

The Central Bank Financial Stability Mandate and Governance Challenges¹

By Dr. Zeti Akhtar Aziz

1. Introduction

Central banks have an integral role in financial stability. Historically, this was derived from the central bank's functions in issuing currency and preserving its value within a monetary system, its central position within inter-bank clearing and settlement systems, and its role as the lender-of-last-resort. Many central banks were also given formal responsibility for the regulation and supervision of banks – reflecting concerns over moral hazard associated with the public safety net and the central bank's key involvement in resolving bank failures – and for the oversight of large-value payment systems.

During and in the period following the global financial crisis of 2007-08, the demands intensified for central banks to restore and safeguard financial stability, notably through actions directed at containing systemic risks. In many cases, central banks, including those without bank supervisory functions, were compelled to act despite ill-defined responsibilities and lacking the necessary powers and tools to do so.² It is noteworthy that prior to the crisis, a number of central banks were being devolved of their bank supervisory functions in favour of separate supervisory authorities,³ and central bank frameworks for delivering price stability had developed to an advanced state of sophistication that was not seen in the area of financial stability. While these developments appeared to suggest trends towards a more limited, even declining role of central banks in financial stability, the global financial crisis leaves little doubt as to the fundamental role of central banks in financial stability, whether explicit or implied.

A re-thinking of financial stability frameworks has ensued on the need to strengthen institutional arrangements for financial stability, independently of the question of whether the functions of banking supervision should be combined with, or separated from, the central bank. Several themes have emerged. There is broad consensus on the need to improve the policy settings for the mitigation of systemic risk. In addition, authorities should have the ability to use a combination of micro- and macroprudential tools to address the build-up of financial imbalances (or excesses) given the potential implications for financial stability. While prudential levers should continue to be the primary instruments used to respond to financial stability risks, monetary policy responses should not be excluded when necessary.⁴ Existing approaches to the supervision of individual financial institutions should also be complemented with considerations of the management of systemic risk and with greater emphasis on having in place credible recovery and resolution plans designed to preserve the core economic functions during periods of stress. Finally, given the possibility⁵ of reliance on taxpayer funding to finance bank failure resolutions, effective mechanisms should exist for authorities to be held accountable to the electorate.

This paper focuses on the governance of financial stability from a central bank's perspective given the above context of evolving financial stability frameworks. A starting point for examining this issue is the identification of the key challenges that arise for central banks in the pursuit of financial stability. This provides a backdrop for the following sections which discuss the different aspects of the governance of financial stability – focusing in particular on the mandate, powers, accountability structures and relationships involved in the management of financial stability by central banks. The role of coordination in a domestic and cross-border context, and the related issues that arise, including in managing crises, will be discussed. In the remaining sections, the issue of central bank independence in the context of financial stability will be specifically examined. The article concludes with observations on the new demands being placed on the institutional capability of central banks.

2. Challenges for Central Banks in the Pursuit of Financial Stability

Central banks are confronted with a number of challenges in the pursuit of financial stability. To begin with, there is no widely accepted, universal definition or measure of financial stability. It is more often described in its negative form – for example, the absence of conditions in financial markets or institutions that harm or threaten to harm economic performance⁶ – and usually with little precision. This renders the design of an appropriate operational framework for delivering financial stability much more difficult in comparison with that which exists for monetary stability. Financial crises are also inherently difficult to predict owing to the multi-faceted contagion paths and the complex relationships that exist between components of the financial system and the real economy. This is compounded by the diversity of the financial system which includes the financial intermediaries, the organised formal and informal markets, the payment and settlement arrangements and financial market infrastructures. The actions of individual agents within each of these components of the financial system can have significant implications for financial stability. Yet in many countries, authorities which have responsibility for the different components are dispersed, each with different mandates. The result is an inevitable, sometimes confusing or even inconsistent, mix of multiple goals, instruments and agencies involved in the task of promoting and safeguarding financial stability. These conditions, though not ideal, tend to work themselves out without too many problems in normal times. But during times of crises, they present significant difficulties and can impede critical and timely actions, and undermine accountability.

A second challenge concerns transparency. While acknowledging that transparency has an important role in promoting financial stability by enabling the relevant parties to make accurate assessments of financial conditions and providing the necessary environment for effective market discipline, there are limits to the degree of transparency that can be achieved on any evolving threats to financial stability. By virtue of their role in the financial system and their position in financial markets, central banks are often the first to receive early signals of emerging risks to financial stability. There are, however, real constraints in releasing such information when

there is a high risk that it would precipitate a confidence crisis resulting in extreme volatility in the financial markets or bank runs that ultimately have self-fulfilling effects. At the extreme, a financial crisis may erupt which could have otherwise been avoided. Concerns with ensuring the effectiveness of policies to respond to financial stability threats may also dictate that advance consultation and full transparency are sometimes undesirable when they are likely to undermine the intended effects of the policy by inducing an escalation of speculative activities in asset markets, or otherwise significantly increase moral hazard.

Often cited in the literature is also the concern that the prominent role of central banks in financial stability would increase the scope and potential for policy conflicts. The inherent conflicts between monetary policy and financial stability are well documented. While there is greater recognition of the legitimate role of monetary policy in preserving financial stability, concerns have been raised on the potential for reputational damage to and the erosion of the independence of central banks in the conduct of monetary policy. Another long standing issue, recently revived in the debate concerning the Single Supervisory Mechanism proposed for Europe, is that a central bank with responsibility for supervision (whether macro- or microprudential supervision) would run the risk of becoming a supervisor with access to central bank liquidity (Coeure, 2013).⁷

The dual objectives of monetary and financial stability may also have political implications – notably political involvement in establishing the goals to be achieved under these objectives and the determination of priorities when there are trade-offs. Political sensitivities can be further heightened by the nature of central bank actions to address risks to financial stability. Unlike monetary policy, these actions draw on a much broader range of powers and instruments which central banks can wield, including the provision of emergency liquidity assistance, prudential regulation and supervision, powers to resolve systemically important financial institutions that are in difficulty and acting as market maker of last resort. In a full-blown crisis, decisions may be taken to provide large financial institutions with capital support in order to protect the wider economy from a free fall, with implications on taxpayers' monies.⁸ Such actions may have distributional consequences and political ramifications that cannot be ignored. Even in the realm of monetary policy, the recent use of unconventional tools amounting to quasi-fiscal actions has seen central bank actions tread towards the more politically sensitive space.

Finally, the extraordinary interventions by central banks to prevent a collapse of the financial system during the global financial crisis has re-ignited concerns – previously raised in connection with decisions to place the supervisory functions under the central bank – over the excessive concentration of powers in the central bank. However justified by a recognition of the strong expertise and alignment of incentives that make central banks well-placed to manage financial stability, granting wide powers and discretion to an unelected institution continues to be contentious. This can be observed in tensions between according central banks an expanded role in preserving financial stability, and moves to simultaneously curtail

absolute discretion by central banks through demands for more clearly defined and increasingly complex decision-making structures. The Dodd-Frank Act illustrates this tension – giving the Federal Reserve an explicit mandate for financial stability and extending its oversight powers over systemically important financial institutions, while pulling back the emergency authority for some forms of lending by the Federal Reserve.⁹

3. The Nature of the Financial Stability Mandate of Central Banks

Central banks need to be given a clear mandate for financial stability that corresponds with their critical role in responding to financial crises. The Bank for International Settlements (BIS) observed that an important reason for this is “*to reduce the risk of a mismatch between what the public expects and what the central bank can deliver.*”¹⁰ In reality, central banks are almost always expected by the public to take a lead role in managing a financial crisis. At the height of a financial crisis, the immediate public concern is with restoring stability. The public expects the authorities to use whatever means available at their disposal to achieve this, and the legislature has usually granted such emergency powers (typically to central banks) when required for this purpose. This would suggest that gaps between public expectations and the limits of central banks’ authority can be closed when needed, but the process may not always be smooth or expedient. A clear financial stability mandate for central banks is also important to provide a framework for accountability which should recognize that the central bank has multiple objectives, with priorities that may differ under different conditions and which involves trade-offs that need to be managed.

Two trends can be observed in the period following the global financial crisis. The first is the move to expand the policy mandates of central banks to include financial stability as an explicit goal. The second is the substantial strengthening of that mandate – mainly through additional powers granted to the central bank – to reflect a financial system that is far more complex and with a higher propensity for systemic non-bank entities to also be a potential cause of major financial disruptions.

Table 1 compares the financial stability-related mandates of central banks in a selected sample of countries before and after 2009.¹¹ Prior to 2009, a number of central banks did not have a significant role in the oversight of the financial system as a whole. In almost all of these cases, the table shows that the responsibility of central banks for the oversight of the financial system as a whole has since been, or is in the process of being, firmly established either in law or under enhanced institutional arrangements. Meanwhile, central banks that have always had a significant role in the oversight of the financial system have generally also seen this role being further reinforced. Another significant change has been the review of institutional structures in the United Kingdom and parts of Europe to combine the supervision functions under the central bank, reflecting the more dominant structures that have prevailed in Asia.

Table 1: Comparative Changes in Central Bank Mandates Post 2009

	Central bank mandates before 2009	Key changes since 2009
France	<ul style="list-style-type: none"> • Major responsibility for oversight of the financial system as a whole • Some legal grounding for financial stability responsibilities • Primary role in the supervision of banks; lesser role in regulation 	<ul style="list-style-type: none"> • Establishment of a super-regulator, the Prudential Supervisory Authority (PSA) within the Banque de France • Banque de France, incorporating the PSA, given explicit financial stability mandate
Indonesia	<ul style="list-style-type: none"> • Some responsibility for oversight of the financial system as a whole • Some legal grounding for financial stability responsibilities • Primary role in the regulation and supervision of banks 	<ul style="list-style-type: none"> • Establishment of Otoritas Jasa Keuangan (OJK), and integrated supervisory agency for the financial services sector in Indonesia • Regulation and supervision of banks will be transferred from Bank Indonesia (BI) to OJK by the end of 2013, although OJK is obligated under law to coordinate with BI in formulating banking regulation
Korea	<ul style="list-style-type: none"> • Minor responsibility for oversight of the financial system as a whole • Some legal grounding for financial stability responsibilities • Some role in the supervision of banks (mainly the ability to participate in examinations of banks by the Financial Supervisory Service (FSS), or to request that such examinations be conducted by FSS) 	<ul style="list-style-type: none"> • Bank of Korea (BOK) given a statutory duty to pay attention to financial stability in carrying out its monetary and credit policies • Strengthened statutory obligation for FSS to comply with a request on the conduct of bank examinations by BOK • Wider ability of BOK to provide emergency credit (liquidity support facilities) to financial institutions and for-profit (commercial) enterprises
Malaysia	<ul style="list-style-type: none"> • Major responsibility for oversight of the financial system as a whole • Some legal grounding for financial stability responsibilities • Primary role in the regulation and supervision of banks and insurers 	<ul style="list-style-type: none"> • Bank Negara Malaysia (BNM) given statutory objective for financial stability • Extended powers granted to the BNM to regulate, supervise and resolve systemically important non-bank financial institutions
Philippines	<ul style="list-style-type: none"> • Minor responsibility for oversight of the financial system as a whole • Some legal grounding for financial stability responsibilities 	<ul style="list-style-type: none"> • Amendments to the central bank law underway to formalise and extend the financial stability functions of Bangko Sentral ng Pilipinas (BSP)

	<ul style="list-style-type: none"> • Primary role in the regulation and supervision of banks 	<ul style="list-style-type: none"> • Other proposed amendments to provide BSP with the expanded avenues and tools for financial stability (including the extension of the lender-of-last-resort facility to systemically critical non-bank institutions)
US	<ul style="list-style-type: none"> • Major responsibility for oversight of the financial system as a whole • Financial stability responsibilities are only weakly grounded in law • Primary role in regulation and shared responsibility for supervision of banks 	<ul style="list-style-type: none"> • More prominent formal role of the Federal Reserve in financial stability recognised in law • Expanded role to regulate and supervise systemically important non-bank entities
UK	<ul style="list-style-type: none"> • Major responsibility for oversight of the financial system as a whole • Financial stability responsibilities are grounded in law • Minor role in the regulation and supervision of banks 	<ul style="list-style-type: none"> • Bank of England given statutory objective for financial stability • Macro- and microprudential supervision of financial institutions (banks, insurers and other prudentially significant firms) integrated under the central bank
EU (European Central Bank, ECB)	<ul style="list-style-type: none"> • Some responsibility for oversight of the financial system as a whole • Financial stability responsibilities are grounded in law • Minor role in the regulation and supervision of banks 	<ul style="list-style-type: none"> • Creation of three new independent supranational European Supervisory Authorities.¹² ECB is a non-voting member of the banking authority • Creation of the European Systemic Risk Board (with significant representation of central banks) tasked with detecting risks to the financial system as a whole

4. Defining Financial Stability Goals

To achieve clarity in the central bank’s mandate for financial stability, the question as to what precisely central banks will be held accountable for must also be addressed. This can be described in the form of specific goals or objectives of financial stability that central banks with financial stability mandates must achieve. Goal-setting theory teaches us that goals should be specific, measurable and time-bound. The difficulty with financial stability is that it is a broad, multi-dimensional concept and therefore, inherently challenging to quantify in a single, consolidated measure. One can be reasonably specific as to the individual components of financial stability, for example, orderly market conditions or sound financial institutions, but achieving a set of goals for the individual components in isolation does not by itself deliver financial stability on a sustainable basis. It has been noted that “*financial stability is expectation-based,*

dynamic, and dependent on many parts of the system working reasonably well" (Schinasi, 2004). Important to add to this is that the components of the financial system must work reasonably well in a way that the failure of one component would not trigger the contagious failure in the other components. This demands that any goals set for individual components of financial stability must also consider the relationships with goals set for other components, and would need to take into account how the goals (individually and collectively) relate to changing economic and financial conditions. Because financial stability is also concerned with tail events, time-bound goals are also inappropriate.

Given the political dimensions of financial stability actions and their potential for conflicts with other policy objectives of central banks, it is extremely important for central banks to know with great clarity the outcomes to be achieved, which in turn will define the limits of actions that central banks can take in order to promote and preserve financial stability. Having clarity in the financial stability goals to be achieved would enable central banks to evaluate policy options and provide an important discipline against an over-extension of the central bank's powers.

Central banks also need to know the information and develop the surveillance frameworks that are required for the effective identification of threats to financial stability. Such information can be vast in its volume and scope, increasing the risk of "missing the forest for the trees." Clarity in the financial stability goals tasked to central banks will allow the central bank to remain focused on systemic risks and threats to financial stability (particularly if it also conducts microprudential supervision), and holds the central bank responsible to ensure that the information is regularly updated and the surveillance frameworks enhanced as market, structural and economic conditions change.

A further reason concerns the powers needed for central banks to effectively deliver financial stability. Once there is clarity in the central bank's responsibility for financial stability, it needs to have the full range of powers necessary to discharge this responsibility. The need for and existence of the powers should not be confused with the oversight of decisions with respect to their use. The central bank must have the necessary powers, but the decisions to use these powers may be subjected to higher standards of accountability, for example, through mechanisms that provide for the independent review of decisions either ex-ante or ex-post.

Several central banks have sought, through public pronouncements, to aid the general understanding of what financial stability means within the context of their own jurisdictions. Some examples from the Asia-Pacific region are provided in Table 2. It can be observed from the table that not all central banks with explicit financial stability mandates in law offer a working definition of financial stability. Conversely, some central banks that are not given such an explicit mandate have gone to some length in public statements to explain what financial stability means. Malaysia in 2009, and the UK in 2011, have adopted formal definitions of financial stability in law for the purpose of clarifying the central bank's mandate for financial stability.

Table 2: Financial Stability Mandates of Selected Central Banks

	Explicit statutory mandate for financial stability	Public statements* to explain financial stability
Reserve Bank of Australia	No	A stable financial system is one in which financial intermediaries, markets and infrastructures facilitate the smooth flow of funds between savers and investors and by doing so, help promote growth in economic activity. Conversely, financial instability is a material disruption to this intermediation process with potentially damaging consequences for the real economy.
People's Bank of China	Yes	-
Hong Kong Monetary Authority	Yes (specifically, stability of the banking system)	-
Bank Indonesia	No	Sources of financial system instability are identified through a forward-looking process to ascertain the potential risks that could influence the future condition of the financial system. Once identified, these risks are analysed for their potential heightened threat, contagion effect and systemic impact that could devastate the economy.
Bank of Japan	Yes	Financial system stability refers to a state in which the financial system functions properly, and participants, such as firms and individuals, have confidence in the system.
Bank of Korea	Yes	Financial stability can be defined as a condition in which the financial system is not unstable. It can also mean a condition in which the three components of the financial system – financial institutions, financial markets and financial infrastructure – are stable.
Reserve Bank of New Zealand	Yes (statutory obligation to publish financial stability reports)	-

Bangko Sentral ng Pilipinas	No	Financial stability refers to the financial system's efficiency to redistribute and manage risks in a satisfactory manner and carry out payments settlement while remaining responsive to the demands and challenges faced by the economy.
Monetary Authority of Singapore	Yes	Confidence and stability are fundamental to a well-functioning financial system. Only when there is confidence in the system would corporates and individuals transact in the financial markets to invest and to raise capital. Without confidence and stability, the economy's ability to mobilise savings for economic use will be compromised.
Bank of Thailand	Yes	-

* From central bank websites

Other examples from a literature review show attempts to describe conditions that are generally present when there is financial stability. These include:

- *“the ability of the financial system to consistently supply the credit intermediation and payment services that are needed in the real economy if it is to continue on its growth path”* (Rosengren, 2011);
- *“a financial system... [that is] capable of facilitating the performance of an economy, and of dissipating financial imbalances”* (Schinasi, 2004);
- *“a condition where the financial system is able to withstand shocks without giving way to cumulative processes, which impair the allocation of savings to investment opportunities and the processing of payments in the economy”* (Padoa-Schioppa, 2003).

From an accountability perspective, a key problem with most existing definitions of financial stability is that they provide substantial scope for central banks to believe that they are delivering financial stability right up to the point when a financial crisis breaks. This is not useful when there is also an expectation of central banks to take preventive actions to avert a crisis, aside from remedial actions to contain its costs if and when a crisis occurs.

A useful definition of financial stability should serve to meet the outcomes intended by providing clear goals for the central bank to achieve – that is knowing the outcomes to be achieved, knowing the information and monitoring frameworks required, and knowing the powers that are needed for achieving the mandate. References

to “*the dissipation of financial imbalances,*” “*the ability to withstand shocks,*” “*contagion effects,*” and “*material disruptions to the intermediation process*” add important nuances to the financial stability definition that help to clarify the goals that a central bank will be held accountable for.

In Malaysia, financial stability is defined in the Central Bank of Malaysia Act 2009 in reference to risks: (i) that disrupt, or are likely to disrupt, the financial intermediation process and functioning of the money and foreign exchange markets; or (ii) that affect, or are likely to affect public confidence in the financial system. The law mandates Bank Negara Malaysia to act as necessary to avert these risks. This approach takes into account the principal financial stability concerns, while allowing a broad set of indicators and triggers to be developed and judgment to be applied by the Bank within the clearly scoped guiding parameters in law. It also provides a clear link between the financial stability powers accorded to the Bank, and the purpose for which those powers are intended to be used. Importantly, it strengthens the accountability of the Bank through an obligation imposed on the Bank to demonstrate either that a risk to financial stability as defined exists, or there are realistic prospects that the risk will arise. This supports the preventive dimension of responses to financial stability threats by ensuring that the Bank can act pre-emptively. Through a clear demonstration of the risks to financial stability, the Bank can be judged on whether actions taken were appropriate and effective in averting or reducing those risks. It also allows the Bank to exit in a timely manner from any exigent measures taken when it can be shown that the identified risks no longer pose a threat to financial stability.

5. Powers for Financial Stability

The effectiveness of central banks in delivering the financial stability mandate is fundamentally dependent on the range of powers and policy instruments accorded to them. As noted by the BIS¹³, “*charging the central bank with responsibility for financial stability is not sufficient – appropriate tools, authorities and safeguards are also needed.*” During the global financial crisis, the urgency to restore confidence in the financial system and to unlock gridlocks in funding flows for intermediation activities saw the powers of central banks that were at the epicentre of the crisis stretched to the limit, resulting in some cases in emergency or additional powers granted to the central banks to prevent the collapse of their financial systems. This included, somewhat controversially, the provision of emergency lending against a wider range of, and riskier collateral. In other parts of the world, central banks have also gained additional and wide-ranging powers. These expanded powers reflected the specific lessons drawn from the global financial crisis, but also more generally, the broader mandates and responsibilities given to central banks in respect of financial stability as well as the significantly more complex sources and triggers of instability.

Apart from the provision of emergency liquidity which has conventionally been a central bank function to arrest financial panic, the expansion of central bank powers for financial stability has been mainly concerned with crisis prevention and containment.

An important – and often understated – power of central banks in the prevention of crises is its ability to obtain information, including from parts of the financial system that are not traditionally regulated, for the purpose of identifying and monitoring potential risks to financial stability. More often, this ability is present when central banks also have supervisory functions, but this is limited to the entities that they supervise. This remains the case in many countries, including those within the membership of SEACEN. The ability of central banks to obtain information that facilitates its assessment of risks to financial stability should, however, exist independently of any powers of supervision. Central banks in many jurisdictions also generally have the ability to make recommendations to other authorities that also contribute to financial stability on measures to address identified financial stability risks. Increasingly, this ability is being recognised more formally either in law, or under the terms of reference of inter-agency cooperation arrangements.

Any recommendation made by the central bank to another authority has, however, tended to be of an advisory nature, reflecting the political realities that can arise with multiple financial regulators having the potential to affect financial stability outcomes through their actions. This leaves the ultimate decision to take a measure in the hands of the authority concerned, raising some practical challenges in the implementation of the measures needed, particularly where the authority concerned is constrained by the limits of its own powers or tools to undertake the measures. It can also create tensions when mandates of the central bank and other authorities are not aligned. These difficulties have been acknowledged by the G20 which, in an effort to achieve greater alignment, has advocated that “*as a supplement to their core mandate, the mandates of all national financial regulators, central banks and oversight authorities, and of all international financial bodies and standard setters (IASB, BCBS, IAIS and IOSCO¹⁴) should take account of financial stability.*”¹⁵

Some countries have gone further to provide absolute or reserve powers to the central bank to take actions directly in circumstances where threats of financial instability are imminent and actions by the relevant primary authorities have been inadequate to avert such threats. The Financial Policy Committee (FPC) of the Bank of England has the “*power to direct the microprudential authorities.*”¹⁶ This takes into account the fact that “*directions could also be valuable when action is required urgently.*” Similarly, Bank Negara Malaysia has powers, subject to the approval of the Financial Stability Executive Committee (FSEC),¹⁷ to issue orders for financial stability to institutions supervised by another authority, provided that the authority shall be represented as a member at the FSEC meeting that decides on the relevant orders.

Another important preventive power is the ability to vary prudential requirements or ratios applied to financial intermediaries to produce countercyclical effects. This includes the use of countercyclical buffers during periods of rapid credit expansion or asset price inflation. Such macroprudential tools are gaining greater prominence as an important part of the central bank’s expanded toolkit. Central banks are considered well-placed to apply such powers given their important role in monitoring and understanding macroeconomic conditions and the close interlinkages between the

financial sector and the broader economy. These perspectives allow central banks to identify and assess the potential for wider destabilising ramifications of such systemic developments.

With increased connectivity within the financial system, and between the financial system as a whole and the domestic economy as well as with other financial systems abroad, a horizontal dimension of supervision that is focused on preserving the effective and orderly functioning of financial intermediation and financial markets has become an important imperative. This has prompted recent moves to draw a clearer distinction between the objectives of supervision of systemic financial institutions (or macroprudential supervision) vis-à-vis other financial institutions (microprudential supervision). Macroprudential supervision is concerned with interlinkages and concentration of risks in the financial system which can arise through the presence of an important financial institution (or a group of financial institutions) or financial market infrastructure whose failure can result in the rapid transmission of risks to other parts of the system.

Distinctions between macroprudential supervision and microprudential supervision can be observed in three respects. The first is the imposition of higher prudential standards – notably in the form of capital surcharges and requirements on recovery and resolution plans – on systemically important financial institutions. Another has been the higher intensity of supervision applied to systemically important financial institutions. For some central banks that are not responsible for micro level supervision and regulation of the financial industry, such as the Bank of Korea and the Oesterreichische Nationalbank,¹⁸ new powers have been gained for the central bank to undertake macroprudential supervision, including the conduct of examinations on major and systemic banks. Among central banks that are also responsible for bank supervision, the Federal Reserve and Bank Negara Malaysia have also been accorded with expanded powers to supervise systemic financial institutions and systemic financial infrastructures which may not already be under their direct supervisory oversight.

The distinction between macroprudential and microprudential instruments is, however, not always clear. This reflects the diverse nature and characteristics of financial stability in contrast to monetary policy where the mandate is better understood and the choice of policy instruments more straightforward. It can be argued that most macroprudential instruments are extensions of powers that are already available to microprudential supervisors. In introducing the Basel III countercyclical buffers,¹⁹ the BIS emphasised that the measure was *primarily* aimed at protecting the overall banking system from periods of excessive credit expansion and risk build up, thus ensuring the availability of capital to withstand periods of stress following such an expansionary phase.²⁰ This places the use of such buffers well within the remit of the microprudential authority. It is also often true that macroprudential policies are rarely implemented in isolation, and follow a period of heightened supervisory intensity which is typically sustained throughout the period that macroprudential policies are in effect. These observations have raised questions over how effective, really, are macroprudential instruments, in particular when they are used without other accompanying measures.

For instance, to address the build-up of financial imbalances in the property market, the central bank may impose a loan-to-value (LTV) ratio requirement. At the same time, the banking prudential supervisor may increase scrutiny over the underwriting and risk pricing practices of banks, potentially requiring all banks (not just more risky ones) to strengthen their buffers and adopt more stringent standards (For example, lowering loan-to-value ratios). Meanwhile, the market conduct authority may intensify the focus on banks' conduct in soliciting new business while the fiscal authority may impose tax requirements. It would be extremely difficult in these circumstances to attribute any positive effects of these interventions to any single measure, least of all a measure that is distinctly "macroprudential."

The use of macroprudential measures is also often fraught with measurement challenges. In the classic example of LTV ratios which act as "speed bumps" to slow down the pace of growth in mortgage lending, there is no precise or scientific way of setting the ratio levels. Debate also continues on the relevant macroeconomic indicators on which to base the application of countercyclical buffers. It is also acknowledged that market participants and economic agents are likely to eventually adjust to any calibration of macroprudential measures, which means that any effects of these measures may be temporary at best.

Despite the measurement challenges and current debate on the effectiveness of macroprudential instruments, many central banks particularly in Asia have effectively deployed these instruments to address periods of imbalances notably during the 1980s and 1990s, and also more recently. While some appear to have had greater success than others, for countries that continued to experience pressures on asset markets despite the deployment of macroprudential measures, it can be argued that the magnitude of these pressures and the associated vulnerabilities created could have been substantially higher had those measures not been introduced. A better understanding of the effects of macroprudential instruments and how they interact with other powers at the disposal of central banks and other financial stability authorities would contribute towards the more optimal use of macroprudential instruments – including their adjustment over time in response to changing conditions.

With respect to crisis resolution and containment, central banks typically are accorded stabilisation powers that aim to restore confidence or liquidity in the market, thus enabling financial intermediation to resume. At the core of these powers is the ability of central banks to provide emergency liquidity. In addition, the ability "*to alter the composition of central bank assets, by adding to (subtracting from) its holdings of claims on the private sector*" (Goodhart, 2011) represents an additional means by which central banks have acted to meet demand for market liquidity. These more unconventional forms of liquidity support have been contentious given that it creates significant exposures for central banks to major financial and balance sheet risks. In times of stress, this may, in turn, affect the capacity of the central banks to perform their mandated roles in other equally important areas, monetary policy being a key one. Ways in which central banks have strove to manage these risks include lending only against acceptable collateral or securing a financial back-stop from the government.

Some central banks have additionally acquired new powers to undertake resolutions of financial intermediaries and systemic financial market infrastructures. There are compelling reasons for placing responsibility for the resolution of financial institutions under a separate resolution authority and not central banks.²¹ An important reason is to insulate central banks from political influence and intervention given the potential fiscal implications of resolution actions. Having the resolution responsibility under a separate authority would support a clear focus and strategies on the development and maintenance of specialised skills and capacity required to effectively implement resolution strategies. There are also benefits in separating the resources and focus of attention required to manage a crisis from that required to undertake specific resolutions, although close coordination between the two would be both inevitable and critical.

6. Decision-Making Arrangements for Financial Stability

Decisions on the use of financial stability powers involve the choice of policy instrument, the management of policy trade-offs, as well as the timing and extent (or calibration) of the measures to be taken. Internationally, varying practices can be observed in the decision-making structures and the supporting processes adopted for the exercise of financial stability powers that have been accorded to the central bank. Not unlike the trends observed in the area of monetary policy, committee-based decision-making structures have become more common, reflecting the multifaceted dimensions of financial stability issues that increase the need to draw on broad-based expertise and perspectives to support sound judgments and decisions.²² Such committees provide an avenue for rigorous debate and critical challenge which arguably contribute to better decisions. This can be important when financial stability decisions can involve complex choices that entail balancing trade-offs. Multiple and potentially conflicting objectives of the central bank, the sensitivity of decisions to market conditions, and the uncertainties inherent in key variables in the decision process are additional reasons that favour committee-based decision-making structures.

Committees for financial stability are generally constituted of members internal to the central bank, with some committees having provisions for external members. Members of internal financial stability committees of central banks tend to be drawn from senior central bank officials involved in regulation, supervision, the oversight of payment systems and treasury/investment operations (due to the potential need for emergency liquidity). Apart from the Governor and Deputy Governor(s), central banks have generally observed some separation between members of the monetary policy and financial stability committees. This is intended to reduce potential conflicts that can arise when concerns over the viability of individual institutions may influence monetary policy outcomes. While this remains a legitimate concern, it is also important to recognise that financial stability responses, both of a micro- and macroprudential nature, are important in addressing financial imbalances. Excessive credit growth and unsustainable levels of household indebtedness are among such imbalances that represent a risk to both monetary and financial stability. Given these interactions, structures that allow for cross-functional deliberations to take place across the financial

stability and monetary policy functions of the central bank can be useful. In 2010, Bank Negara Malaysia established the Joint Policy Committee comprising members of the Financial Stability Committee and Monetary Policy Committee to address the common concerns of both the financial stability and monetary policy goals.

Table 3: SEACEN Central Banks with Internal Committees for Financial Stability

	Name	Focus	Composition
Bank Negara Malaysia	Financial Stability Committee (since 2004)	<ul style="list-style-type: none"> • Macroprudential assessment and responses • Microsurveillance intervention and resolution • Crisis management 	Chair: Governor Members: <ul style="list-style-type: none"> • All Deputy Governors • Assistant Governors responsible for regulation, supervision, treasury & investment operations and payment systems
Bangko Sentral ng Pilipinas	Financial Stability Committee (since 2010)	<ul style="list-style-type: none"> • Policy direction for financial stability with emphasis on mitigating the build-up of systemic risk 	Chair: Governor Members: <ul style="list-style-type: none"> • All Deputy Governors • 3 other senior officials
Monetary Authority of Singapore	Financial Stability Committee	<ul style="list-style-type: none"> • Supports Board level Chairman's Meeting, a designated forum for major policy decisions relating to the objective of financial stability, in addition to its oversight of major changes to microprudential policies 	Chair: Managing Director Members: <ul style="list-style-type: none"> • Senior management overseeing surveillance, supervisory and prudential policy, markets and investments, and economic policy functions

The Financial Policy Committee of the Bank of England is one example of a committee with provisions for external members. Four of the FPC's 10 members are individuals appointed from outside the central bank based on their relevant expertise. Within Asia, such committees with external members more commonly serve to promote effective inter-agency coordination. Consistent with this objective, the members of most of these committees tend to comprise of officials serving in an ex-officio capacity from relevant agencies that have some role in financial stability. The supranational European Supervisory Authorities serves a similar purpose. In Malaysia and Thailand, external members on financial stability committees include individuals other than those in an ex-officio capacity to further enhance the decision-making process. The FSEC in Malaysia is specifically mandated in the law to approve certain financial stability actions by the Bank and its membership includes external members who are

appointed on the basis of their professional expertise and experience. The Financial Institutions Policy Committee in Thailand similarly makes decisions on policy matters and includes external members with financial industry and market experience. A challenge noted in both countries with the inclusion of external members on financial stability committees has been the difficulty of identifying suitably qualified members who are not also conflicted by their business associations. While it may be expected that the decision-making arrangements can differ during normal and crisis times, there is little evidence of this in practice among central banks that adopt committee-based decision-making structures.

Table 4: SEACEN Economies with Committees for Financial Stability that include External Members

	Name	Focus	Composition
India	Financial Stability and Development Council	<ul style="list-style-type: none"> Systemic oversight, regulatory coordination, financial sector development, literacy and inclusion 	Chair: Minister of Finance Members: <ul style="list-style-type: none"> Governor, Reserve Bank of India Securities and Exchange Board of India Pension Fund Regulatory and Development Authority Insurance Regulatory and Development Authority
Indonesia	Financial System Stability Forum (since December 2005)	<ul style="list-style-type: none"> Discuss issues confronting government stakeholders in the financial system with potential systemic impact, as informed by the financial institution supervisory committee Coordinate and exchange information for synchronisation of laws and regulations concerning the banking system, non-bank financial institutions and the capital market Coordinate implementation or preparation of specific initiatives in the financial sector 	Chair: Minister of Finance Members: <ul style="list-style-type: none"> Governor, Bank Indonesia Chairman, Otoritas Jasa Keuangan Chief Executive Officer, Indonesia Deposit Insurance Corporation

<p>Malaysia</p>	<p>Financial Stability Executive Committee (since 2010)</p>	<ul style="list-style-type: none"> • Decide on the provision of liquidity assistance and issuance of specific directives to non-bank financial institutions not regulated by BNM • Decide on financial assistance (capital support) to financial institutions regulated by BNM 	<p>Chair: Governor, Bank Negara Malaysia (BNM)</p> <p>Members:</p> <ul style="list-style-type: none"> • Secretary General to Treasury • Chairman of Securities Commission Malaysia • CEO of Malaysia Deposit Insurance Corporation • A Deputy Governor of BNM • Up to two external experts
<p>Philippines</p>	<p>Financial Stability Coordinating Council (since 2012)</p> <p>Financial Sector Forum (since 2004)</p>	<ul style="list-style-type: none"> • Coordinating mechanism that identifies areas of brewing pressures and to take pro-active measures before these risks spillover • Improve supervision of financial conglomerates • Address regulatory gray areas 	<ul style="list-style-type: none"> • Chair: Governor, Bangko Sentral ng Pilipinas <p>Members:</p> <ul style="list-style-type: none"> • Bangko Sentral ng Pilipinas • Treasury • Securities and Exchange Commission • Insurance Commission • Philippine Deposit Insurance Corporation <p>Chair: Deputy Governor, Bangko Sentral ng Pilipinas</p> <p>Members:</p> <ul style="list-style-type: none"> • Securities and Exchange Commission • Insurance Commission • Philippine Deposit Insurance Corporation
<p>Thailand</p>	<p>Financial Institutions Policy Committee (since 2011) – formerly known as Financial Institutions Policy Board</p>	<ul style="list-style-type: none"> • Formulate and execute policies relating to supervision and examination of financial institutions • Determine policies concerning financial institutions 	<p>Chair: Governor, Bank of Thailand</p> <p>Members:</p> <ul style="list-style-type: none"> • 2 Deputy Governors • Director of the Fiscal Policy Office • Secretary of Insurance Commission

		<ul style="list-style-type: none"> • Determine financial proportion, including prudential financial ratios for financial institutions • Provide an opinion or recommendation relating to the establishment of new financial institutions 	<ul style="list-style-type: none"> • Secretary of Securities and Exchange Commission • 5 external experts
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Notwithstanding the trends observed in the inclusion of external members on financial stability committees, decisions on the provision of emergency lending to distressed financial institutions remain the exclusive authority of most central banks. This acknowledges the criticality of speed required in these decisions, and also the existence of important safeguards that have been built around such lending to protect central banks from exposures to financial losses. Central banks have generally developed strong frameworks for the provision of emergency lending which include a ready list of acceptable high-quality collateral against which lending is to be provided, prudent valuation methodologies that also provide for an appropriate level of haircuts, and processes for the assessment of an institution’s continuing viability, particularly when lending is required to be rolled-over. There are exceptions in which the provision of emergency liquidity by the central banks has been subjected to the authority of an external committee or the Treasury. On closer examination, such exceptions have generally been where questions of viability are more likely to arise, in particular when it relates to institutions not directly supervised by the central bank. In Malaysia, liquidity assistance to such institutions that are not directly supervised by Bank Negara Malaysia (thereby rendering viability assessments more difficult) must be approved by a committee of BNM that includes external members. Another example can be found in the United Kingdom, where the Chancellor of the Exchequer holds the power in deciding on the provision of emergency liquidity assistance,²³ which is subsequently executed by the Bank of England.

Whether internal or external committees are used, the quality of financial stability decisions begins with strong internal central bank processes (including strong analytical frameworks and supporting structures) that support the decision-making process. There are different approaches to the internal organisation of financial stability functions within central banks. Some central banks have separately staffed and resourced departments dedicated to the management of financial stability, while in other central banks, this function is subsumed within the existing microprudential supervision or macroeconomic functions. How the financial stability function is organised within central banks is likely to be influenced to some degree by the hierarchy of the financial stability mandate (vis-à-vis price stability and other mandates of the central bank), the clarity of the mandate in the legislation and the powers conferred on the central bank. A study by the World Bank that focused on regulation and supervision aspects reported that three quarters of the

survey respondents from emerging markets and developing economies (EMDEs) have established a specialised department that focuses on financial stability and systemic supervision (Cihak et al, 2012b). In contrast, only 44% of central banks from advanced economies had dedicated units, usually within the macroeconomic or micro-supervision functions, that undertake financial stability analyses. Given the substantially stronger focus on the management of systemic risks following the global financial crisis and broader financial stability mandates being given to central banks, there is a cause for central banks to review and enhance the manner in which financial stability issues (including information flows) are coordinated internally and externally. This should contribute towards improving existing organisational arrangements to maintain a clear focus on the identification and management of systemic risks and to generally support more effective coordination.

7. Cooperation and Coordination Across Agencies and Across Borders

One important change in the management of financial stability has been the increased emphasis placed on having in place and ensuring the effective operation of cooperation and coordination arrangements (CCAs) across agencies and across borders. This is reflected in the Basel Committee on Banking Supervision (BCBS) Good Practice Principles on Supervisory Colleges²⁴ and the recently revised (September 2012) BIS Core Principles for Effective Banking Supervision, which has substantially expanded the methodology for assessing compliance with principles relating to coordination for the purpose of financial sector assessments carried out under the IMF/World Bank Financial Sector Assessment Program.

Effective CCAs have become more critical for a number of reasons. Financial innovation and increased market sophistication have deepened the interlinkages between the different parts of the financial system and introduced new channels through which risks which can threaten financial stability are transmitted. Not all of these channels are within the span of direct control and influence of central banks. As discussed in the previous section, policy instruments for responding to financial stability risks can also be dispersed across multiple agencies, requiring coordination between these instruments to optimise their combined effect and avoid over-adjustments. The expansion of activities of financial groups beyond their domestic markets as well as greater capital mobility across borders as a result of increased liberalisation adds a further cross-border dimension to the management of financial stability that cannot be ignored. Consequently, central banks and other financial stability authorities have become more inter-dependent both at the national and cross-border levels.

CCAs supporting financial stability are generally structured to achieve four key objectives: (i) to facilitate the prompt identification and assessment of systemic risks; (ii) to manage potential cross-border effects of regulation and supervision, particularly in the implementation of global reforms and the regulation and supervision of systemically important financial institutions; (iii) to coordinate policy responses to reduce risks to financial stability; and (iv) to provide clarity in the roles and responsibilities of relevant authorities in the management and containment of crises. Given these objectives,

CCAs have mainly focused on information-sharing arrangements; commitments to consultations on key policy initiatives, in particular those having an impact on the mandates of other authorities; and cooperative efforts to enhance the capacity and overall resilience of the financial system, for example in the deepening of financial markets in the region and the provision of cross-border liquidity support such as that facilitated through the cross-border collateral agreements²⁵ which have been advanced among EMEAP²⁶ countries. In the area of resolutions, the establishment of cross-border crisis management groups (CMGs)²⁷ is expected to enhance the state of preparedness of relevant authorities in dealing with potential cross-border spillovers from the failure of systemic financial institutions with significant operations in multiple jurisdictions. To work effectively, CMGs will need to be inclusive, with well-defined arrangements dealing with the roles and responsibilities of the authorities concerned and safeguards to support timely information flows between authorities.

In the more recent period, there have been increasing trends towards establishing more formal arrangements for cooperation and coordination between central banks and other authorities, including through cooperation agreements that set out in substantial detail how authorities intend to cooperate with each other in the management of financial stability both during normal times and in crises. Some of these agreements may be grounded in law, such as the Strategic Alliance Agreement between the central bank and the deposit insurance corporation in Malaysia. Central banks may also have specific legal obligations to consult with other authorities on policy matters that may affect the mandates of other authorities. These developments have had an important role in promoting a shared view of important financial stability outcomes, and in establishing priorities for coordination towards contributing to those outcomes.

Confidentiality concerns and constraints continue to present some challenges to central banks in efforts to improve important information flows under CCAs for the purpose of managing systemic risks. In many cases, legislative solutions will be needed to overcome these challenges. In Malaysia for instance, provisions were built into the Central Bank of Malaysia Act 2009 to enable the central bank to share information and cooperate with other supervisory authorities within and outside Malaysia for the purpose of promoting financial stability. This includes the specific coordination of financial stability measures.

Even with formalised gateways for information-sharing, equally important are the operational protocols and secure platforms for sharing and handling sensitive information before the challenges can be fully resolved. This needs to be put in place well before a financial crisis is imminent in order to provide confidence among the different agencies involved to share critical information during a crisis when agencies are likely to be more guarded in sharing sensitive information, particularly in a cross-border context. Such protocols may address when information is shared, who it will be shared with, and binding obligations to ensure the protection of the information shared. It is also important to agree in some detail the purpose of information-sharing arrangements. This in turn will define the nature, level of detail, and timing of information to be shared which should be fit-for-purpose. One clear objective of

cross-border information-sharing arrangements is to inform the policy responses of central banks where risks of cross-border contagion are likely to be high. This allows an opportunity for central banks and other financial stability authorities to implement coordinated responses to mitigate the risks and avert wider spillovers. An example of this was the synchronised announcement of government blanket deposit guarantees by the central banks of Malaysia, Singapore and Hong Kong in 2008 to contain the spillover effects from the global financial crisis.

Building trust and understanding, which are preconditions for CCAs to work effectively, takes time. In practice, it will be important for authorities to establish the CCAs during normal times, so that there will be confidence that they will function when tested by the immense pressures during a crisis. This should include nurturing a strong culture of collaboration within central banks, developing new skills that may be needed to manage more complex external relationships, and ensuring on an ongoing basis that the arrangements are practicable under different potential scenarios.

8. Accountability and the Financial Stability Mandate

The issues around central bank accountability are a subject of extensive debate given the broad powers provided for central banks to perform their functions and the relevance and implications of central banks' actions for wider constituents. Earlier sections of this paper have discussed the importance of clarity in the financial stability mandate and its related objectives and powers which are important components of the accountability framework for the performance of central banks with respect to their financial stability mandates. Appropriately organised decision-making structures and processes further promote ex-ante accountability and provide checks against the abuse of powers by central banks. This section discusses the different ex-post accountability frameworks that have been adopted by central banks.

In all central banks, oversight arrangements through a governing board exist for holding central banks accountable for the performance of their mandates. Variations, however, exist with respect to the scope of decisions that come directly under the authority of such governing boards. Decisions on financial stability policies and measures are more commonly taken by specialised internal or external committees which are held directly accountable for these decisions. This acknowledges the depth of specific knowledge and expertise involved in financial stability matters and their extensive implications which are likely to exceed the normal breadth of experience one might be able to achieve in a board that is generally charged with the oversight of the overall affairs of the central bank. In some countries such as Thailand, the legislation provides for the setting up of a few policy boards (not unlike external committees), one of which is focused on financial sector regulation and supervision. Decisions on financial stability matters must be approved by this board. This remains relatively rare. In most countries, reporting mechanisms are more commonly in place for central banks to keep the oversight board informed of financial stability developments and policy measures taken, and to explain these matters when required by the board.

Greater transparency in the decision-making process can also strengthen accountability frameworks that apply to the central bank's financial stability mandate. This is achieved in the same way that market discipline works, by releasing information such as minutes of meetings or public statements following key decisions which allow stakeholders to scrutinise the manner in which financial stability decisions were taken and to evaluate the considerations, circumstances and trade-offs leading to those decisions. For reasons discussed earlier in the paper, such transparency is usually provided only after a time-lag.

The accountability of central banks to the wider public is also provided through the obligation of central banks to report to an elected body such as a parliamentary committee and the government (typically through the Minister of Finance) on financial stability matters and on the general affairs of its business. In most cases, such obligations are legislated and can be quite specific as to the content, frequency and manner of reporting. For example, in Indonesia, the central bank is mandated by law to present to the House of Representatives the development of the central bank's activities every three months. For some central banks, there is also a mandatory requirement to table to the parliament the annual report which may contain matters pertaining to financial stability before such reports are released to the public.

An increasing number of central banks have leveraged on Financial Stability Reports (FSRs) to explain their assessments of risks to financial stability and how these risks are being managed. Publications of FSRs are commonly accompanied by briefings held by the central bank for the media, financial industry, analysts and in some cases, business sectors during which central banks have further opportunities to elaborate their assessments and actions. In addition to their relevance as a way in which central banks can be held accountable for their financial stability mandate, FSRs also have been positioned by central banks as an instrument to *promote* financial stability. This is achieved by providing information in FSRs that can improve the understanding of and contribute to dialogue on emerging risks to financial intermediaries, highlight potential implications for financial stability from the collective actions of individual agents in the financial system, and influence behaviours towards reducing risks that are building up in the financial system or strengthening buffers that will improve the resilience of financial intermediaries to stress (Cihak, 2006). Given the limited frequency of publication of FSRs, central banks have also used other means, such as speeches and interviews given by senior central bank officials, to maintain confidence in the financial system and to highlight any emerging concerns.

9. Central Bank Independence and Financial Stability

Independence represents one of the core pillars on which the effectiveness of the central bank depends. In the aftermath of the global financial crisis, the issue of central bank independence has come under increased scrutiny. The time consistency problem in monetary policy where longer-term horizons of policies conflict with shorter-term expectations of economic agents has been well established as a primary motivation

for the independence of central banks. This is to ensure credibility in the conduct of monetary policy. This is equally relevant in the sphere of financial stability policy. Such independence is necessary to promote credible and consistent rules and regulations for financial stability which are not subject to short-term pressures and undue external influence.

A frequently cited example of when such pressures can arise is in the management of the trade-offs between curbing credit-fuelled speculative activities in order to prevent the build up of financial imbalances over time through the tightening of prudential regulations, and the potential growth moderating effects these measures might have in the short-term. During normal times, views on the costs and benefits of such measures to the financial sector and to the wider economy may be widely divergent. This is compounded by the fact that the immediate costs of macroprudential policy measures are highly visible while the effectiveness of such policies may only be observed over the medium and longer term. Even then, the lack of clear evidence in the absence of financial instability or crises often brings into question the necessity of such measures. Given the wide-ranging implications of such measures, affected parties may be prompted to attempt to influence the decision-making process. As the causes of financial instability and the necessary policy responses have yet to be fully appreciated, a bias in favor of delayed action can often prevail. Insulating the financial stability authorities from pressures by the market, industry or lobby groups is therefore important to maintain credibility and support for the effective implementation of financial stability policies.

The issue of independence is also particularly contentious when frameworks for holding central banks accountable for financial stability have yet to be fully developed. These issues are not, however, insurmountable. The elements of governance that have been discussed in the earlier parts of this paper provide the essential underpinnings for a strong foundation for central bank independence in performing its role in safeguarding financial stability. Having clarity on the central bank's mandate for financial stability, with clear goals and the necessary powers supporting that mandate, is a key element that needs to be in place if independence is to be gained. The combination of clarity of the mandate reinforced by the necessary powers allows the central bank to be judged on whether the actions taken to achieve the stated goals were appropriate and whether in fact, they yielded the desired results.

For most central banks, the autonomy and independence for the mandate for monetary stability is conferred in the legislation whereby the law clearly defines the goals and objectives of the mandate, as well as the rules by which these goals are achieved, thereby providing a strong link between the monetary stability mandate and the corresponding powers to achieve the mandate. As noted in the earlier part of this paper, there have been recent moves to legislate the financial stability mandate in a similar manner to give clarity to the mandate in the law. In doing so, it provides clarity on the expectations of the central bank and the objectives for which it will be held accountable, without which it would be difficult to accord independence to central banks for the financial stability mandate.

A further important element supporting the independence and autonomy of the central bank with respect to the financial stability function is the oversight arrangements over the performance of the central bank in achieving the goals of the financial stability mandate. This includes a robust decision-making process and increased transparency in how the central bank manages financial stability, thereby ensuring that effective checks and balances are in place. As discussed in the earlier parts of this paper, such oversight arrangements have ranged from central bank boards to parliamentary committees that provide oversight to varying degrees in keeping under constant review the performance of central banks in achieving their objective of financial stability, and ensuring the responsible use of its powers and resources for this purpose. This ensures that decisions of the central bank are aligned to its mandated role and mitigates the risk of a misuse of powers and improper conduct by the central bank.

Ensuring independence throughout the stages of the economic cycle will also require sound structures and arrangements to manage conflicts between the financial stability and the other mandates of the central bank; appropriate mechanisms to escalate the decision-making process to wider stakeholders; effective channels for engagement across relevant authorities involved in financial stability; and having more developed frameworks for effective financial stability communications. These arrangements are even more important for emerging economies where the mandate for central banks is also broader including having a developmental role that may require extensive coordination with the government and other relevant agencies.²⁸

The pursuit of central bank independence in managing financial stability is confronted with two main challenges. The first concerns the growing demand for greater transparency through prior consultation on the financial stability measures, while managing the implications that such consultation can sometimes have on the intended effects of financial stability measures. Consultations are clearly desirable when the objective is to generate wider debate and dialogue that will help to clarify proposed policies, prepare industry for their implementation and to gauge their likely impact and costs in advance. However, in crisis-related situations, or when conditions exist which give rise to systemic concerns affecting the functioning of the financial intermediation process or the orderly functioning of the financial markets, the speed of action required may not allow for advance consultations to take place. Under these circumstances, a robust decision-making process, clear communications on the central bank's assessments of financial stability risks, and the release of information and further explanations on the decisions after the fact, would lend support for trust and confidence in the central bank, and respect for its independence.

The second challenge concerns the need for central banks to coordinate with other regulators and agencies, including the government, while avoiding compromised actions that can undermine the objectives of the financial stability mandate. Central banks from different parts of the world have addressed this need for coordination by establishing various inter-agency committees and councils with different governance arrangements having different implications for the central bank's autonomy and

independence. Given that the need for coordination is particularly important in the management of a financial crisis, it has been suggested that a distinction be made between normal and crisis times.²⁹ It is suggested that independence during a crisis “*is neither possible nor desirable*” but that in the post crisis period the central bank should then “*re-establish its independence.*” It is well recognised that someone has to take the lead during a crisis in making key decisions – whether it is to provide emergency liquidity or to nationalise or close down an institution. The issue is then whether this decision should more appropriately be taken by an elected official given that it may involve taxpayer monies and have wider implications for public interests at large.

While there is a general consensus on the need for greater engagement and on the need to leverage on information and assessments from other relevant authorities, there have been differences concerning the lead authority for this process. Alternative arrangements exist with respect to the establishment of coordinating committees and councils for this purpose. In the US, the Secretary of the Treasury chairs the Financial Stability Oversight Council, while in Australia, the Governor chairs the coordinating council.³⁰ In the more complex conditions during a crisis, clarity on the objectives to be achieved and the explicit governance arrangements for the decision-making process (thus ensuring accountability), provide the basis for the independence of the central bank even during a financial crisis. Particularly when the central bank also has the responsibility for the regulatory and supervisory oversight function in addition to the lender of last resort function, the central bank is relied upon to take into consideration all factors from the different parts of the financial system to support its assessment of the financial stability conditions and to make decisions that would be in the best interest of the nation. Frequently, institutional arrangements for this purpose are endorsed by legislation and provide the parameters and conditions under which the actions can be taken.³¹

Collectively, the accountability, oversight and decision-making arrangements are elements that provide the foundations for autonomy and independence in the central bank’s mandate for financial stability. Central bank independence can thus be preserved with the right arrangements in place to ensure accountability. Given the conditional nature of this independence and its relation to governance and accountability, the level of central bank independence with respect to its financial stability mandate will continue to evolve over time.

10. Institutional Capability for the Financial Stability Mandate

To maximise the effectiveness of the central bank in performing its financial stability mandate, it will also need to be supported by a reinforcement of its institutional capability. This is to enable the central bank to be well equipped to deliver the key outcomes under the financial stability mandate. Recognising the changing contours of the financial landscape both at the national and international levels, this institutional capability needs to be periodically reviewed to ensure its continued relevance and effectiveness. This has not only prompted central banks to review the structure, frameworks and governance practices for the central bank’s financial stability mandate

but, as noted earlier in this paper, to also redesign its internal structures and approaches and to accord increased resources towards strengthening their financial stability capability.

The main areas of focus have been to strengthen the surveillance capabilities of the central bank, taking into account domestic and international developments that will have implications on financial stability; to improve the early detection of risks and vulnerabilities including the channels of contagion through which risks are transmitted; to strengthen the formulation of micro- and macroprudential policies; and to enhance capabilities in the area of crisis management and resolution. Greater liberalisation and the globalisation of finance and the resulting increased international interconnectedness of financial systems have further increased demands for central banks to develop new capabilities for supporting a more comprehensive approach to surveillance and policy formulation that takes into account perspectives beyond domestic considerations, and to have the ability to perform constructively in a more integrated approach to crisis management that involves other financial systems. In the more recent times, there has also been an increasing focus on market conduct and consumer protection. In emerging economies, the further development of the financial system has also been given important attention given its significance in supporting the financial stability mandate.

The internal institutional capacity of central banks to deliver the financial stability mandate must also critically include the ability to leverage on new technologies, and having the right talent in place, including at the senior leadership levels. Given that the economic and financial landscape is being dramatically transformed to become more complex with increased uncertainties, central banks will need to critically review their existing internal capability which may no longer be sufficient for the continued effectiveness of the institution. The central bank's talent pool needs to have new skill sets and competencies around integrated analytical thinking, complex problem solving under multiple scenarios and the ability to make sound judgments and manage wide-ranging tradeoffs. The nature of the financial stability mandate also requires central bankers to be able to work collaboratively, and manage complex relationships with significantly enhanced communication skills. In most emerging economies, talent with these new capabilities is in short supply. Central banks are also confronted with competition from the industry and from other parts of the world for talent with these similar skills and competencies. In addressing these challenges, central banks require comprehensive frameworks for managing human capital that are targeted and more focused on building these new capabilities across the dimensions of recruitment, progression, capacity development, retention and rewards at all levels of the organisation.

The financial stability mandate will also need to be supported by high quality data and information. The data sources need to be significantly broadened to take into account the changing financial landscape and to consider the adequacy of the systematic risk indicators that are being monitored. There is also a need to strengthen the research and analytical functions of the central bank and continuously improve the application

of models used for stress testing, risk management and assessments of conditions in the financial system under a wide range of scenarios. The use of multi-disciplinary teams that can collaborate effectively to aggregate and interpret different types of information – financial and non-financial, macro and micro, quantitative and qualitative – will become more important, requiring new skills to combine assessments in an integrated manner and potentially covering areas that are not traditionally associated with central banking. Flows of information within the central bank will increasingly need to leverage on multiple sources of information with clear paths for information to be shared horizontally across microprudential, macroprudential and macroeconomic functions of the bank, and to be escalated vertically for the deliberation of issues and decision-making by management. In preserving the confidentiality of information shared, particularly market-sensitive information, central bank practices have ranged from allowing relatively free flows of information across functions within the central bank, to practices that enforce strict restrictions on access to only the highest levels of the organisation.

Achieving the requisite level of institutional capability to effectively discharge the financial stability mandate in the more challenging environment is a significant undertaking for any individual central bank. For this reason, central banks in the different regions in the world have pooled efforts, resources, and expertise for their mutual benefit to enhance their organisational capability. In the Asian region, this has been facilitated through platforms such as The SEACEN Centre which has had an important role in advancing research and talent development initiatives for the region, focusing in particular on supporting the financial stability mandates of its member central banks.

11. The Role of The SEACEN Centre

The SEACEN Centre was formally established in 1979 by a number of central banks in the Asian region to provide a platform for the exchange and sharing of information to facilitate greater cooperation in the area of central banking. The year 2013 marks 31 years of The SEACEN Centre's existence and contribution to central banking development since its incorporation as a legal entity in 1982. Its central bank membership has now increased from eight members to 19, also including among its members the three central banks of the large economies in Asia, comprising Bank of Korea (1990), People's Bank of China (2011) and Reserve Bank of India (2013).

From its initial years, the programmes of The SEACEN Centre were already focused on supporting the financial stability mandate. The Centre's flagship Financial Stability and Banking Supervision programmes have now trained more than 3,000 participants. Since 1987, The SEACEN Centre has also held annual meetings for the directors of supervision which have fostered the broad exchange of information and sharing of experiences that have contributed towards building stronger financial systems in the region. The first annual meeting of the Deputy Governors in-charge of financial stability and banking supervision was convened in 2010 to discuss issues and matters related to financial stability. Through these meetings, arrangements for

greater cooperation and collaboration in the area of financial stability have also been strengthened. In the more recent years, the Centre has partnered with the Financial Stability Institute of the BIS and the Toronto Centre for Leadership in Supervision to further enhance the capacity building programs offered to central banks in the area of financial stability.

With over 30 years of history in serving the central banks in the Asia-Pacific region through its learning programmes, research work, and networking and collaboration platforms for capability building in central banking, The SEACEN Centre is well placed to support the capacity of central banks in delivering their financial stability mandate. Recent and upcoming initiatives by The SEACEN Centre underscore the potential for the Centre in fostering thought leadership in financial stability. This includes the publication of the SEACEN Financial Stability Journal and the proposed establishment of a Policy Working Paper series that will generate high-quality research and build a strong knowledge base in financial stability issues within the context of the Asia-Pacific region; as well as the proposal to set up the SEACEN Supervisory Issues Discussion Room, an interactive web-based platform that will serve as a forum for supervisors in the region to deliberate on policies and challenges of central banks in safeguarding financial stability.

The SEACEN Centre's efforts additionally include conferences and training on current issues in financial stability to provide further avenues for the sharing of central bank experiences across the region and the development and implementation of capacity building programmes which are more tailored to specific needs and issues faced in individual economies. These initiatives have been reinforced with the establishment of the SEACEN Advisory Group for Banking Supervision and Financial Stability in 2009 to provide specific feedback on the Centre's various learning and development initiatives. An outcome of this process has been the introduction of a comprehensive banking risk curriculum covering credit, market, operational and liquidity risks.

Over the years, The SEACEN Centre has also undertaken a series of collaborative research projects in the financial stability area among member central banks, including on strengthening financial stability indicators in an environment of rapid financial innovation and addressing the changing nature of risks in promoting financial stability. A signature research project for 2013 will focus on the theme of the SEACEN 30th Anniversary Conference which is 'Greater Financial Integration and Financial Stability.' These projects provide a platform for international academics, policymakers and industry leaders to provide thought leadership on contemporary financial stability issues and developments. Case studies have also been developed in the areas of assessing systemic financial market infrastructure and on the challenges and opportunities in implementing Basel III, while simulations on crisis management have been jointly conducted with the Toronto Centre.

Given the rapid pace of financial integration in Asia, in particular, among the ASEAN region and ASEAN+3, which will involve further financial liberalisation,

more interconnected financial market infrastructures and increased cross-border trade and financial flows, there is an even greater role for The SEACEN Centre to contribute towards the strengthening of the institutional capability of the central banks to deliver their financial stability mandate and to foster greater regional cooperation and collaboration among central banks in the Asia-Pacific region.

12. Conclusion

The events of the global financial crisis have prompted a fundamental re-thinking of financial stability frameworks. Central banks around the world are being confronted with issues that arise from a significantly expanded role in financial stability. This role has also become more contentious in several respects, notably in relation to the potential conflicts that arise with the central bank's monetary policy mandate and the more extensive powers for financial stability accorded to central banks. Important steps are being taken to provide greater clarity around the central bank's financial stability mandate and to identify the range of attendant powers required for central banks to deliver that mandate. In a more complex financial world, financial stability powers are necessarily wide, raising important questions around how decisions on the use of these powers are made, and how to hold central banks properly accountable. Defining financial stability goals more clearly is an important starting point. This is reinforced through varying arrangements that exist across central banks to achieve better coordination, decision-making and accountability. These arrangements also provide the basis for securing an appropriate degree of independence of central banks with respect to the financial stability mandate.

In meeting the challenges associated with the financial stability mandate, central banks must continue to invest in strengthening their institutional capability. New skills will need to be developed, and existing frameworks, structures, tools and processes will need to be continuously enhanced. The task is a challenging one for any individual central bank and opportunities should be leveraged to pool resources and efforts among central banks to strengthen their individual and collective capacity to effectively deliver the financial stability mandate and in the process, contribute towards preserving financial stability in the region.

Zeti Akhtar Aziz is the Governor of Bank Negara Malaysia since 2000. She has had an important role in the successful transformation of the financial system in Malaysia including overseeing the enactment of eight new major legislation for the financial sector. Dr. Zeti is also actively involved in strengthening regional financial integration in Asia. She chaired the regional taskforce that prepared the report for future financial cooperation in the region. A founding member of the BIS Asian Consultative Group for Asia, she was also the first co-chair of the Financial Stability Board Regional Consultative Group for Asia. She has also had an important role in global development of Islamic finance. Dr. Zeti received her PhD in Economics from the University of Pennsylvania.

Endnotes

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2. See also Nier (2009).
3. Including central banks in the United Kingdom, Australia, Canada, Japan, South Korea and China.
4. Eichengreen, Prasad and Rajan (2011) argue that monetary policy should be regarded a legitimate part of the macroprudential supervisors' toolkit.
5. Especially under explicit deposit protection systems with a financial back-stop by the Government.
6. See Chant (2003), Crockett (1997), Ferguson (2002) and Mishkin (1999).
7. Speech by Benoit Coeure, Member of the Executive Board of ECB, Frankfurt, 2013.
8. During the global financial crisis, large financial institutions in the US received capital support under programmes and transactions backed by the Treasury and Federal Reserve. This included the Troubled Asset Relief Programme, the takeover of Fannie Mae and Freddie Mac, and the Maiden Lane Transactions which supported the bail-outs of Bear Stearns and the American International Group.
9. Examples include prohibitions on lending to specific non-bank institutions and the requirements for Treasury approval to extend the Federal Reserve's liquidity programmes to such institutions.
10. BIS Report on Central Bank Governance and Financial Stability (2011). The report was produced based on a study undertaken by the Central Bank Governance Group under the chairmanship of Stefan Ingves, Governor Sveriges Riksbank.
11. Position in 2009 drawn from a BIS survey published in the report on Central Bank Governance and Financial Stability (2011).
12. European Banking Authority, European Insurance and Occupational Pensions Authority and European Securities and Markets Authority.

13. Report on Central Bank Governance and Financial Stability (2011).
14. International Accounting Standards Board (IASB), Basel Committee on Banking Supervision (BCBS), International Association of Insurance Supervisors (IAIS), International Organisation of Securities Commissions (IOSCO).
15. G20 Working Group Report on “Enhancing Sound Regulation and Strengthening Transparency” published on 25 March 2009.
16. A Discussion Paper entitled Instruments of Macroprudential Policy, issued by the Bank of England in December 2011.
17. See Table 4 of this article for further details on the FSEC.
18. The 2008 supervisory reform in Austria sought, among other things, to clarify the supervisory responsibilities and optimize the communication interfaces between the Oesterreichische Nationalbank (OeNB) and the Financial Market Authority (FMA). While the FMA remains the independent integrated financial supervisory authority, OeNB assumes all operational responsibilities in respect of all on-site inspections and off-site analysis (which were formerly shared with the FMA). Under this new arrangement, OeNB is now responsible for overall risk assessment (or fact finding) while decision making functions are entrusted with the FMA.
19. Consultative Document on Countercyclical Capital Buffer Proposal issued by the Basel Committee on Banking Supervision in December 2010.
20. The moderating effect of such capital buffers on credit expansion during the build up phase was considered a “positive side effect”, helping “to lean against the build-up phase of the cycle in the first place”.
21. See Goodhart (2011).
22. Also highlighted in a report from the Central Bank Governance Group entitled Issues in the Governance of Central Banks issued by the BIS in May 2009.
23. Defined as support operations outside the Bank of England’s published frameworks, as contained in the Memorandum of Understanding on Financial Crisis Management published in December 2012.
24. Issued by the Basel Committee on Banking Supervision in October 2010.
25. Cross-border collateral arrangements are reciprocal arrangements between central banks which allow internationally-active banks to obtain liquidity abroad from host central banks by pledging home-currency denominated securities through their respective home central banks.

26. Executives' Meeting of East Asia-Pacific Central Banks.
27. As advocated in the Key Attributes of Effective Resolution Regimes for Financial Institutions issued by the Financial Stability Board (2011).
28. Also see Reddy (2011).
29. Blinder (2012).
30. Also see Table 4 of this article on SEACEN Economies with Committees for Financial Stability that include External Members.
31. An important example is legislation for resolution authority.

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