Macro-Prudential Policy Framework in Pakistan





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Preamble

The document delineates the Macroprudential Policy Framework (MPPF) in Pakistan, as envisaged under Section 4C(j) of SBP Act 1956 (as amended in Jan-2022). It outlines the objectives, institutional framework, set of policy tools along with assessment mechanism and communication strategy for the macroprudential policy. The purpose is to help stakeholders understand the mechanism of financial stability assessment and set of tools at the disposal of SBP, which may be invoked as policy intervention(s) under certain scenarios to contain systemic risks in order to ensure stability of the banking sector, in particular, and the financial sector, in general.

1. Introduction

1. Financial stability is one of the basic statutory objectives of State Bank of Pakistan (SBP), as set out in the SBP Act 1956 and duly cascaded into the SBP's Vision and Strategic Plan. The stability of the financial system in turn is a key imperative for the monetary and price stability, paving way for a sustainable economic development.

Financial stability reflects the state in which the financial system - financial intermediaries, financial markets and financial market infrastructure - aids in smooth flow of funds between savers and investors in a structured and trustful manner. Financial sector is considered sound and stable, when financial institutions in general are:

- i. performing the financial intermediation process without any disruption and are financially sound enough to honour their financial obligations in orderly manners,
- ii. effectively identifying, pricing and managing their risks, and
- iii. resilient enough to withstand severe macroeconomic shocks.

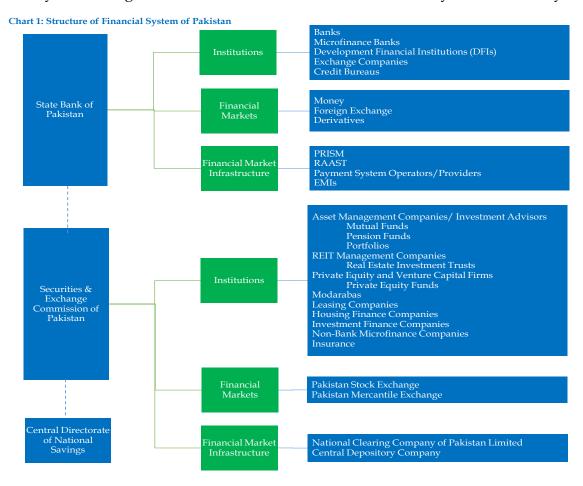
The financial system's stability is important for three key reasons:

- i. It creates trust and confidence of savers and investors in the financial system and its institutions;
- ii. It provides a stable foundation for the transmission of monetary policy and therefore, price stability; and
- iii. It encourages efficient allocation of capital and promotes trade, which in turn, underpins economic activity and growth.
- 2. Post global financial crisis of 2007-08, financial sector's ability to generate and propagate imbalances as well as the inter-linkages between real and financial sectors of the economy were laid bare. As a result, policymakers and regulators have increased their focus on evaluation and monitoring of buildup of systemic risks. The idea is to implement a Macroprudential Policy Framework (MPPF), which can:
 - i. prevent buildup of systemic risks during business cycle's upturns and slowdowns,
 - ii. sort out fragilities which could arise from cross-sectional and structural dynamics of financial sector, and
 - iii. inhibit excessive risk taking among financial institutions.

3. Indeed, the Basel Core Principles for Effective Banking Supervision, which set the minimum standards of an effective supervision framework, also emphasize the need to focus on systemic risk and macroprudential aspect of supervision (CP-8). Importantly, the recently introduced Section **4C(j)** of SBP Act 1956² requires SBP to adopt and implement macro-prudential measures for scheduled banks and financial institutions that fall under SBP's domain.

2. SBP's Role in Financial Stability

4. Pakistan's financial sector comprises a host of banking and non-banking financial institutions (see **Chart-1**) that are regulated by the SBP and Securities and Exchange Commission of Pakistan (SECP). However, banks perform the predominant part in the intermediation process e.g., banks contribute around 80 percent of the financial sector's asset base and have a crucial role in the payment system. Therefore, the stability of banking sector is crucial for overall financial stability in the economy.



¹ BIS (2024). Core Principles for Effective Banking Supervision, April 2024.

² As amended in January 2022

- 5. In pursuit of its objectives of *price stability* by 'regulating the monetary and credit system of Pakistan' and 'contribute to the *stability of financial system* of Pakistan' in order 'to foster development and fuller utilization of the country's productive resources', as laid down in SBP Act 1956, the SBP pursues the monetary and other prudential policies. Particularly, to ensure stability of the banking sector, an elaborate regime has been put in place which comprises:
 - i. Regulatory standards and guidelines setting minimum prudential requirements and prescribing best practices in key areas to be applied in line with the principle of proportionality,
 - ii. Risk-based supervisory regime which proactively supervises the performance and soundness of regulated institutions and takes corrective actions to redress any supervisory concerns at an early stage. Moreover, this system is augmented by a comprehensive set of additional safety nets i.e., lender of last resort (LOLR) facility and deposit protection system as well as bank resolution and crisis management regimes.

Legal Framework sets the mandate, powers and responsibilities of SBP (the SBP Act, BCO, MFI Ordinance, Payment System and Electronic Fund Transfer Act, DPC Act, etc.) Crisis Preparedness Framework * Safety nets to prevent crisis and protect depositors i.e., LOLR and Deposit Insurance Scheme Provide guidance and set regulatory expectations by prescribing minimum standards. Supervisory Framework * Risk-based Supervision of Financial Institutions Contingency Planning and Resolution * Corrective Actions and Enforcement Regime to Address Concerns in timely manners Crisis Simulation Exercises * Enhanced Supervision of Systematically Important Banks * Consolidated Supervision of banking groups and financial conglomerates Coordination and Cooperation *Financing to Corporate, SMEs, Agriculture, and Microfinance * National Financial Stability Council (MOF, SBP and SECP) *Anti Money Laundering and Counter Terrorist Financing * Periodical Assessment of overall Financial Stability * Coordination with SECP and other * Coordination with International Standard Setting Bodies Underlying Objective: Promote Financial Stability and forward other policy objectives

Chart-2: Key Elements of SBP's Regulatory and Supervisory Framework

iii. This regulatory and supervisory regime is complemented by the macroprudential framework, which assesses the systemic risks (pertaining to both time dimension i.e., business cycle dynamics as well as cross-

sectional/ structural aspects) at aggregate level and the findings of this assessment feed into the regulatory standards to mitigate these risks. The later aspect closely corresponds to the **Macroprudential policy (MPP)** (see **Chart-2**).

3. Overview of SBP's Macroprudential Policy Framework

- 6. The MPP is defined as the use of primarily prudential tools to limit systemic risk.³ The systemic risk i.e., the possibility of a widespread disruption in provision of financial services that is caused by impairment of all or parts of the financial system, potentially bearing negative consequences for the real economy has two dimensions:
 - i. Buildup of vulnerabilities over time (time dimension), and
 - ii. Risks generated by the interconnectedness of various constituents of the financial sector, complexities in the structures and products, etc. (*cross-sectional* or *structural dimension*).

The mitigation of systemic risks via macroprudential measures ultimately aims to reduce the severity and frequency of financial crises.

- 7. While an elaborate and strong micro-prudential supervisory and regulatory framework caters to the idiosyncratic issues in individual institutions under SBP's purview, a dedicated department, viz., Financial Stability Department has been created since 2015 for the assessment and monitoring of systemic risk. The department carries out assessment of system level risks from both time as well as cross-sectional dimensions (macro-prudential aspect).
- 8. Incidentally, based on these macroprudential assessment various policy interventions have already been made in the past to mitigate systemic impacts of risk, which emanated from macro-environment as well as cross-sectional and structural dynamics of financial system. For example, during the COVID-19 pandemic of 2020, various supervisory interventions were made at micro- and macro- level, which included a reduction of 100 basis points in capital conservation buffer, principal payment holidays and relaxation in provisioning requirements of rescheduling/restructuring of loans of borrowers who were distressed by the pandemic, a sharp cut in policy rate etc. Similarly, SBP has introduced a framework for enhanced supervision and regulation of domestic systemically important banks (D-SIB) to address cross-sectional dynamics and moral hazard of too-big-to fail. The SBP also monitors

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³ Elements of Effective Macroprudential Policies, Lessons from International Experience by IMF, FSB, BIS (2016)

banking groups on consolidated basis to address the risks from structural dynamics and variety of businesses that banks perform through their subsidiaries.

4. Macroprudential Policy Framework: Key Elements

- 9. The international best practices, reviewed and synthesized in a joint study by the International Monetary Fund (IMF), the Financial Stability Board (FSB) and the Bank for International Settlements (BIS) i.e., Elements of Effective Macroprudential Policies, Lessons from International Experience (IMF-FSB-BIS, 2016), provide following main elements for an effective MPP:
 - a) Definition, Objectives and Scope
 - b) Institutional arrangements,
 - c) Operational considerations Assessment, Tools, and Surveillance, and
 - d) Communication of MPP.

SBP's MPP framework includes all of the prescribed elements (see Chart 3).

Chart 3: Overview of SBP's MPP Framework



The following paragraphs briefly discuss the SBP's MPP framework.

a) Mandate, Objectives and Legal Framework

10. For the public policy to yield desired outcomes, some intermediate targets/objectives need to be set. For macro-prudential policy, the ultimate objective is to ensure financial stability by preventing buildup of financial excesses and systemic risks and to strengthen the resilience of the system to potential shocks. Once the defenses of the financial system are strong in the face of macro-financial shocks, the system continues

provision of basic services such as deposits, credit, payments, etc. even under adverse economic conditions.

- 11. MPP of a country aims to prevent buildup of risks in the financial system as a whole - financial institutions, markets and infrastructure. However, in view of the bankcentric financial system in Pakistan where predominant part of the financial intermediation takes place through banks, the MPP at SBP mainly focuses on the banking system. This approach is also in line with Section 4C(j) of the SBP Act 1956 as well as international advice (IMF-FSB-BIS, 2016).⁴ For this purpose, sufficient powers are already entrusted to the central bank via the SBP Act 1956 and the Banking Companies Ordinance (BCO) 1962. The Act mandates SBP to regulate the monetary and credit system of Pakistan to secure 'domestic price stability' and 'contribute to the stability of the financial system' to 'foster development and fuller utilization of country's productive resources'. The BCO entrusts the State Bank, inter alia, to regulate and supervise the banking system for protecting the interest of depositors and preserving the financial stability. Nonetheless, non-bank segments of the financial sectors and the impact of other economic policies on financial sector are covered through a comprehensive coordination arrangement with the Federal Government and Securities and Exchange Commission of Pakistan (SECP)⁵ and SBP regularly assesses the state of overall financial stability. In this connection, the SECP also has a statutory mandate to identify and address the factors resulting in systemic risk in its regulated markets.
- 12. With regards to the banking sector, a more targeted set of *intermediate objectives*, which emanate from the basic function of the banks, viz., financial intermediation, are:
 - i. *Prevent excessive growth and seizure of credit*: Asset price bubbles are often fueled by the unchecked credit booms during the cyclical upturns when the credit standards are generally loosened, the indebtedness of the economic agents increases as does

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⁴ As per (IMF-FSB-BIS, 2016), where 'banks are significant providers of credit to the economy, macroprudential policy typically applies its policy levers to the banking system'.

⁵ A coordination body between the SBP and the Securities and Exchange Commission of Pakistan (SECP) viz., Council of Regulators (CoR) was initially formed in 2017 to performs the assessment of systemic risks facing the financial sector. The CoR has been replaced by a newly formed broader and higher-level coordination forum i.e. National Financial Stability Council in 2020, which comprises SBP, SECP and Ministry of Finance, Government of Pakistan. Moreover, SBP and SECP have setup a Joint Task Force to proactively assess and address the risk posed by conglomeration in financial sector.

⁶ SBP in its flagship publication, viz., Financial Stability Review assesses the financial sector as a whole.

the leverage in the financial markets as well as the risks to banks. Similarly, during economic slowdown, the bank credit can seize up due to increased credit risk and delinquencies, which leads to further slowdown in economic activity and losses to banks, thus creating a feedback loop. Macroprudential policy can help contain excessive credit growth or contraction by imposing minimum capital requirements as well as creating buffers, namely counter-cyclical buffer (CCyB), in good times which can be released during bad times, ensuring a smoother flow of credit and minimizing the probability of crisis.

- ii. *Limit maturity mismatches*: Maturity transformation is the basic function of banks, where the major funding source, i.e., deposits, is mainly of 'on-demand' nature while lending is generally for longer tenor. The MPP helps to ensure that the banks possess enough liquidity cushions and stable funding so that the maturity gaps remain in a manageable range.
- iii. Contain direct and indirect exposures: Apart from raising deposits from households and firms, the banks not only borrow and lend to each other, they are linked via common exposures as well. Given relatively higher level of interlinkages, a shock to one or two institutions or problems in a large borrowing group or in a class of correlated assets may easily propagate to the whole system and to the rest of the economy via direct links or correlated exposures.⁷
- iv. Strengthen resilience of systemically important banks: Because of their size, interlinkages with other institutions in the system, criticality/indispensability of the services they provide as well as the complexities in their business, structure and operations, some banks become important such that their failure may lead to instability of the whole sector, huge losses to the entire economy and consequent social repercussions. It is thus important that such domestic systemically important banks (DSIBs) receive an enhanced regulatory and supervisory focus of the SBP. Ensuring resilience of DSIBs thus leads to a more resilient banking system.
- v. Address challenges arising from common exposure, structural dynamics and variety of businesses conducted by regulated financial institutions: Pakistani banks in general are allowed to perform universal banking, so that they can perform various non-

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⁷ A leading example of common exposures leading to financial and economic crises is financial institutions' exposures to mortgage financing and its underlying derivatives in the USA in 2008.

banking businesses e.g. brokerage, investment banking, asset management etc.8 For this purpose, many banks or their sponsors have set up subsidiaries to carryout non-banking businesses. Such interlinkages pose various financial stability challenges and warrant supervision of banks on a consolidated basis and coordination with SECP to address the risk posed by conglomeration in financial sector. Similarly, banks' common or strongly correlated exposures can have systemic implications. For instance, banks' tendency to lend more to large corporate firms or certain sectors of the economy can lead to a situation where various banks may have significant exposure on such firm(s) or sector(s), and the failure of that firm or sector can create stability concerns for the banking industry.

To pursue these objective, related operational and institutional arrangements of SBP are discussed below.

b) Institutional Arrangements

- 13. Institutional arrangements refer to making an existing authority responsible for the MPP and developing necessary infrastructure to effectively perform the crucial functions. Such an authority needs to have a clear **mandate**, well-defined **objectives**, adequate legal **powers**, and broad **domestic cooperation** from all the stakeholders. The element of **accountability** is equally essential as well.
- 14. Two most common arrangements being followed globally are where the central bank (**Model 1**) or a committee outside the central bank (**Model 2**) is the designated MPP authority. Within *first* model, the central bank could be either entrusted with MPP mandate having coordination with other non-bank regulating/supervising agencies (**Model 1a**) or a committee within central bank can be assigned the mandate (**Model 1b**).
- 15. Pakistan's financial sector is mainly bank centric.¹⁰ On the other hand, a relatively shallower capital market has a low market capitalization to GDP ratio and a small investor-base; there is non-complex and relatively thin volume of trading in financial markets, limited cross boarder exposures, low volume of mortgage financing (thus,

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⁸ As per BCO, a bank can perform various non-banking businesses except for insurance business. However, subject to SBP approval, banks can own upto 30 percent shareholdings in an insurance firm.

⁹ Briefly, countries like New Zealand, Singapore, Switzerland follow Model 1a; Malaysia, Saudi Arabia, United Kingdom, are on Model 1b and France, Germany, USA, follow Model 2. For more examples of countries following various models, see Table 1 in (IMF-FSB-BIS, 2016).

¹⁰ Banks contribute 79.2 percent of the financial sector's asset base (as as of 31-12-2023).

expectedly, limited impact of real estate prices on financial sector), and less reliance on wholesale funding (implying low interconnectedness among FIs). Therefore, the stability of banking sector is pivotal to the overall financial stability in the economy. Accordingly, Pakistan has a well-developed supervisory and regulatory structure for the banks as instituted and operated by SBP, whereas SBP has also been explicitly entrusted with the financial stability mandate vide Section 4(B) of the SBP Act 1956. Consequently, the SBP is the key authority to carry out the task of ensuring financial stability by implementing MPP (Model 1).

- 16. It is important to note that SECP also has been enthused with statutory obligation to identify and address the factors resulting in systemic risk in the markets regulated by the SECP. In order to coordinate the supervisory efforts, the SBP and SECP have set up various coordination arrangements. Besides, a national level forum i.e., National Financial Stability Councils (NFSC) is also in place to coordinate the assessments and policy actions of Federal Government, the SBP and SECP (Model 2).
- 17. In terms of the SBP Act, SBP's Board of Directors (BoD) is responsible for the overall oversight of bank's affairs and functions. Further, in terms of Section 9F of SBP Act 1956 (as amended in Jan-2022), a high level Executive Committee (EC) has also been established to, inter alia, formulate policies related to SBP's core functions. EC is a collegial decision making forum comprising the Governor (chairperson), the Deputy Governors (voting members), the Executive Directors (non-voting members) and, as needed, other senior officials.
- 18. In order to assist the BoD and the EC, a dedicated financial stability assessment function and coordination arrangements are in place to present the findings along with any policy recommendations. In this regard, Financial Stability Department (FSD) carries out assessment of financial stability and systemic risks in coordination with relevant departments and also coordinates with stakeholders (internal and external) on the relevant issues. Besides conducting various analyses on financial stability and publications of assessment reports, FSD also makes presentations on the performance and soundness of banking sector to the BoD on a quarterly basis.
- 19. Since financial stability may also be driven by the dynamics of other economic and administrative policies as well as non-bank financial sector, there also exists an overarching, high-level body i.e., the NFSC to seek the coordination and support of the SECP and Federal Government. The Council is the body to deliberate on issues

and trends in the financial system affecting the financial stability and recommend coordinated policy responses to address the systemic risks. It comprises the Minister of Finance (chair), the Governor SBP and the Chairman SECP. The Council is meant to provide a forum for relevant stakeholders to deliberate on the key issues pertaining to the financial stability. In line with practice being followed in various countries, a tripartite Memorandum of Understanding (MoU) among three agencies was signed in May 2020. Finance Division, Ministry of Finance is the focal point and secretariat of the Council. This arrangement has its merits in that it has the political ownership and preserves the functional independence of the participating institutions.

- 20. It may be mentioned that there exists a relatively small sized non-bank financial (NBFI) sector that has some integration with banking sector. The role of NFSC would become more important with the increase in both the size of non-bank financial sector and capital market and the role of Federal Government's policies e.g. fiscal, trade, commerce, climate-change polices etc.
- 21. In the current bank-centric financial system, therefore, the Executive Committee (EC) of SBP is deemed to be more effective for ensuring the stability of financial sector, and hence is the designated macroprudential body (Model 1b). Further, arrangements under domestic cooperation (see below) can always be utilized for any policy interventions transcending beyond banking system.
- 22. *Powers*: In terms of powers, the SBP enjoys a host of hard/semi-hard/soft powers under various laws and statutes to regulate and supervise the entities under its purview.
 These include, e.g., the SBP Act 1956, the Banking Companies Ordinance 1962, Microfinance Institutions Ordinance 2001, Credit Bureau Act 2015, Payments System & Electronic and Fund Transfers Act 2007, Deposit Protection Corporation Act 2016, and Foreign Exchange Regulation Act 1947.
- 23. Assessment Frequency and Meeting: SBP's senior management and Board are regularly apprised about the performance of the banking sector and state of financial stability on a *quarterly* basis, while the senior management and Board can also advise for any special assessment in view of any important issue at hand. Moreover, FSD keeps the

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¹¹ **Hard Powers** give policymakers direct control over macroprudential tools or the ability to direct other regulatory authorities; **Semi-hard Powers** enable policymakers to make formal recommendations to other regulatory authorities, coupled with a 'comply or explain' mechanism and **Soft Powers** enable policymakers to express an opinion, or warning, or a recommendation that is not subject to comply or explain.

senior management updated about the state of financial stability in line with the laid down process. The assessments carried out by SBP are also shared widely through annual FSR and the Governor's annual report to the parliament (the reports reviewed and approved by SBP Board) as well as a mid-year review of banking sector. Finally, EC, the designated macroprudential body, shall meet on a half-yearly basis, or more frequently if necessary.

- 24. *Domestic Cooperation:* For any systemic vulnerability that transcends the banking sector, the coordination with other regulator viz., the SECP, can be facilitated via SBP-SECP Coordination Committee or NFSC and the relevant macroprudential policy interventions can be recommended/effected. The NFSC forum can help in addressing the national level systemic risks that involve interactions between various financial and non-financial sectors of the economy as well as polices like fiscal, monetary, micro-prudential, etc. Incidentally, SBP and SECP also have a forum of Joint Task Force (JTF) for managing the risks posed by conglomeration in the financial sector; it supports interagency coordination for the supervision of financial conglomerates as well as the consolidated supervision of banks.
- 25. *Accountability*: FSD makes presentations on the performance of the banking sector on a *quarterly* basis to the SBP's BoD, which is entrusted with the oversight of the affairs and functions of the SBP. In terms of Section 39 of the SBP Act 1956, the SBP submits an Annual Report before the *Majlis-e-Shoora* (Parliament) that in addition to other areas comprehensively covers state of financial system. Under the same section ibid, SBP is also required to publish an annual report on financial stability, the 'Financial Stability Review', that provides overall assessment of the financial system. Moreover, to ensure transparency and support the information needs of a wide range of stakeholders, relevant data and reports at higher frequency (i.e. Quarterly Compendium of Banking Statistics and FSIs and Mid-year Performance Review of Banking Sector) are also being disseminated.

c) Operational considerations

- 26. The implementation of MPP requires
 - (i) analyzing and monitoring systemic risks along both time dimension and cross-sectional (structural) dynamics,
 - (ii) identifying and establishing macroprudential policy tools, and

(iii) operationalizing the use of tools including the evaluation and impact assessment of costs and benefits of the policy and the interaction with other policies.

Analysis of Systemic Risks

- 27. A proactive and comprehensive assessment of the existing and potential systemic vulnerabilities in the financial sector is pivotal for an effective MPP. Equally important is the understanding of how the identified risks are likely to affect not only the financial sector but also the real economy the transmission channels. SBP has an elaborate framework and employs a host of tools and methods to assess the impact of economic and financial developments on the health of not only the individual financial institutions but the overall stability of the financial system. Moreover, the Risk Based Supervisory (RBS) framework, where risks emanating from individual institutions are evaluated, is adequately complementing this assessment by incorporating the macro-financial dynamics in the supervision of individual institutions.
- 28. It is emphasized that the risk assessment processes at SBP are dynamic and flexible to incorporate evolving international best practices, including tools, methods and regulations. Besides strengthening the analytical frameworks, the current focus is to incorporate the related emerging risks e.g., climate change, cyber security, etc., improve recovery and resolution planning process for systemically important institutions and strengthen the bank resolution and crisis management function in line with the strategic thinking, viz., SBP Vision 2028. The expert judgement, which complements the quantitative assessments, is gleaned from various surveys, e.g., Systemic Risk Survey, Bank Lending Survey, Consumer/Business Confidence Survey, etc.

Mapping Vulnerabilities to MPP Tools

29. A variety of tools, being utilized by various jurisdictions depending on the idiosyncratic dynamics of their financial system, are categorized as (a) Broad-based to address system-wide credit booms, (b) Sectoral – to target vulnerabilities from lending to specific sectors, (c) Liquidity-related – to address buildup of liquidity and foreign exchange risks associated with lending booms, and (e) Structural – to limit contagion or inter-connectedness risks (see e.g., (IMF, 2014)). Within this paradigm of instruments, the SBP would utilize the [non-exhaustive] set of tools listed in **Table 1**.

Table 1: Intermediate Objectives and Macroprudential Tools at SBP's Disposal

Intermediate Objective	Key Instrument
Prevent excessive	Broad-based (Aggregate)
growth of credit	 Risk-based capital adequacy ratio
	 Counter-cyclical Capital Buffer
	 Capital Conservation Buffer
	 Leverage Ratio
	 Benefit of Forced-Sale-Value in provisioning
	 Cash Reserves Requirement
	Household
	 Limits on Loan-to-Value Ratio
	 Limits on Debt-to-Income Ratio
	 Risk Weights on exposure
	Non-financial Corporates
	 Risk Weights on exposures
	Lending/Exposure Limits
Limit maturity	 Liquidity Coverage Ratio
mismatches	 Net Stable Funding Ratio
	 Reserve Requirements (statutory liquidity
	and cash reserve requirements)
	 Foreign Exchange Exposure Limit (FEEL) etc.
Contain direct and	 Large Exposure (Concentration) Limits
indirect exposures	 Limit on real estate exposures
	Sectoral Capital Buffers (Risk Weights)
Strengthen resilience of	 Systemic Capital Charge for designated D-
systemically important	SIBs and enhanced supervisory requirements
banks	for sample D-SIBs, including recovery and
	resolution planning, incorporation of macro-
	stress testing results and systemic importance
	in internal capital adequacy assessment
	process (ICAAP) and risk appetite of D-SIBs,
	etc.
Structural dynamics	 Consolidated supervision of banks and
	interagency coordination to manage the risks
	posed by conglomeration in financial sector
	 Proactive assessment of large borrowers of
	banking sector and key economic sectors that
	have systemic implications for the sector

- 30. Historically, a variety of these tools have been utilized under specific circumstances (see **Appendix-A**).
- 31. As has been the cases previously, depending on a comprehensive assessment of the level of economic cycles, the tools can be activated and released. The activation/release will take into consideration not only the manner in which the tools affect the financial cycle but would also take into account its impact on the business cycles and the interaction with other policies, such as the monetary policy, micro-prudential policy, crises management and resolution policies.

Operationalization of Tools

- 32. Once the risk assessment is completed and the tools to manage those risks are at hand, appropriate policy response needs to be calibrated. Before translation of systemic risk assessment into policy action to contain the risks, some important caveats need to be considered:
 - **Gradual versus Forceful**: Depending on the intensity of the identified risks, the approach could be either gradual or forceful.
 - **Broad-based versus Sectoral**: A broad-based buildup of vulnerabilities requires a response via broad-based tools, e.g., CCyB, FSV Benefit, liquidity buffers etc. More targeted interventions may be necessary if the vulnerabilities arise via excesses in exposures in specific segment(s) or sector(s). For example, the LTV, DTI, higher risk weights or capital buffers may be implemented.
 - **Single versus multiple tools**: While interventions via single tool could be easy, the marginal benefits wane, especially when the markets can circumvent it.
 - Rules versus discretion: In a developing country like Pakistan, a rule-based automatic stabilizers may not always be feasible due to existence of arbitrage possibilities as well as non-availability of established indicators for the MPP. Instead, some sort of guided discretion is desirable where indicators and judgment can be combined.
 - Adjustment costs: Implementation of liquidity and capital tools invariably
 impose compliance and adjustment costs on the banks. Announcement of
 measures well in advance, based on anticipated trajectory of risks, may lead
 not only to an orderly implementation but may also yield desired benefits with
 minimal downside effects.

- **Output costs**: An assessment of costs to the real economy, in case of tightening of MPP is essential. However, it may be kept in mind that sometimes short-run costs may be substantial.
- Leakages: Leakages refer to the migration of financial activity outside the scope of application and enforcement of the MPP tool, potentially undermining its effectiveness.
- **Potential for tools to be relaxed**: For an effective implementation of MPP, a due consideration may be necessary for the conditions under which the tools can be relaxed. A thorough analysis of indicators is required on the appropriateness, timing and speed of relaxation.
- **Inaction Bias**: The political economy costs coupled with difficulties in timely identification of risks and possibility of false alarms could result in 'inaction' or postponement of policy intervention.
- 33. The transmission mechanism of MPP is surrounded by a perceptible degree of uncertainty in a developing economy like Pakistan. Therefore, the approach to MPP at SBP needs to be gradual and with 'guided discretion'. It is expected that a gradual approach would minimize adjustment and output costs and would avoid inaction bias as well. Coordinated interventions in consultation with other stakeholders (e.g. SECP and Ministry of Finance) would also help stem the untoward leakages and stemming any undue pressures coming from fiscal and other macroeconomic policies.

Evaluation and Impact Assessment

34. The *ex post* evaluation of prudential regulations and standards is necessary to gauge effectiveness and efficiency of the tools to achieve desired objective(s) as well as the understanding of the transmission mechanism. This helps in improving the decision-making and ensure accountability. The feedback from market participant, the empirical research studies on the impact of prudential regulations and standards on mitigation of systemic risks and enhancing the resilience of the banking and financial sector will further guide the evaluation exercise.

Interaction with other Policies

35. The financial stability is affected by a range of policies other than MPP, both *ex ante* and *ex post* (IMF, 2013). Therefore, the MPP can interact with a range of other policies such as monetary policy, microprudential policy, crises preparedness and resolution policy and fiscal policy etc. However, within the mandate of SBP, the policy

interactions with monetary policy, crises preparedness and resolution policy and microprudential policy (supervision and regulation) are important (**Figure 1**). Although the overall objectives of all four policies is enshrined in the SBP Act, the paths treaded by each are different and may be conflicting at times. Therefore, coordination with these clusters/departments when making MPP interventions would ensure that all the policies are acting consistently to achieve the desired objectives.

Monetary Policy Price versus Financial Stability Systemic Marco versus Micro Economic Idiosyncratic **Prudential** Prudential Risk versus **Policy Fiscal Policy** Financial **Policy** Stability Resilience Assessment Supervision versus Effective Resolution Resolution Regime Crisis Management and **Resolution Policies** Source: IMF, 2013 and SBP Staff

Figure 1: MPP: Interaction with other policies

d) Communication of MPP

- 36. The SBP has an elaborated system of communicating the economic, financial and monetary stability issues to the stakeholders. A number of periodic publications are part of this system. These include, for example, half-year and annual reports on The State of the Economy, Governor's Annual Report to the Parliament, the yearly Financial Stability Review (FSR), the mid-year Performance Review of the Banking Sector, Quarterly Compendium of Banking Statistics and Financial Soundness Indicators and a wealth of other data on banking sector. However, for the MPP related assessments and decisions, following scheme may be important:
 - (i) The developments on financial stability front would generally be part of the annual FSR, as required under Section 39(3) of the Act, as well as the Governor's Annual Report and mid-year performance review of banking sector. The systemic risk analysis and macroprudential actions, recommendations and decisions taken by the SBP and NFSC may also be disseminated to the public via press releases and SBP website's. Where required, special messages, interviews of the Governor or other senior officials, and explanatory podcasts may also be broadcast.
 - (ii) The decisions on activation or relaxation of macro-prudential tools, if any, are notified to the banks and market via SBP Circulars.
 - (iii) The designation of systemically important banks is communicated annually via a press release.
 - (iv) *Data dissemination*: The Financial Soundness Indicators and other data on the banking sector and other sectors, including results of micro-stress testing, are published on a quarterly basis.

Bibliography

- Beau D, C. L. (2012). Macroprudential Policy and the Conduct of Monetary Policy. *Working Paper 390 Bank of France*.
- BIS. (2014). Objective Setting and Communication of Macroprudential Policy. CGFS Paper No. 57.
- BIS. (2023, July). Core Principles for Effective Banking Spervsion. Basel, Basel, Switzerland. Retrieved January 19, 2024, from https://www.bis.org/bcbs/publ/d551.htm
- Claessens S., K. A. (2012). How do Business and Financial Cycles Interact? *Journal of International Economics*, 178-190.
- Drehmann M, B. C. (2012). Characterising the financial cycle: don't lose sight of the medium term! *BIS WP No. 380*. Bank for International Settlements.
- IMF. (2012). Staff Guidance on Macroprudential Policy. International MOnetary Fund.
- IMF. (2012). The Interaction of Monetary and Macroprudential Policies Background Paper. International Monetary Fund.
- IMF. (2013). Key Aspects of Macroprudential Policy. International MOnetary Fund.
- IMF. (2013). *The Interaction of Monetary and Macroprudential Policies.* Washington, D. C.: International Monetary Fund. Retrieved from https://www.imf.org/external/np/pp/eng/2013/012913.pdf
- IMF. (2014). Staff Guidance Note on Macroprudential Policy. International Monetary Fund.
- IMF. (2014). Staff Guidance Note on Macroprudential Policy Details on Instruments. International Monetary Fund.
- IMF-FSB-BIS. (2016). Element of Effective Macroprudential Policies: Lessons from International Experience. International Monetary Fund.
- Nier E, K. H. (2016). Monetary and Macroprudential Policies Exploring Interactions. BIS Paper No. 86. Retrieved from https://ssrn.com/abstract=2844249
- Osinski J, S. K. (2013). Macroprudential and Microrpudential Policies Towards Cohabitation. 28. International Monetary Fund. Retrieved from https://doi.org/10.5089/9781484369999.006

Annexures

Annexure-A: Use of various Macro-prudential tools at SBP – A historical perspective.

Table XX: Year-wise Domestic Implementation/Change in Macroprudential Policy Measures

Sr. No	Instruments	Year of Application/ Change in Particular Instrument													
1	MCR	1998	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	13
2	CRR	1999	1999	2000	2000	2006	2007	2008	2008	2008	2008	2008	2021		12
3	CAR	1997	2008	2008	2009	2015	2016	2017	2018	2019	2020				10
4	Loan Loss Provisioning	2004	2013	2016	2016	2017	2020	2024							7
5	Gross FX Positions	1999	2007	2009	2011	2013	2020								6
6	Limit on Single Obligor/Group	2009	2010	2011	2012	2013	2014								6
7	CRR-FCD	2001	2002	2007	2008	2020									5
8	SLR	1999	2006	2008	2008										4
9	Caps on DSTI (Consumer loans)	2004	2009	2020	2021										4
10	Limit on Foreign Exchange Funding	1997	2002	2016											3
11	Corporate Sector Capital Requirements	2008	2014	2015											3
12	Caps on LTV (Auto Loans)	2004	2016	2021											3
13	Risk Weight for Housing Finance	2008	2019	2020											3
14	Limit on amortization periods (auto loans)	2004	2021	2022											3
15	Limit on amortization periods (Housing finance)	2004	2014	2020											3
16	Restriction on Unsecured Loans (consumer financing)	2004	2012	2016											3
17	Capital Distribution	2013	2020												2
18	FX Swaps	2004	2014												2
19	Limit on Exposure against Real Estate Sector	2014	2019												2
20	Limit on Large Exposure	2014	2017												2
21	Limit on Clean Exposure-Corporate Sector	2004	2014												2
22	Caps on LTV (Housing Finance)	2004	2019												2
23	Caps on DSTI (Housing finance)	2014	2020												2
24	Limit on Clean Exposure - SMEs	2004	2013												2
25	Per Party Exposure Limit-Small Enterprises	2013	2016												2
26	Per Party Exposure Limit-Medium Enterprises	2013	2016												2
27	Capital surcharges for D-SIBs	2019	2022												2
28	Limit on Related Party Exposure	2015													1
29	Leverage Ratio	2013													1
30	ADR	2008													1
31	NFSR	2017													1
32	LCR	2018													1
33	FX Loans	2018													1
34	Per Party Exposure Limit-SMEs	2004													1
35	Aggregate Exposure of Bank of SME sector	2004													1
36	Measures to mitigate risks from financial institutions' exposures to sovereigns	2008													1

^{*} Frequency represents number of times an instrument has been changed over specific time period. It also includes when a particular measures was introduced Source: SBP

