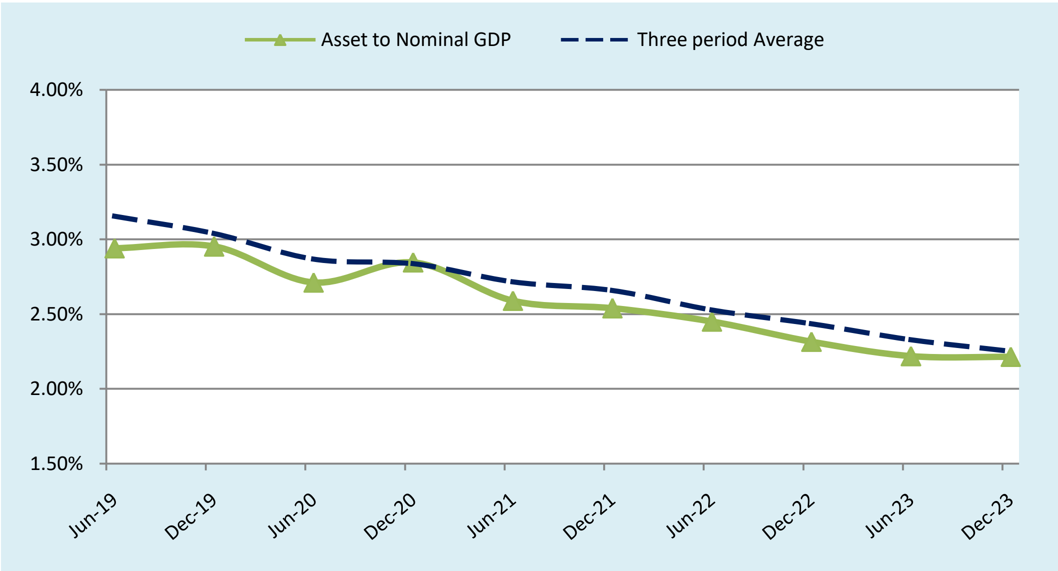


Note: Leverage ratio is defined as the ratio of Tier-1 capital after required deduction to total exposure after required deduction, in line with Basel III.
Source: DOS, BB.

At end-December 2023, banking sector's leverage ratio increased moderately compared to the position of end-June 2023 and stood at 4.67 percent which was above the regulatory requirement of 3.25 percent for 2023.

7.3 Financial institutions (FIs) sector size

FIs' assets to nominal GDP

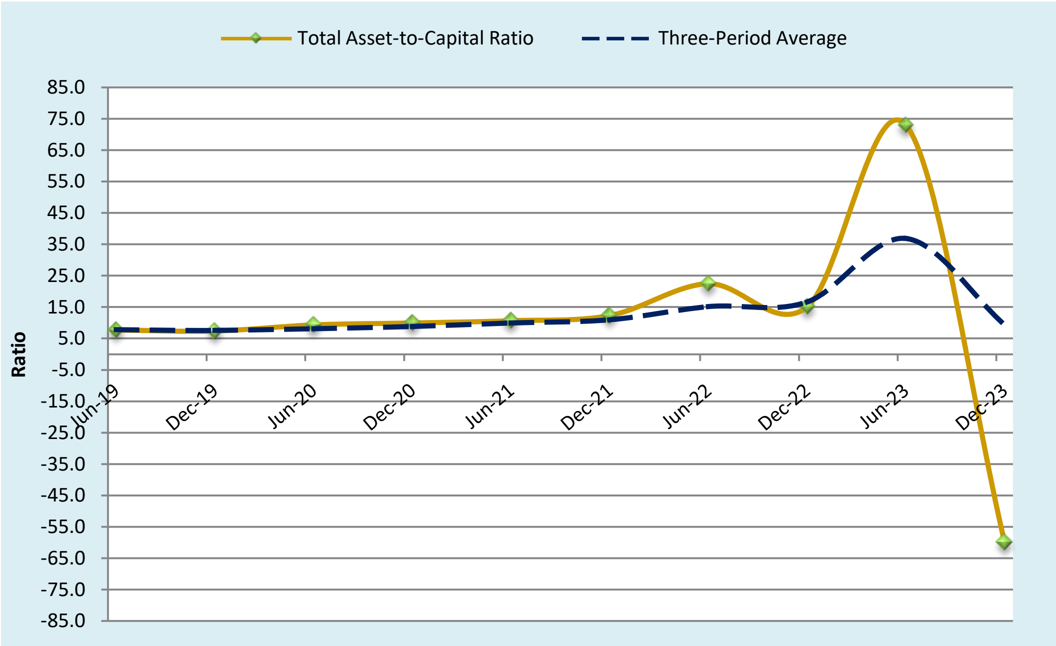


Note: June based GDP data is used for December in calculating this indicator.
Source: DFIM, BB.

FIs' assets to nominal GDP ratio demonstrated a general downward trend during the last several periods. The ratio declined moderately in the review period compared to that of the previous period.

7. Structural risk–cont'd.

7.4 Financial institutions (FIs) sector leverage



Note: For the FIs sector, leverage ratio is calculated as the total assets to total capital (as per the book of affairs and min-risk-weighted).
Source: DFIM, BB.

Financial institutions' leverage, defined as total asset-to-capital ratio, showed a significant decline at the end of December 2023 compared to that of the preceding period.

Annex to Bangladesh Systemic Risk Dashboard

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, 2023.

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 Public 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).

Public 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.

1.4 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.

1.5 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.

1.6 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 financial institutions (FIs), 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 FIs

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, assured liquidity support (ALS) and special repo. Repo facilities are provided on an overnight (one-day) or 7, 14 and 28-day basis to the banks and NBFIs 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 (BDT/USD)

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. Cost to 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 FIs' profitability indicators

a. Return on equity (ROE)

Source: Department of Financial Institutions and Market, BB.

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

b. 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.

c. Cost to income ratio

Source: Department of Financial Institutions and Markets, BB.

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

d. Net interest income to total operating income ratio

Source: Department of Financial Institutions and Markets, BB.

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

5.4 FIs' 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 FIs' loans to housing sector

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

It refers to the growth in loans extended by FIs 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 FI sector size

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

The indicator is based on the ratio of total assets of financial institutions (FIs) to nominal GDP.

7.4 FI sector leverage

Source: DFIM, BB.

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

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- This report is prepared by Financial Stability Department, Bangladesh Bank, Head Office, Motijheel, Dhaka-1000, Bangladesh.
- The report is based on data and information available as of end-December 2023, unless stated otherwise.
- The report can be accessed through internet at https://www.bb.org.bd/en/index.php/publication/publictn/1/70.
- Feedback on the report may be sent to gm.fsd@bb.org.bd.