4

Resilience of the Banking Sector

The stress scenario used in this assessment is not a forecast of macroeconomic and financial conditions. It is a hypothetical, coherent, tail-risk setting designed specifically to assess the resilience of the banking sector against hypothesized deterioration in macroeconomic conditions. Under the baseline scenario, the solvency level of the banking sector remains stable, however, under stress scenario it comes under strain but remains well above the domestic regulatory benchmark over the projected three-year horizon. Systemically important large banks carry sufficiently higher capital buffers and are expected to sustain the impact of the assumed shocks over the assessment period. Similarly, the medium and small sized banks are also expected to remain resilient to the shocks. The credit growth under the baseline scenario is projected to remain healthy. However, under the stress scenario, loans' growth is projected to be lower –even showing decline. Considering the uncertainty regarding global commodity markets and macro financial conditions, SBP continues to closely watch the evolving situation and remains ready to take actions necessary to safeguard financial stability.

4 Resilience of the Banking Sector

4.1 Overview and Scenario Design

The State Bank of Pakistan uses various tools to gauge the stability of the financial system. One such tool is the Macro Stress Testing (MST), which evaluates the ability of the banking sector to absorb shocks from adverse macroeconomic and financial developments, emanating both domestically and globally. The MST exercise maps the impact on credit, market and operational risks, and ultimately, on solvency position of the banking sector.

This MST exercise simulates two scenarios to evaluate the impact on the solvency position. First, the *baseline or business as usual (S_0)* scenario reflects the most probable economic trajectory. Second, the *hypothetical stressed (S_1)* scenario assumes severe but plausible macroeconomic and financial conditions. Spanning a three-year projection horizon from Q1CY26 to Q4CY28, this exercise assumes a dynamic balance sheet, which estimates the credit portfolios and delinquency rates in response to shifting macro-financial risk factors. By utilizing a suite of vector auto-regressive (VAR) models, SBP projects the trajectory of gross non-performing loans ratio (GNPLR) and lending volumes to determine their impact on the eligible capital (EC) and risk-weighted assets (RWAs), which consist of exposures to credit, market and operational risks.

Beyond the consolidated system-level analysis, the MST also captures cross-sectional heterogeneity by categorizing banks into three categories with respect to their asset size, i.e. small, medium, and large.

4.2 The Baseline Scenario (S_0)

Following the consolidation phase in CY24, the domestic economy maintained a steady recovery throughout CY25. This stabilization was underpinned by a significant moderation in inflationary pressures, the strategic rebuilding of foreign exchange buffers, and a contained current account deficit. Coupled with continued fiscal consolidation and a calibrated monetary policy stance, these developments effectively kept the exchange rate stable.

Furthermore, successful engagement with the IMF bolstered investor confidence and reduced country risk premium, which helped strengthen the overall stability of the macroeconomy.[1] Based on the above-mentioned developments of CY25, a baseline scenario (S_0) has been devised under which the outlook centers around three main assumptions regarding domestic and global risk factors.

Continuity of a coordinated policy environment and smooth implementation of structural reforms are assumed.

The S_0 assumes continuity in the policy environment over the projection horizon. The progression of the IMF program, alongside strengthening macroeconomic fundamentals, characterized by policy discipline and improved country risk ratings, has mitigated the risk of abrupt policy shifts.

While recent fiscal reforms in the tax and energy sectors have been instrumental in sustaining economic growth[2], the successful conclusion of the current IMF program, scheduled to end in October 2027, is expected to yield the necessary

[1] In August 2025, Moody's upgraded Pakistan's rating from *positive* to *stable* and in April 2025, Fitch Ratings upgraded the rating from CCC+ to B- with stable outlook.
[2] Regional Economic Outlook, Middle East and Central Asia, October 2025, IMF.

fiscal space to address deep-rooted structural rigidities. The timely resolution of these structural bottlenecks could potentially spur growth beyond the baseline projections.

The NCPI inflation remained within the medium-term target range for much of CY25 due to continued prudent policy mix, lower global commodity prices, and favorable base effects. Nonetheless, the ongoing geopolitical conflict in the Midde-East is expected to push inflation slightly above the medium-term target range.

Geopolitical tensions pose a downside risk to the global and domestic economic outlook

By the end of CY25, the global outlook was expected to remain favorable on the back of technology-related investments and accommodative financial conditions. However, the outbreak of War in the Middle East, in late February 2026, could affect global economic activity. Further, global inflation was also expected to maintain its downward trajectory; however, the outbreak of war in Middle East began to disrupt the global supply chains and is expected to bring about a strong rebound in global inflation. To curb the inflationary pressure, the monetary authorities across the globe are expected to take corrective measures and the financial conditions may tighten.

The ongoing War in the Middle East is expected to have adverse impact on the domestic economy in numerous ways. First, the closure of sea routes and consequent disruption of global oil supply are anticipated to exert upward pressure on domestic fuel prices, primarily through an expected increase in international oil prices. Second, the country's exports to the Middle East are also expected to fall. Third, a temporary halt in the oil production activity, as announced by several Middle Eastern countries, is expected to reduce the inflow of remittances and further weigh on the country's current account deficit.[3]

Improved agriculture supply is expected to ease price pressure

The agriculture sector demonstrated notable turnaround in the aftermath of the 2025 climatic disruptions. A rebound in production was facilitated by improved input offtake (specifically fertilizers), increased mechanization through higher machinery imports, and relatively higher disbursements of agricultural credit.[4] Improved supply is expected to ease price pressure which rose during the second half of CY25 due to floods-related market frictions and seasonal higher demand.[5]

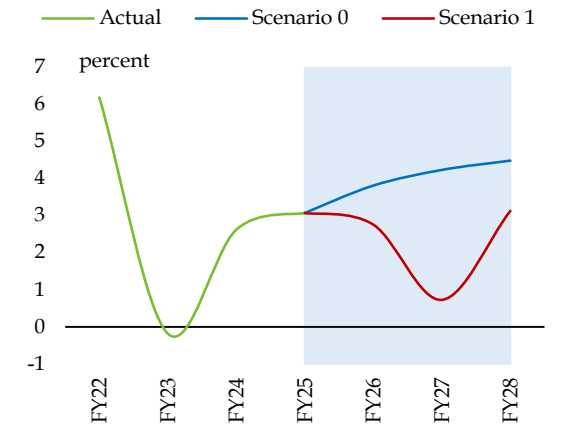
Despite the recovery, the sector remains the primary conduit for downside risks. Unfavorable weather patterns, volatility in water availability, and increasing frequency of climate-related events[6] pose persistent threats to yields. Such disruptions could exert renewed supply-side pressure on food inflation.

Overall growth is expected to remain on track and inflation within target range over the medium term

Under S_0, growth is expected to grow by 3.8 percent in FY26. However, for the next two years of the projection period, it is expected to reach 4.2 percent during FY27 and stabilize at 4.5 percent in FY28 (**Figure 4.1**).

[3] Bloomberg, 2026. Gas Prices Surge as Qatar Shuts World's Largest LNG Export Plant (dated: March 02, 2026)
[4] Ministry of Finance Monthly Economic Update & Outlook, February 2026.
[5] SBP Monetary Policy Report, February 2026.
[6] NDMA has projected 22-26 percent above average rainfall for 2026 monsoon. Webinar report on recent floods in Pakistan: Is it an impact of climate change? A way forward. National Institute of Public Policy, 30 October 2025.

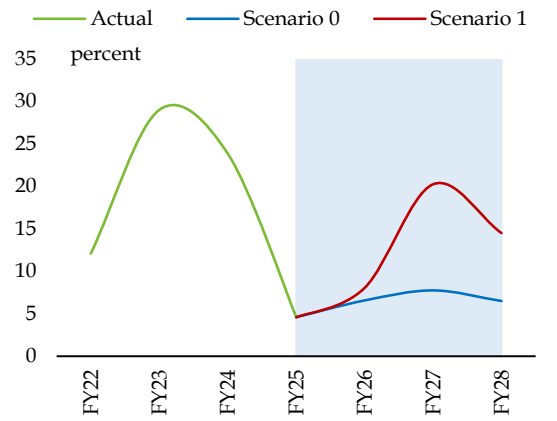
Real GDP Growth **Figure 4.1**



Source: SBP Calculations

Inflation is expected to rise to 6.6 and 7.7 percent in FY26 and FY27, respectively, before receding to 6.5 percent in FY28, within the medium-term target level of 5-7 percent (**Figure 4.2**).

Inflation **Figure 4.2**



Source: SBP Calculations

4.3 The Hypothetical Stressed Scenario (S_1)

Unlike the S_0, the hypothetical stressed scenario (S_1) assumes a significant departure from the current macroeconomic path, characterized with heightened geopolitical volatility and disruption in domestic structural reforms. Three key assumptions made under S_1 are discussed below.

The severity of the ongoing conflicts and trade frictions could slow down global economy and raise international commodity prices even further

S_1 incorporates a prolonged and marked escalation in geopolitical tensions across the Middle East and surrounding countries, triggering severe disruptions in the global supply chain and trade routes. The resulting negative supply shock is expected to cause a considerable slowdown globally and resurgence in global commodity prices, particularly food and energy.

S_1 also assumes resurgence of protectionist global trade policies which may further prolong the uncertainty and weigh heavily on global economy.

For the domestic economy, these global headwinds could translate into stress on the external account through widening current account deficit and depletion in the country's foreign exchange reserves. Under these circumstances, external borrowing would be costlier with higher country-risk premiums, ultimately, exerting pressure on the exchange rate.

Macroeconomic imbalances could lead to abrupt policy shifts and disrupt the pace of structural reforms

The S_1 also assumes discontinuity of structural reforms, particularly in the taxation and energy sector, leading to a higher fiscal deficit. Increased domestic financing needs are expected to elevate sovereign yields, further strengthen the sovereign-bank nexus and crowd out private sector credit. Moreover, due to the general elections scheduled in FY29, higher government spending is anticipated towards the end of

projection period, expanding the fiscal deficit and exerting pressure on the local currency.

Recurrence of severe climate-related events may pose a significant downside risk to the domestic economy.

S_1 also assumes an extreme climate event including catastrophic rains leading to floods, specifically urban floods during the first year of the projection horizon. The anticipated recurrence of climate losses could induce severe agriculture and infrastructure losses, which may lead to increased government expenses and higher food imports, leading to widening twin deficits with higher debt accumulation. Moreover, uncertainties over the water supply from a neighboring country, during dry season, are also expected to hamper the productivity of the agriculture sector.

The assumptions made under S_1 could lead to external account pressure and high inflation during the projection period.

In S_1, economic growth is projected at 2.8 percent during FY26, declining to 0.7 percent in FY27 before recovering to 3.1 percent in FY28. Th supply shocks emanated from severe floods and intensified geopolitical tensions is assumed to raise inflation to 8.1 percent during FY26, however, it is expected to increase beyond the target range to 20.3 percent in FY27 and 14.5 percent in FY28.

4.4 Stress Testing Results: System Level

At the outset, some caveats are noted on using the data on advances and risk weighted assets (RWAs). Specifically, during Q4CY24, the advances portfolio expanded sharply, with banks extending Rs. 3,913 billion in gross advances, reflecting a 30.1 percent QoQ growth, largely driven by the ADR-linked tax policy. This surge mechanically lowered the gross non-performing loans ratio (GNPLR)[7] and capital adequacy ratio (CAR)[8] due to inflated denominators. For stress-testing purposes, advances and RWAs were normalized using the average YoY growth of the past five years (excluding 2020), resulting in adjusted GNPLR and CAR of 7.3 percent and 21.8 percent, compared to realized ratios of 6.3 percent and 20.6 percent, respectively, as of December 2024.

a) Impact on Credit Riskiness

The results of the MST exercise indicate that the GNPLR under S_0 is likely to slightly increase by 35 bps over initial seven quarters followed by a 59 bps decline towards the end (**Figure 4.3**). The initial rise in loan delinquency ratio was due to the lagged effects of assumed economic challenges e.g., slight downward adjustment in economic activity, short-term upward trend in inflation followed by an appropriate monetary policy response, which may lead to a slight surge in NPLs. As a result, the GNPLR is expected to peak at 6.4 percent, up from the current level of 6.1 percent, before settling at 5.8 percent by the end of projection period i.e., Q4CY28. On average, advances are projected to grow by around 13.6 percent over CY26–CY28 under S_0.

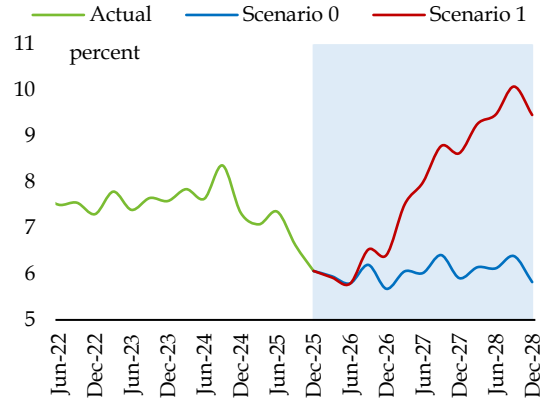
The asset quality indicator, under hypothetical stressed scenario, S_1, on the other hand, follows an upward trajectory because of the assumed sharp economic slowdown amid elevated global commodity prices and domestic supply shocks. The initially subdued rise in the infection ratio may reflect relatively strong creditworthiness of borrowers and the inherent lags in the recognition of NPLs. Under prudential

[7] GNPLR = Gross Non-Performing Loans ÷ Gross Advances
[8] CAR = Eligible Capital ÷ Risk Weighted Assets

regulations, asset quality deterioration typically materializes gradually (time-based criterion), causing the infection ratio to respond with a delay to emerging macroeconomic stress, even when underlying credit risk begins to rise earlier, which is also evident from the rise in infection in the latter half of projection period.

The growth in advances may also be affected by the assumed deterioration of macroeconomic dynamics. Under S_1, the lending portfolio is projected to grow on average, by 6.1 percent over the projection period. The delinquency rate rises gradually and peaks at around 10 percent before taking a slight dip and settling at 9.5 percent towards the end of projection horizon (**Figure 4.3**). The slow onset of infection ratio might be due to factors stated under stressed scenario.

System-Level Gross Non-Performing Loans Ratio **Figure 4.3**

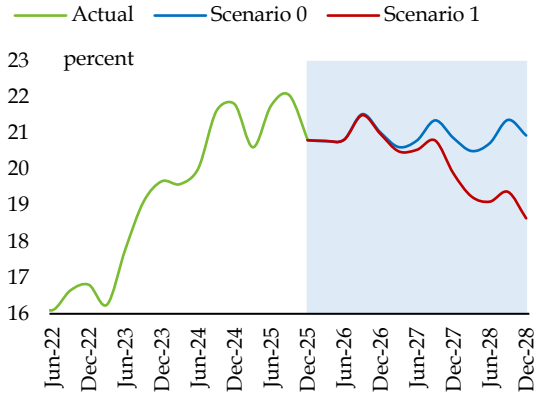


Source: SBP Calculations

b) Impact on Solvency

The impact on solvency is measured via CAR of the banking system. The incremental NPLs have been adjusted in the projected EC and RWAs. The CAR of the system slightly improves in baseline scenario. Under S_0, the CAR rises by merely 13 bps by the end of CY28 from the prevailing level of 20.8 percent. However, in the stress scenario, it falls by 217 bps from the current level (**Figure 4.4**).

System-Level Capital Adequacy Ratio* **Figure 4.4**



* Regulatory Benchmark is 11.5 percent.

Source: SBP Calculations

However, under both scenarios, the banking industry maintains its CAR above the domestic and global minimum benchmarks of 11.5 percent and 10.5 percent, respectively, during the entire projection horizon.

Despite the assumed significant slowdown in real economic activity, the banking sector is expected to remain resilient and maintain adequate solvency buffers. This can be attributed to several structural and regulatory factors. First, the sector currently maintains capital buffer of around 930 bps above the regulatory benchmark of 11.5 percent, indicating strong loss-absorbing capacity. Second, the 100 bps capital conservation buffer released during the COVID-19 period has not yet been reinstated, effectively providing banks with additional space to absorb potential shocks. Third, the favorable repricing structure of banks' earning assets, amid assumed monetary policy conditions, provides further resilience by supporting interest income during periods of stress. Finally, historical trends show that banks tend to reallocate their asset portfolios toward low-risk government securities[9] during

[9] The exposure of banks to the public sector stands at 64.6 percent of total assets at the end of CY25.

economic downturns, thereby reducing credit risk exposure. Within SBP's robust regulatory and supervisory framework, banks also generally adopt conservative lending practices, prioritizing borrowers with stronger creditworthiness and greater capacity to withstand macroeconomic shocks.

4.5 Results: Cross Sectional Dynamics of Banking Segments

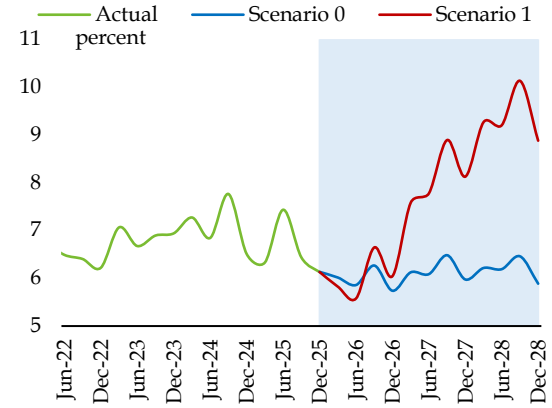
In line with the system-level credit risk analysis, infection ratios of banking segments, viz., small, medium and large sized banks,[10] have also been projected separately. This aspect of the banking industry is included to assess how cross-sectional heterogeneity affects the resilience of banks against various macroeconomic risks.

For the GNPLR, system-level projections of NPLs and gross advances are distributed proportionately based on the contribution of each segment to the aggregate loan portfolio of the banking system as of December 2025. Similarly, capital is also distributed proportionately to compute segment level CARs.

(a) Large Banks

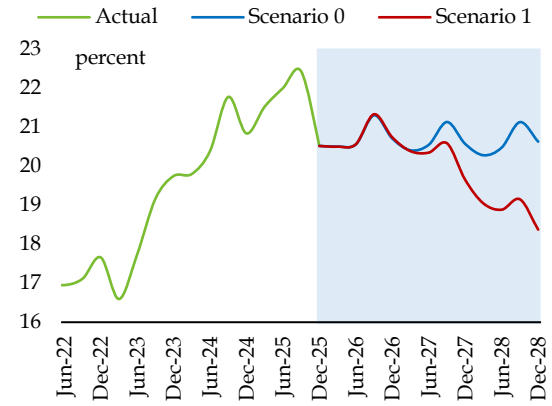
The large banks segment – comprising around 77.2 percent of the banking sector's assets – witnesses a decrease of 25 bps in GNPLR by end CY28 from its current level of 6.1 percent in the baseline. Under stress, however, the infection ratio may rise gradually by 275 bps by the end of projection horizon (**Figure 4.5**). The CAR may increase by 11 bps in the baseline scenario but may fall by 214 bps in the stressed scenario from prevailing level of 20.5 percent over the projection span (**Figure 4.6**). Remarkably though, the CAR remains 912 and 688 bps higher than the local benchmark, respectively under S_0 and S_1.

Large Banks - Gross Non-Performing Loans Ratio **Figure 4.5**



Source: SBP Calculations

Large Banks - Capital Adequacy Ratio* **Figure 4.6**



* Regulatory Benchmark is 11.5 percent.
Source: SBP Calculations

The large banks are expected to remain well-positioned to withstand adverse shocks over the simulation horizon, reflecting their stronger capital positions and stable funding structures. Owing to their extensive outreach and diversified deposit base, large banks benefit from relatively lower costs of funds, enabling them to maintain higher-quality loan portfolios. Moreover, Domestic Systemically Important

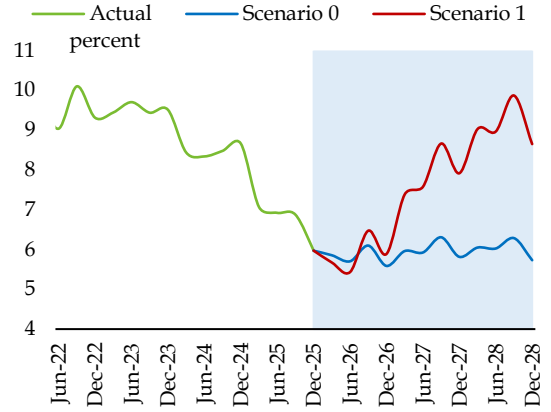
[10] The categorization has been done based on size of banks' balance sheet. The banks with assets above 70th percentile of the entire banking sector are termed as 'Large' while below 30th percentile are categorized as 'Small'. The banks falling in between these two thresholds are categorized as 'Medium' sized banks.

Banks (D-SIBs), which account for 42.8 percent of banking sector assets, are expected to remain well-capitalized and resilient under stressed scenarios, supported by additional capital surcharge requirements under SBP's prudential framework.

(b) Medium-sized Banks

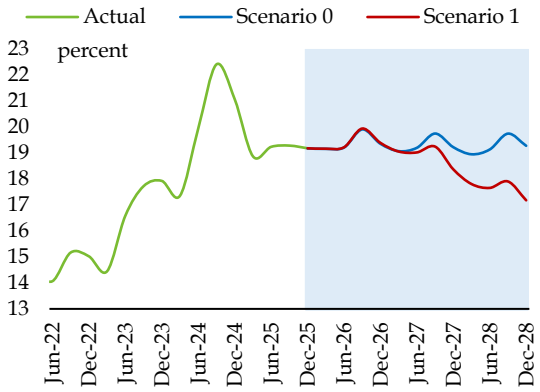
By the end of the projection period, the infection ratio of medium-sized banks (having market share of around 18.6 percent) decreases by 24 bps in S_0, from existing level of 6.0 percent. However, it may increase by 268 bps in S_1 (**Figure 4.7**). The CAR, correspondingly, is likely to rise by 10 bps in S_0 but decline by 200 bps in S_1 compared with the prevailing reading of 19.2 percent. The medium-sized banks are, therefore, also expected to remain compliant with the regulatory CAR standards, even under the stressed scenario (**Figure 4.8**).

Medium Banks - Gross Non-Performing Loans Ratio **Figure 4.7**



Source: SBP Calculations

Medium Banks - Capital Adequacy Ratio* **Figure 4.8**



* Regulatory Benchmark is 11.5 percent.

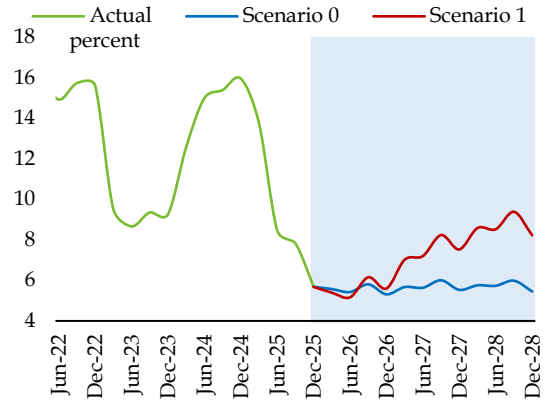
Source: SBP Calculations

The level of CAR for medium-sized banks remains 778 and 568 bps percentage points above the minimum regulatory requirement in S_0 and S_1, respectively. Although medium-sized banks maintain relatively lower pre-shock capital buffers compared to large and small banks, they are also expected to withstand the assumed macro-financial shocks under the stressed scenario, supported by their satisfactory capital positions.

(c) Small Banks

Small banks – contributing around 4.3 percent of the banking sector assets – turn out to be the most resilient segment in both baseline and stressed scenarios, compared to large and medium-sized banks. From its existing level of 5.7 percent, the loan delinquency rate decreases by 23 bps in S_0, whereas it rises by 255 bps under S_1, by the end of horizon (**Figure 4.9**).

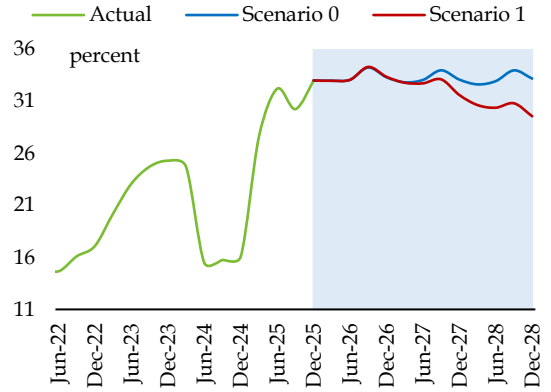
Small Banks - Gross Non-Performing Loans Ratio **Figure 4.9**



Source: SBP Calculations

In terms of solvency, the CAR of small banks rises by 17 under S_0 and falls by 344 bps under S_1 from the prevailing level of 33.0 percent (**Figure 4.10**). The CAR, however, remains a solid 2,170 bps higher than the local benchmark in S_0 while also staying a healthy 1,808 bps above the minimum requirement under S_1. Over time, this segment has strengthened its resilience by substantially building capital buffers.

Small Banks - Capital Adequacy Ratio* **Figure 4.10**



* Regulatory Benchmark is 11.5 percent.
Source: SBP Calculations

Overall, under the baseline scenario, the delinquency ratio is expected to remain stable whereas the solvency of the banking sector portrays an encouraging picture with capital adequacy staying well above the domestic regulatory benchmark. Under the hypothetical stress scenario as well, the banking sector is expected to withstand a severe slowdown induced by adverse global and domestic macroeconomic conditions, including the global commodity market pressures. Thus, with stronger solvency buffers, the sector is expected to continue catering to credit needs of the economy even under stressed macroeconomic conditions, though at a slower pace.

In terms of size, all the segments of the sector (small, medium, and large) can withstand the assumed stressed conditions as well. Encouragingly, the large size banks, whose stability has particular significance for economy and financial system, carry higher capital buffers and are thus able to sustain the impact of hypothesized shocks for the projection period of three years. Also, the other two segments of banks meet the solvency criteria during the projection horizon. Furthermore, the domestic banking sector has generally performed quite reasonably during severe downturns, such as the external sector crises in 2008, COVID-19 pandemic and flash floods of 2022. This is visible in the results of the stressed scenario (S_1), as the sector remains well capitalized and resilient.

However, the exact severity, duration, and paths of assumed global commodity markets and macro financial conditions due to intensely spreading geopolitical tensions in the Middle East, specifically, and Eastern Europe, generally, remain highly uncertain. Consequently, the stress testing results should be interpreted with caution, given the inherent limitations of the underlying assumptions and modelling framework. SBP continues to closely watch the evolving situation and remains ready to take necessary actions to safeguard financial stability.