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Forum Theme: Macroprudential Surveillance Framework and Considerations for the Stability of Islamic Services Industry

Macroprudential Surveillance and the Role of Supervisory and Regulatory Authorities

Paper by:

H.E. Shahid Hafiz Kardar

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Contact information:
Islamic Financial Services Board
Level 5, Sasana Kijang,
Bank Negara Malaysia,
2, Jalan Dato' Onn,
50480 Kuala Lumpur, Malaysia
Tel : + 6 03 9195 1400
Fax : + 6 03 9195 1405
Email : ifsb_sec@ifsb.org

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ABSTRACT

Recent global financial crises have highlighted issues in quality of regulation and supervision in the financial sector, and tested the effectiveness of the microprudential approach in identifying and mitigating the risks faced by these systems in various jurisdictions. With increasing complexity in conventional and Islamic banking, coupled with growing severity of the crises, the focus of regulators has shifted to the adoption of a more structured macroprudential framework to address systemic risks and account for the interconnectedness of financial and non-financial institutions in the economic system. The paper discusses the evolving role of macroprudential policy and its implications in financial sector surveillance.[1] It provides a brief overview of the financial system of Pakistan and elaborates on the development of a macroprudential policy for the country. The paper also discusses the challenges in adopting a macroprudential framework. The paper concludes that, despite the shortcomings of the microprudential approach, it is still an integral part of the toolkit for ensuring financial system stability, requiring the supervisors to strike a balance between the macro and micro approaches. Furthermore, the macroprudential surveillance framework is influenced by analytical, institutional and political factors, and these need to be addressed through effective coordination between the key stakeholders.

[1] This paper was prepared for the Third Islamic Financial Stability Forum, organised by the IFSB and held on 31 March 2011 in Amman, Jordan.

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1.0 Introduction

Financial crises, particularly in developed financial markets, during the last two decades have highlighted the limitations of supervisory and regulatory frameworks to predict the build-up of imbalances in the real sector and their resulting adverse impact on financial systems. The recent financial crisis has once again signalled the need for a means of identifying and assessing system-wide risks and modifying the regulatory and supervisory framework to mitigate risks and maintain them within manageable limits. The crisis also underscored the importance for regulators of separating the wood from the trees by developing, monitoring and supervising both macroprudential and microprudential frameworks to ensure financial system stability.

While the microprudential policy tries to achieve financial system stability by focusing on the safety and soundness of individual financial institutions, it was observed during both the Asian crisis of 1997 and the recent crisis in Western financial markets that it may be a necessary, but not a sufficient, condition for fulfilling the objective of financial system stability. The microprudential approach overlooks the interconnectivity of financial institutions and the complexity of financial transactions that emanates from innovative financial products developed to distribute risks across multiple market participants. To fully assess such risks to the financial system requires a holistic view, beyond reviews of the operational conduct of individual institutions.

There is, therefore, an emerging consensus about the need for a supervisory framework which not only ensures prudence, discipline and transparency in individual financial institutions, but is also able to identify system-wide risks. The overall objective of this approach (macroprudential) is to limit the incidence of financial crisis and minimise the related costs to the economy and the national exchequer. The key components of a viable macroprudential framework would comprise: (i) a system-wide review of the risks to the stability of the financial system, and identification and analysis of the risks posed by the interconnectivity of financial institutions and markets; (ii) analysis of business cycles to identify and address the risks from the procyclical and herd mentality tendencies of the financial system; (iii) identification of market failures that could result in financial crisis; and (iv) definition of the specific roles of all key stakeholders, regulators and parallel institutions, government, central banks/banks' regulators, and Non-Banking Finance Companies (NBFC)s' regulators in maintaining financial system stability on an ongoing basis.

This paper is divided into four sections. The first section elaborates the evolving role and usefulness of macroprudential policy and surveillance and its use in the leading economies. The second part briefly highlights the financial system of Pakistan, while the third section covers the development of a macroprudential policy and surveillance framework with reference to Pakistan. The final section discusses future challenges and issues in financial supervision in the current environment.

2.0 Evolving Role of Macroprudential Policy and Surveillance

As argued above, in contrast to microprudential policy, macroprudential policy focuses on the soundness and stability of the financial system. This policy proposes to limit the incidence of financial crisis, promote financial stability and preserve the integrity of financial markets by mitigating systemic risk, protecting and safeguarding the entire financial system, and maintaining the flow of financial services and payment systems.[2] It is imperative to look at financial stability not only at each point in time, but in a dynamic context.

Table 1: Macroprudential versus Microprudential Policies

	Macroprudential Policy	**Microprudential Policy**
Proximate objective	Limit financial system-wide distress	Limit distress of individual institutions
Ultimate objective	Avoid macroeconomic costs linked to financial instability	Characterisation of risk
Characterisation of risk	"Endogenous" (dependent on collective behaviour)	"Exogenous" (independent of individual agents' behaviour)
Correlations and common exposures across institutions	Important	Irrelevant
Calibration of prudential controls	In terms of system-wide risk: top - down	In terms of risks of individual institutions: bottom-up

Source: Borio (2003)

[2] The systemic risks are classified as negative externalities – that is, risks that are not internalised and have the tendency to disrupt financial services and create spillover effects in the real economy (Carosio 2010).

In addition, this is not merely a change in approach; it also helps regulators to adopt countercyclical credit and monetary policies, thereby avoiding the build-up of bubbles in boom periods and helping to check credit crunch and supply shocks in deteriorating economic conditions. Moreover, the macroprudential framework also complements microprudential surveillance by monitoring conjunctural and structural trends in financial markets and developing early warning signals using macroprudential tools.

However, a macroprudential framework is still in the embryonic stages of development, with only a limited set of policy tools available for the use of supervisors and regulators in carrying out such surveillance. Although there are high expectations, the macroprudential framework is just part of the tool kit required to achieve the objectives stated above and not a magic bullet to achieve financial system stability. The use of these tools may require changes in prudential regulations and monetary policy conduct, and even changes to some laws governing the banking system.

The Basel Committee on Banking Supervision (BCBS) suggests appropriate buffers, such as changing capital requirements to provide a buffer in a countercyclical manner. The capital requirement can be enhanced in credit booms and relaxed during crunch times. Moreover, the capital requirement for individual financial institutions may be determined on the basis of size, complexity, and connectivity with the rest of the financial system and the real economy. The limits to connectivity and leverage may be prescribed to minimise the spillover effects and building of credit bubbles, while macro stress testing can be employed to assess the preparedness and resilience of the financial system to real sector shocks with their resulting impacts on the financial sector and the feedback to the real sector. The specificities of each country drive the nature and manner of its use of the tool kit.

The macro approach to supervision has been used on a limited basis in the region. After the 1997 Asian crisis, many Asian central banks took a lead in implementing macroprudential policy tools (see Table 2).

Table 2: Macroprudential Tools: Experience of Asian Economies

Objective	Tools	Countries
Manage risk over time (procyclicality)	Countercyclical capital buffers linked to credit growth	China
	Countercyclical provisioning	China, India
	Loan to value (LTV) ratios	China, Hong Kong, Korea, Singapore, Korea, Philippines, Malaysia
	Direct controls on lending to specific sectors	Singapore
Manage aggregate risk at every point in time (systemic oversight)	Capital surcharges for Systematically Important Financial Institutions (SIFI)	China, India, Philippines, Singapore

	Caps on leveraging, levy on non-core liabilities	Korea
	Liquidity/funding requirements	Korea, Philippines, Singapore
	Limits on currency mismatches	India, Malaysia, Philippines
	Loan to deposit or income	China, Korea

Source: Committee on the Global Financial System (CGFS) (2010)

The examples above illustrate how macroprudential instruments can play a role in enhancing the resilience of the financial system against vulnerabilities. However, knowing what instruments to use, and how to use them, so as to strike the right balance between risk mitigation and efficiency is easier said than done. This is because the impact and effectiveness of such instruments, and the quality and efficiency of the transmission mechanism in preventing financial crisis, are still unclear, being difficult to measure and calibrate. Every crisis has its own idiosyncrasies in terms of its causes and impact on different sectors. Therefore, developing and fine tuning macroprudential tools is a dynamic task. Moreover, barring a few new tools such as the countercyclical buffer, most macro and microprudential tools are identical. However, their use and focus in macroprudential policy is system-wide, rather than specific to each individual institution as in microprudential policy. The Bank for International Settlements (BIS) paper on macroprudential policy rightly emphasises that macroprudential policy complements microprudential policy, rather than substituting for it.[3]

The role of the central bank in macroprudential policy is of critical importance, as its mandate is to maintain financial and payment system stability. Moreover, since the macroprudential framework aims to achieve financial stability over time, it would help central banks not only to ensure financial stability, but also to support price stability over a long-term horizon by maintaining the supply of credit during various phases of the business cycle.

In addition to the central bank, the Ministry of Finance (MoF) is also a major player in the design and monitoring of a macroprudential framework, since other policies are equally important. The government is one of the biggest stakeholders in the financial system – as a borrower, depositor, policy-maker and lender of last resort (LOLR) (in the case of a large system-wide crisis). Fiscal policy can be a particular source of risk for the financial system since poor fiscal decisions can undermine financial stability. The government can also provide financial support in the shape of automatic stabilisers, which serve as countercyclical and discretionary measures – for example, fiscal buffers and reduction in level of debt in good times, expansionary fiscal policies during periods of demand constraint, and mechanisms for bailing out systemically important institutions. The macroprudential framework thus pre-empts the possible risks and threats to the financial system and sets out the roles and responsibilities of all key stakeholders during periods of distress in the system, so as to minimise its cost to the economy.

Although the contours of a macroprudential framework policy are still evolving, and the efficacy of its various tools and the interconnectivity between macroprudential policy and monetary policy is still being debated, there is nevertheless strong recognition of its relevance among

[3] "Macroprudential policy tools and frameworks", Update to G20 Finance Ministers and Central Bank Governors, BIS, 14 February 2011.

regulators and multilateral agencies, providing grounds for optimism about an early finalisation of such a macroprudential framework as well as the tool kit for implementing it. Academic research and dialogue among the supervisory authorities should also help in shaping effective mechanisms to counter serious threats to financial system stability.

3.0 Pakistan's Financial System: An Overview

The financial system in Pakistan has grown substantially in the last decade, benefiting from multi-dimensional financial reforms that were initiated in the early 1990s. These reforms have been consistently pursued for over a decade and have yielded favourable results in enhancing financial system soundness, improving quality of supervision, and broadening and deepening the financial system. Similarly, the inefficiencies and weaknesses that were typical of banks' operations during the pre-reform period have been gradually reduced. Like other developing countries, the country's financial system is highly skewed towards the banking sector, with a 73% share in total assets of the financial system, and an asset size in relation to GDP of 46.2% (see Table 3).

Table 3: Asset Composition of the Financial Sector

	CY02	CY03	CY04	CY05	CY06	CY07	CY08	CY09	H1-CY10
Growth Rate (%)	12.3	15.4	14.6	15.1	14.5	19.4	8.4	15.0	12.0
As percent of total assets									
MFIs	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
NBFIs	6.2	6.6	7.0	7.6	7.8	8.0	7.6	5.3	5.1
Insurance	3.8	3.8	3.8	3.9	4.1	4.6	4.4	4.4	4.4
CDNS	24.9	25.0	21.7	18.0	16.1	14.6	14.8	16.6	17.1
Banks	65.0	64.5	67.3	70.4	71.9	72.7	73.0	73.5	73.2
MFIs	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NBFIs	4.6	4.9	5.2	5.6	5.7	5.9	5.0	3.4	3.2
Insurance	2.8	2.9	2.8	2.9	3.0	3.4	2.9	2.8	2.8
CDNS	18.2	18.8	16.1	13.3	11.7	10.8	9.8	10.8	10.8
Banks	47.7	48.3	50.1	51.8	52.4	53.9	48.1	47.6	46.2
Overall	73.3	75.0	74.4	73.7	72.9	74.1	66.0	64.7	63.2

MFIs (Microfinance Institutions); NBFIs (Non Banking Financial Institutions; CDNS (Central Directoriat of National Saving)

Source: State Bank of Pakistan

The performance of the banking system in Pakistan has improved considerably over time, reflected in the robust increase in asset size and profitability (see Table 4). Similarly, with financial liberalisation, privatisation of most of the state-owned banks, and permissions for new banks in the private sector, the share of state-owned banks has decreased from 92% in early 1990s to 19% in 2010. The number of banks has also increased from 24 in 1990 to 38 in 2010, contributing to a more competitive environment.

Similarly, the solvency profile of the banking system has also improved with the adoption of best international practices of the Basel I and, subsequently, Basel II framework (Standardised Approach), strengthening the resilience of the financial system in withstanding exogenous shocks.

Table 4: Performance of Pakistan's Banking Sector (billions of Rs)

	1990	1995	2000	2005	2006	2007	2008	2009	2010
Equity	17.5	46.9	87.2	292.4	402.4	544.4	562.9	660.3	697.1
Deposits	354.6	855.7	1,322.8	2,831.9	3,255	3,854	4,217.7	4,785.9	5,450
Liabilities	408.2	981.6	1,553.5	3,367.2	3,950.5	4,627.1	5,065	5,856.1	6,440.5
Advances	218.5	463.1	798.3	1,990.6	2,427.7	2,688.1	3,172.6	3,239.7	3,714.3
Investment	111.3	308.3	366.5	800.2	833.4	1,275.8	1,086.6	1,737	2,141.8
Assets	425.6	1,028.4	1,640.7	3,659.6	4,352.9	5,171.6	5,627.9	6,516.3	7,137.6
Income	41.5	109.6	163	270.7	385.5	475.2	582	689.6	730.6
Expense	38.8	98.9	153.1	176.9	261.6	368.4	518.8	608.9	619.3
Share of Islamic Banks and Islamic Bank Branches (IBBs in Aggregate Banking) (%)									
Advances				1.70	2.30	3.50	4.40	4.50	6.20
Deposits				1.80	2.60	3.80	4.80	5.90	7.20
Assets				2.00	2.80	4.00	4.90	5.60	6.70

Source: State Bank of Pakistan

In recent years, Islamic banking has also shown impressive growth. There is also recognition that Islamic banking, being mostly backed by real assets and discouraging of speculative activities, is perhaps less prone to financial distress than conventional banks. Furthermore, it provides inherent checks and balances that help contain the risks of the financial system within reasonable limits vis-à-vis the real economy. Notwithstanding the inherent strengths of an Islamic economic system, current practices of Islamic banks to replicate/mimic the products of the conventional banking system may expose them to the same risks and threats faced by the conventional system. There is, therefore, a need to conduct an objective and unbiased review of both the conventional and Islamic banking systems to develop a financial system that is sound and stable, and that facilitates growth and development of the real sector, and expands as a result of that growth and development. In this regard, those jurisdictions with major Islamic financial exposures should take a lead in initiating such reviews.

4.0 Development of Macroprudential Framework: Pakistan's Perspective

An effective macroprudential framework with the capacity to pre-empt risks and put in place an adequate set of instruments and mechanisms to mitigate them requires that all regulators and fiscal managers coordinate and engage actively under some formal institutional setting. While the State Bank of Pakistan (SBP), being the banking sector supervisor, has a key role in the development of a macroprudential framework and its execution, the other regulators – Securities and Exchange Commission of Pakistan (SECP), (which regulates NBFIs and the capital market) and the Ministry of Commerce (for insurance) and the Ministry of Finance (with

its responsibility for fiscal and financial discipline) – would have to be members of this institutional arrangement in which the objectives, design and respective roles in the implementation and monitoring of the overall framework and initiating corrective measures to minimise the cost of any financial crisis, would have to be finalised.

The SBP, in addition to conducting monetary policy to ensure price stability, has responsibility for financial stability.[4] While the financial sector continues to make advancements in response to ongoing implementation of financial sector reforms, SBP in its role as the banking system regulator strives to ensure prudence and the adequacy of risk management systems and disclosures and corporate governance practices of individual banks.

However, it is not clear as to who should play the role of the lead agency – the central bank or the Ministry of Finance – because, as some commentators argue, it is inevitably the government that is held responsible by the public for any crisis and thereafter for providing the policy and the funding to avert it. The MoF also has a role in providing financing for resolving solvency issues of systemically important financial institutions, or in the event of a deposit run on banks.

SBP has exhibited its lead in maintaining financial stability by providing liquidity facilities in times of crisis. Further, it has relaxed loan provisioning regulations in the past whenever industry faced a slow-down. A brief discussion follows of the various steps SBP has undertaken to ensure financial stability.

(i) Prudential Regulations and Other Instructions

Besides monitoring the performance of individual institutions, SBP also keeps a close watch on the performance and stability of the banking system as a whole. This analysis is primarily based on aggregate indicators of the banking system, which help in evaluating its performance and how it addresses potential risks. To regulate the behaviour of banks prone to risky ventures, separate prudential regulations for risk management are issued which include per party (single borrower) exposure limits, and limits on contingent liabilities and exposures against shares which are linked with the equity of the bank or the individual borrower. To measure the aggregate risk of the banking system, SBP looks at indicators such as the Advances to Deposit ratio to assess the liquidity risk of banks. This gives an in-house sense of any accumulation of risks on the balance sheets of individual banks and of the banking sector as whole. This could help in identifying Systemically Important Financial Institutions (SIFI) in difficulty and their role in attaining the objective of overall stability of the financial system.

(ii) Off-Site Surveillance and On-Site Supervision

SBP follows a well-developed framework for the off-site surveillance and on-site supervision of banks and Development Finance Institutions (DFIs). In doing so, it makes use of the CAELS (Capital Adequacy, Asset Quality, Earnings, Liquidity and Sensitivity) rating system for the off-site monitoring of banks and DFIs as a key component of its supervisory and stability framework. This system encompasses a temporal and cross-sectional analysis of financial ratios. The exercise helps not only in identifying the key risk areas of banks and DFIs, but also in the efficient use of scarce on-site supervisory resources. The analysis of CAELS ratios

[4] State Bank of Pakistan derives its mandate of financial stability from the State Bank of Pakistan Act 1956.

for the (aggregate) banking system is periodically published in various SBP publications which also discuss and analyse banking and financial system stability, highlighting possible risks to the financial system and recommendations and actions launched to mitigate them.

For the on-site inspection of banks, SBP uses the CAMELS-S (Capital Adequacy, Asset Quality, Management, Earnings, Liquidity, Sensitivity and Systems & Controls) framework on a regular basis. The key ratios for each component of the framework and their respective benchmarks are specified in the SBP On-site Inspection Manual. The CAELS framework referred to above, used for off-site surveillance of banks, is a sub-set of the CAMELS-S framework.

(iii) Financial Soundness Indicators (FSIs)

FSIs are used to monitor the performance of the financial system, its vulnerability to various shocks and its capacity to absorb losses stemming from the identified shocks. The analysis of FSIs usually includes the examination of temporal and cross-sectional variation in the indicators and comparative analysis with peer groups. The core set of banking sector FSIs is grouped under the CAMELS framework. These FSIs are used to quantify information related to the stability or vulnerability of the banking sector. They help supervisors in formulating policies that address system-wide problems in a focused manner. The recent trend in key FSIs (see Table 5) shows a well- capitalised banking system. However, the loan infection ratio (Non-Performing Loans to Total Loans) has been increasing in recent years.

Table 5: Financial Soundness Indicators of the Banking System (%)

	2005	2006	2007	2008	2009	2010
Capital Adequacy Ratio	11.3	12.7	12.3	12.2	14	14
Tier 1 Capital to RWA	8.3	10.0	10.0	10.1	11.6	11.8
Capital to Total Assets	8	9.4	10.5	10	10.1	9.8
NPLs to Total Loans	8.3	6.9	7.6	10.5	12.6	14.7
Net NPLs to Net Loans	2.1	1.6	1.1	3.4	4.1	5.4
Net NPLs to Capital	14.1	9.7	5.6	19.4	20.4	26.2
Return on Assets (Before Tax)	2.8	3.1	2.2	1.2	1.3	1.7
Return on Equity (Before Tax)	37.3	35.2	22.6	11.4	13.2	16.7
Liquid Assets/Total Assets	33.7	31.9	33.6	28.2	32.7	33.5
Liquid Assets/Total Deposits	43.6	42.7	45.1	37.7	44.5	45.9
Advances/Deposits	70.3	74.6	69.7	75.2	67.7	61.4

Source: State Bank of Pakistan

The rise in credit risk served as one of the impetuses for the revision of regulations pertaining to loan provisioning, to encourage banks to restructure loans to borrowers facing difficulties in servicing their debt in a challenging economic environment.

(iv) Stress Testing

In view of the importance of a forward-looking approach to risk management, SBP has instituted a framework of stress testing. The framework is based on single factor sensitivity and regression-based analysis. Under the single factor sensitivity analysis, exposures of all banks to five major risks – that is, interest rate risk, credit risk, real estate price risk, equity price risk and exchange rate risk – are assessed through the instruction of unusual, but plausible,

shocks to the underlying risk factors.

These exercises help in assessing overall risk exposures as well as the structural vulnerabilities of banks that could have externalities and contagion effects. Furthermore, to inculcate sound risk management practices among banks, and to improve the effectiveness of the stress testing exercise and make it consistent and focused, SBP has issued guidelines on stress testing. These guidelines provide a framework for stress testing, along with the methodologies and the manner of calibrating shocks.

Presently, no separate stress testing exercise is being done in the case of Islamic banks. However, under the traditional stress testing approach, Islamic banks in Pakistan are found to be resilient to shocks defined for the broader banking industry. However, there is a need for a separate stress testing framework for Islamic banks in line with their business risks.

5.0 Future Challenges

Pakistan's financial sector is dominated by privately owned banks with market-based banking practices. However, there are some structural and analytical issues in the development of a well-structured macroprudential framework that need to be addressed in order to ensure financial system stability. The major challenges for the implementation of this framework in Pakistan are discussed next.

(i) Development of Early Warning Tools

For a forward-looking assessment of the financial system, tools such as early warning indictors are needed. There are documented merits and drawbacks of early warning indicators for banking crises. They predict events likely to occur in the near future, but are unable to assess the linkages between the real and financial sectors. However, a variation of these indicators based on credit quantities and asset markets has been found to be better in predicting distress over a one- to four-year period. The basic premise is that excessive credit growth and financial asset prices indicate the build-up of financial imbalances which could unravel in a disruptive fashion, impacting the economy negatively. A number of central banks and global financial institutions have also developed an Early Warning System (EWS) as a key component of their financial stability framework. The SBP is also developing an EWS that includes identification of various financial indicators, which would then be used to develop a model based on the indicator approach employed by the International Monetary Fund (IMF). This will then be taken to the next level of sophistication by developing an EWS based on limited dependent variable techniques.

(ii) Consolidated Supervision

Increasing the scope of supervision will facilitate the achievement of the financial stability objective. Financial conglomeration is now a common feature of the global financial architecture. There is an increasing trend of consolidation in the financial sector in all markets. Only 40% of the world's 500 largest financial firms were conglomerates in the mid-1990s; that number has now increased to 70%. Pakistan's banking sector is also experiencing a consolidation trend in the form of banks' non-banking subsidiaries, stakes of sponsors in other financial institutions and involvement of banks in investment/consulting services. One of the several reform pillars being adopted by SBP is the implementation of consolidated supervision of conglomerate groups that include banks. The rationale for implementing a consolidated

approach to the supervision of banks is based on the need to protect banks from contagion risk, especially if the capital of the bank has been over-leveraged indirectly. In developing an appropriate framework for consolidated supervision, SBP has drawn on international experience and expertise, while giving due consideration to the specific characteristics of Pakistan's financial system and its current stage of development. SBP is striving to develop an inclusive regulatory structure that will legally empower the monitoring of financial conglomerates. SBP has also entered into memorandums of understanding (MoUs) with domestic and overseas regulators on the supervision of banks on a consolidated basis. While the establishment of an enabling legal and regulatory system is in the process, a joint taskforce of the SBP and SECP is monitoring and reviewing the risks posed by conglomerates in the financial sector. The holding company structure is being considered to ring-fence commercial banks of the business group to check/reduce interconnectivity to group companies.

(iii) Institutional Structure

There is a growing debate in financial markets on the implementation of a macroprudential framework and policy. Different options are being discussed in terms of the delegation of macroprudential supervision and a single supervisor versus a number of supervisors. There is no correct or clear answer to the question: What is an optimal regulatory structure? A G30 working group on macroprudential policy strongly recommended central banks as the principal supervisor for implementing macroprudential policy, since they are the repository of key information on the financial sector dominated by the banking industry. However, it is up to each individual country to decide whether to opt for a macroprudential supervisory authority, provided the line of action and the roles and responsibilities of all stakeholders are clear.

(iv) Reducing Procyclicality and Strengthening Bank Capital

In the aftermath of the global financial crisis of 2007–2008, there was a growing realisation that a framework was needed to address the issue of procyclicality of capital rules. Consequently, the enhanced Basel II, commonly referred to as "Basel III", has come up with a framework for countercyclical buffers above the minimum capital requirement. In terms of capital standards, Basel III has proposed two additional layers of capital buffers to improve the global banking industry's ability to absorb shocks arising from financial and economic stress, thus limiting the risk of spillovers from the financial sector to the real economy. One of the proposals announced under the new capital standards is the mechanism of the Countercyclical Capital Buffer (CCCB).

The CCCB mechanism is designed to ensure the smooth flow of credit at all times by increasing the capital requirement in good times – signalling those requirements clearly one year in advance – and relaxing them when the economy is contracting. This increase in the capital requirement may lead to a loss of output in the short term, but it may prove effective in tackling credit growth bubbles and in achieving sustainable long-term economic growth. It can serve as an important instrument in the macroprudential tool kit at the disposal of regulators. However, it is not clear whether there should be a countercyclical requirement or simply a higher capital requirement. Moreover, when the going is good it is politically difficult to levy costs, with a legitimate fear that the costs could also become too high with the over-use of macroprudential tools; hence the importance of rules versus discretion in the use and mix of different instruments.

A recent study to estimate the countercyclical capital buffer for Pakistan's financial sector showed that the banking industry is already maintaining capital buffers in excess of the levels

envisioned in Basel III. However, by classifying capital buffers into categories as described in Basel III, the domestic banking industry would be better placed to handle the problem emanating from the procyclical policy response to the credit growth cycle. This can be achieved by releasing funds from the countercyclical capital buffer in times of stress, and vice versa. The comfortable position of Pakistan's banking industry reflects a high level and quality of capital.

Just how effective are these instruments during a cycle is an empirical question. Most such experiences are during booms, and little is known about their effectiveness during crises.

(v) Development of Financial Safety Nets

The privatisation of most of the banking sector has made safety nets necessary as a complement to regulation and enforcement. There are four components of such safety nets in the financial environment of Pakistan. They include a deposit protection scheme, the lender of last resort facility, an effective exit framework for problem banks, and a well-structured coordination framework to bail out banks in distress.

a. Depositor protection

The privatisation of banks in Pakistan resulted in the repeal of the provision of explicit deposit protection as spelled out in the Bank Nationalization Act 1974, which took the shape of an implicit guarantee of the Government of Pakistan. However, the changing landscape of the banking industry calls for an unambiguous Deposit Protection Scheme (DPS) to protect the large number of small depositors. Although there is no recent history of deposits lost, there is need for a Deposit Protection Fund (DPF) to avoid any shocks to the payment system. The modus operandi of a deposit protection scheme requires it to work under the aegis of a regulatory body which can activate repayments of deposits after bank failures, against the receipt of an annual premium. The major challenge in the formation of a Deposit Protection Fund is legal autonomy, on the subject of which SBP has prepared a concept paper.

b. Lender of last resort

Liquidity maintenance and smooth functioning of the payments system are the core objectives of SBP. SBP also provides liquidity to solvent institutions facing temporary liquidity issues. The major challenge in this area is the expansion of the scope of the LOLR facility by getting more legal powers to respond in such crisis situations. Presently, SBP can provide funding to the market and any institution against unencumbered government securities. If the institutions run out of these securities, as is natural in times of crisis, there is no effective instrument with which to meet liquidity needs and augment the capital base. Recent liquidity problems in the market have tested SBP's ability to manage situations of stress, which SBP has managed successfully through its monetary tools. However, there is a need for an effective mechanism involving the government and other stakeholders to support both individual banks as well as the financial industry in situations of serious stress.

c. Exit framework for banks

The absence of a structured framework to deal with unviable financial institutions can pose a major threat to the payment system and overall financial stability. Interconnectedness of banks can trigger systemic risk, requiring prompt corrective action from a regulator once certain indicators of distress are apparent. A real-time monitoring of financial institutions with a focus on systemic risk caused by common exposures should be an integral part of the

regulatory structure and tool kit. To safeguard the system, problem banks can be forced to exit the system. This exit framework could take many forms, including mergers, orderly liquidation or other measures pre-defined in the exit framework. To implement such a framework, the regulator needs powers to intervene, reorganise or liquidate problem institutions. Although SBP has dealt with problem banks effectively in the past, a formal exit framework supported by strong legal powers to intervene at an early stage is missing.

d. Coordination with the government

Effective coordination with other institutions, and especially the government, is critical for the implementation of a macroprudential framework in general and the management of a financial safety net in particular. The proposal that DPS, LOLR and bank exit will be managed by SBP is an important aspect of the proposed safety net in Pakistan, which will allow supervisors, managers of LOLR facilities and the DPF to operate on the basis of the same data by sharing it on a timely basis, a critical requirement for effective policy-making and management in rapidly changing circumstances. SBP is legally empowered to deal with individual banks without recourse to government, and the DPS would be a natural extension of SBP's existing banking supervisory and enforcement powers.

Systemic problems or an outright crisis would, however, require a broader policy coordination framework that will necessarily have to involve the government. Broader problems would most likely require unsecured LOLR support and/or direct solvency support that would need to be guaranteed or provided by the government, which could also have broader fiscal and other macroeconomic implications. Systemic banking problems caused by adverse macroeconomic or political developments go beyond the scope of a traditional LOLR support and may need corrective macroeconomic measures and assistance, which is not possible without active government involvement.

6.0 Conclusion

The primary aim of macroprudential surveillance is to mitigate the stress on the entire financial system, which could have a heavy macroeconomic cost in the form of expensive bank bail-outs. Today, there is strong recognition that some of the risks faced by the financial system are different from those faced by an individual institution. However, an appropriate balance between the microprudential and macroprudential dimensions of regulatory and supervisory fronts is required. This framework is undergoing refinement in response to the dynamics of a rapidly expanding financial sector. The role of a prudential framework can only be effective in facing systemic challenges if there are supportive monetary and fiscal policies. Prudential authorities cannot address these issues on their own.

Finally, since this paper is being read from the IFSB platform, it is desirable to recommend that the regulatory and supervisory authorities review the inherent strengths of the Islamic economic system and see how it can facilitate achievement of the objective of financial system stability.

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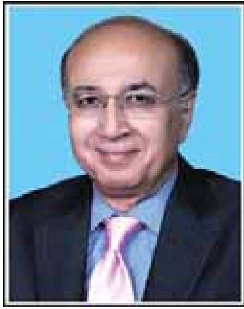

H.E. Shahid Hafiz Kardar
Govenor
State Bank of Pakistan

Mr Shahid Hafiz Kardar assumed the charge of the office of Governor, State Bank of Pakistan for a period of three years with effect from 9 September 2010. Mr Kardar, 58, an economist of repute, is the 16th Governor of SBP since its inception in 1948.

Prior to joining SBP, he was associated with Issues and Policies Consultants as Managing Partner since 2001. Mr Kardar had also served as Minister for Finance, Planning & Development, Excise and Taxation and Industries & Minerals Development, Government of Punjab from November 1999 to January 2001.

After completing his BA (Hons) from the University of Punjab in 1974 and his PPE (with a major in Economics) from the University of Oxford in 1976, Mr Kardar gained his Chartered Accountancy credentials from the Institute of Chartered Accountants, England and Wales in 1979.

During his long and illustrious career, Mr Kardar also held several other key positions, including Chairman of the Punjab Education Foundation from June 2005 to October 2008. He has also been a member of the (a) National Commission for Government Reform (2006–08); (b) Banking Laws Review Commission for four years until 2007; (c) the Advisory Board of Kashf Microfinance Bank Ltd; and (d) several government committees and task forces set up by the federal and Punjab governments at various times since the mid-1980s.

Mr Kardar, who is the son of the former test cricket captain Mr Abdul Hafiz Kardar, has served numerous other organisations in various capacities, including: (a) Honorary Treasurer, Human Rights Commission of Pakistan (HRCP); (b) Member, Board of Governors, Beaconhouse National University and Beaconhouse Foundation; (c) Director, Royal Bank of Scotland Pakistan, Service Industries Limited, Pakistan Security Printing Corporation and Free Media Foundation (South Asia Free Media Association); and (d) Member, Task Force on Education established by the Government of Pakistan and the British government.

He has authored three books – *Reflections on Pakistan's Economy*; *The Political Economy of Pakistan*; and *Polarization in the Regions: The Roots of Discontent* – besides writing several research papers covering economic and social issues in Pakistan.

Mr Kardar has also led several projects and studies on key socioeconomic issues facing the country. Some of these key projects/studies include: Fiscal Position of the Government of Punjab for DFID (2010); High Level Government Review of Punjab for DFID (2010); Growth Strategies and Development Priorities of Pakistan for Panel of Economists (2009); Economic Report of Azad Jammu and Kashmir for DFID (2008/09); Social Protection Strategy and Plan for the Government of Punjab (2008); Agenda for Civil Service Reform in the Punjab for ADB (2007); Education Sector Reform Programme (2003, 2006/07 and 2008/09) in Punjab and Sindh for World Bank; Punjab Public Resource Management TA Design for DFID (2006); Labour Markets in Pakistan for World Bank (2006); Punjab Public Sector Reform Management Programme for ADB (2002–05); Balochistan Public Sector Reform Management Program for

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Mr Kardar has been a visiting lecturer at Pakistan School of Public Policy, National Defence College, Pakistan Administrative Staff College, NIPA and Civil Services Academy. He is also a regular guest speaker at seminars organised within the country and abroad by academic institutions, multilateral and bilateral financial institutions, and NGOs.

Mr Kardar has regularly provided consultancy services to multilateral and bilateral donors such as the World Bank, the Asian Development Bank, the Department for International Development (DFID) of the UK, and so on. He has also contributed regular articles on economic and related subjects to leading newspapers in Pakistan, which have very well received.

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