

The Banking Sector

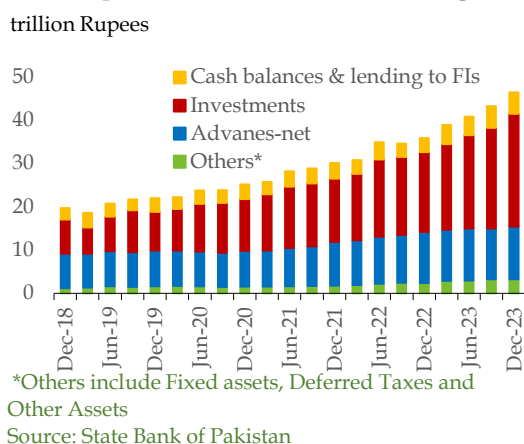
The banking sector maintained its soundness in a challenging macro-financial environment during 2023. Asset base expanded by 29.5 percent to touch Rs 46.4 trillion by end December, 2023, mainly driven by investments. A lackluster demand due to weak economic activity and tight macro-financial conditions coupled with risk averse strategy of banks dampened the growth in loan portfolio. While deposit growth remained healthy in a higher return environment, however, the higher pace of investments in government securities increased the banks' reliance on borrowings. Earnings indicators improved mainly on the back of higher net interest/markup income. Despite subdued economic activity and tight financial conditions, the assets quality indicators of banks manifested muted risk to solvency. Liquidity profile in terms of liquid assets vis-à-vis liabilities remained comfortable – augmented by the increased investments in government securities. In the backdrop of a conservative regulatory regime, banks could comfortably manage currency and equity price movement risks, while the market risk also remained contained due to relatively shorter repricing maturity of investment portfolio. Baseline solvency indicator viz. Capital Adequacy Ratio (CAR) at 19.7 percent not only strengthened further on the back of higher earnings but also stood well above the minimum regulatory requirements. Islamic Banking Institutions (IBIs) maintained their growth momentum and sound financial position, which contributed to the overall stability of banking sector.



3 The Banking Sector

The banking sector continued its steady performance and remained resilient in terms of its operational and financial soundness in a challenging economic environment during CY23. Assets base of the sector expanded by Rs 10,568 billion or 29.5 percent to touch Rs 46,364 billion by end December, 2023, which is a 20-year high growth (**Figure 3.1**). The expansion in assets was mainly driven by investments (largely government securities), while growth in advances moderated due to a challenging macroeconomic environment.

Assets Composition of Banks **Figure 3.1**

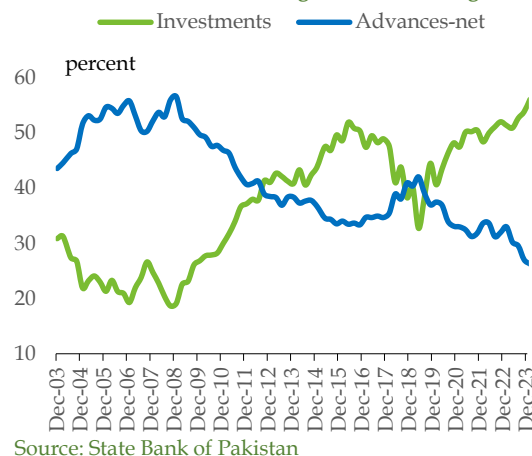


Assets composition further tilted towards investments, constituting around 56 percent in assets by end December 2023 (**Figure 3.2**). The rising share of government securities on balance sheet of banks reflects the structural imbalances in the economy such as large fiscal deficit leading to the government's increased reliance on domestic resources, especially banking sector, to meet its financing needs.

Investments increased by Rs 7,619 billion, expanding at a 14-years high rate of 41.4 percent in CY23, higher than 26.4 percent in CY22. Around 98 percent of the expansion in investments emanated from increase in the government securities. The pattern of investments, remained tilted towards shorter tenor MTBs and floating rate PIBs, constituting

around 58 percent of total investment. However, banks also showed interest in fixed-rate instruments such PIBs and Fixed Rental Rate Sukuk in auctions, which may reflect their view about inflection point of the tightening cycle (see **Chapter 2 on Financial Markets Behavior**).

Share in Total Assets of Banking Sector **Figure 3.2**



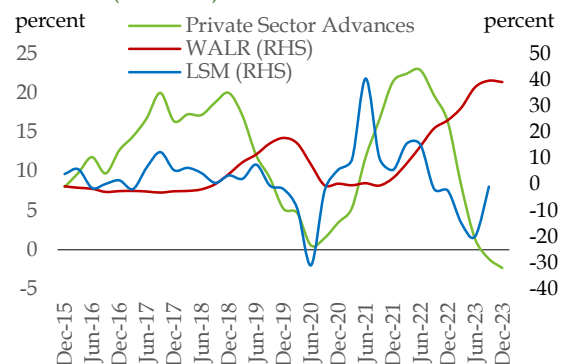
Tough year for advances but a silver lining was visible in Q4CY23

In contrast to double-digit growth rates in last two years i.e. 22.1 percent in 2021 and 16.8 percent in 2022, growth in advances decelerated to 3.0 percent, mainly reflecting lackluster credit demand amid subdued economic activity and tight macro-financial conditions. This deceleration was mainly driven by domestic advances, which constitute 94.2 percent of banking sector's total loan portfolio, reflecting that a challenging domestic macro-financial environment and subdued economic and large-scale manufacturing activity coupled with high public sector borrowings weighed on private sector credit during CY23 (**Figure 3.3**).¹

¹ LSM fell by 9.8 percent in CY23 compared to increase of 6.7 percent in CY22.

LSM, WALR and Private Sector Advances (Domestic)

Figure 3.3

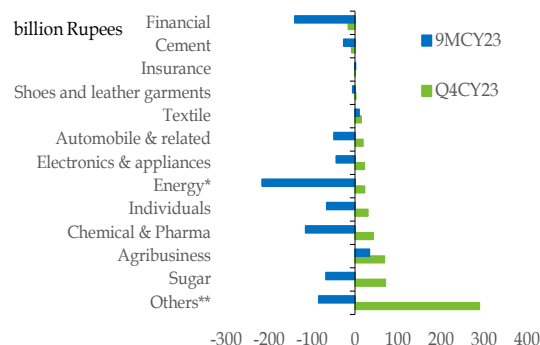


Source: State Bank of Pakistan and Pakistan Bureau of Statistics

Domestic *private sector advances* witnessed a broad-based contraction in CY23. Nonetheless, a notable borrowing activity was visible in the last quarter when domestic private advances rose by Rs 554.1 billion. Though the increase in Q4CY23 was lower than Rs 672.9 billion uptick in fourth quarter of CY22, adjusting for the ADR-related tax policy, flow of advances for Q4CY23 was higher than the same period last year.² A number of sectors including Sugar, Chemicals & Pharmaceuticals, Automobiles and Textile increased their credit intake in Q4CY23. The increased borrowing can be traced to working capital requirements amid a seasonal rebound in production activity in various sectors during the last quarter, increased input prices and cash flow problems of certain sectors (Figure 3.4).³

Flow of Sector wise Private Advances (Domestic)

Figure 3.4



*Production and transmission of energy

**Others mainly include manufacturers of food products, paper & paper products, coke & refined petroleum products, basic metals, construction, wholesale & retail trade, and communication

Source: State Bank of Pakistan

Consumer financing recorded a net retirement of Rs 80.8 billion in CY23, for the first time since CY11. The retirements were mainly driven by repayments in auto financing, as households faced tight purchasing power conditions amid 30.8 percent average inflation and elevated prices of vehicles as well as tightened macro-prudential policy.

However, *public sector advances*, which constitute 27.2 percent of total domestic advances, increased strongly by Rs 642.0 billion (23.6 percent) in CY23 and supported the growth in overall loan portfolio. Public sector entities in commodity operations and energy related sector (mainly refined petroleum) increased their bank borrowing while the government also availed a foreign currency loan from the banking sector.

Deposits mobilization revived

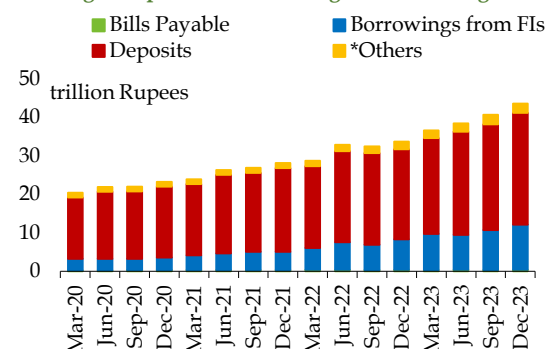
On funding side, deposits increased by Rs 5,667 billion or 24.2 percent in CY23, a 20-years high growth. The major impetus came from rate sensitive deposits as banks' deposit rates responded to the high policy rates (Figure 3.5).⁴

² In order to improve their ADR amid applicability of ADR-related taxation policy, banks increased lending to non-bank financial entities. This was a one-off phenomenon in Q4CY22 and normalized in CY23, as the applicability of this taxation policy was withdrawn for Tax year 2024.

³ For instance, a 68.9 percent fall in sales of passenger cars may have resulted in cash flow problems and contributed in bank financing of auto sector in CY23.

⁴ For instance, Weighted Average Deposit Rate (excluding interbank and zero markup) on fresh deposits rose to 19.0 percent by end December 2023 from 14.4 percent at end December 2022

Funding Composition of Banking Sector Figure 3.5

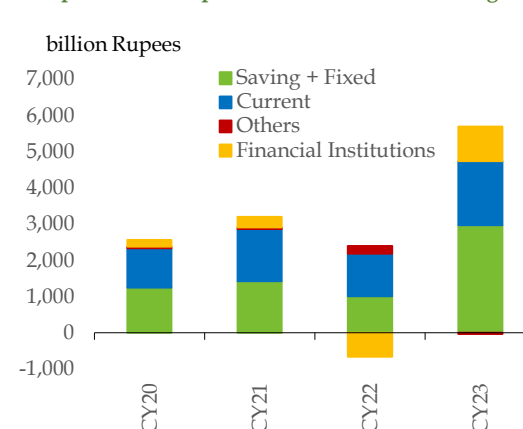


*Other include Sub-ordinated loans, Liabilities against Assets subject to Finance Lease, deferred tax liabilities and other liabilities

Source: State Bank of Pakistan

Besides, SBP digitization initiatives such as Raast, that has recorded increased transaction volumes, also contributed to deposits growth during 2023. Moreover, a part of the sharp revival in deposit mobilization reflected a rebound from last year's deceleration of 8.0 percent amid ADR-linked taxation policy in CY22.⁵ Particularly in Q4CY22, banks seemed to have slowed down their deposit mobilization (especially deposit from non-bank financial institutions) to manage their ADR level, as there was low demand for bank loans from private sector due to stressed macro-financial conditions. However, with the withdrawal of this tax policy, banks' deposits from financial institutions (especially NBFIs) grew by Rs 960.9 billion in CY23 compared to a fall of Rs 662.4 billion in CY22 (Figure 3.6).

Composition of Deposit Mobilization Figure 3.6



Source: State Bank of Pakistan

However due to a sharp increase in asset base during the year under review, the share of deposits in overall funding declined to 66.8 percent of total liabilities in December 2023 from 69.6 percent last year.

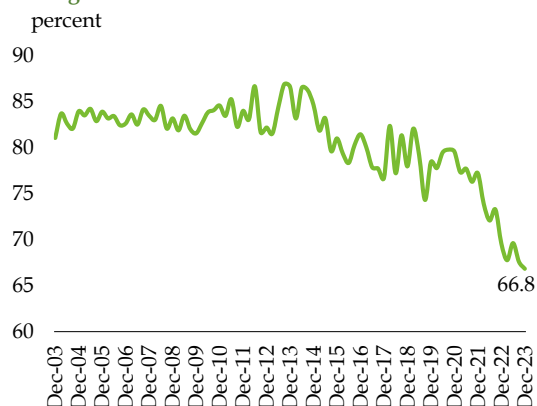
while reliance on borrowings increased further during CY23

Post pandemic, deposits mobilization has fallen short of asset growth, and has led to an increased reliance of banks on borrowings (Figure 3.7). The borrowings rose by 48.8 percent in CY23 and their share in funding base rose to 26.8 percent (23.3 percent at end CY22) (Figure 3.8). Around 80 percent of the additional borrowing in CY23 came from SBP, reflecting increased reliance of the banks on central bank liquidity. The rising share of borrowings contributes in raising interest expenses because most of the fresh borrowing reflects expensive short term borrowings while deposits are a relatively economical source of funding as around one-third of the deposits are in current (non-remunerative) accounts category.

⁵ Under the Finance Act, 2021, income attributable to investment in the Federal Government securities of banks was made taxable at tax rates of 40 percent, 37.5 percent and 35 percent, if ADR was up to 40 percent, between 40 to 50 percent and above 50 percent respectively. The Finance Act 2022 further enhanced these rates, that is, for tax year 2023 and onwards, tax rates would be 55 percent, 49 percent and 39 percent for these ADR slabs, respectively. Source: FBR Circular C.No.4(21) IT-Budget/2022 dated July 21, 2022. However, this policy was withdrawn for tax year 2024. Source: FBR S.R.O 226 (I)/2023.

Share of Deposits in Total Liabilities of Banking Sector

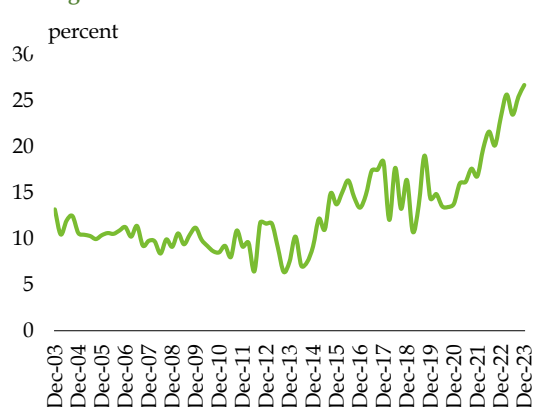
Figure 3.7



Source: State Bank of Pakistan

Share of Borrowings in Total Liabilities of Banking Sector

Figure 3.8



Source: State Bank of Pakistan

Earnings remained upbeat

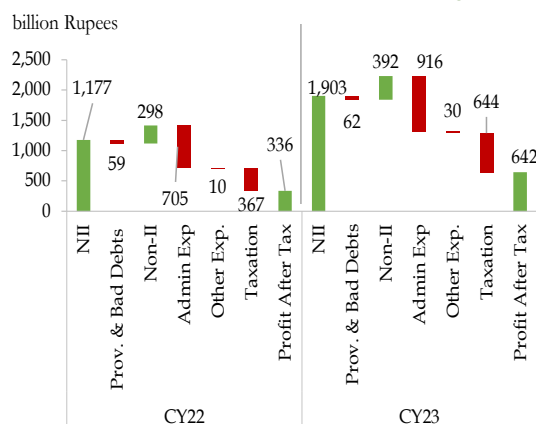
After-tax profit of the banking sector surged by 90.9 percent to Rs 642.2 billion in CY23, and baseline indicators also improved over CY22. After-tax ROA rose to 1.6 percent from 1.0 percent in CY22, while after-tax ROE increased to 27.1 percent in CY23 from 16.9 percent in the previous year.

While fee-based and FX incomes posted noticeable expansion, the growth in bottom line was mainly supported by net interest/markup income (NII), as the pass-through of tightened monetary policy to earning assets led to a faster

growth in interest income vis-a-vis interest expenses (Figure 3.9).

Composition of Profit After Tax

Figure 3.9



Source: State Bank of Pakistan

A rate-volume analysis of increase in interest earnings and interest expenses shows that the rate component was more pronounced for earnings and expenses on advances, investments, and deposits vis-à-vis growth in volume. However, in case of borrowings, the increase in interest expenses were due to higher volumes of borrowings specifically during last two quarters of CY23.

In line with rising share of investments in balance sheet of the banking sector, the proportion of interest/markup earnings from investments is also on a consistent increase since March 2019 and has reached 64.1 percent of interest income, manifesting concentration of earnings.

On the expenses side, non-interest expenses increased by 32.5 percent in CY23, which was in sync with the rise in admin costs in the high inflation environment as well as the branch network expansion.⁶ Non-interest expense, which mainly comprised of administration expenses of banks, has a strong correlation with

⁶ By adding 534 new branches, banks expand its network to 16,867 branches by end CY23. Data source: RCOA, SBP

overall inflation in the economy.⁷ Provisioning expenses rose in line with the movement in gross NPLs.

Various metrics suggest increasing tax incidence on the banking sector in recent years

Taxation expenses of banking sector continued to be on a higher side, though income tax expenses as percent of profit before tax slightly fell to 50.1 percent in CY23 from 52.1 percent in CY22. An extended Du Pont analysis of ROE also suggests rising tax expenses (as percent of before tax earnings) on the banking sector in the recent years (Table 3.1 below).⁸

Extended Du Pont Breakup of Banking Sector's After-Tax ROE Table 3.1

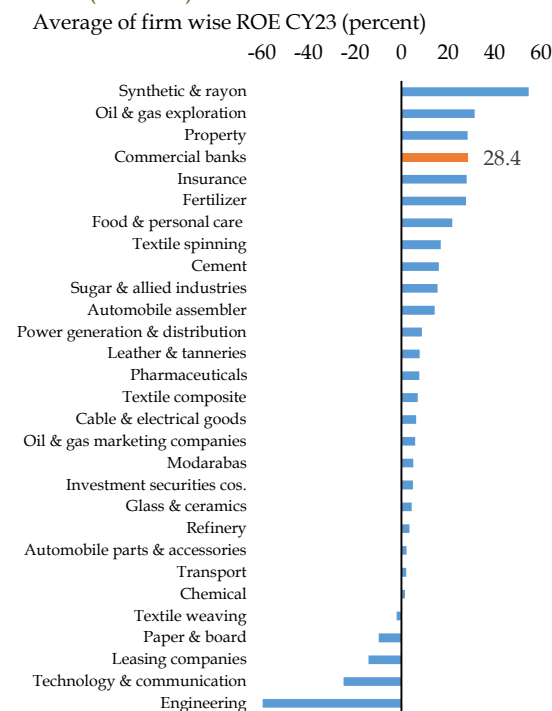
	CY21	CY22	CY23
Impact of tax i.e., PAT/PBT (a)	0.59	0.48	0.50
Operating efficiency i.e., PBT/NII (b)	0.54	0.60	0.68
Interest Margin i.e., NII/Interest Income (c)	0.46	0.34	0.30
Yield on Assets i.e., Interest Income/Assets (d)	0.07	0.10	0.16
Leverage i.e., Assets/Equity (e)	14.7	16.7	17.3
ROE (f = a x b x c x d x e)	14.0%	16.9%	27.1%

Source: State Bank of Pakistan

It may be noted that due to its importance in the overall economic stability and growth, the banking sector is subject to comparatively stricter entry and exit barriers as well as enhanced governance and financial reporting requirements, including minimum capital requirements and prudential standards. An implication of higher taxation on banks is that it reduces sector's ability to build further capital buffers against unforeseen shocks, which are

necessary for sector's financial soundness and thus overall economic stability of the economy. Moreover, relatively higher taxes discourage capital investments, which may be important to promote efficiency and financial inclusion.

Sector wise ROE of Listed Firms on PSX (418 firms) Figure 3.10



Source: Capital Stake

Risks to Financial stability subsided over the year

The banking sector stability map (BSSM)⁹, which assesses key financial soundness indicators, shows that risks to financial stability have subsided along various dimensions, including Asset Quality, Earnings, Capital Adequacy, Liquidity and Deposits as the year 2023 progressed (Figure 3.11).¹⁰

⁷ The unconditional correlation coefficient between YoY CPI inflation and YoY changes in admin expense is 0.89 and is statistically significant at 5 percent significance level.

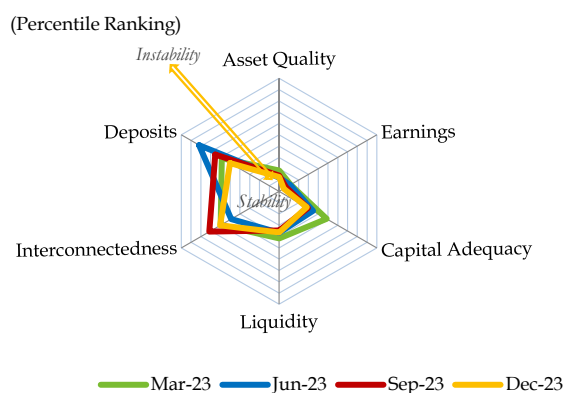
⁸ Net interest/Markup income rose by 61.6 percent to Rs 1.9 trillion in CY23 from Rs 1.2 trillion in CY22.

⁹ BSSM ranks the Financial Soundness Indicators of the current period vis-à-vis their historical level. It is based on percentile rankings (scaled from 1 to 10) of various indicators, and the summary score of these indicators in a particular dimension e.g. asset quality. A ranking close to 10 value on the summary statistic suggests increased risks but not necessarily immediate stability concern. This is because the summary statistic is based on percentile rankings of historical series and the actual indicators for the quarter may still be in comfortable position or above the minimum regulatory requirement. Methodology of BSSM is based on Dattels, P., McCaughrin, R., Miyajima, K., & Puig, J. (2010). "Can you map global financial stability?" IMF Working Papers, 1-42

¹⁰ Although the banking sector's interconnectedness with financial institutions increased in Q3CY23 due to peculiar interim circumstances, however, the situation largely normalized by end CY23.

Banking Sector Stability Map

Figure 3.11



Source: State Bank of Pakistan

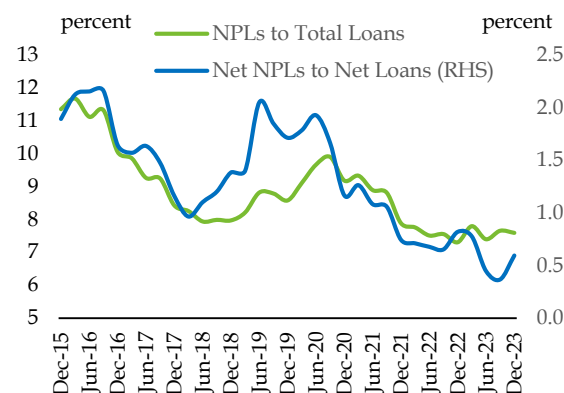
3.1 Credit risk

The asset quality indicators of the banking sector suggested no serious concerns as the existing stock of delinquent loans is adequately provided for with provisioning coverage of 92.7 percent. Although NPLs to loans ratio slightly inched-up to 7.6 percent in CY23 (7.3 percent in CY22) due to moderate growth in banks' loan portfolio vis-à-vis NPLs, the net NPLs ratio at 0.6 percent remains at one of its lowest level of last two decades (**Figure 3.12**). Gross NPLs rose by Rs 70.8 billion (or by 7.7 percent) in CY23, compared to Rs 63.8 billion in CY22, mainly pertaining to domestic operations.¹¹

While specific provisions rose in line with gross NPLs, general provisions rose by Rs 35.1 billion in CY23, much higher than Rs 9.1 billion increase in CY22, reflecting efforts to shield the potential impact of adoption of IFRS-9 by banks with effect from January 01, 2024.¹² The implementation of IFRS-9 is expected to further strengthen both risk management practices in

banks as well as their cushions to withstand potential as well as incurred losses.

Asset Quality Indicators of Banking Sector Figure 3.12



Source: State Bank of Pakistan

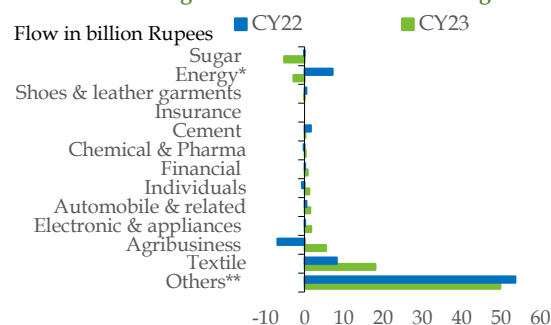
Sector wise analysis shows that in line with its largest share in banks advances, the textile sector contributed the leading part of the increase in NPLs during CY23. Besides textiles, the NPLs in agribusiness, auto and individuals also rose. Agribusinesses faced high input costs such as fertilizer, POL etc., and lagged impact of floods in monsoon of 2022 and 2023, which squeezed borrowers cash flows; sales in auto sector declined, while elevated inflation squeezed the purchasing power of individuals (**Figure 3.13**).¹³

¹¹ NPLs in domestic and overseas loan portfolios rose by Rs 67.0 billion and Rs 3.8 billion, respectively, in CY23, compared to Rs 8.4 billion and Rs 55.4 billion in CY22.

¹² IFRS-9 requires provisioning against financial instruments (loans and investments) on Expected Credit Loss (ECL) approach, instead of Incurred Credit Loss approach

¹³ Average Fertilizer-WPI rose 19.8 percent YoY, Pesticides-WPI rose 15.2 percent YoY and Diesel Oil (an input in agriculture) showed 22.8 percent inflation during CY23. The YoY change for these input were 54.8 percent, 4.9 percent and 76.9 percent, respectively, in CY22.

Sector wise Change in Gross NPLs Figure 3.13



*Production and Transmission of Energy

**Others mainly include manufacturers of food products, paper & paper products, coke & refined petroleum products, basic metals, construction, wholesale & retail trade, and communication

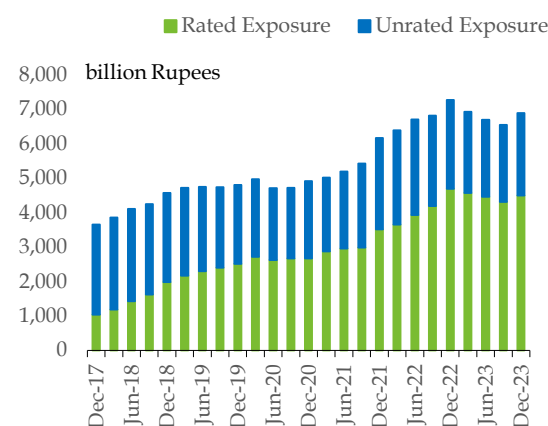
Source: State Bank of Pakistan

It is noteworthy that the overall credit risk profile of banking sector is in a comfortable position, which is evident by relatively contained increase in NPLs despite stressed macroeconomic environment. Banks' loan portfolio reflects a relatively conservative approach in terms of credit worthiness of borrowers, as it mainly comprises large borrowers with generally better credit worthiness and established business track record e.g. around 65 percent of corporate and commercial credit portfolio is lent to rated borrowers (Figure 3.14). Moreover, within rated exposure, 45 percent carries credit risk weight of 20 percent, reflecting relatively better credit worthiness of the borrowers. These large rated borrowers can also access the capital market for their financing needs, however, they prefer bank borrowings due to a number of reasons including the possible reason of limited outreach of capital markets.

It is pertinent to mention that the SBP duly recognizes the importance of a developed capital market for financial stability and sustainable economic growth. In this regard, SBP is cooperating with Securities and Exchange Commission of Pakistan (SECP) for the

implementation of Capital Market Development Plan and Road Map.¹⁴ Through its regulatory regime, SBP is also promoting corporate governance regime and incentivizing the firms to access capital market funding.¹⁵

Rated and Unrated Exposure of Banks Figure 3.14



Source: State Bank of Pakistan

3.2 Market Risk

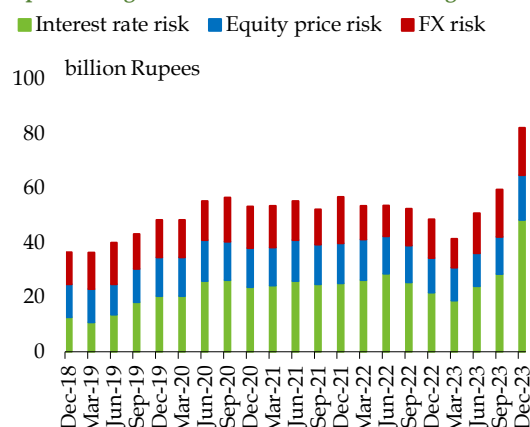
The market risk accounts for only 5.1 percent of the minimum required regulatory capital at end CY23. This low capital charge is due to limited exposure of the banking sector in FX and equities. However, due to higher exposure in government securities, a zero-rated from credit risk perspective, interest rate risk increased over the year under review (Figure 3.15).

In particular, investment in government securities has reached 53.0 percent of the banking sector's asset base by end CY23. Furthermore, despite healthy deposits mobilization during CY23, reliance of banks on borrowings from FIs also increased, which reached 25.2 percent of assets.

¹⁴ Source: Capital Market Development Plan and Road Map, 2020-2027, SECP

¹⁵ For instance, as per SBP's prudential regulations, audited financial statements of the borrower is a pre requisite for corporate sector lending by banks/DFIs. Similarly, lending to large unrated borrowers (with total exposure of more than Rs 3 billion) involves higher capital charge for banks/DFIs, thus incentivizing the large borrowers to get themselves rated which is also essential for accessing the capital market funding in the form of shares, bonds, and Sukuk.

Capital Charge for Market Risk Figure 3.15



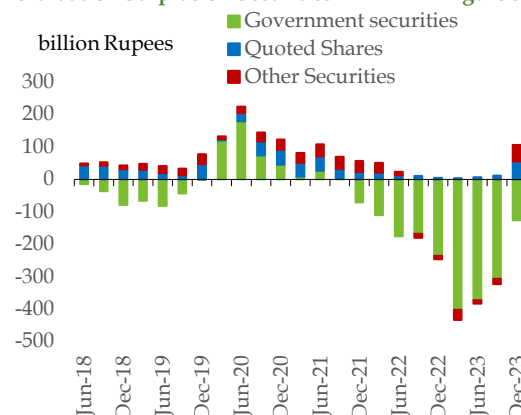
Source: State Bank of Pakistan

Despite elevated interest rate environment, the revaluation losses subsided as year progressed

Around 90 percent of the government securities were held in Available for Sale (AFS) and Held for Trading (HFT) categories. Both these categories are subject to regular mark-to-market adjustment for any changes in interest rates to represent the true and fair value of these instruments in equity and capital cushions of banks.

SBP raised the policy rate by a cumulative 600 bps during CY23. Accordingly, the increase in PKRV rates also affected banks through revaluation losses on government securities held in AFS category. However, the revaluation deficit on government securities, which rose to Rs 307.2 billion by end September 2023, fell to Rs 126.7 billion by end December 2023. The improvement mainly emanated from a downward shift of yield curve in Q4CY23 as well as gradual decline in duration of the investments, which resulted in lowering the revaluation losses on AFS in Q4CY23. Besides, the rebound in domestic equity market also resulted in revaluation gains on quoted shares, which also contributed in the reduction of overall deficit on revaluation of securities to only Rs 20.9 billion by end CY23 from Rs 242.2 billion at end December 2022 (Figure 3.16).

Revaluation Surplus on Securities Figure 3.16



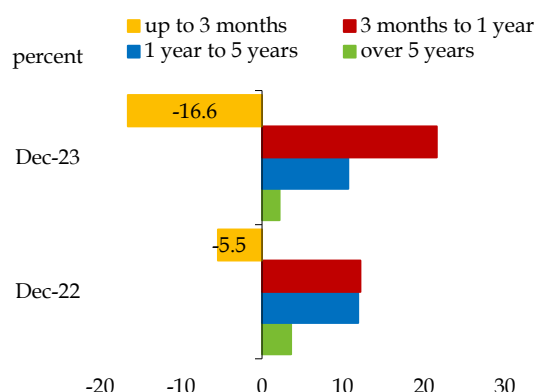
Source: State Bank of Pakistan

Exposure to floating rate securities increased

Banks have also strategized to increase the combined share of floating rate portfolio in their government securities in AFS and HFT categories, which rose to 63.9 percent by end 2023 from 58.3 percent at end 2022. The weighted average duration of the floating rate instruments is 2.4 months for AFS category and 1.1 months for the floating rate instruments under HFT category. The increasing share of shorter maturity/repricing tenors of the investment portfolio helped banks to contain the impact of revaluation losses in a rising interest rates environment.

The gap of rate sensitive assets and liabilities (RSA and RSL) is another channel that impacts banks' financial health in case of changes in interest rates. The banking sector was able to maintain a positive RSA-RSL gap in different maturity buckets. However, the gap for up to 3-month bucket widened in December 2023 (Figure 3.17) due to mobilization of saving deposits and short-term borrowing to support the growth in banks assets.

Gap of Rate Sensitive Assets and Liabilities as Percent of Total Assets **Figure 3.17**



Source: State Bank of Pakistan

Nonetheless, the results of the latest stress testing exercise show that the banking sector in general remained resilient to hypothetical severe shocks related to various market risk factors such as up to a 300 bps upward shift in yield curve along all maturities, up to 30 percent depreciation of PKR against USD, and up to 36.1 percent decline in equities (the maximum quarterly fall in the KSE-100 index).¹⁶

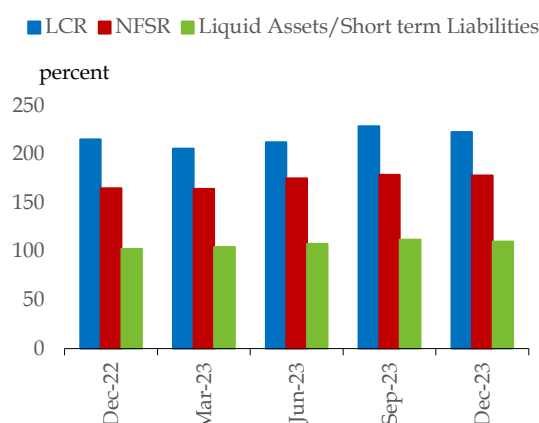
3.3 Liquidity Risk

On the back of a significant increase in the holding of government securities, the banking sector maintained a comfortable liquidity profile during CY23 that is also reflected in liquidity-related FSIs of the sector (**Figure 3.18**). The higher government securities in asset mix facilitated banks to manage their liquidity requirements, as these instruments have a reasonably developed secondary market.

The banking sector remained compliant with statutory requirements of the Basel-III standards of Liquidity Coverage Ratio (LCR) and Net

Stable Funding Ratio (NSFR) of at least 100 percent that cover different aspects of banks overall liquidity profile in dynamic manners. The LCR and NSFR ratio of the banking sector improved to 223.0 percent and 178.2 percent, respectively, in December 2023 from 215.5 percent and 166.0 percent at end December 2022, suggesting a satisfactory liquidity profile.¹⁷

Liquidity Indicators of Banking Sector **Figure 3.18**



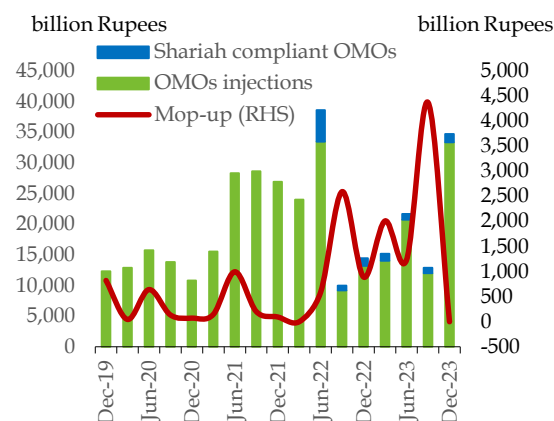
Source: State Bank of Pakistan

A substantial expansion of balance sheet required a concomitant increase in funding. However, the deposit growth could not keep pace with asset growth, necessitating borrowing from financial institutions, especially the central bank. Specifically, the reliance of banks on the SBP's OMOs injections remained intact (**Figure 3.19**). Besides assisting banks in managing their day-to-day liquidity requirements, these OMO injections helped SBP to keep the overnight rate close to the policy rate.

¹⁶ The results of stress testing (sensitivity analysis) is available at: <https://www.sbp.org.pk/ecodata/fsi/qc/2023/Dec.pdf>

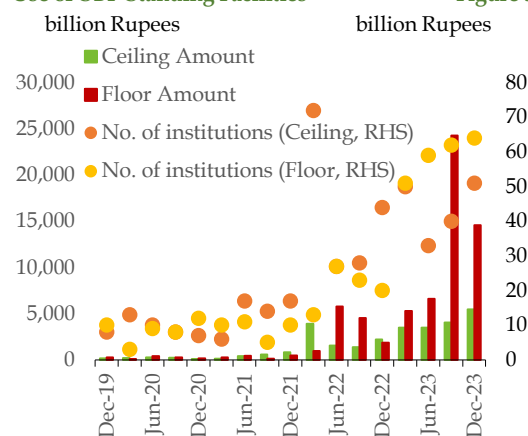
¹⁷ The minimum LCR requirement ensures that banks have high-quality liquid assets to cover all of their liabilities maturing in next 30 days. NSFR, which has long-term perspective, requires that banks have stable funding available to cover at least 100 percent required stable funding needs of their business. Available Stable Funding is the portion of a bank's capital and liabilities that will remain with the institution for more than one year, while Required Stable Funding is the amount of stable funding that it is required to hold given the liquidity characteristics and residual maturities of its assets and the contingent liquidity risk arising from its off-balance sheet exposures. Details of NSFR is available at: www.bis.org/fsi/fsisummaries/nsfr.htm

SBP OMOs Injections and Mop-up Figure 3.19



Source: State Bank of Pakistan

Use of SBP Standing Facilities Figure 3.20



Source: State Bank of Pakistan

Moreover, the higher use of SBP standing facility (floor) was a notable phenomenon, especially in Q3CY23, reflecting surplus liquidity with certain banks which they preferred to place for short-term in line with their expectations on interest rates (Figure 3.20). Specifically before the monetary policy review of September 14, 2023, the market was possibly perceiving a rise in SBP policy rate on the back of increase in global oil prices and their pass-

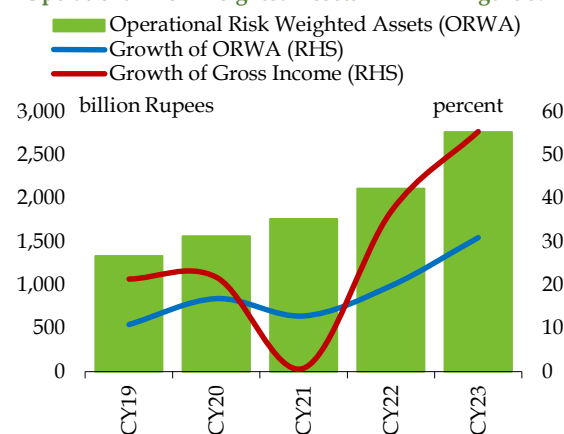
through to domestic prices, and current account's deficit in July 2023 which was in surplus during previous two quarters of 2023.¹⁸

Nonetheless, the sensitivity stress testing exercise of hypothetical liquidity shocks suggests that most of the banks survive withdrawal of up to 10 percent of customer deposits till 5th day; however, in a severe hypothetical shock of withdrawal of up to 50 percent wholesale deposits, a few banks may face liquidity constraints beyond five days.¹⁹

3.4 Operational Risk

Operational Risk Weighted Assets (ORWA) have been rising steadily in recent years; however, with a doubling of earnings (gross income) in CY23 (compared to CY21), ORWA has recorded a sharp increase (Figure 3.21). Its share in total risk weighted assets rose to 19.9 percent in 2023 (17.0 percent at end 2022), and is still second major component of total risk weighted assets of the banking sector.²⁰

Operational Risk Weighted Assets Figure 3.21



Source: State Bank of Pakistan

¹⁸ Domestic petrol prices rose Rs 14.9 per liter and High speed diesel oil price rose Rs 18.4 per liter on September 1, 2023. These prices were increased by Rs 17.5 per liter for petrol and Rs 20.0 per liter for High speed diesel on August 16, 2023.

¹⁹ <https://www.sbp.org.pk/ecodata/fsi/qc/2023/Dec.pdf>

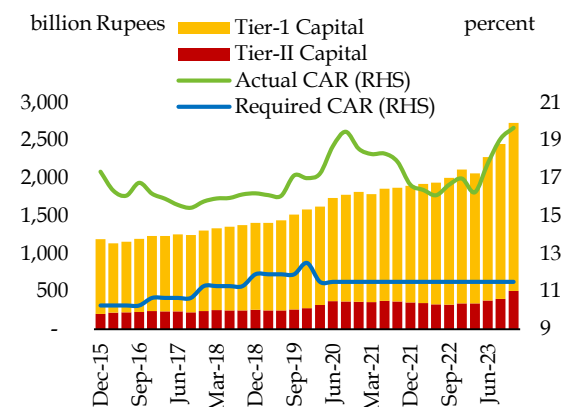
²⁰ Gross income forms the basis of calculating the ORWA under Basic Indicators approach (BIA) of Basel-III standards and is used by most of the banks in Pakistan. Capital charge for operational risk under the BIA is a fixed percentage of the average annual gross income of a bank over past three years.

With the expanding outreach of banking sector and transaction volumes along with increased use of alternative delivery channels and digitization, there has been an associated increase in various types of operational and fraud risks in the operations of banks. SBP has provided an enabling regulatory regime to mitigate the risk of such frauds; moreover, it proactively supervises the effectiveness of banks' controls system and engages with them to minimize the occurrence of such incidents to protect depositors and users of financial services. During the year under review, SBP took a number of measures to improve the controls against sophisticated fraud techniques and raise public awareness (for details see **Appendix A on SBP Regulatory Developments during CY2023**).

3.5 Solvency

Solvency of the banking sector improved as the Capital Adequacy Ratio (CAR) increased to 19.7 percent by end December 2023 from 17.0 percent at end December 2022. The uptick in CAR emanated from higher growth in regulatory capital that outpaced growth in total risks weighted assets. While the higher profits enabled banks to retain earnings that augmented Tier-I Capital, Tier-II capital also rose due to revaluation gains on AFS securities (**Figure 3.22**). Particularly, these gains occurred in Q4CY23, when the yield curve shifted

Solvency Indicators of Banking Sector **Figure 3.22**

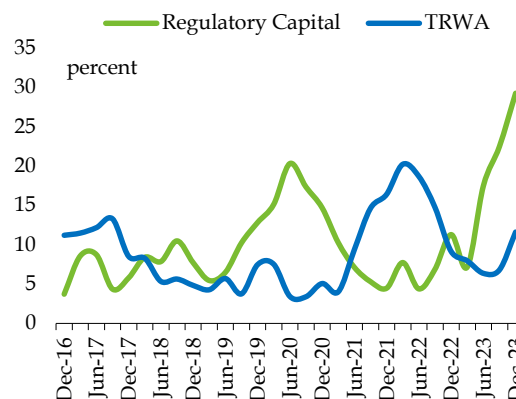


Source: State Bank of Pakistan

downward from its end September 2023 level (see the section on Market Risk for details).

On the other hand, a subdued expansion in overall advances suppressed growth in Credit Risk Weighted Assets, which is the major component (73.0 percent at end December 2023) of Total Risk Weighted Assets (TRWAs), and favorably contributed to solvency. A higher growth in regulatory capital that outpaced the growth of TRWAs, raised the CAR by end 2023 (**Figure 3.23**). The prevailing CAR was well above the domestic and international minimum benchmarks of 11.5 percent and 10.5 percent, respectively.

Growth in Regulatory Capital and Total Risk Weighted Assets (TRWA) of Banking Sector **Figure 3.23**

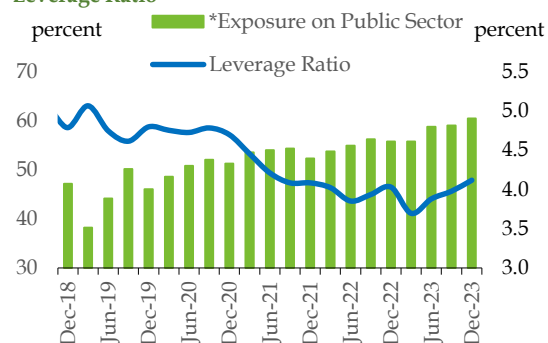


Source: State Bank of Pakistan

Over the last few years, banking sector exposure in government securities has significantly increased which requires no capital charge (involving zero risk weight) for credit risk and relatively low capital charge in respect of market risk. In order to avoid the excessive leverage that banks can build in such an investment proposition, banks are subject to a minimum leverage ratio requirement i.e., 3.0 percent as per Basel standards. This ratio acts as non-risk backstop to CAR requirement to address any model issues in calculating the risk weights and

address the issues of excessive leveraging.²¹ The leverage ratio of Pakistan's banking sector has come down in the last few years due to increase in assets base and exposure, particularly the investment in government securities – declining from 4.8 percent at end December 2018 to 4.1 percent at end CY23 (Figure 3.24). However, the ratio is still higher than the minimum requirement of 3 percent.

Banks' Exposure to Public Sector and Leverage Ratio Figure 3.24



*Exposure to Public Sector = Investment in Government Securities + Public Sector Advances
Source: State Bank of Pakistan

Nevertheless, substantial increase in banks' exposure on government has implications for private sector credit and economic growth as well as the performance of banks.²² It is, therefore, important to both improve the fiscal position by rationalizing the expenditures and enhancing revenues through broadening of tax net as well as tap alternate sources e.g. capital market for financing the fiscal needs.

As regards the key financial risk to the solvency of banking sector, i.e., credit risk, the capital impairment ratio (net NPLs to capital) of 2.7 percent at end December 2023 stands at a comfortable level, suggesting a contained risk to the solvency of the sector from its existing delinquent loan portfolio. The results of stress tests, which SBP conducts regularly, also show that the banking sector has adequate resilience to withstand a set of severe but plausible hypothetical shocks in key risk factors (credit, market and liquidity risks) as well as macroeconomic conditions (**for details see chapter on Resilience of the banking sector**).

²¹ Leverage ratio, a non-risk based constraint on banks' exposures vis-à-vis capital levels, was introduced by the Basel Committee on Banking Supervision in 2014. It is defined as LR = Tier 1 Capital/Total Exposure. Exposure means on and off balance sheet exposures at their nominal value, without assigning any lower risk weight to government exposures.

²² See (i) Ahmed, J. (2016). Credit conditions in Pakistan: supply constraints or demand deficiencies? *The Developing Economies*, 54(2), 139-161. (ii) Zaheer, S., Khaliq, F., & Rafiq, M. (2017). Does government borrowing crowd out private sector credit in Pakistan. State Bank of Pakistan, Working paper, 83.

Box 3.1: Islamic Banking Institutions: Performance and Soundness

Islamic banking institutions (IBIs) continued their growth momentum during CY23. Their asset base expanded by 24.4 percent (Rs 1,765 billion) on the back of strong growth in deposits. The growth in assets was mainly contributed by investments, while growth in financing decelerated to 7.1 percent in CY23, which was however higher than the growth in advances of conventional counterparts (**Table 3.1.1**).

The increase in IBIs' investments was driven by Government of Pakistan Ijarah Sukuk, which raised the share of investments in asset base to 47.1 percent by end CY23. Shariah-compliant investments in government securities has recorded double-digit growth in last four years (CY20-CY23), as the government issued Shariah-compliant instruments (Sukuk) for meeting its rising fiscal needs. This is helpful for the development of Sukuk market in the country and diversifying government debt instruments. Moreover, the rising share of Sukuk on balance sheet of IBIs also facilitated them in managing their liquidity.

Since the asset base of conventional banks posted relatively stronger growth on the back of higher borrowings and investment in government securities, the IBI's share in asset base of overall banking sector slightly came down to 19.4 percent by end CY23 (20.2 percent at end CY22). Their share in total deposits, however, rose to 23.2 percent by end CY23 from 22.0 percent in December 2022, as IBIs maintained a healthy deposit mobilization in CY23 – surpassing the deposit growth of conventional counterparts (**Figure 3.1.1**).

In line with the overall trend in banking sector, weak financing demand, subdued economic activity and tight financial conditions dampened the IBIs' financing activity. Financing grew by significantly lower amount i.e. Rs 222.0 billion in CY23 compared to Rs 515.9 billion in last year. This increase was mainly driven by private financing to sectors such as agribusinesses, textile, chemicals, sugar etc. However, the net retirements by commodity procurement agencies suppressed the overall increase in financing during CY23.

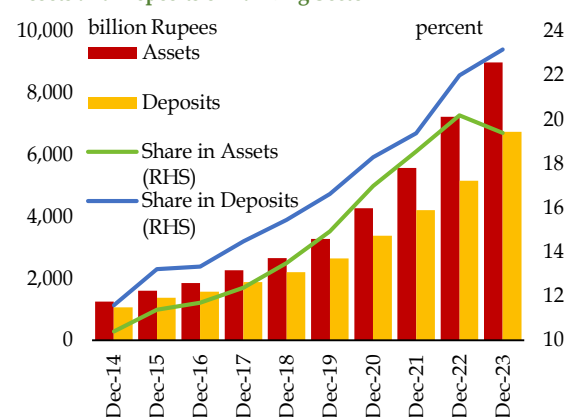
On funding side, deposits showed strong growth in CY23. Besides the abolishment of ADR-linked tax policy, full conversion of one bank as a full-fledged Islamic bank, may have supported this strong growth in CY23. Accordingly, IBIs' reliance on borrowings declined over the year – borrowing declined by Rs 242.6 billion in CY23, as compared to Rs 443.5 billion increase in last year. The reduced average size of Murabaha-based OMOs injections (from Rs 132.8 billion in last year to Rs 64.7 billion in CY23) also suggests IBI's lower reliance on central bank liquidity facilities during the year under review.

Performance of Islamic Banking Institutions**Table 3.1.1**

	CY21	CY22	CY23	CY21	CY22	CY23
	IBIs			Conventional Banks		
billion Rupees						
Total assets	5,577	7,229	8,994	24,482	28,567	37,369
Investments-net	1,852	3,051	4,235	12,703	15,349	21,784
Advances-net	2,597	3,113	3,335	7,523	8,705	8,843
Deposits	4,211	5,161	6,749	17,509	18,301	22,379
Borrowings	671	1,115	872	4,067	6,730	10,801
YoY Change (percent)						
Total assets	30.6	29.6	24.4	17.4	16.7	30.8
Investments-net	46.8	64.8	38.8	19.0	20.8	41.9
Advances-net	38.1	19.9	7.1	17.4	15.7	1.6
Deposits	24.2	22.6	30.8	15.7	4.5	22.3
Borrowings	91.3	66.1	-21.8	41.9	65.5	60.5
Share within Total Assets (percent)						
Investments-net	33.2	42.2	47.1	51.9	53.7	58.3
Advances-net	46.6	43.1	37.1	30.7	30.5	23.7
Deposits	75.5	71.4	75.0	71.5	64.1	59.9
Borrowings	12.0	15.4	9.7	16.6	23.6	28.9
FDR/ADR (%)*	61.7	60.3	49.4	43.0	47.6	39.5
*FDR=Financing to Deposits ratio and ADR=Advances to Deposits ratio						
Source: State Bank of Pakistan						

*FDR=Financing to Deposits ratio and ADR=Advances to Deposits ratio

Source: State Bank of Pakistan

Share of Islamic Banking Institutions in Assets and Deposits of Banking Sector**Figure 3.1.1**

Source: State Bank of Pakistan

Due to faster growth in deposits compared to financing, the FDR ratio fell to 49.4 percent by end December 2023, though the ratio was still higher than ADR of conventional banks (Table 3.1.1).

Islamic Banking Institutions maintained soundness

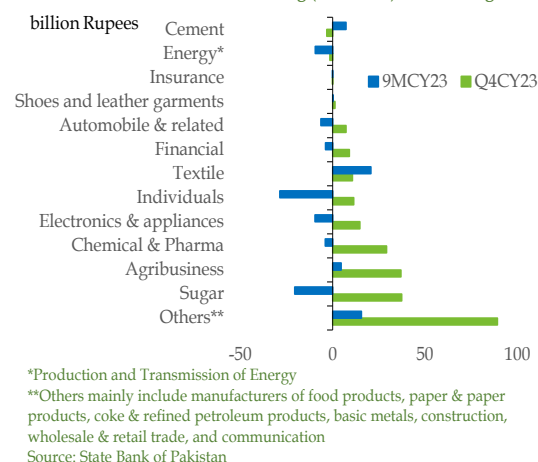
By maintaining a sound financial position, IBIs contributed to the overall stability of banking sector. The non-performing financing (NPF) to total gross financing ratio rose to 3.8 percent, however, the overall asset quality indicators remained at a comfortable level with provisioning coverage of 91.5 percent and contained net NPF ratio.

Earning indicators such as ROA and ROE showed significant improvement, as after tax profit almost doubled in CY23 to Rs 225.4 billion. Major push to the earnings came from net profit income in a high benchmark rate environment, while non-markup income, such as fee income, also contributed. IBIs contributed 35 percent of after tax profit to the overall banking sector during CY23, much higher than their market share in overall banking sector.

Liquidity profile of IBIs improved on the back of increased investments in Sukuk and reduction in short-term borrowings.

Solvency indicators such as CAR improved to 20.7 percent in CY23, as higher earnings augmented Tier-I capital. The CAR which mainly comprised Tier-I capital was well above the minimum regulatory requirement of 11.5 percent as well as higher than the overall CAR of the banking sector (Table 3.1.2).

Flow of Sector wise Private Financing (Domestic) of IBIs Figure 3.1.2



Financial Soundness Indicators of Islamic Banking Institutions Table 3.1.2

	percent		
	Dec-21	Dec-22	Dec-23
Asset Quality			
NPFs to Total Financing	2.7	2.6	3.8
Provision to NPFs	90.8	96.1	91.5
Net NPFs to Net Financing	0.3	0.1	0.3
Net NPFs to Capital	2.1	0.8	1.7
Earnings			
ROA before Tax	2.0	2.9	4.9
ROA after Tax	1.3	1.7	2.8
ROE before Tax	32.6	51.4	75.5
ROE after Tax	21.4	30.5	43.2
Liquidity			
Liquid Assets to Total Assets	33.2	41.6	49.1
Liquid Assets to Total Deposits	44.0	58.2	65.4
Liquid Assets/Short term Liabilities	74.9	88.6	112.1
Financing to Deposits	61.7	60.3	49.4
Customer Deposits to Total Financing	145.6	149.5	177.1
Capital			
Total Capital to Total RWA	16.0	17.8	20.7
Tier 1 Capital to Total RWA	12.8	15.0	17.3
Capital to Total Assets	5.7	5.9	7.3

Source: State Bank of Pakistan