**BANGLADESH BANK**
Central Bank of Bangladesh

Macro Prudential Supervision of Financial System

# Bangladesh Systemic Risk Dashboard (BSRD)

**Financial Stability Department**
**June 2023**

# Bangladesh Systemic Risk Dashboard (BSRD)

## June 2023

**Advisor**

Nurun Nahar
Deputy Governor

**Editors**

1. Md. Khurshid Alam, Executive Director (Grade-1)-1
2. Md. Alauddin, Director (FSD)

**Co-editors**

1. Subash Chandra Das, Additional Director
2. Shantanu Biswas, Joint Director
3. Mst. Shahida Kamrun, Deputy 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 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 |
| 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

*Real Gross Domestic Product (GDP) growth of Bangladesh stood at 6.03 percent in FY23, down from 7.10 percent in FY22, though it remained higher than the prediction of IMF. The growth slightly slowed down because of the downturn in the global economy. Despite the decline in GDP growth, the development trajectory continues. Also, current account balance (CAB) turned out to be positive in the review period, January-June 2023, due to various measures, associated with imports, taken by the authorities. Furthermore, Government deficit-to-GDP ratio declined; however, the public debt to nominal GDP ratio increased moderately in FY23 compared to that of FY22. Two other macroeconomic indicators, namely household debt-to-Gross National Disposable Income (GNDI) ratio and the NFC debt-to-GDP ratio, decreased in the first half (H1) of 2023.*

*In the review period, annual growth rate of loans from banks and NBDCs to household, growth of banks' loans to Non-Financial Corporations (NFCs) experienced a decrease compared to those of the previous period. Contrary to that, NBDCs loans to private NFCs showed an increasing trend. Apart from this, banks continued to maintain both the LCR and the NSFR well above the required level in H1 of 2023, though the sector availed liquidity support from Bangladesh Bank amounting BDT 5563.45 billion through the arrangement of assured liquidity support (ALS), Repo, and special Repo facilities as compared to BDT 7415.25 billion in H2 of 2022. During this period, the ADR of the banking industry stood at 78.51 percent, recording a decrease of 49 basis points compared to that of the prior period.*

*Investment of banks in Treasury bonds with a remaining maturity of over 5 years and up to 10 years maintained the largest volume, whereas the smallest was maintained by the ones with a remaining maturity of more than 15 years at end-June 2023. On the other hand, 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. Equity indices of DSE, the prime bourse of Bangladesh, recorded a slightly upward trend and the market P/E ratio increased as well during H1 of 2023 compared to that of H2 of 2022. The average call money borrowing rate thrived and the weighted average interest rate on banks' advances and deposits also accelerated slightly in the review period. The BDT in relation to the US dollar (USD) depreciated significantly.*

*Banks' gross NPL ratio increased slightly at end-June 2023 compared to that of the preceding period, which might have resulted in deceleration in the profitability indices of the sector such as ROA and ROE. Additionally, Tier-1 capital to RWA ratio decreased slightly during this period. On the contrary, the NPL ratio of FIs continued to rise considerably, which largely led to decline in overall profit and Tier-1 capital to RWA ratio of the industry. At end-June 2023, the provision maintenance ratios of banks and FIs were 78.75 percent and 89.0 percent respectively.*

*Annualized growth of banks' credit to the commercial housing sector and Government sector accelerated, while the same to the residential housing sector decelerated during the review period compared to those of the preceding period. NBDCs' contribution posted a downturn in the Government sector but opposite took place in the housing sector. Nevertheless, both banks' and NBDCs' loans to counterpart sectors exhibited a progressive escalation in terms of volume. Furthermore, NFCs possessed the lion's share in both cases. Banks' cross-border claim accelerated slightly during the review period. Besides, assets to nominal GDP ratio for both domestic and foreign banks marginally decreased at end-June 2023 compared to those of the previous period, same as for FIs. Banks' leverage ratio, defined as Tier-1 capital to total exposure according to Basel-III, decreased, while the leverage ratio of FIs, defined as assets to capital, increased during the review period.*

# 1. Macro risk

## 1.1 Current and forecasted real GDP growth
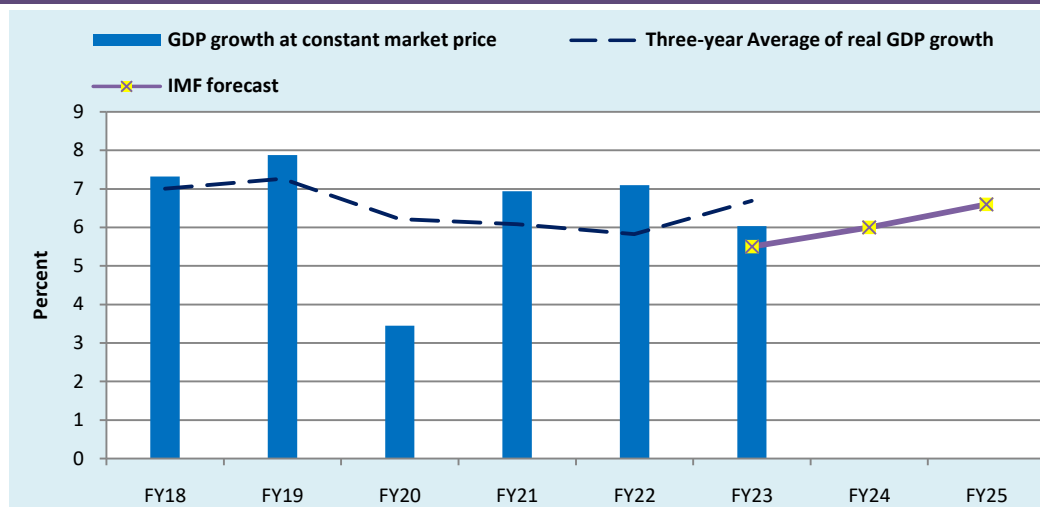


**Notes:** 1) The base year is 2015-16.  2) As half-yearly GDP is not calculated in Bangladesh, GDP growth is shown for only fiscal years.
**Source:** Monthly Economic Trends, Statistics Department, BB; IMF's World Economic Outlook, April 2023 and October 2023.

*The real GDP growth was 6.03 percent in FY23, down from 7.10 percent in FY22, partly due to the effect of a worldwide economic downturn. However, according to the IMF's projections, growth may be increased in FY24 from the level of growth forecasted by them in April 2023 for FY 2023.*

## 1.2 Current account balance-to-GDP ratio
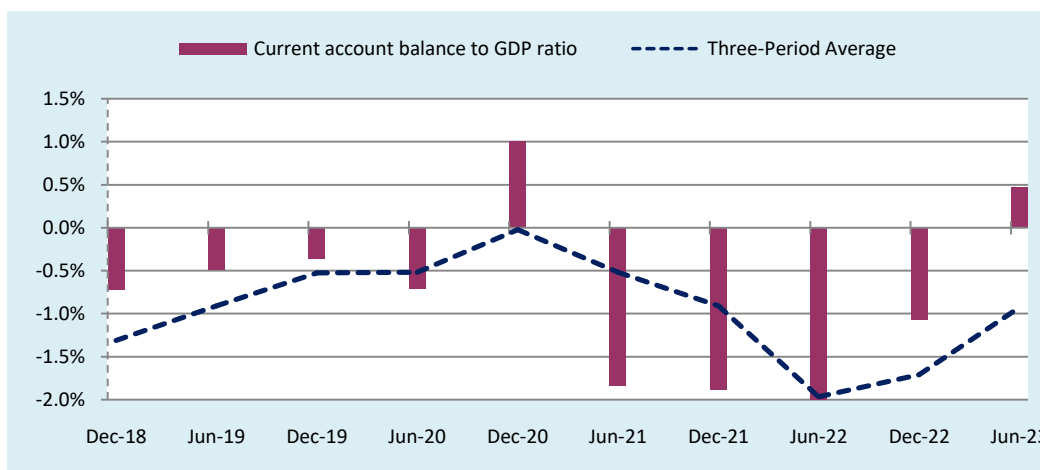


**Note:** 1) Provisional data is used for Jun-2023. 2) As half-yearly GDP is not calculated in Bangladesh, June based GDP data is used for December in calculating the desired ratio.
**Source:** Monthly Economic Trends, Statistics Department, BB.

*According to the chart, the current account balance-to-GDP ratio showed a notable improvement after remaining negative during June 2021 to December 2022.*

# 1. Macro risk–Cont'd.

## 1.3 Public debt-to-GDP ratio
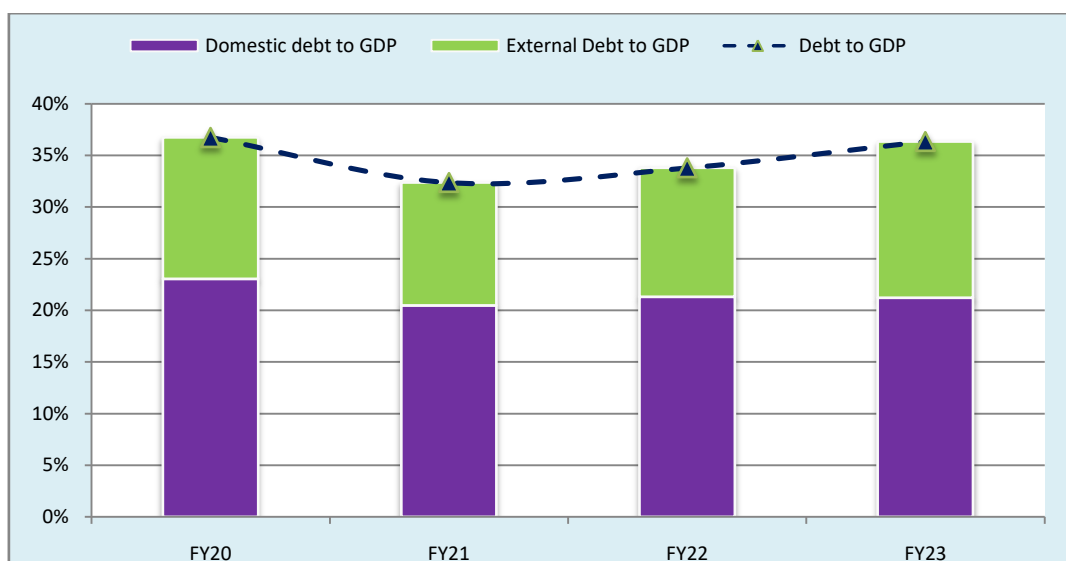


**Notes:** 1) Because of unavailability of half-yearly data of GDP, the ratio is shown only for fiscal years.
**Source:** Monthly Economic Trends, Statistics Department, BB and Quarterly Debt Bulletin, Finance Division, Ministry of Finance, GOB.

*A notable upturn was observed in the public debt-to-GDP ratio in FY23 compared to that of FY22.*

## 1.4 Government deficit-to-GDP ratio
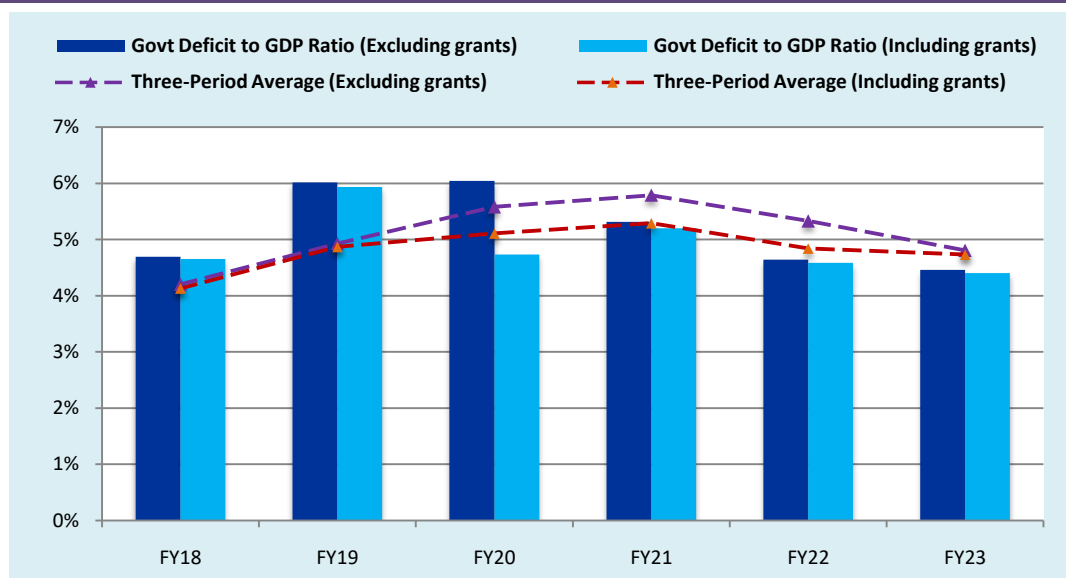


**Notes:** 1) Because of unavailability of half-yearly data of GDP, government deficit-to-GDP ratio is shown for fiscal years only. 2) For FY20 to FY22, GDP is considered as per new base year 2015-16. 3) Data for FY22 is revised.
**Source:** Monthly Report on Fiscal Position, June-2023 issue, Ministry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

*Compared to the preceding fiscal year, the government's deficit-to-GDP ratio decreased slightly in FY23, both including and excluding grants.*

# 1. Macro risk–Cont'd.

## 1.5 Household debt-to-gross national disposable income ratio
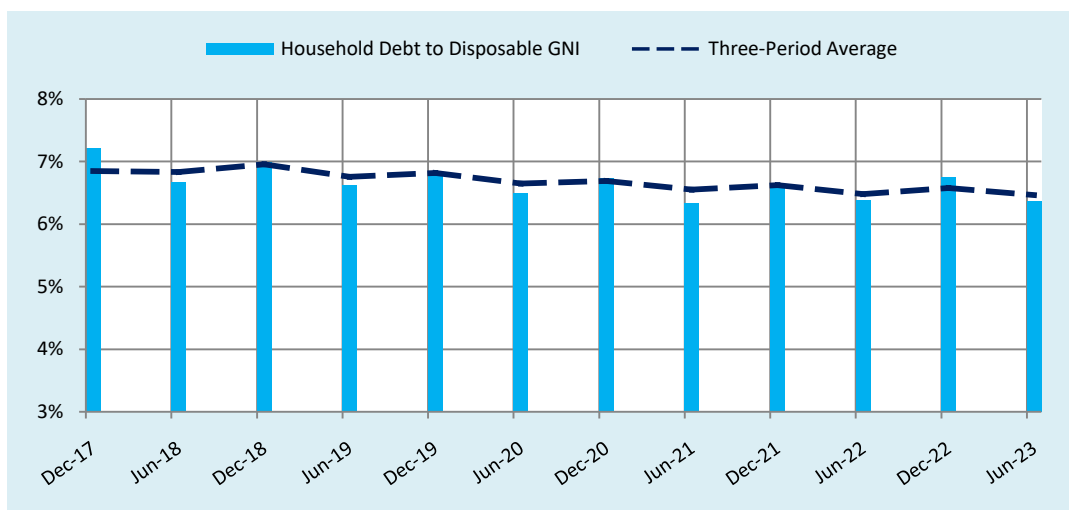


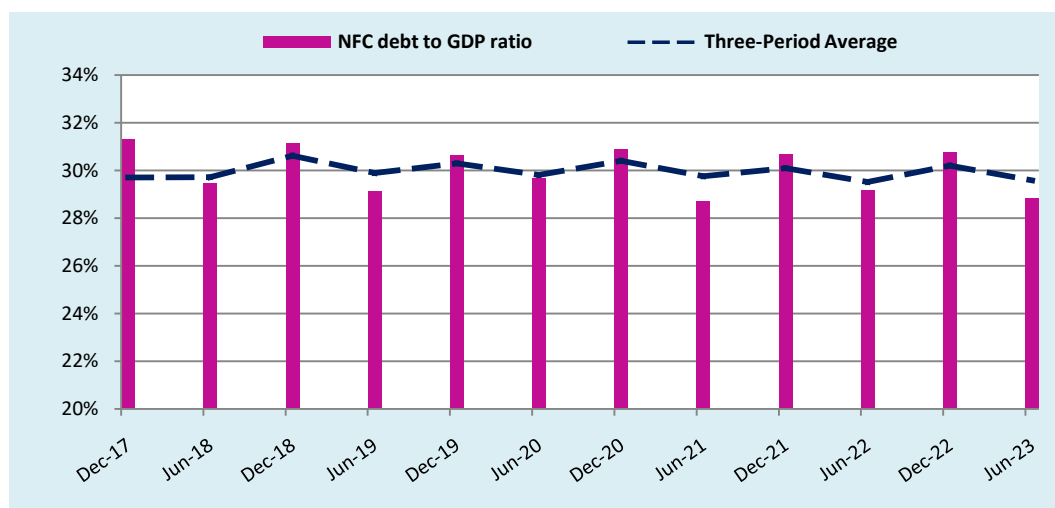**Notes:** 1) June-23 based data is provisional. 2) As half-yearly gross national disposable income (GNDI) is not calculated in Bangladesh, June based data of gross national disposable income (GNDI) is used for December in calculating the ratio. 3) Before june-2022 data represents Household debt to gross national income ratio.
**Sources:** Monthly Economic Trends, Statistics Department, BB.

*The ratio of household debt-to-gross national disposable income (GNDI) decreased in June 2023 compared to that of December 2022. It is also slightly lower than the position of June 2022.*

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



**Notes:** 1) June-23 based data is provisional. 2) NFC debt includes debts of both public and private NFCs. 3) As half yearly GDP is not calculated in Bangladesh, 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 decreased at end-June 2023 compared to that of end-December 2022. Also, the ratio fell in comparison with the same of end-June 2022. 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
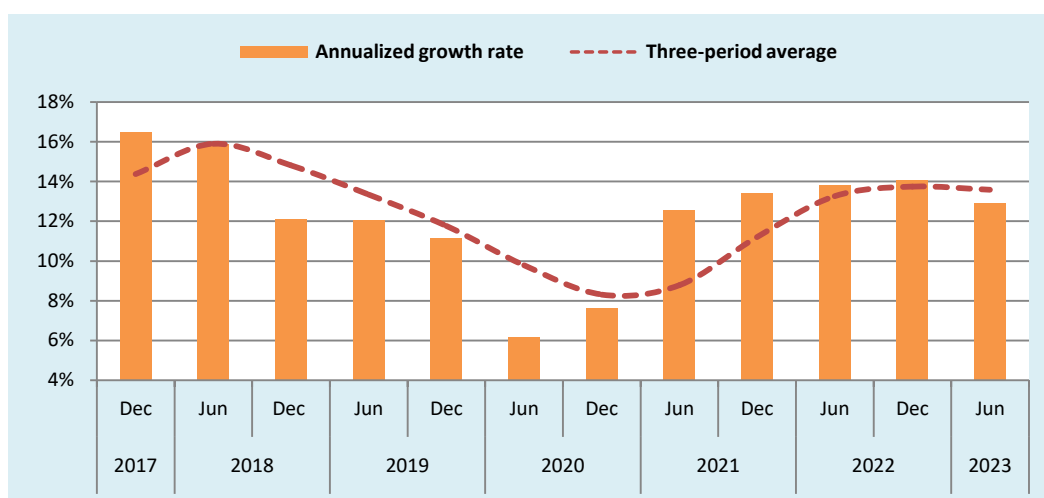


**Notes:** Loans refer to outstanding loans and advances extended to domestic households (individuals) excluding bills.
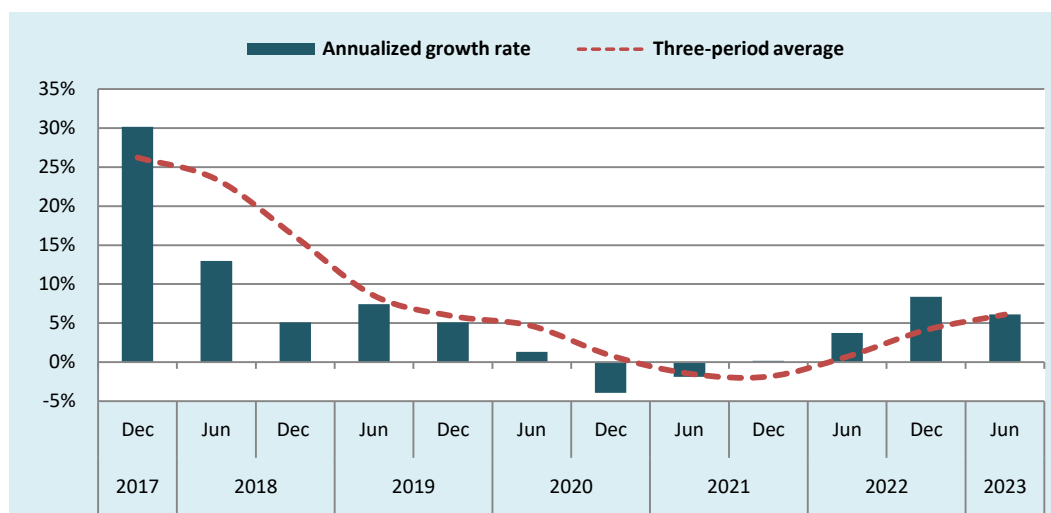**Source:** Statistics Department, BB.

*In contrast to an increasing growth trend observed from December 2020 to December 2022, banks' credit growth to the household sector decreased slightly in this review period.*

## 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.
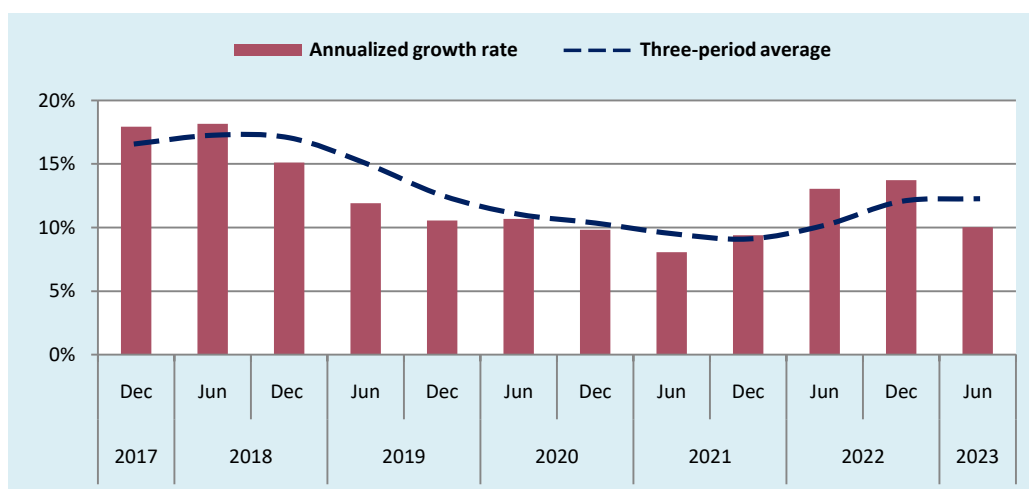**Source:** Statistics Department, BB.

*After the negative growth in December 2020 and June 2021 the growth of non-bank depository corporations' (NBDC) loans to the household sector has started to show an upward trend. In June 2023 the growth was lower than that of December 2022.*

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[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.

*Following a notable increasing trend seen after June 2021, the growth of banks' loan to private NFCs declined markedly in June 2023 compared to December 2022.*

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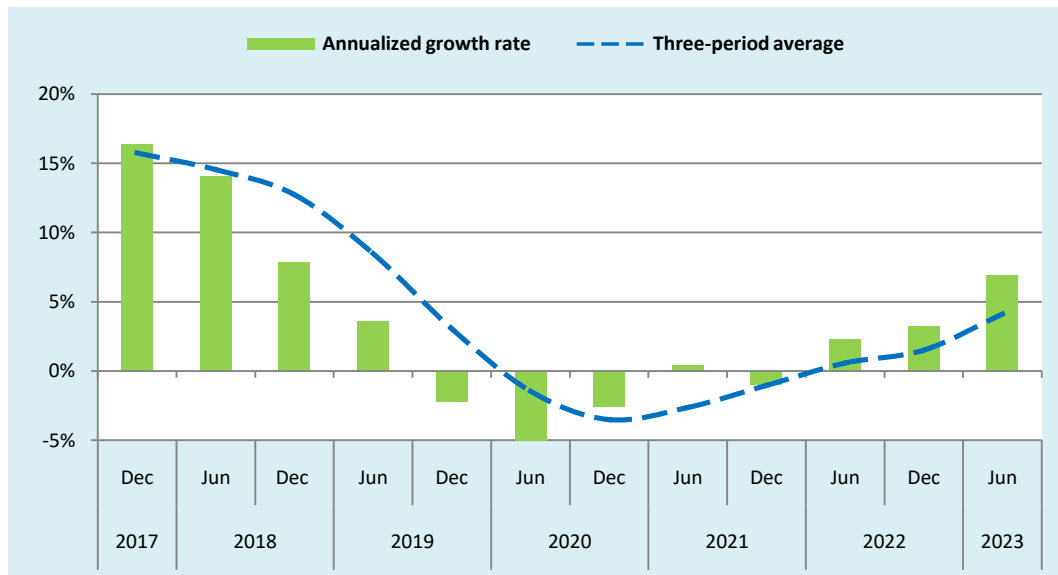


**Notes:** NFC refers to private NFCs only. NBDCs include deposit taking FIs, Ansar-VDP Unnayan Bank, Karmasangsthan Bank, Grameen Bank, and Bangladesh Samabaya Bank.
**Source:** Statistics Department, BB.

*NBDCs' loans to private NFCs continued to show a positive growth since June 2022, in contrast to the downward and negative growth that occurred over a few years until December 2021. In June 2023, the growth increased significantly compared to that of the preceding period.*

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# 2. Credit risk–Cont'd.

## 2.5 Provision maintenance ratio of banks
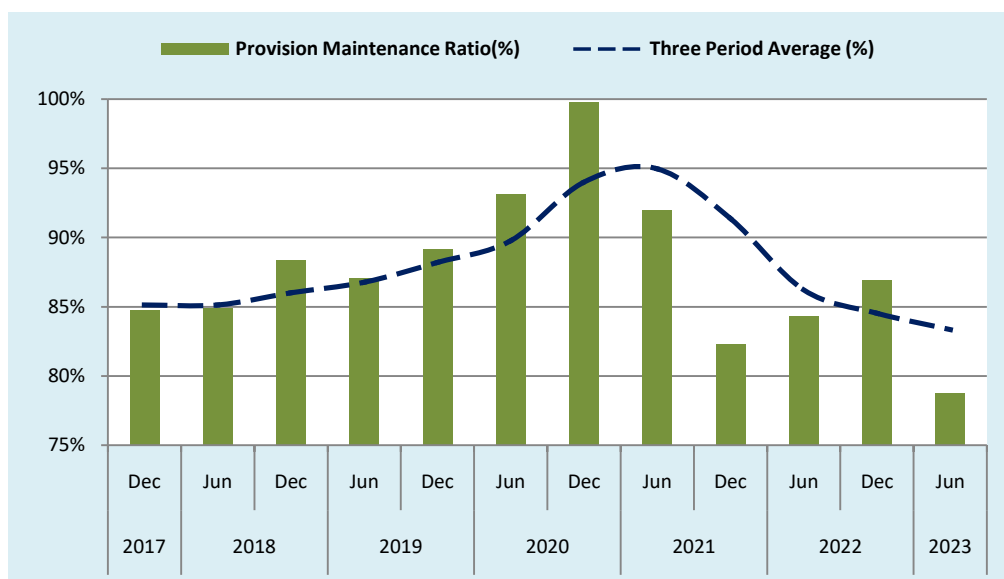


**Notes:** Provision maintenance ratio refers to maintained provision as a percentage of required provision.
**Source:** BRPD, BB.

*Banks' provision maintenance ratio stood at 78.75 percent at end-June 2023. The ratio recorded notable decline at end-June 2023 compared to that of end-December 2022.*

## 2.6 Provision maintenance ratio of FIs
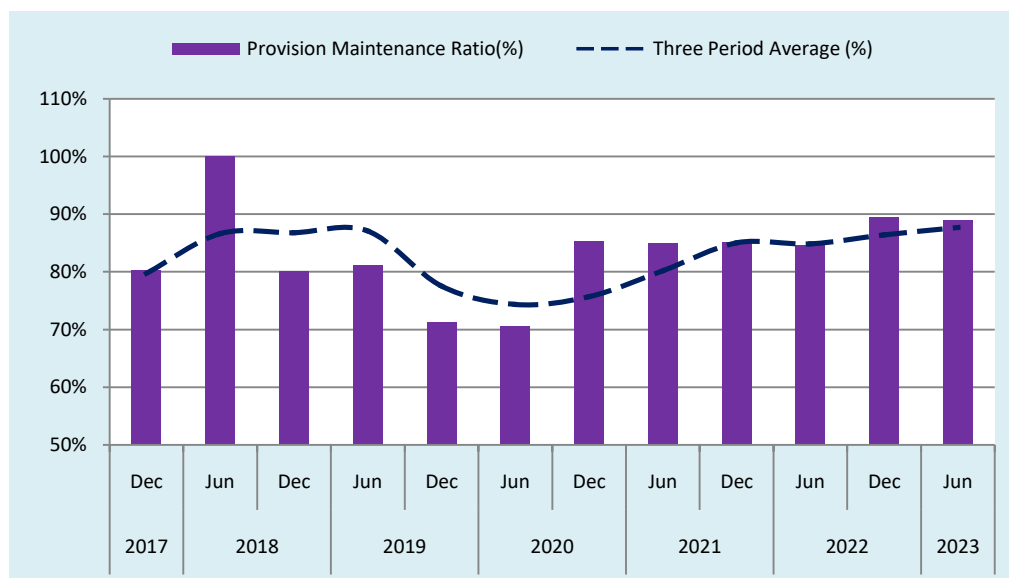


**Notes:** Data for December 2022 and June 2023 are un-audited.
**Source:** DFIM, BB.

*After witnessing a moderate growth at the end of December 2022, FIs' provision maintenance ratio observed a slight decrease at the end of June 2023 and stood at 89.0 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**
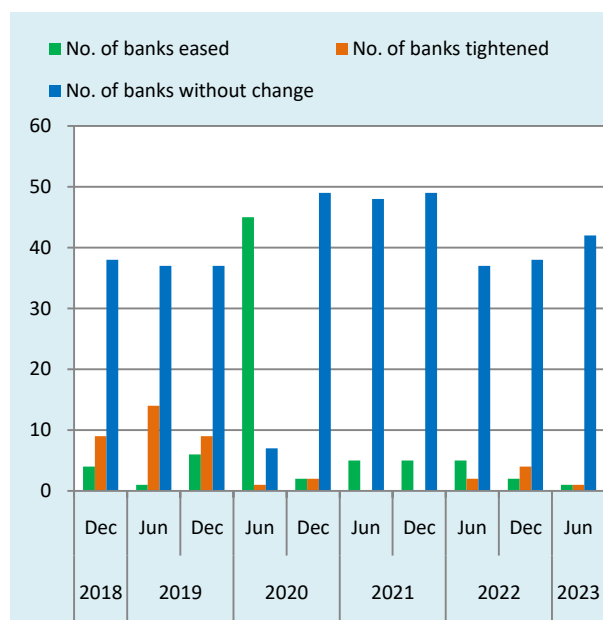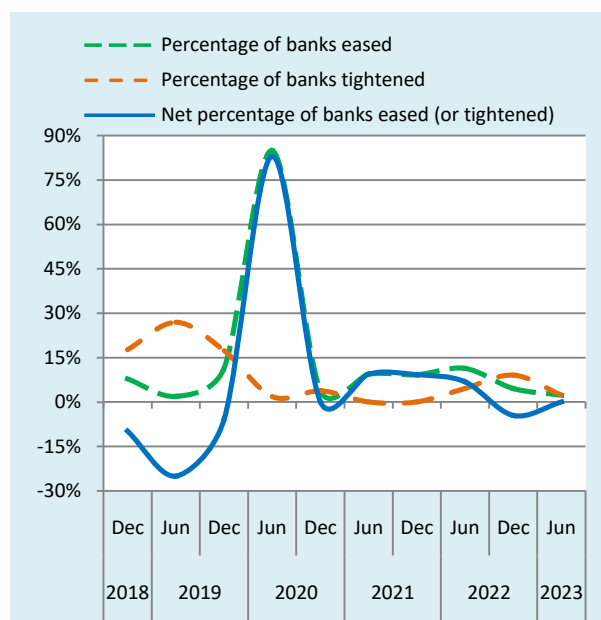


**Notes:** Changes in banks' announced interest rate for housing loans have been used as a proxy for changes in banks' credit standards. Net percentage change is the difference between the share of banks reporting that interest rates have been eased (decreased) and the share of banks reporting that they 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 first half of 2023, 2.3 percent of 44 respondent scheduled banks eased the interest rates of housing loans, while same percent (2.3%) of banks tightened; the remaining banks kept their rates unchanged. As a result, neither net tightening nor net easing was observed during this period.*

# 3. Funding and liquidity risk

## 3.1 Bangladesh Bank's liquidity support to banks
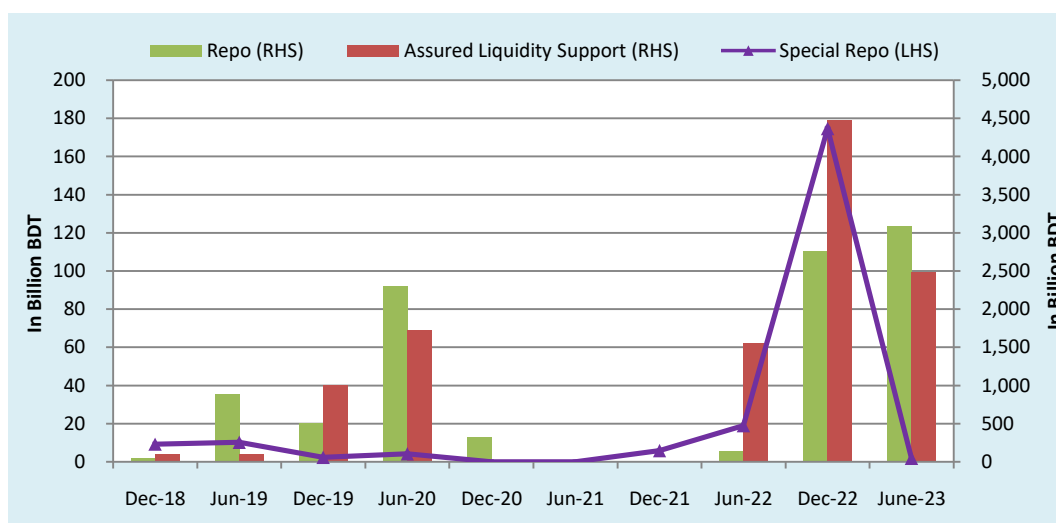


Source: DMD, BB.

*Bangladesh Bank's liquidity assistance in the form of Special Repo shrank significantly during the review period. Assured Liquidity Support decreased considerably as well compared to that of the second half of 2022. On the other hand, Repo increased considerably during the preceding period.*

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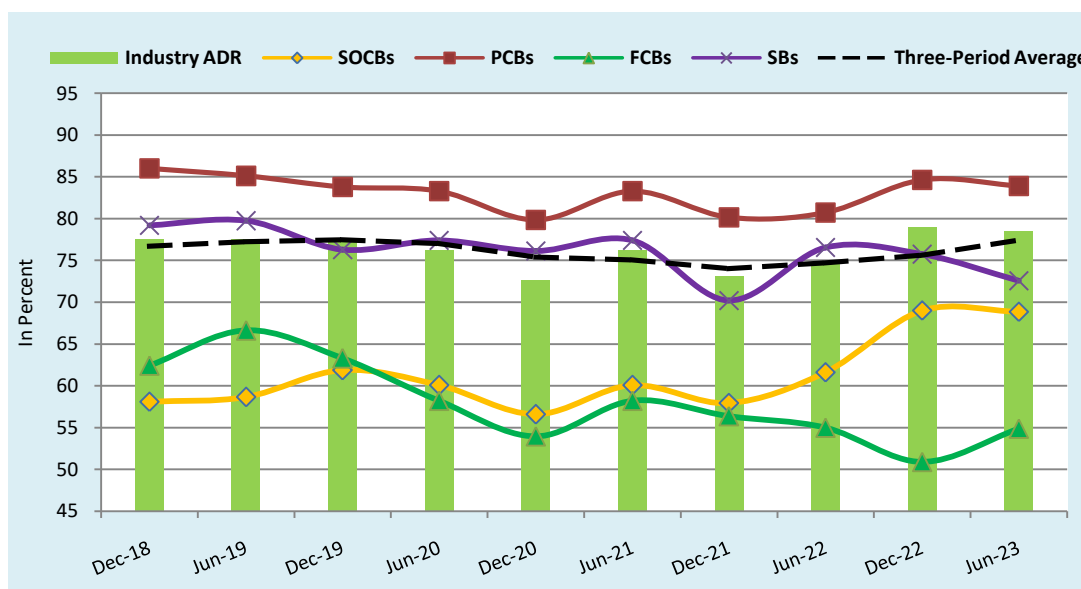


Source: DOS, BB.

*The industry Advance-to-Deposit Ratio (ADR) decreased slightly, and stood at 78.51 percent at end-June 2023 which was 79.0 percent at end-December 2022. PCBs maintained a higher ADR than the industry average, but SOCBs and FCBs had lower ADRs. Notably, FCBs showed an increasing trend in terms of ADR after a declining trend in contrast to the industry trend. On the other hand, SBs are showing a declining trajectory in this period after significant hike in June 2022.*

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# 3. Funding and liquidity risk–cont'd.

## 3.3 Maturity profile of government's outstanding debt securities

### a. Treasury Bond
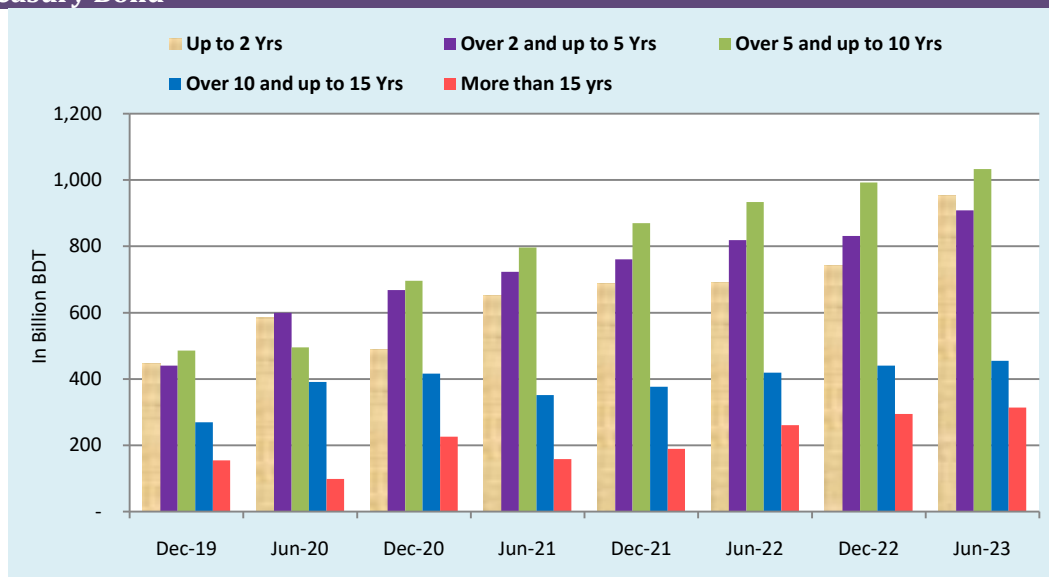


**Notes:** 1. The maturity profile refers to the residual maturity of long-term and short-term debt securities issued by Government of Bangladesh. Long-term debt securities include government Treasury bond with a maturity of more than 12 months. Data are based on amounts outstanding at the end of the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

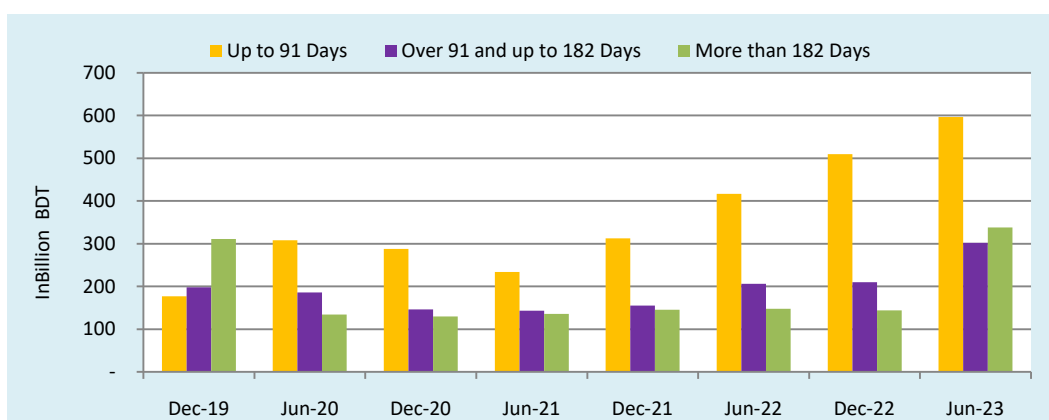*Treasury bonds with a remaining maturity over 5 and up to 10 years remained the largest in terms of volume, whereas the ones with remaining maturity of more than 15 years remained the smallest at end-June 2023. The overall balance of the treasury bonds increased in the review period compared to that 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 in terms of volume. The outstanding of all the treasury bills increased at end-June 2023 compared to the position of end-December 2022.*

# 3. Funding and liquidity risk–cont'd.

## 3.4 Subordinated debt
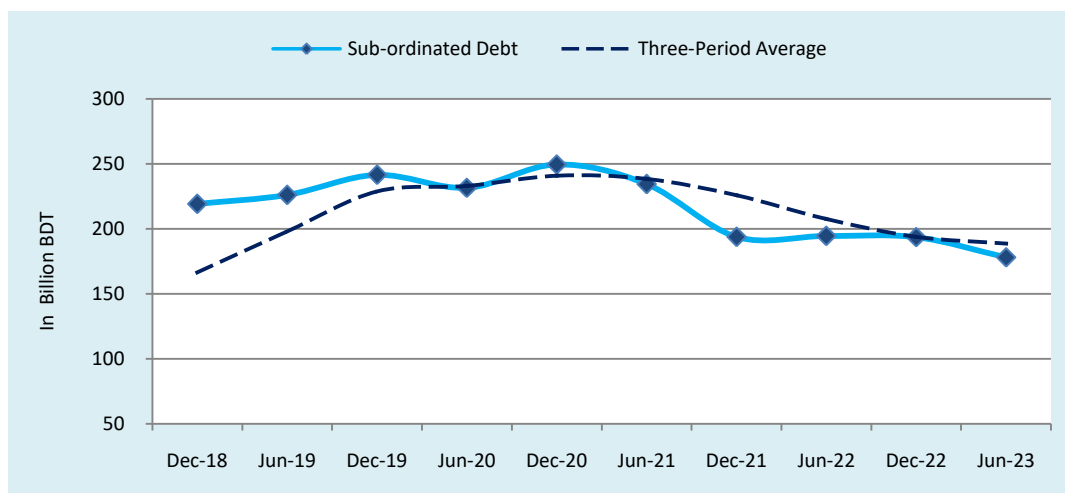


**Note:** Subordinated debts are eligible to be included as Tier-2 Capital for calculating the regulatory capital as per BASEL III Capital Framework.
**Source:** DOS, BB.

*Subordinated debt issued by banks declined slightly at the end of June 2023 compared to that of the end-December2022.*

## 3.5 Banks' LCR and NSFR
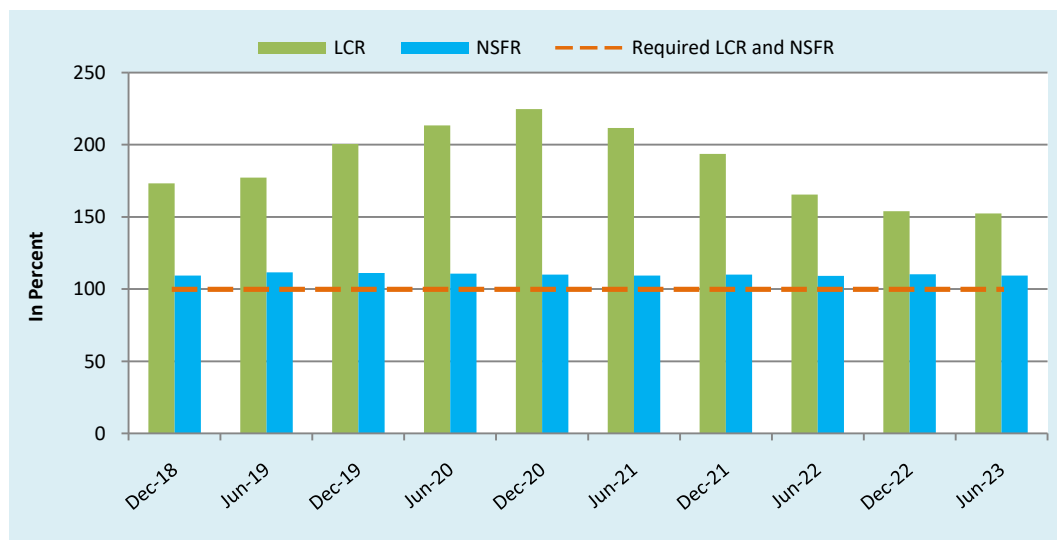


**Note:** 1) BDBL, BKB, PKB and RAKUB are exempted from maintaining LCR and NSFR. 2) Requirement for LCR is equal or greater than 100 percent and for NSFR, it is above 100 percent in Bangladesh.
**Source:** DOS, BB.

*The liquidity coverage ratio (LCR) of the banking sector exhibited a declining trend after December 2020; it was still much higher than the minimum requirement in the review period. Another indicator of banks' liquidity, net stable funding ratio (NSFR) also decreased slightly and stood at around 109 percent against the benchmark of 'above 100 percent'.*

# 4. Market risk

## 4.1 Equity indices
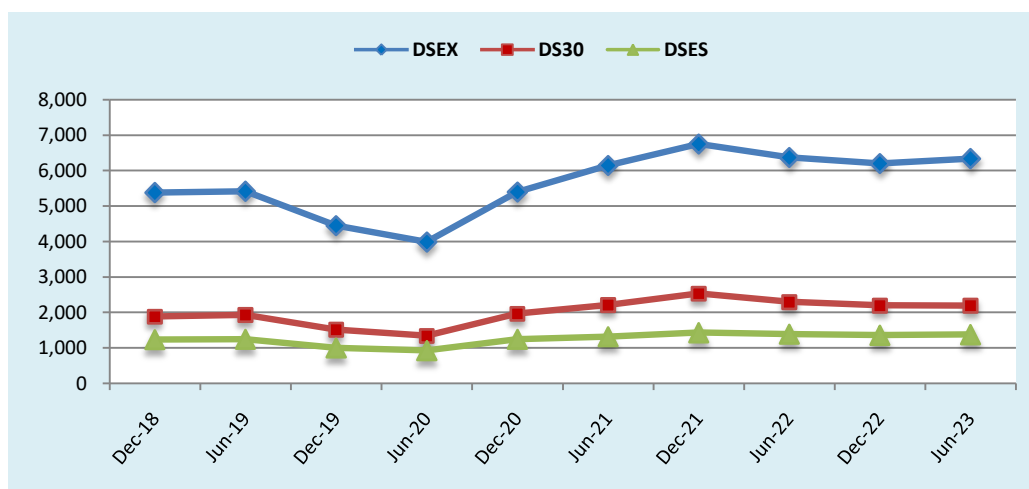


**Source:** DSE Website.

*DSEX, the key DSE index, and DSES both increased slightly at the end of June 2023 compared to those of end December 2022. Other equity index-DSE30 decreased a bit in when compared with the position of end-December 2022.*

## 4.2 Price/earnings (P/E) ratio
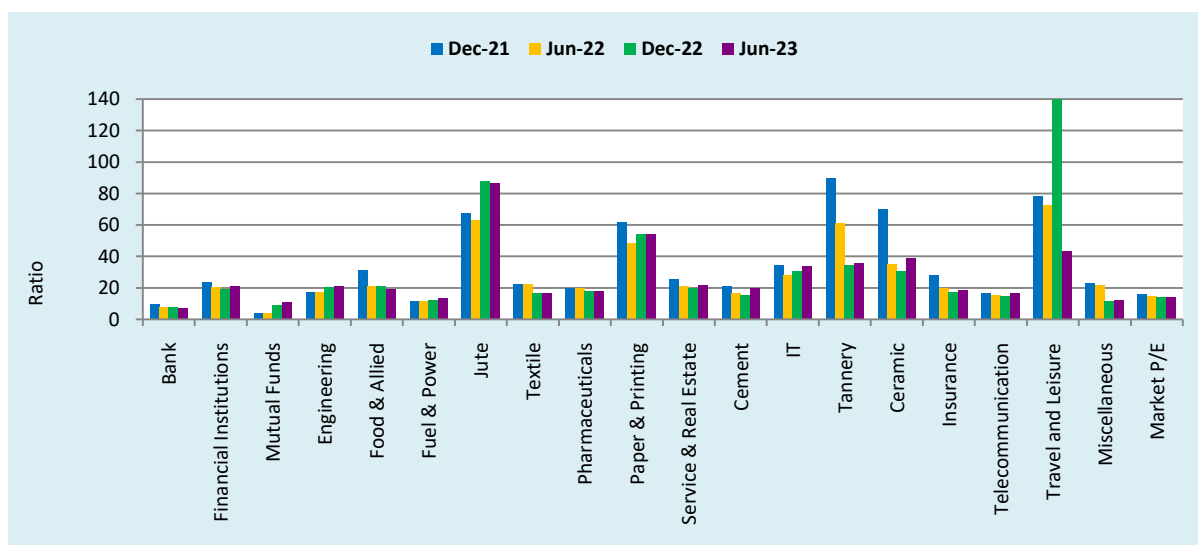


**Source:** DSE Website.

*The P/E ratio of 68.42 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 slightly increased and stood at 14.34 at end-June 2023, from 14.11 at end-December 2022.*

# 4. Market risk–cont'd.

## 4.3 Weighted average call money market rates
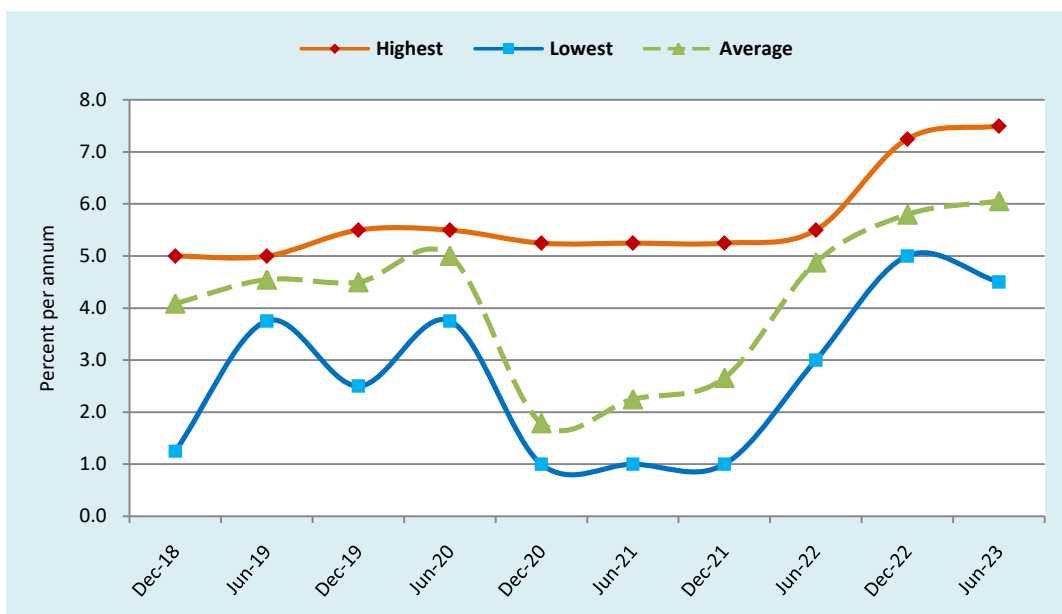


**Source:** Monthly Economic Trends, Statistics Department, BB.

*The weighted average call money borrowing rate increased gradually since December 2020 and it increased further at end-June 2023 except the lowest rate which decreased slightly compared to that of end-December 2022.*

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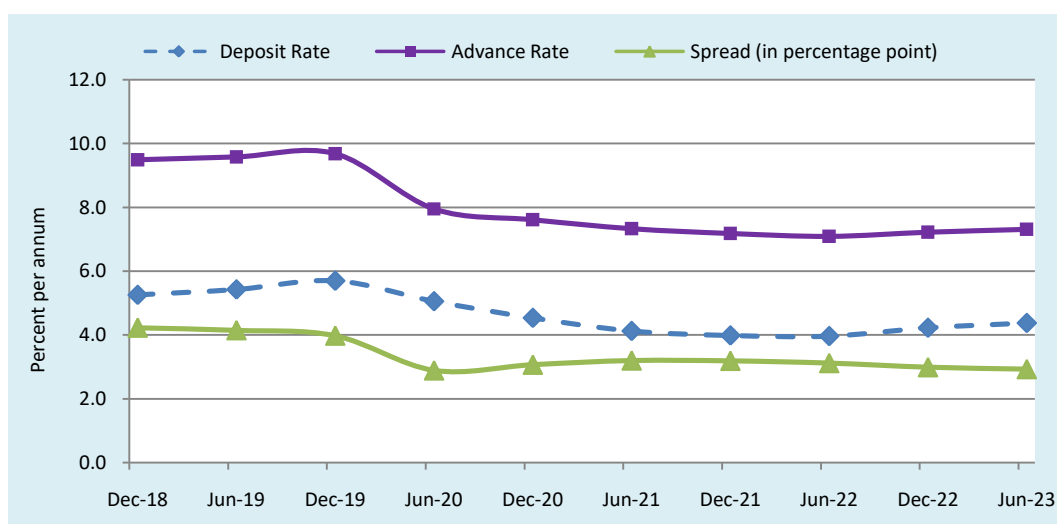


**Source:** Monthly Economic Trends, Statistics Department, BB.

*After June 2022 the weighted average interest rate on deposits and advances exhibited an increasing trend though there was a downward trend from December 2019 to June 2022. It is noteworthy that, the spread shrank by 6 basis points in the first half of 2023 compared to that of the second half of 2022.*

# 4. Market risk–cont'd.

## 4.5 Weighted average exchange rate (USD/BDT)
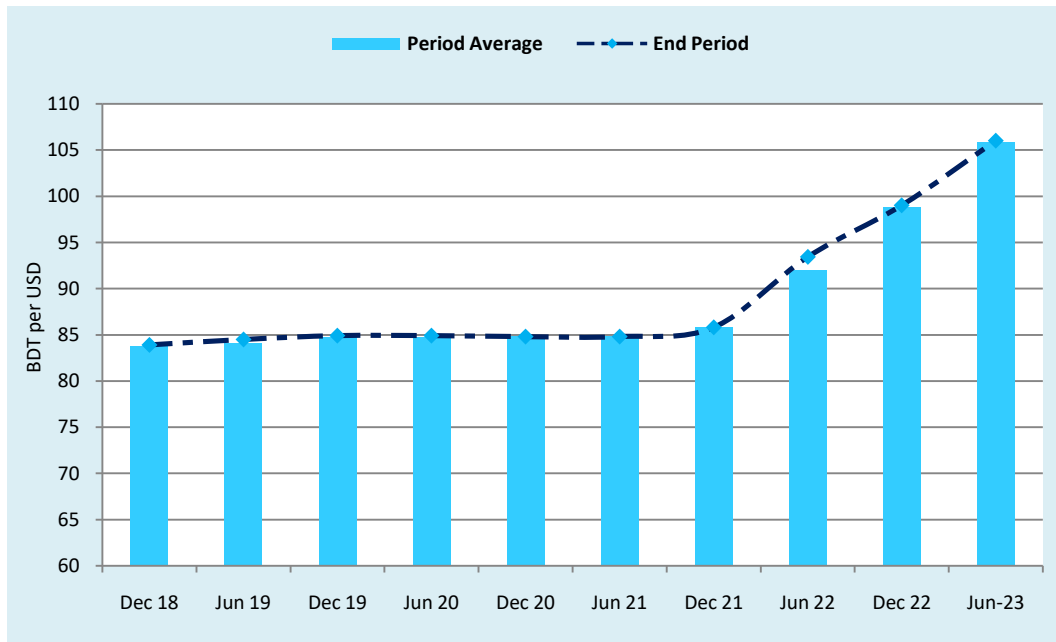


**Source:** Monthly Economic Trends, Statistics Department, BB.

*At end-June 2023, Bangladeshi Taka (BDT) depreciated further against US Dollar unlike the stable trend in the preceding several years, largely due to the global economic shocks, trade imbalance, slow growth in FDI inflow and high cost of imported products and 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)
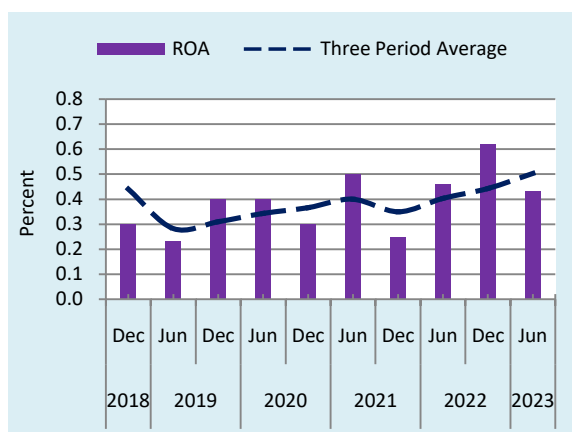


**Note:** Ratios of June period are annualized.
**Source:** DOS, BB; Computation: FSD, BB

*Banks' ROE and ROA both decreased in the first half of the year 2023 compared to those of the second half of the preceding year though three period averages is showing an upward trend.*
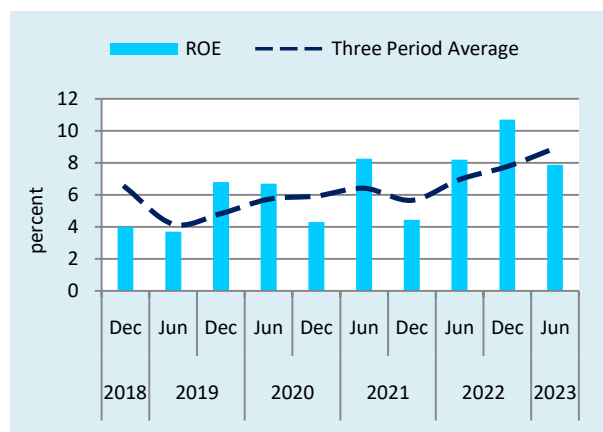
### c. Cost-to-income ratio
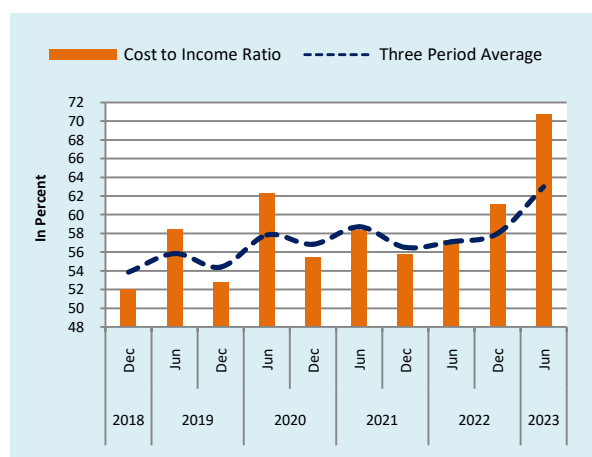


**Note:** Ratio of operating expenses and operating income.
**Source:** DOS, BB; Computation: FSD, BB.

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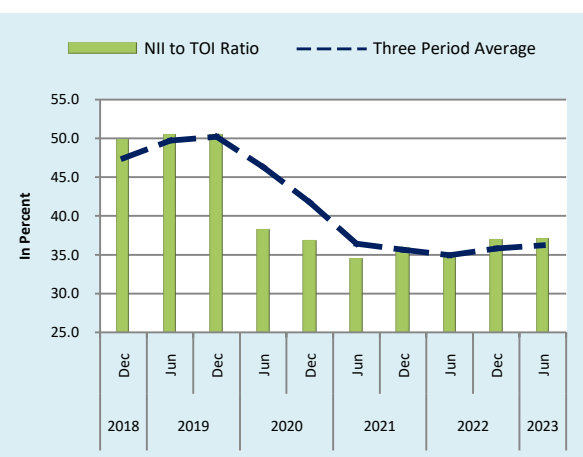


**Note:** Ratio of net interest income and total operating income.
**Source:** DOS, BB; Computation: FSD, BB.

*In the period of January-June 2023, banks' cost-to-income ratio increased notably and reached the peak during the last five years. Banks' net interest income to total operating income ratio increased slightly during the same period as well.*

# 5. Profitability and solvency risk–cont'd.

## 5.2 Banks' solvency indicators

### a. Tier-1 to RWA ratio
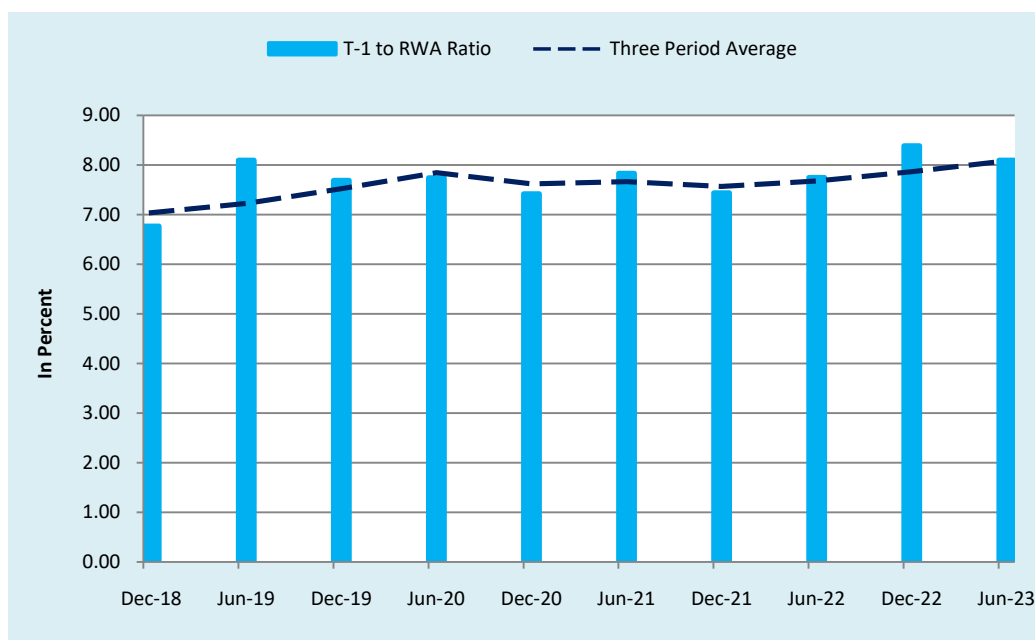


**Note:** Ratio of Tier-1 capital to total risk-weighted assets.
**Source:** DOS, BB.

*Banks' Tier-1 capital to total risk-weighted assets ratio decreased slightly at end-June 2023 from the position of end-December 2022 and stood at 8.10 percent, which remained well above the regulatory requirement of 6.0 percent.*

### b. Gross non-performing loan (NPL) ratio
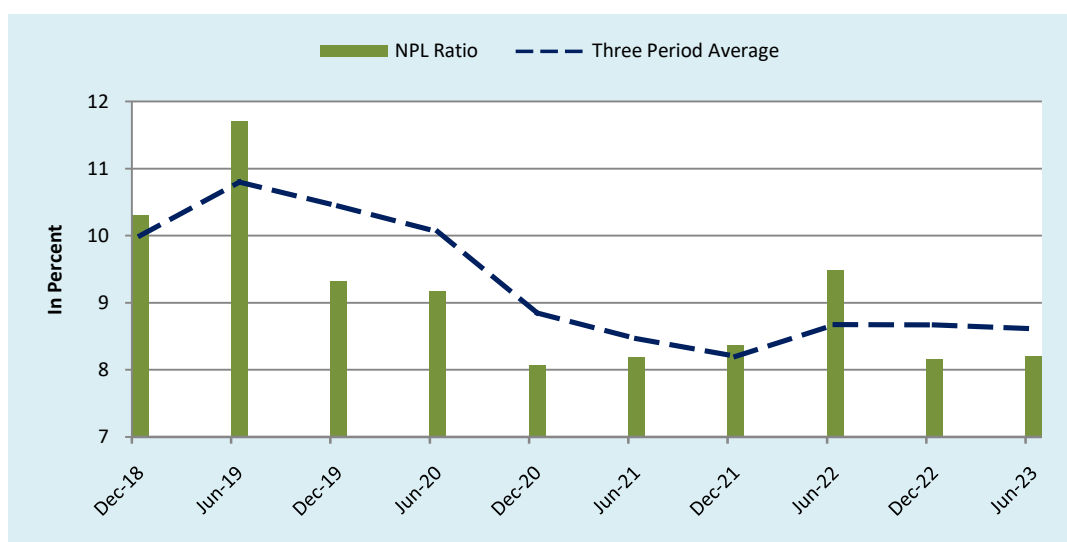


**Note:** Data up to September 2020 contains information without OBU.
**Source:** BRPD, BB.

*At end-June 2023, banks' gross NPL ratio rose slightly in comparison with that of end-December 2022; however, compared to the position of end-June 2022 the ratio declined significantly.*

# 5. Profitability and solvency risk–cont'd.

## 5.3 FIs' profitability indicators

### a. Return on equity (ROE)
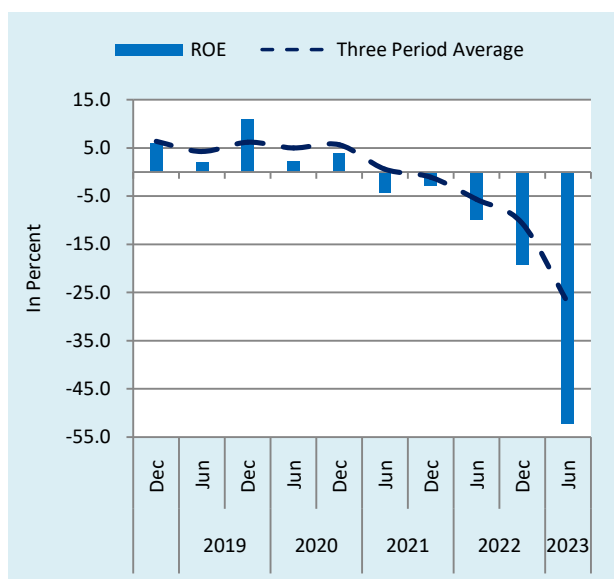


**Note:** Data for Dec-22 and June-23 are provisional.
**Source:** DFIM, BB.

### b. Return on assets (ROA)
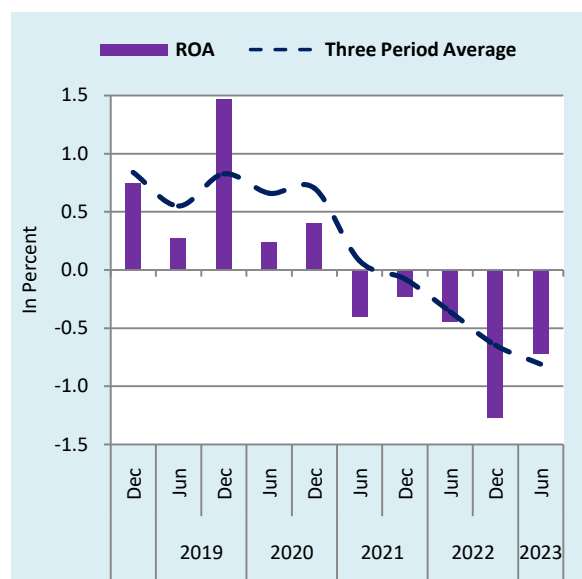


**Note:** Data for Dec-22 and June-23 are provisional.
**Source**: DFIM, BB.

*During January-June 2023, FIs' ROE remained significantly negative like that of the preceding period. ROA also remained negative though it improved considerably in comparison with that of end-December2022.*

### c. Cost-to-income ratio
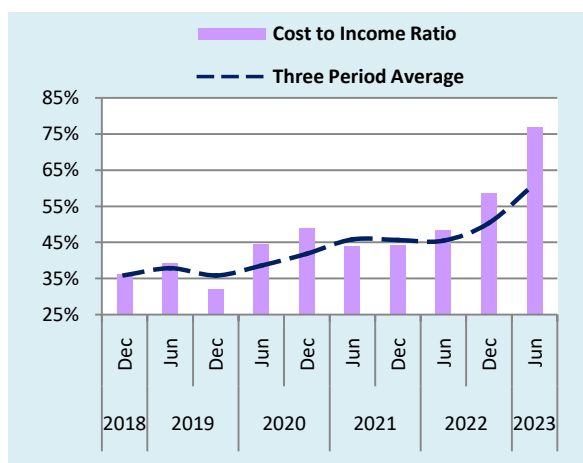


**Note**: 1) Cost-to-income ratio refers to ratio of operating expenses and operating income. 2) Dec-22 and June-23 data are provisional.
**Source**: DFIM, BB.

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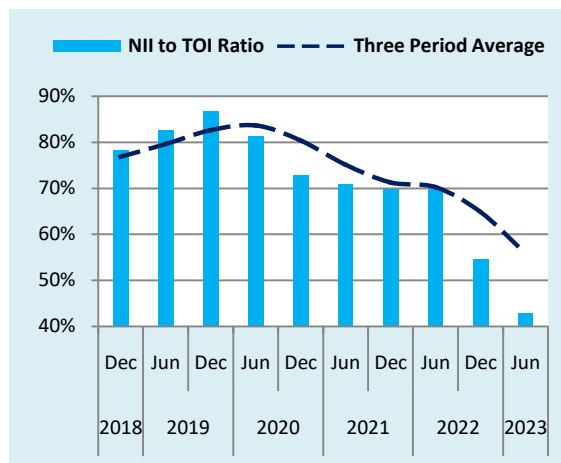


**Note:** 1) Ratio of net interest income and total operating income. 2) Dec-22 and June-23 data are provisional.
**Source**: DFIM, BB.

*FIs' cost-to-income ratio increased while net interest income to total operating income ratio decreased at end-June 2023 compared to those of the previous period.*

# 5. Profitability and solvency risk–cont'd.

## 5.4 FIs' solvency indicators
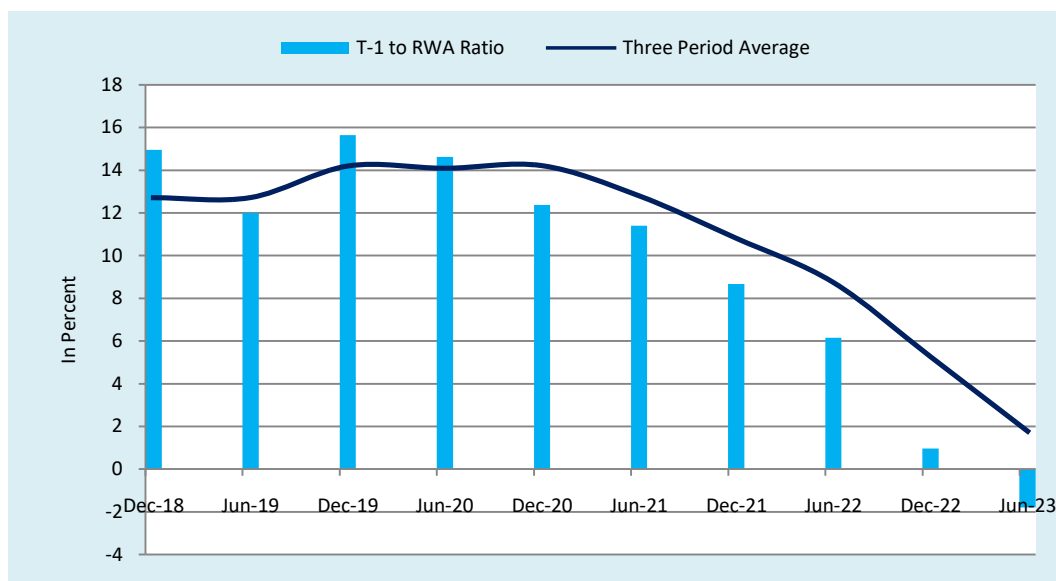
### a. Tier-1 to RWA ratio



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

*At end-June 2023, the FIs' Tier-1 capital to RWA ratio stood at -1.80 percent, including People's Leasing and Financial Services Limited. However, The ratio would jump to 3.13 percent, if People's Leasing and Financial Services Limited was excluded from FIs' list.*

### b. Gross non-performing loan (NPL) ratio
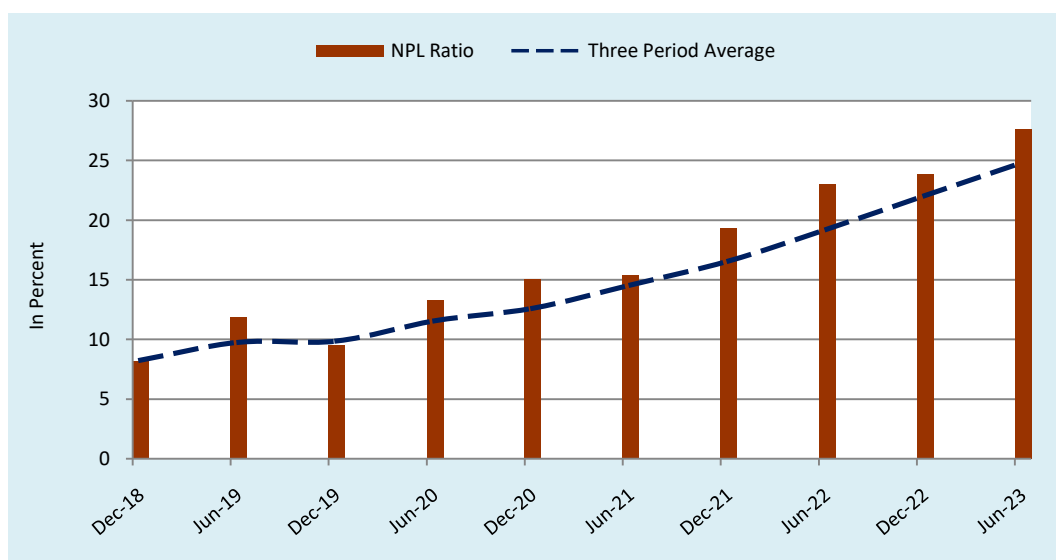


**Note**: 1) Ratio of non-performing loans and leases to total loans and leases. 2) Data for Dec-22 and June-23 are provisional.
**Source:** DFIM, BB.

*Since June 2020, FIs' gross NPL ratio exhibited a continued upward trend. In the review period, the ratio stood at 27.65 percent, which was 23.88 percent at end-December 2022.*

# 6. Inter-linkages

## 6.1 Growth of banks' credit (gross) to government
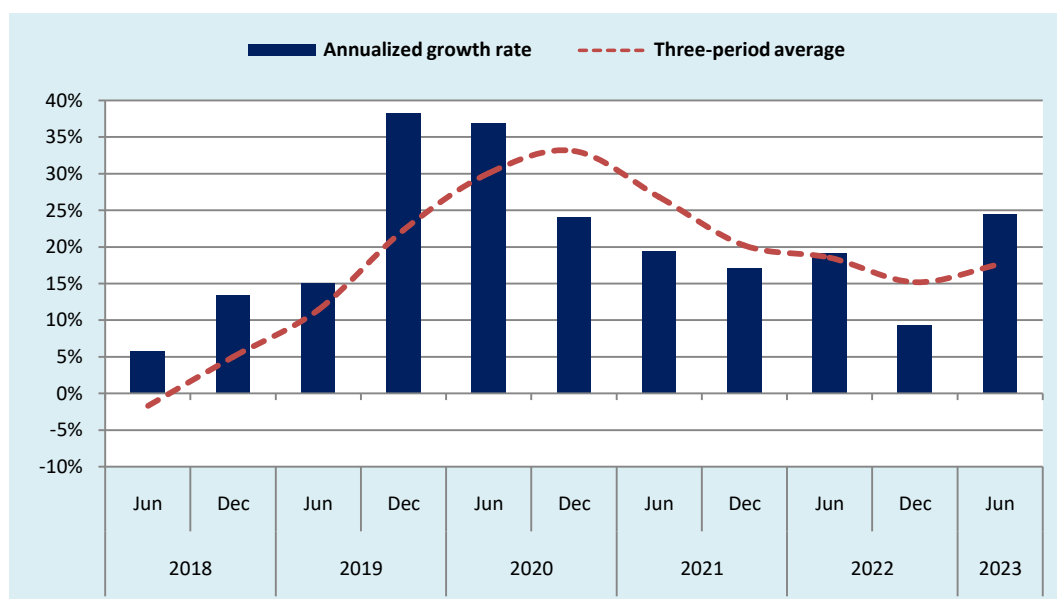


**Notes:** Credit extended to the government refers to gross amount.
**Source:** Statistics Department, Bangladesh Bank.

*The growth rate of Government borrowings from the banking sector recorded a declining trend after December 2019. However, the growth rose considerably at end-June 2023 compared to that of the previous period.*

## 6.2 Growth of NBDCs' credit (gross) to government
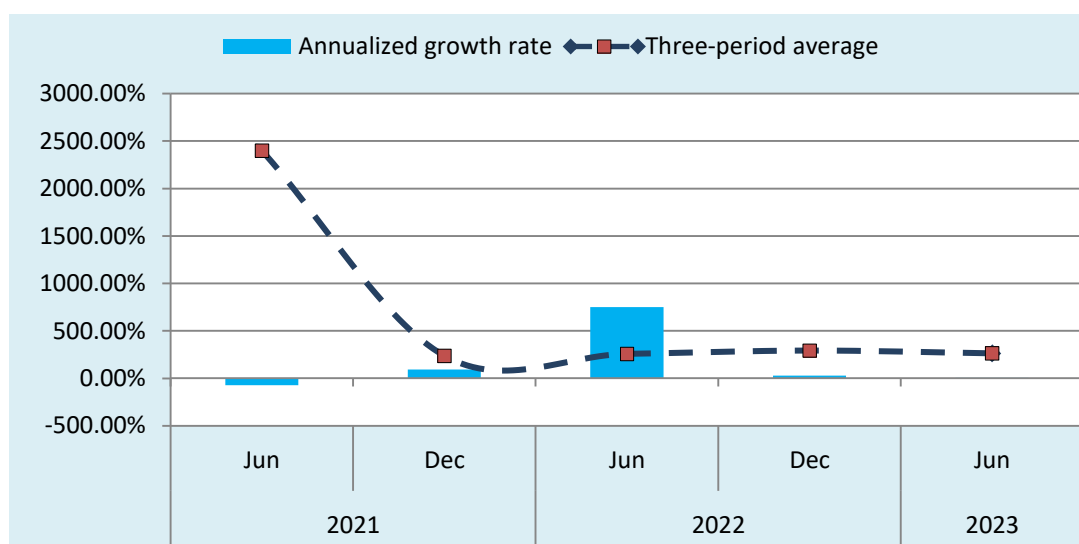


**Notes:** NBDCs include deposit taking FIs, Ansar-VDP Unnayan Bank, Karmasangsthan Bank, Grameen Bank, and Bangladesh Samabaya Bank.
**Source:** Statistics Department, Bangladesh Bank.

*Government borrowings from the NBDCs shrank at end June 2023 compared to that of end-December 2022.*

# 6. Inter-linkages– Cont'd.

## 6.3 Growth of banks' loans to housing sector

### a. Loans to residential housing
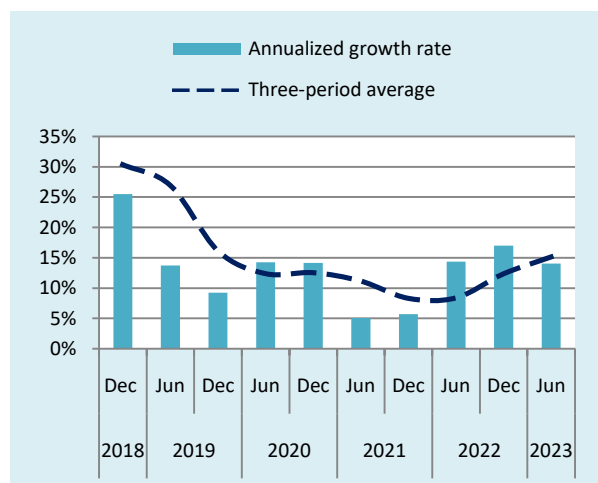


### b. Loans to commercial housing
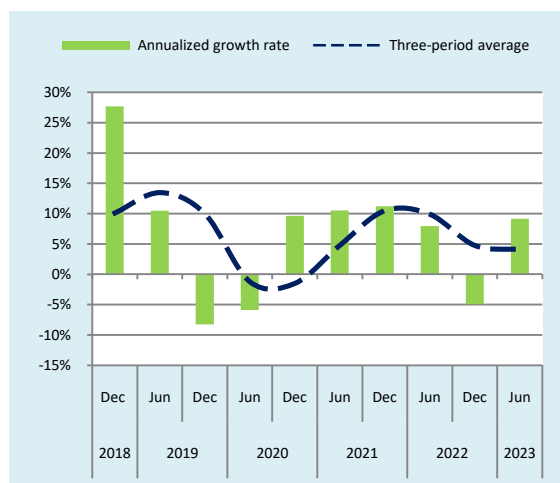


**Notes:** Data for Dec-22 and Jun-23 are provisional. 2) Loans refer to outstanding loans and advances excluding bills. 3) Loans to residential housing refer to loans extended to domestic households for house/flat/land purchase and repair/renovation/extension. 4) Loans to commercial housing refer to loans extended to commercial developers/contractors.
**Source:** Statistics Department, Bangladesh Bank.

*Loan growth in the residential housing sector decreased in the first half of 2023 compared to that of the preceding period. In contrast, loan growth in the commercial housing sector, increased significantly after posting a negative growth at the end of December 2022.*

## 6.4 Growth of FIs' loans to housing sector
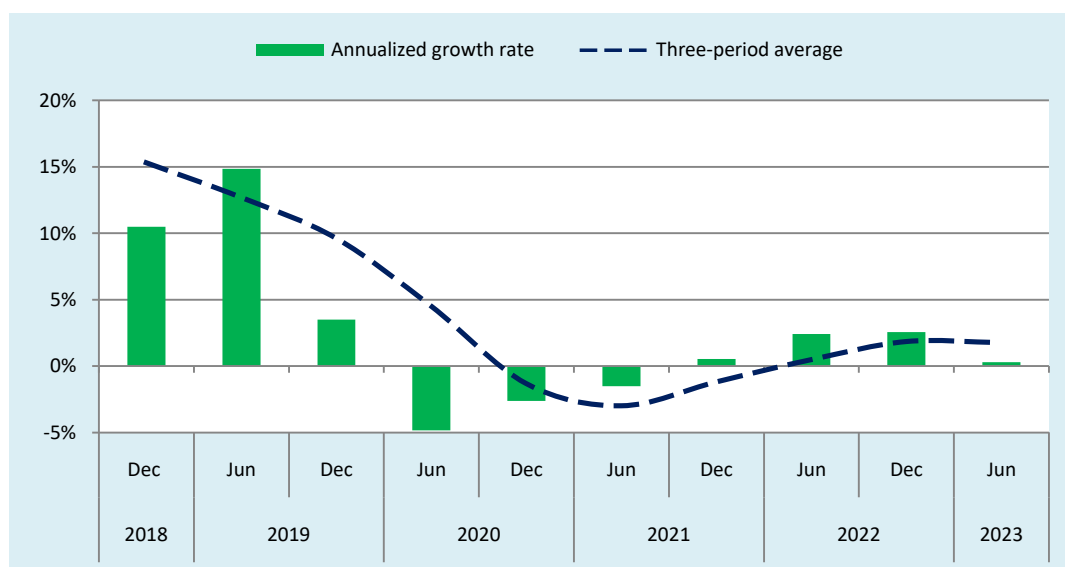


Notes: Data for Dec-22 and Jun-23 are unaudited.
Source: DFIM, Bangladesh Bank.

*The growth of FIs' loans to the housing sector declined notably in this review period, after the progressive improvement by the end of December 2022.*

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# 6. Inter-linkages– Cont'd.

## 6.5 Banks' loans to counterpart sectors
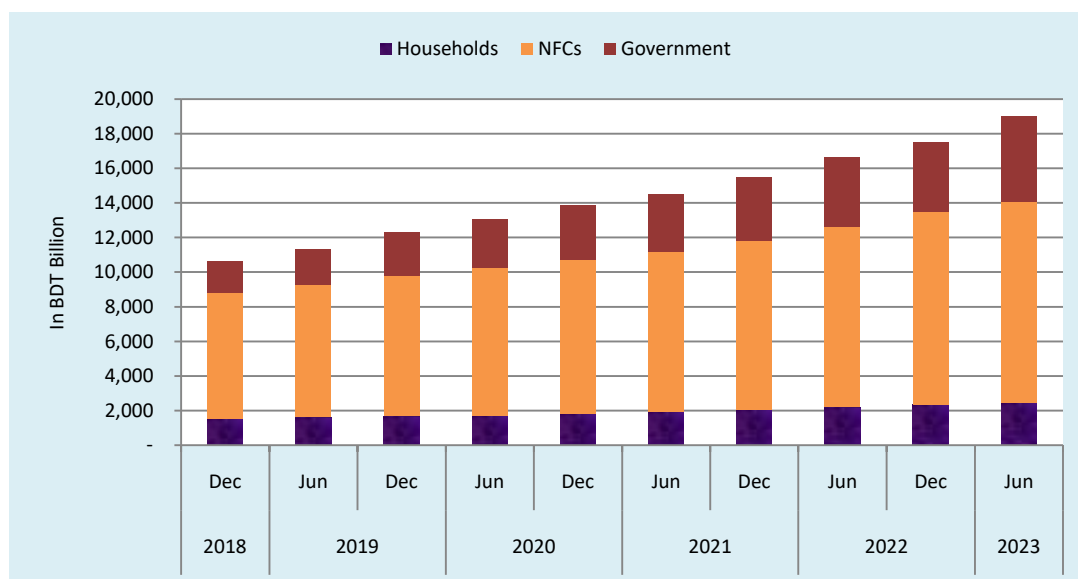


**Notes:** Loans extended to households and NFCs refer to outstanding loans and advances excluding bills. Loans to government refer to gross amount.
**Source:** Statistics Department, Bangladesh Bank.

*Banks' exposures to their major public and private counterparts surged further in the review period and showed a continued increasing trend headed mostly by private NFCs.*

## 6.6 NBDCs' loans to counterpart sectors
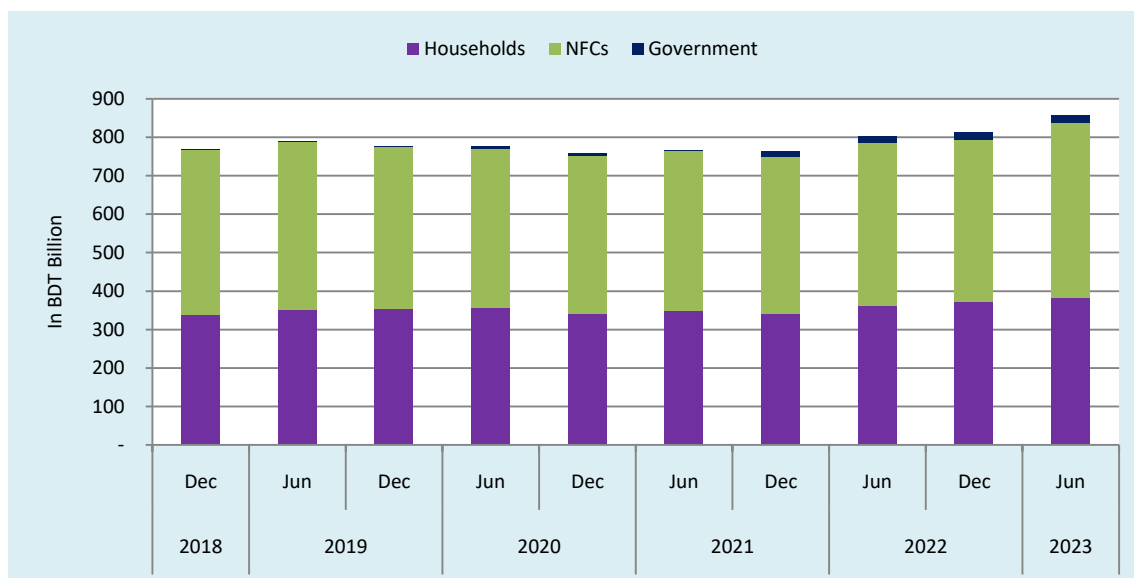


**Notes:** Loans to government refer to gross amount. NBDCs include deposit taking FIs, Ansar-VDP Unnayan Bank, Karmasangsthan Bank, Grameen Bank and Bangladesh Samabaya Bank.
**Source:** Statistics Department, Bangladesh Bank.

*The output of NBDCs' loans to counterpart sectors rose further mostly due to increase in loan portfolio in NFCs at the end of June 2023 compared to that of the preceding period.*

# 6. Inter-linkages– Cont'd.

## 6.7 Banks' cross-border claim (Foreign Assets)
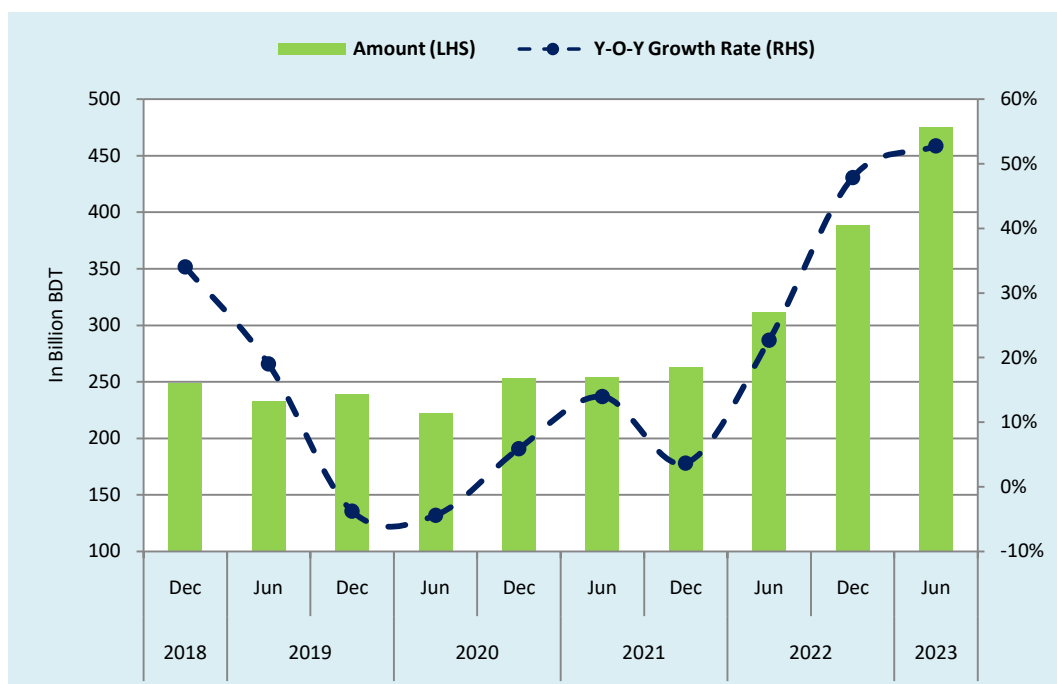


**Notes:** Cross-border claim includes foreign currency notes in hand, balances with banks abroad, bilateral trade credits, wage earners' balance abroad, foreign bills, foreign direct investment, portfolio investment.
**Source:** Statistics Department, Bangladesh Bank.

*In the review period, cross-border claims by banks grew notably, showing a general increasing trend after the end of June 2021.*

# 7. Structural risk

## 7.1 Banking sector size
### a. Domestic Banks
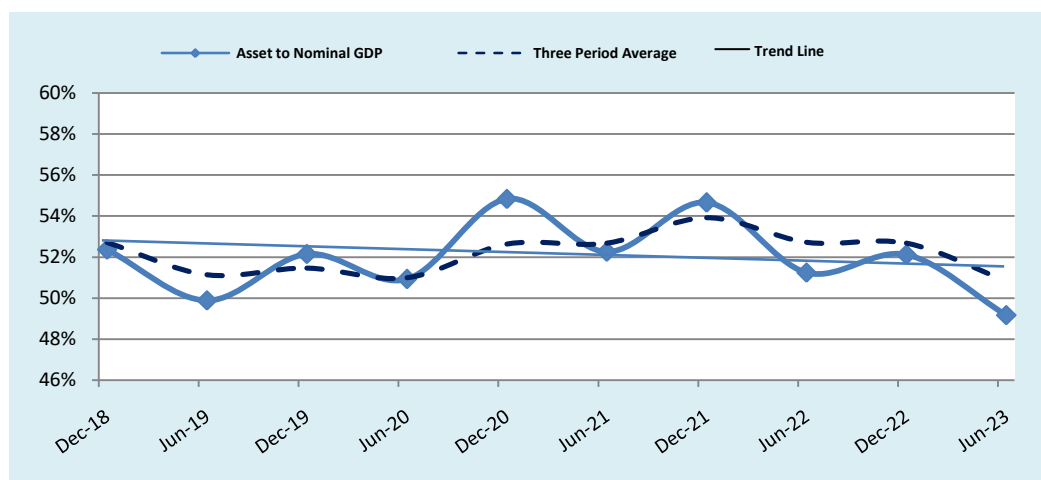


**Note:** Ratio of domestic banks' total assets to nominal GDP. As half-yearly GDP is not calculated in Bangladesh, June based GDP data is used for December in calculating this ratio.
**Source:** DOS, BB and Monthly Economic Trends, BB; computation: FSD, BB.

*In the review period, domestic banks' total assets to nominal GDP ratio decreased slightly and stood at 49.17 percent from 52.12 percent at the end of December 2022.*

### b. Foreign Banks
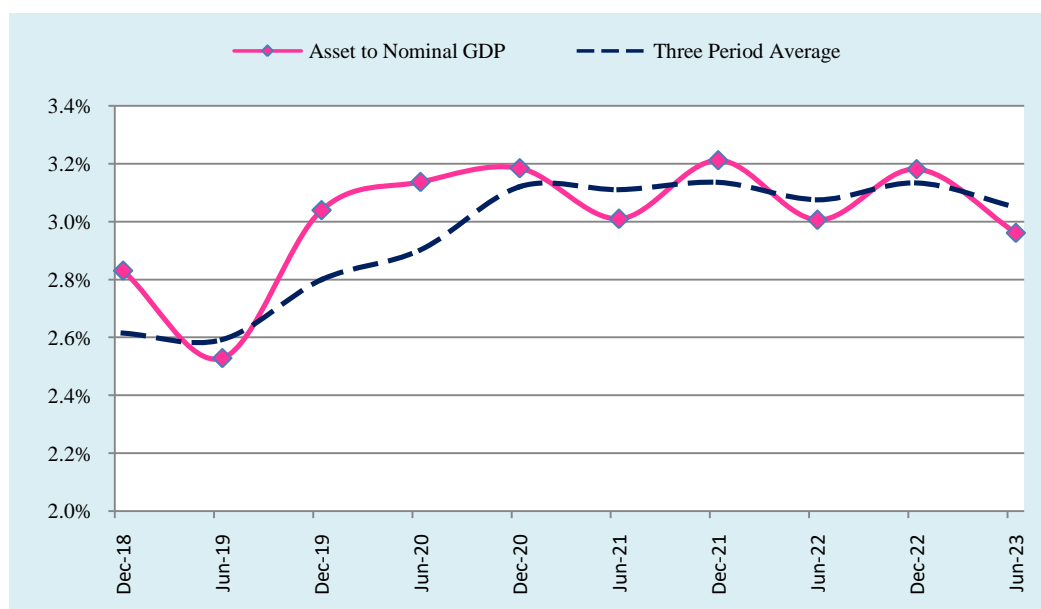


**Note:** Ratio of foreign banks' total assets to nominal GDP. As half-yearly GDP is not calculated in Bangladesh, June based GDP data is used for December in calculating this ratio.
**Source:** DOS, BB and Monthly Economic Trends, BB; computation: FSD, BB.

*Foreign banks' total assets to nominal GDP ratio decreased at end-June 2023 compared to the position of end-December 2022.*

# 7. Structural risk–cont'd.

## 7.2 Banking sector leverage ratio
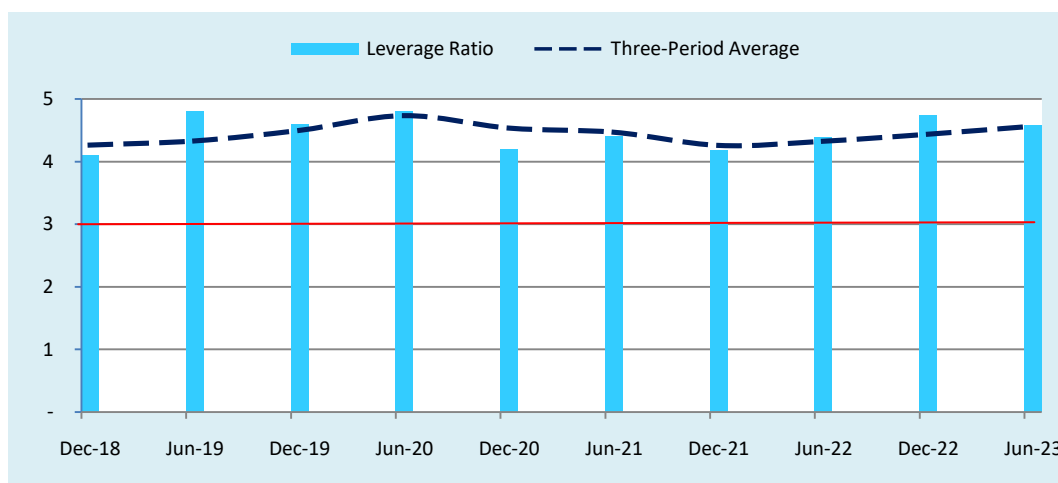


**Note**: Leverage ratio is defined as the ratio of Tier-1 capital after required deduction to total exposure after required deduction, in line with Basel III.
**Source**: DOS, BB.

*Banking sector's leverage ratio slightly decreased at end-June 2023 compared to the position of the previous period and stood at 4.57 percent which is above the regulatory requirement of 3.25 percent for 2023.*

## 7.3 Financial institutions (FIs) sector size

### FIs' assets to nominal GDP
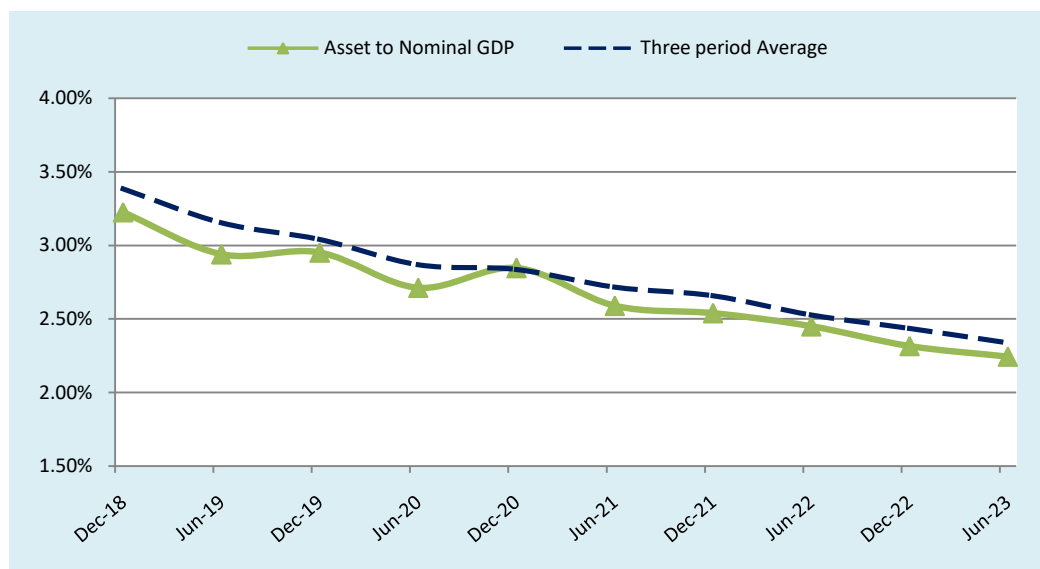


**Note:** As half-yearly GDP is not calculated in Bangladesh, June based GDP data is used for December in calculating this indicator.
**Source:** DFIM, BB.

*Financial institutions' assets to nominal GDP ratio showed a declining trend since 2018. Following the trend it decreased again at end-June 2023 compared to that of the preceding period.*

# 7. Structural risk–cont'd.

## 7.4 Financial institutions (FIs) sector leverage
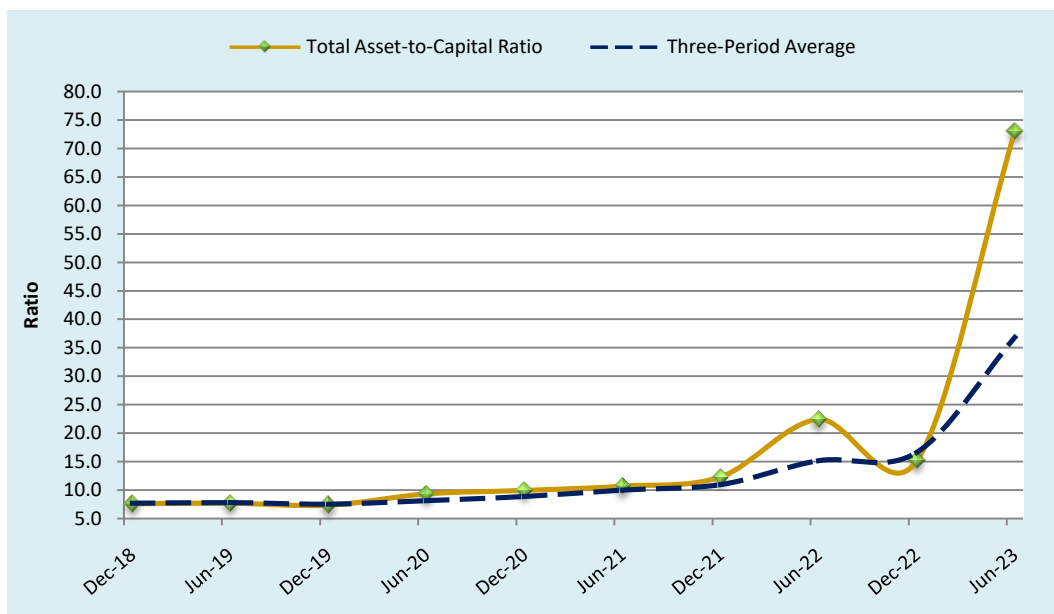


**Note**: For the FIs sector, leverage ratio is calculated as the total assets to total capital (as per the book of affairs).
**Source:** DFIM, BB.

*At the end of June 2023, financial institutions' leverage, defined as total asset-to-capital ratio stepped up significantly and reached in peak in the last several years.*

# 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, April and 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, (Government of the People's Republic of Bangladesh) GOB.

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 the People's Republic 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's 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 (other depository corporations) ODCs. 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. June-2022 based data was taken from FIs and the calculation was done by FSD, BB.

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 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 for special purposes.

### 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 bank clusters/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 up to 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.

Liquidity coverage ratio (LCR) refers to liquidity coverage ratio while net stable funding ratio (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. 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/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. 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 was 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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