Occasional Papers No 30

AN ASSESSMENT OF THE CAUSES OF FINANCIAL INSTABILITY AND POSSIBLE POLICY SOLUTIONS

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PREFACE

The Occasional Papers No. 30, *"An Assessment of the Causes of Financial Instability and Possible Policy Solutions"* was one of the two main resource papers presented at the SEACEN Seminar on **Systemic Financial Sector Restructuring and Macroeconomic Policy in the SEACEN Countries,** which was hosted by the Central Bank of Sri Lanka and held in Colombo on 20-22 July 1999. The discussions focused on issues relating to strategies for systemic financial restructuring and the building of a robust financial sector, drawing on the experiences of some SEACEN countries, New Zealand and the Scandinavian countries.

This Paper provides an excellent summary of the main issues relating to financial stability and offers some suggestions on the policies that can be adapted to reduce the potential for systemic instability. It explains why financial stability is important to the economy and why governments need to attach high priority to the promotion of financial stability. It also shows how the instability of the financial system could be traced to the structural features of financial systems. The Paper concludes with some recommendations on the policies required to promote a robust financial system.

The SEACEN Centre wishes to thank Mr. Geof Mortlock, Senior Advisor of the Economics Department, Reserve Bank of New Zealand, for preparing this informative and well-written paper. We also gratefully acknowledge his excellent presentations and concise comments during the Seminar. Last but not least, we thank the Reserve Bank of New Zealand for making available Mr. Mortlock to speak at the Seminar.

The views expressed in this paper are those of the author and do not necessarily represent the views of the Reserve Bank of New Zealand or The SEACEN Centre.

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Officer-in-Charge

The SEACEN Centre
Kuala Lumpur
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AN ASSESSMENT OF THE CAUSES OF FINANCIAL INSTABILITY AND POSSIBLE POLICY SOLUTIONS

I. Introduction

The economic turbulence experienced in parts of Asia in the last two years is a reminder of the importance that financial systems play in the wider economy. It is also a reminder of the potential for financial systems to become unstable, and for this instability to contribute to a more general dislocation of economic activity.

Although the Asian Crisis is the most recent example of financial system distress, it is by no means the only example. Recent years have seen many examples of financial system distress of varying degrees in many different types of economies. These have included the USA, South Africa, Australia, New Zealand, Finland, Norway, Sweden, Mexico and most recently in Japan, Indonesia, Thailand, Korea and Malaysia. Although each episode of financial distress has unique characteristics, there are certain common underlying causal factors that can be detected.

This paper attempts to distil some common threads underlying financial system instability, and to reflect on the policies that can be applied to reduce the potential for future systemic instability. In particular, the paper:

- Summarises the reasons why financial stability is important to the wider economy and why governments need to attach high priority to the promotion of financial stability.

- Summarises the structural features of financial systems that make financial systems inherently vulnerable to potential instability.

- Discusses the principal causes of financial instability.

- Reflects on the policies required to promote a robust financial system.

II. Why is Financial Stability Important?

In any modern economy, the financial system plays a very important role in the wider economy. This role encompasses:

- Maturity transformation.
- A repository for household and business sector savings.
- The creation and allocation of credit, and therefore resource allocation within an economy.
- Intermediation of cross border capital flows.
- A mechanism for settling transactions and meeting payment obligations.
- A mechanism for facilitating foreign trade.
- A channel for the conduct of monetary policy.

A smooth functioning, reliable financial system is an essential underpinning to sustainable economic development and growth. Conversely, a financial system in acute distress can have serious adverse effects on the real economy, including reduced economic growth or economic contraction, an increase in unemployment, falls in real income and wealth, and the inevitable social, political and environmental consequences that flow from economic dislocation. In particular, financial instability or poorly developed financial markets can have adverse impacts on the wider economy in the following ways:

- ***Financial instability can weaken the ability of the banking system to make credit available.*** A banking system weakened by loan losses and with a low level of capital will face major constraints in making credit available to borrowers. This, coupled with the extreme caution often adopted by bankers in the aftermath of a crisis, can make it very difficult for borrowers, however credit worthy they may be, to obtain funds, both during and after a banking crisis. This in turn can weaken the ability of the real economy to recover and resume a growth path.

- ***Skewed allocation of credit.*** When banks are under capitalised and their profitability is sliding, they can be tempted to increase profit by biasing their lending to more profitable, but riskier, borrowers. This carries with it many risks, not least that the bank's capital position could be further eroded if the loans eventually turn bad. But it also has implications for the wider economy, by potentially skewing the allocation of credit, possibly leading to a sub-optimal resource allocation within the real economy. This, in turn, can weaken economic growth prospects.

- ***Migration of funds from the banking system.*** If a banking system is prone to financial instability, depositors and other creditors will have incentives to avoid placing their funds with banks – they may horde funds at home or divert their savings into other assets. This can impose significant costs on the real economy, by reducing the availability of capital to borrowers, reducing the efficiency of the intermediation process and diverting capital into less productive assets.

- ***Capital account and exchange rate volatility.*** Financial instability is not a recipe for overseas investor confidence. Understandably, overseas investors become nervous when a country's financial system becomes unstable, encouraging them to withdraw capital and to become reluctant to re-enter the market. This can lead to liquidity pressures in the domestic economy, downwards pressures on asset prices and potentially a sharp fall in the exchange rate, with attendant costs for the real economy.

- ***Inefficient intermediation of capital flows.*** A poorly developed financial system, where credit management skills are inadequately developed, can result in an inefficient intermediation of cross border capital flows, leading to poor resource allocation, lower long term growth, and potentially sowing the seeds for future lending losses within the financial sector.

- ***Financial instability can impede the functioning of payments systems.*** In episodes of severe financial distress, the payments system can become dysfunctional. This may be as a result of the failure of one or more large financial institutions, or it can result from technical breakdowns in the payments system itself. In either case, if the dysfunction is protracted and widespread, this can

impede the ability of firms and individuals to conduct business and meet their financial obligations, both in the domestic market and in the foreign exchange market. If sufficiently severe, this may have an adverse effect on economic growth and trade.

- ***Financial instability can contribute to or exacerbate declines in asset prices.*** Severe episodes of financial instability can result in declines in real incomes and wealth as a result of banks' non-performing assets being wound up or otherwise disposed of. The process of dealing with non-performing assets can create a "buyer's market", by sharply increasing the supply of assets on the market, often in the face of weakened demand, and by adversely affecting the psychology of asset price markets. Declines in real wealth and incomes can have significant consequences for the wider economy, by reducing investment and consumption expenditure and sapping business confidence.

- ***Fiscal costs of rescuing banks.*** The fiscal costs of rescuing or restructuring failed banks can be large. Sometimes much of the initial fiscal cost can be recovered by a careful management of non-performing loans, as was the case with Scandinavia. But there is usually a substantial element of "dead money", representing a permanent loss to the taxpayer. Fiscal costs can have serious longer-term consequences for the economy, by taking resources from potentially more productive sectors (via increases in taxation or reducing the scope for tax cuts) and by increasing the level of real interest rates.

The importance of financial system stability for economic development and growth, and for international trade, clearly suggests the need for the adoption of policies to promote robust and efficient financial markets.

III. The Inherent Vulnerability of Financial Systems

In considering the causes of financial instability, it is helpful to remember that financial systems are by their nature vulnerable to instability. A number of structural features of financial systems create the potential for fragility:

- Financial institutions tend to be highly leveraged, operating on a thin base of capital. This makes them vulnerable to insolvency in the event of significant levels of loan losses or other economic losses.

- Financial institutions tend to have a large mismatch between the maturity of their assets (which are generally of medium term maturity) and their liabilities (which tend to be of relatively short maturity). This makes them vulnerable to liquidity pressures. It can also expose them to significant interest rate risk.

- Financial institutions are complex organisations, facing a complicated array of risks, including credit risk, interest rate risk, exchange rate risk, operations risk, legal risks and exposure concentration risks. Managing all of these risks adequately is not an easy task, particularly in a world of global capital mobility and increasing financial complexity. There is always the potential for things to go wrong.

- Financial institutions, by the nature of their business, tend to have large exposures to one another, through payments system obligations, correspondent banking relationships and other inter-banking arrangements. Although some of these exposures are manageable, the nature of banking business inevitably exposes financial institutions to a high risk of contagion.

- In a financial crisis, depositors and other creditors of financial institutions do not always have the skills, information or inclination to distinguish between "safe" institutions and those that may be in financial difficulty. This can lead to a generalised run on the financial system, exposing even the more prudentially sound financial institutions to severe liquidity, and potentially solvency, pressures.

It is therefore important to appreciate the inherent fragility of financial systems. As discussed later in this paper, many of the policies required to promote a more robust financial system involve reducing the elements of fragility inherent in existing financial structures.

IV. Factors Contributing to Financial Instability

Although each episode of financial distress has its own unique causes, many examples of distress can be attributed to a combination of factors, including:

- The effects of inappropriate economic policy and structural economic imbalances.
- Structural features of the financial system, including its ownership arrangements.
- Inadequacies in financial sector regulation.
- Poor risk management within financial institutions, partly as a result of inadequate disclosure and corporate governance arrangements.
- A weakening of market disciplines on banks and other financial institutions, often as a result of government policies, such as deposit insurance, lender of last resort and bank rescue policies.

This section of the paper discusses the principal factors contributing to financial instability.

1. Monetary policy

In some episodes of financial distress, loose or overly accommodating monetary policy has played a part in triggering or exacerbating financial stress, by facilitating an excessive rate of asset price inflation. Although asset price inflation is caused by a number of factors, not least the effects of strong capital inflows and inadequate investment and lending decisions, an excessively accommodating monetary policy is often a significant contributory factor. This tends to be the case where monetary policy is insufficiently focused on the pursuit of price stability – for example, where monetary policy is burdened with conflicting macroeconomic objectives or where a lack of central bank independence impedes the implementation or maintenance of appropriate monetary policy settings.

History demonstrates that, after a period of excessive asset price inflation, asset prices eventually fall to more sustainable levels. Where this occurs gradually, and lending decisions by financial institutions have been based on a prudent assessment of risks, the risk of asset price deflation to the financial system might not be sufficient to cause instability. But where there is a sudden and severe correction of asset prices, this can result in banks, among others, sustaining large losses, particularly where banks had lent incautiously on the basis of inflated collateral values. The risk of loan losses is particularly high when the decline in asset prices occurs in association with a reduction in real economic activity and incomes – i.e., when borrowers are facing difficulties in servicing their debts. The sudden collapse of asset prices, if severe, is likely to have a material effect on the ability of borrowers to service their debt obligations, given that rapidly falling asset prices could be expected to weaken investor and consumer confidence, dampen investment and consumption expenditure and weaken real incomes, and therefore debt servicing capacity.

2. High interest rates

Another factor underlying some periods of financial instability has been the effect of high real or nominal interest rates. High interest rates, particularly real interest rates, can increase the risk of loan losses by increasing the debt servicing costs of borrowers and by dampening economic activity. High levels of interest rates can also lead to adverse selection, whereby borrowers with riskier business ventures are better placed to seek credit than are borrowers with more conservative cashflow prospects. In the absence of suitably cautious lending practices by banks, adverse selection can result in banks lending a greater proportion of their loan book to higher risk borrowers than would have been the case in a lower real interest rate environment. In a situation where disinflation is accompanied by falling asset prices and weakening domestic demand conditions, high real interest rates can significantly increase a bank's loan losses, and in so doing, threaten its capital base.

High real interest rates are typically associated with disinflationary periods, for example where monetary policy is tightened to combat sharp exchange rate depreciation or other inflationary pressures, and where monetary policy is not adequately supported by complementary economic policies, particularly fiscal policy. The defence of a pegged exchange rate can also give rise to high real interest rates, particularly

where the market has formed the view that the exchange rate is unlikely to be sustainable.

3. Volatile foreign capital flows

Large swings in foreign capital flows have also played a significant role in contributing to financial instability. This was a significant factor in the Asian Crisis, where large capital inflows contributed to an overheating of some asset markets, sowing the seeds for subsequent loan losses. Equally, when market sentiment changes and capital inflows suddenly reverse, this can pose serious problems for financial system stability, as we have seen in Asia and elsewhere. Large and sudden capital outflows can put the financial system under acute liquidity pressure, forcing banks to liquidate assets, often at considerable expense. This in turn can weaken asset prices, at the very time when this is least welcome. Potentially, liquidity problems can become insolvency problems.

Rapid capital outflows also pose risks for exchange rates and price stability. Capital flight places pegged exchange rates under pressure. If capital outflows are particularly large, maintaining a fixed peg may be unsustainable, as proved to be the case in some Asian economies during 1997/98, resulting in severe exchange rate depreciation. This creates pressure on the financial system to the extent that banks and those borrowing from them have large unhedged foreign currency obligations. As a result, bank solvency is threatened by the bank's own foreign currency losses and by losses on its exposure to counterparties rendered insolvent by the collapse in the currency. In addition, bank solvency is threatened by second round effects, such as the effects that inflation – fueled by currency devaluation – and corrective policies, such as a tightening of monetary conditions, can have on real incomes and expenditure, and hence on the ability of bank customers to service their debts.

4. Inappropriate sequencing of financial and economic reforms

An important cause of financial distress in some countries has been inadequacies in the sequencing of macroeconomic and microeconomic reforms, particularly the liberalisation of a country's capital account and financial sector before fundamental domestic reforms have been adequately implemented. Capital account liberalisation, particularly of

short-term capital flows, and deregulation of the financial sector, can create the conditions for financial and economic instability where these reforms are not preceded by measures to create a robust financial system. A financial system that is not adequately supervised and not subject to robust disclosure and corporate governance arrangements, and where credit disciplines and intermediation skills have been poorly developed, will generally be ill equipped to cope in a deregulated financial and capital environment. As a result, there is a high risk that capital flows will be poorly intermediated, resulting in sub-optimal, and possibly destabilising, resource allocation.

It is now being appreciated that there are dangers in liberalising a country's capital account, and in deregulating the wider economy, before some basic underpinnings for financial stability have been put in place – such as appropriate monetary and fiscal policy, an adequate system of prudential regulation and banking supervision, sound corporate governance arrangements, and so forth. In the absence of these critical underpinnings, a country's financial sector will be vulnerable to financial instability during and after the liberalisation process.

5. Insufficient economic reform

Although rapid liberalisation, unsupported by moves to strengthen financial sector risk management and economic governance arrangements, has been a significant factor in causing financial instability, it is also true that insufficient economic reform has contributed to periods of financial instability in some cases. For example, excessive and inconsistent regulation of industries, industry subsidies, inadequate market contestability and regulatory distortions to the pricing of goods and services, including financial services, have been significant factors in restraining economic growth, distorting resource allocation and weakening the real economy in various countries, contributing to financial instability. This is particularly so where banks have lent to protected industries, only to subsequently discover that the removal of industry protection and economic restructuring renders the industries in question, or at least some companies within them, uneconomic.

6. Directed lending and lending to related parties

A common feature underlying episodes of financial instability, particularly in economies in transition, is the incidence of directed

lending and lending to related parties. Directed lending and related party lending can take a number of forms, including directors of a bank exercising inappropriate influence on management, such that loans are made available to companies with which the directors or the owners of the bank are associated. It tends to arise as a result of banks being owned by governments or large corporations, where the owners are in a position to direct or encourage the bank to make loans available to parties associated with the owner. In the case of government-owned banks, directed lending may arise as a result of the government wishing to make credit available to particular industries or companies for economic development purposes.

Whatever form directed or related party lending may take, there is a considerable risk that loans will be made outside of the normal credit decision-making process. As a result, loan proposals may receive less objective and rigorous scrutiny than would otherwise be the case, potentially exposing the bank in question to a higher risk of loan loss.

Directed lending and lending to related parties has arisen in various episodes of financial system distress over recent years, but is most often associated with countries which have inadequate corporate governance arrangements, inadequate prudential regulation and banking supervision, and inadequate financial transparency arrangements. These elements are discussed below.

7. Inadequate corporate governance arrangements

Inadequate corporate governance has been a factor underlying a number of financial distress episodes over recent decades, particularly in the case of economies in transition. In this context, corporate governance refers to the rules of law applicable to the way corporations, including financial institutions, are governed, and to the accountability of directors and management. In some countries, there have been significant deficiencies in the legal rules, and/or the enforcement of rules, relating to:

- The duties of company directors.
- The obligations of directors and senior management to satisfy themselves that their company's business risks are being adequately identified, monitored and managed.

- Penalties for breach of directors' duties.

- The requirements for directors to provide accurate and timely information on the state of the company's financial position and performance.

- The desirability of having some independent, non-executive directors on the board of a company.

- Transparency arrangements applicable to directed lending and lending to related parties.

- A requirement for an external audit of the company's financial statements, and for that audit to be performed by an independent auditor.

Inadequacies in these types of requirements can contribute to financial instability in at least two ways. In a direct sense, inadequate corporate governance in banks and other financial institutions can lead to imprudent lending and impede the effective management of risks. In a less direct sense, inadequacies in corporate governance arrangements in the corporate sector can increase the riskiness of companies, reduce the effectiveness of their management and make it difficult for lenders to make prudent lending decisions.

8. Lack of adequate financial transparency

Inadequate financial transparency has also been a significant contributor to financial instability. Inadequacies have included:

- Deficiencies in domestic accounting standards, particularly with respect to the measurement of credit exposures (including whether exposures should be measured at fair value or historic value), the treatment of unrealised losses, the treatment of off-balance sheet exposures, the measurement of non-performing loans and the determination of provisioning.

- Inadequacies in external audit arrangements. These include insufficiently developed auditing standards, lack of independence of auditors, sometimes a lack of frequency of audit, and in some cases inadequate disciplines on auditors.

- Insufficient accountability on the part of bank directors and senior management for the veracity and comprehensiveness of their bank's financial statements, and a lack of appropriate penalties and enforcement of penalties for breaches of disclosure requirements.

- Insufficiently specified financial disclosures for banks. Although accounting standards should provide the broad framework for measuring and presenting financial information, they are usually pitched at a general level, given their relatively broad application. What is often needed therefore is a more specific set of disclosure requirements aimed specifically at banks and other financial institutions.

A lack of robust financial transparency arrangements can increase the risk of financial distress by reducing the accountability of bank directors and senior management for the management of risks and thereby reducing the incentives for maintaining sound risk management practices. Inadequate financial transparency also reduces the ability of creditors and other market participants to make well informed assessments of the risk profile of a bank or other financial institution, and therefore reduces the market's ability to exercise appropriate disciplines on financial institutions via pricing and credit allocation decisions. Inadequate disclosure can also increase the risk of herd behaviour in financial markets.

In addition, a lack of adequate financial disclosure also reduces the ability of ordinary depositors to make intelligent assessments as to where they should place their funds. As a result, depositors may have a stronger basis for expecting governments to insulate them from losses resulting from a bank failure, and governments are in a weaker position to resist depositors' demands for insulation from losses. And inadequate disclosure by banks can also increase the likelihood of bank runs in times of financial distress.

In a less direct sense, lack of disclosure standards in the non-bank corporate sector can also have a deleterious effect on financial stability, by reducing the reliability of companies' financial information, including management accounts. As a result, financial institutions face additional difficulties in making sound credit decisions when assessing whether to make funds available to corporate borrowers and in monitoring the financial performance of borrowers.

9. Inadequate prudential regulation and banking supervision

One of the important factors underlying some episodes of financial distress has been an inadequacy in prudential regulation and banking supervision arrangements. Deficiencies in these arrangements will obviously vary from country to country, but can include:

- Inadequate minimum capital requirements for banks and other systemically important financial institutions.
- Insufficient monitoring and/or regulation of banks' exposure concentration, particularly to individual companies or groups of associated companies, and to particular economic sectors, such as the commercial property sector.
- Insufficient monitoring and regulation of related party exposures.
- Inadequate assessment of a bank's risk management systems and internal controls.
- Insufficient attention being given to the level of a bank's exposure to other banks, and therefore contagion risk.

One of the ingredients required for financial stability is an appropriate set of supervisory arrangements for the financial system. The precise nature of these arrangements (such as breadth of the regulatory net, the level of regulation required and the intensity of the supervision process) will depend on a number of factors, including the policy objectives of the government (e.g., depositor protection versus systemic stability), adequacy of corporate governance and transparency arrangements, the ownership structure of the banking system, the broader economic governance arrangements applicable to the country in question and a range of other legal and institutional considerations. Although there are clearly risks associated with inadequate supervisory arrangements, there are also risks associated with excessive prudential regulation and supervision. Therefore, there is a need to get the balance "right", by ensuring that the other ingredients needed for financial stability are also established.

10. Ownership of banks

The nature of the ownership of banks and other financial institutions has also contributed to episodes of financial system instability, particularly government ownership and ownership by large corporations.

One of the difficulties sometimes associated with government ownership of banks is inadequate corporate governance, including poorly qualified directors with little or no experience in banking or finance, inadequacies in internal controls and risk management systems, insufficient accountability of management to the board, and insufficient scrutiny of the performance of the bank and its directors and senior management by the government as owner. Government ownership can also give rise to conflicts of interest, such as where a government directs or encourages a state-owned bank to lend to particular sectors or on particular projects, regardless of whether this would be in the prudential interests of the bank. In addition, government ownership of banks carries with it a risk of an implied government guarantee, thereby reducing market disciplines and encouraging a weaker management of banking risks.

Corporate ownership of banks can also prove to be a source of banking risk, particularly if one corporation or group of companies has a controlling interest in the bank. Again, this can arise as a result of inadequacies in corporate governance arrangements, similar to those in the case of government ownership. But probably the greatest problem associated with banks controlled by a non-bank corporation is one of related party lending, where the bank is directed or encouraged to lend to the parent company or associated companies, often to the ultimate detriment of the bank.

As discussed later in this paper, one of the ingredients for promoting greater financial system stability lies in the reform of bank ownership structures.

11. Moral hazard

One of the important factors underlying many episodes of financial instability has been moral hazard and inadequate market disciplines on banks. Moral hazard – the tendency for the management of banks to

indulge in risk preferent behaviour as a result of inadequate market disciplines and insulation from risk – can arise in a number of ways, depending on the way financial regulation is structured. For example, deposit insurance, particularly if it is not adequately capped and priced on the basis of perceived risk, can give rise to moral hazard, potentially resulting in banks taking on greater risks than they otherwise would. Deposit insurance also reduces the incentives for depositors to monitor banks and to exercise appropriate disciplines on poorly performing banks, thereby reducing the incentives for banks to manage risks effectively. Even where there is no formal deposit insurance, an implied government guarantee can give rise to moral hazard and reduce the effectiveness of market disciplines on banks. This arises, for example, where a government rescue or restructuring of a bank leaves depositors and other creditors of a bank insulated from losses or where there is a long term market expectation that banks in difficulty will be rescued.

An important ingredient in promoting the longer-term stability of financial systems lies in the reduction of moral hazard and the sharpening of market disciplines on banks.

V. Suggested Policies to Reduce the Risk of Financial Instability

Before setting out some specific thoughts on the policies that can assist in reducing financial instability, some broad principles are worth highlighting:

- ***Financial distress cannot be eliminated.*** It is important to remember that it is not possible to eliminate financial risks. Risks can be managed and limited, but they cannot be eliminated. And it is not desirable to try to do so. For not only will such efforts be bound to fail, but any attempt to eliminate financial risks will result in an excessive degree of regulation, at the cost of reducing financial innovation, creating excessive compliance costs, and creating regulatory distortions to economic behaviour – all to the detriment of longer term growth. The most that can sensibly be achieved is a reduction in the probability of financial distress and an increase in a financial system's ability to withstand and recover from economic shocks. Moreover, it is important to recognise that bank failures are not necessarily injurious to the financial system or wider economy. Provided that bank failures do not threaten

financial stability and are not excessively frequent, they can play a helpful role in promoting longer term financial stability – by reinforcing market disciplines and encouraging survivor banks to manage their risks more prudently – provided that shareholders and creditors (including depositors) bear their fair share of the losses, and that management and directors of failed banks bear the consequences of poor management decisions.

- ***A balanced policy response is needed.*** Placing excessive reliance on any single policy response is unlikely to produce the desired results. Prudential regulation and banking supervision, alone, is very unlikely to deliver financial system stability. Equally, relying solely on disclosure and market disciplines will generally not be sufficient. What is needed is a sensible and credible balance of mutually supportive policies.

- ***No rigid templates.*** Although international standards, such as those being developed by the Basle Committee on Banking Supervision, can play a helpful role, there are no satisfactory rigid templates of the "right" policies for promoting systemic stability. The nature of the policies, and the combinations thereof, will vary from country to country, depending on a number of factors, including market structure, policy objectives, institutional and legal arrangements, extent of sophistication of market participants and so forth. Therefore, a "one size fits all" approach should be avoided.

- ***Do not look for global solutions – the answers lie at home.*** In the debate on financial instability, much attention has been given to the so-called "global financial architecture". Some ambitious proposals have been put forward. Although there is undoubtedly merit in reforming aspects of global financial arrangements, there should be no illusion that global financial architecture will provide the main solutions to financial instability. The main solutions do not lie in international financial architecture per se. They lie in incremental, practical reforms at a national level – both at a macroeconomic level and in terms of microeconomic and regulatory reform. And the solutions require political commitment – to see the reforms through to a satisfactory completion.

With these principles in mind, a number of policy responses can be identified to assist in strengthening financial markets. The key ingredients include:

- Creating the conditions for financial stability through sound, sustainable and credible macroeconomic and microeconomic policies.

- Ensuring that financial sector and capital account liberalisation are preceded by appropriate economic and financial reforms, including policies to strengthen financial markets and create efficient intermediation and credit risk management capacity within the financial system.

- Encouraging a contestable and more competitive financial system, by allowing the entry of foreign banks of appropriate quality and by reducing barriers to competition within the financial sector.

- Ensuring that there is an adequate degree of regulatory oversight over the financial system – but not taking regulation to the point where the regulators take responsibility for managing banking risks, and where regulation imposes severe compliance costs and unintended regulatory distortions.

- Strengthening market disciplines on banks, including through the ownership structure of banks, enhanced financial disclosure and reduced government underwriting of banks' liabilities.

- Encouraging better risk management by banks, including through enhanced disclosure and stronger corporate governance.

- Developing techniques for responding to financial system distress – in ways that minimise dislocation to the financial system, restore confidence in the financial system and sharpen market disciplines on banks.

This section elaborates on these policy issues.

1. Sound monetary policy

Given that systemic instability is often associated with large swings in asset prices and with periods of high real interest rates, one of the

important ingredients in promoting a stable financial system is to adopt and maintain a credible and sound monetary policy. The nature of the monetary policy objectives, and the modalities of achieving them, are complex subjects and are beyond the scope of this paper. Suffice it to say that a monetary policy aimed at achieving and maintaining stability in the general level of prices can play a helpful role in promoting financial stability, by reducing volatility in asset prices, reducing the level of nominal and real interest rates, creating a more stable environment for investment decision making, and providing a basis for greater overseas and domestic confidence in the economy. However, for these benefits to be achievable, monetary policy should not be burdened with conflicting economic objectives, such as supporting the exchange rate or being required to directly achieve real economy objectives. And it needs to be supported by complementary economic policies, including fiscal policy and financial sector policies. Moreover, monetary policy is more likely to achieve price stability objectives where the central bank has a credible degree of independence in the conduct of monetary policy and where the central bank is subject to appropriate transparency and accountability arrangements.

2. Policies to reduce vulnerability to short-term capital flows

As noted earlier, foreign capital flows played a major role in the Asian Crisis. It is important that steps be taken to reduce the vulnerability of economies to the volatility of short-term capital flows.

We live in a world of increasing capital mobility and most would agree that the benefits this brings outweigh the costs. In particular, international mobility of capital reduces the cost of capital, strengthens the disciplines on policy-makers to maintain sound and credible policies, improves the efficiency of resource allocation and assists in economic development. Turning the clock back to a world of closed capital accounts is neither feasible nor desirable. But a number of measures can be taken to reduce the risks associated with short-term capital volatility:

- Adopting and maintaining sound, sustainable and credible economic policies and transparency arrangements are clearly essential prerequisites for reducing an economy's vulnerability to capital account volatility. Although robust and credible policies will not eliminate the risk of sudden capital outflows, they can be expected

to assist in reducing volatility and the propensity for herd behaviour by creating a stronger basis for creditors and investors to make intelligent investment decisions and by improving investor confidence.

- The creation of a robust financial system – with a well developed credit risk management and intermediation capacity – is clearly an essential prerequisite for reducing an economy's and its financial markets' vulnerability to capital flows. In this context it is essential that financial institutions have the incentives and capacity to manage the risks associated with cross-border capital flows, such as exchange rate risk and liquidity risk.

- The choice of exchange rate regime is also clearly an important factor in determining an economy's vulnerability to short term capital flows. Recent financial crises have demonstrated the dangers associated with pegged exchange rates – including the propensity for pegged rates to become inconsistent with economic fundamentals, the risk of currency speculation and the fiscal costs of holding the peg in the face of sudden capital outflows. Another danger is that pegged exchange rates reduce the incentives for financial institutions and corporate entities to hedge against foreign exchange risk, with predictable consequences in the event that the peg proves to be unsustainable. For these reasons, a new orthodoxy seems to be emerging on exchange rate policy. This thinking suggests that currencies should either be firmly anchored (for example, by way of a currency board arrangement) so that markets have confidence that the rate will be maintained, or that more flexible exchange rate regimes should be adopted.

  Although the choice of exchange rate regime will necessarily depend on a range of institutional, political and economic factors, there are some advantages in countries adopting more flexible exchange rate regimes. These include promoting greater scope to pursue an independent, well focused monetary policy, reducing the risks of market manipulation, reducing the fiscal costs inherent in supporting fixed rates and sharpening the incentives for exchange rate risk hedging by government and private sector entities. When banks and corporates know that the exchange rate is floating, and may move in either direction, the incentive to borrow heavily overseas is sharply reduced – or at the least, the incentive

to hedge the risks associated with overseas borrowing is greatly increased. On this basis, when capital inflows become capital outflows, and the exchange rate falls, banks and corporates – and indeed governments – are much less likely to be seriously damaged.

- The imposition of controls on capital flows – particularly capital inflows – has been an approach adopted by a number of countries to reduce capital volatility, with varying degrees of success. Capital controls have the potential to assist in reducing an economy's vulnerability to sudden changes in investor sentiment, particularly as a transition measure or when financial systems are weak. However, capital controls are unlikely to be a satisfactory long-term solution. Controls are susceptible to evasion and there is a risk of them becoming less effective as market participants become more adept at evading them. This is particularly so in a market where new derivative instruments are evolving rapidly and national boundaries are becoming increasingly less relevant. Moreover, capital controls can be expensive to enforce and have the potential to create undesirable distortions to resource allocation. In some cases there is also a risk that controls on capital flows can reduce the incentives for governments to adopt and maintain sound and credible economic policies.

3. Promoting a more competitive and vibrant real economy

To a large extent, a financial system will only be as healthy as the real economy of which it is part. A real economy prone to slow growth or recession, and to structural inefficiencies, is unlikely to provide an environment conducive to financial stability. Therefore, it follows that one of the important ingredients for promoting a sound financial system in the longer term is to implement policies conducive to efficient resource allocation and sustainable growth in the real economy. This will involve a combination of policies, which will vary from country to country depending on its stage of development and structural features. But some common elements will include:

- Measures to promote the competitiveness of sectors within the economy, such as the progressive elimination of industry subsidies, the progressive removal of barriers to entry, and the promotion of a competitively neutral policy framework.

- Measures to free up the mobility of capital, labour and other factor resources from sector to sector within the economy.

- Measures to free up relative price signals, so that resources can be allocated efficiently on the basis of maximising the risk adjusted rate of return on resource inputs.

- Measures to progressively expose the economy to greater international competition, so that input costs can be reduced and resources can be allocated to those sectors with a comparative advantage.

- Measures to promote a stable macroeconomic environment, including monetary policy aimed at consistently promoting price stability, and a sustainable fiscal policy.

4. Corporate governance

A sound corporate governance structure is an essential prerequisite for the promotion of financial stability. This is necessary not only for financial institutions, but also for the broader corporate community. The key ingredients for a sound corporate governance structure will vary from country to country, depending on its legal structure and other arrangements, but common desirable features include:

- Clearly defined duties for directors, including the need for directors to act in the best interests of the company of which they are director and to not incur obligations if they believe that the company will be unable to meet those obligations.

- An appropriate set of penalties for breaches of director duties and other corporate governance requirements, and a regulatory, judicial and legal system capable of enforcing, and willing to enforce, these penalties. The authorities responsible for the enforcement of corporate governance requirements should be subject to appropriate transparency and accountability arrangements.

- Structures to require a strong degree of accountability of directors to shareholders and creditors of the company, and of management to directors.

- A requirement that the board of directors have transparent rules governing conflicts of interest and related party lending, and that board decisions in these areas be disclosed to shareholders.

- Robust financial disclosure and external auditing arrangements. Directors should be held accountable for the veracity of their company's financial disclosures.

- A structure that requires directors to be satisfied with the adequacy of their company's systems for identifying, monitoring and managing risks.

5. Financial disclosure and accounting standards

Another critical ingredient in the promotion of financial stability is the implementation of robust financial disclosure and accounting standards. Financial disclosure is essential as a means of strengthening the accountability of bank directors and senior management and enhancing the incentives for risk management. It is also essential if market participants and observers – particularly the larger creditors of banks, financial news media, financial analysts and rating agencies – are to effectively monitor the performance and soundness of financial institutions and exercise appropriate disciplines on those institutions which do not perform well or fail to meet acceptable prudential standards. Financial disclosure is also essential if smaller creditors, including depositors, are to have any chance of protecting their own interests, particularly if there is no deposit insurance.

Although the structure of financial disclosure and accounting standards will vary from country to country, depending on institutional and legal arrangements, some broad principles can be identified:

- An effective set of disclosure requirements will need to be underpinned by robust accounting standards. These standards should desirably conform to international standards, although national modifications may well be appropriate. In particular, it is essential for accounting standards to set out meaningful frameworks for measuring credit exposures – preferably based on market values rather than on historic cost or other notional valuations. Accounting standards should also prescribe meaningful, and reasonably specific, rules for the recognition of income and losses, for the

recognition and classification of off-balance sheet exposures, and for the classification of assets and liabilities. In general, accounting standards should require the disclosure of financial information on the basis of its economic substance, rather than on the basis of accounting or legal contrivances.

- Financial disclosures should be subject to rigorous external auditing requirements, based on a set of auditing guidelines promulgated by an appropriately qualified body. External audit should be conducted by a fully independent auditor, whose business connections with its client should not be such as to compromise the auditor's objectivity and independence.

- As a general rule, disclosures of financial information are more useful and reliable if they are made with a reasonable degree of frequency – at least six monthly.

- Disclosure of financial and risk-related information should be in respect of the parent bank and the consolidated group. In some cases, holding company disclosures may also be appropriate.

- The types of information required to be disclosed will vary depending on the type of entity making the disclosures, and the particular needs of the jurisdiction. As a general rule, however, banks could be expected to disclose:

  - Capital, disaggregated by type of capital, and the percentage of capital relative to credit exposures, probably using the BIS Capital Accord as the measurement framework. Where possible, capital ratios should be measured and disclosed on the basis of the lowest end-of-day capital position within reporting periods.

  - Comprehensive and detailed information on the balance sheet, income statement and off-balance sheet obligations.

  - Exposure concentration, in terms of exposures to individual counterparties or groups of associated counterparties, desirably on a peak end-of-day basis.

  - Exposures to particular economic sectors or industries.

- Detailed information on asset quality, including the amount of non-performing loans and the level of specific provisioning in relation to such loans.

- Information on market risk (i.e., interest rate risk, exchange rate risk and equity risk), desirably using the BIS market risk methodology or an acceptable and credible alternative.

- Information on related party exposures, desirably on a peak end of day basis.

- Information on the nature of a bank's funds management, securitisation and other fiduciary business, including details of funding provided by the bank to these business activities and the structures in place to limit contagion between the funds management activities and the core business of the bank.

- Information on the bank's systems for managing its business risks, including information on the nature of its internal control systems, internal audit arrangements and any other arrangements it has for an external review of the adequacy of its risk management systems and internal controls.

- An important element of a disclosure regime is the accountability it can bring to the board of directors. This recognises the vital role which bank directors play in overseeing, and taking ultimate responsibility for, the prudent management of all of their bank's business risks. In order to sharpen the accountability of a bank's directors, banks and other financial institutions could usefully be required to regularly disclose:

- Directors' qualifications and experience.

- The board's rules for handling directors' conflicts of interests.

- Attestations signed by each director as to whether they are satisfied that the bank's/financial institution's risks (itemised by specific type of risk) are being adequately identified, monitored and controlled at all times.

- For any disclosure regime to be effective, it must be enforced and there must be an appropriate set of penalties for breach of the disclosure requirements. Hence, it is essential that penalties for non-compliance are clearly specified, that these apply not only to the financial institution itself, but also to its directors and other key officers, and that there is a competent authority to enforce the disclosure rules.

- In introducing a disclosure regime, it is also important to ensure that relevant audiences are well educated about the objectives of financial disclosure and the nature of the disclosure arrangements, so that they can make the most efficient use of financial disclosures. This might suggest providing explanatory material to financial journalists and analysts, and encouraging the financial news media to take a keen interest in the disclosures issued by banks and other financial institutions. And, it might suggest the need for explanatory material, suitably written, to be provided to depositors, to assist them to interpret a bank's disclosures.

6. Promoting a contestable financial system: increasing the presence of overseas banks

Another important ingredient in promoting a robust financial system is to encourage competitiveness within the financial sector, by increasing the contestability of financial markets. In particular, opening up the financial sector to foreign banks can assist in promoting a more competitive, innovative and mature financial sector and can enhance the development of risk management skills in the financial sector. And having some large foreign banks operating within the financial sector can reduce the risk profile of the financial system, given that these banks are generally sufficiently large, with diversified loan portfolios and a substantial capital base, as to withstand the kind of shocks to the domestic economy that can cause less diversified domestically-owned banks to fail. It is important to ensure that liberalisation of the financial sector is accompanied by other measures to strengthen the financial system, so that increased competitiveness does not result in instability.

7. Ownership of banks/financial institutions

As indicated earlier in this paper, many periods of financial distress have been partly associated with inadequate commercial disciplines

within state-owned banks or banks controlled by large corporations. Therefore, one of the ingredients in promoting a robust financial system involves a restructuring of ownership arrangements. In that regard, the privatisation of government-owned financial institutions offers a number of potential benefits. These include: reduced fiscal risk associated with government ownership of financial institutions, strengthened market disciplines on the institution in question, sharper incentives for sound risk management within the institution and the likelihood of stronger corporate governance arrangements being implemented (provided that the institution is sold to a sound parent bank or corporation).

In order for privatisation to bring these benefits, certain prerequisites must first be met, such as the implementation of appropriate corporate governance arrangements, ensuring that the financial institution is in a sound condition and that there are appropriate regulatory and disclosure arrangements in place for the financial system. And it is essential, of course, to ensure that the new owner of a bank is suitable – i.e., that they have experience and expertise in banking business, that they will supervise the bank appropriately and that they can demonstrate a reasonable commitment to stand behind the bank should it get into difficulty.

If privatisation of state-owned banks is not a viable option, then it is essential that sound corporate governance arrangements are established, that the board comprises directors with suitable qualifications and experience, that the bank operates according to strict commercial criteria and is not used as an instrument of broader public policy. Similarly, if large corporations are permitted to hold a controlling interest in banks, it is essential that the necessary corporate governance arrangements are put in place and that there is a reasonable degree of separation between the management and activities of the bank and those of its corporate owner.

8. Prudential regulation and banking supervision

An effective set of prudential regulations and supervisory arrangements is clearly essential for the promotion of systemic stability. However, the form they take will necessarily vary from country to country, depending on such factors as the legal and institutional infrastructure, the adequacy or otherwise of corporate governance and trans-

parency arrangements, and the broader economic policy environment. All else being equal, prudential regulation and supervision will need to be more comprehensive and intensive where there are substantial inadequacies in the other ingredients required to promote systemic stability. Conversely, if these other ingredients are all satisfactorily in place, this provides a basis for reducing the intensity of prudential regulation and banking supervision, and instead, placing greater reliance on market disciplines as a means of encouraging banks to adopt and maintain prudent behaviour.

Given that the nature of the required supervisory arrangements will vary from country to country, it is not possible to specify a standard model for banking supervision for application in all countries. However, some general principles can be distilled:

- Supervisors need to have a sound understanding of banking risks and the means by which these risks can be managed. These risks include credit risk, interest rate risk, exchange rate risk, liquidity risk, equity risk, exposure concentration risk, the risks associated with directed lending and lending to related parties, business continuity risks, operations risk, and the risks associated with interfacing with the payments system.

- Supervisors need to have a sound understanding of the environment within which banks operate, and the various transmission channels through which risks can pass to banks. This suggests a need for supervisors to think laterally, including as to the linkages between the broader economy and financial stability, the importance of corporate governance and transparency, and the nature of the leading indicators that can point to incipient financial distress.

- Supervisors need to have a sound understanding of the nature of each of their bank's business risks and the adequacy of the management of those risks. Desirably, this should not be taken so far as to become a very intrusive role. Certainly, supervisors need to be aware that they do not have responsibility for the management of banks in their jurisdiction; the sole responsibility for the management of banks lies with the directors and senior management of those banks. In developing and transition economies, it may be necessary for supervisors to play a more active role in overseeing the management of risks within particular banks until suitable

transparency and corporate governance arrangements can be put in place. However, it is important that supervisors encourage the adoption of structures that will eventually minimise the need for supervisors to play an intensive day-to-day role in this area.

- Minimum capital ratios for banks and other systemically important financial institutions provide a safeguard against loan losses and other economic losses. The Basle capital accord provides a framework for measuring exposures for capital purposes and the 8-percent standard minimum capital ratio is a useful benchmark. But in some cases it may be necessary for banks to hold well above the 8-percent capital ratio – for example, where a bank's risk profile is relatively high or where economic and financial conditions in the country in which it is based or has substantial operations would justify a higher ratio. Comprehensive financial and risk-related disclosures can assist the market to assess what the appropriate capital ratio for a bank should be. Where such disclosures are not available or where the market is insufficiently developed to make use of such disclosures, then it may be necessary for the supervisory authority to ensure that the bank in question holds sufficient capital to compensate for the risks involved – either by requiring the bank's directors to be accountable for determining an appropriate level of capital or, where appropriate, by imposing a higher level of capital than the standard 8 percent.

- In addition to minimum capital requirements, it can be appropriate to regulate other aspects of banking risks. For example, in some cases, it may be desirable to impose limits on banks' exposures to individual counterparties and groups of related counterparties, limits on related party exposures, and limits on other exposures, such as market risk exposures and mismatches in liquidity. The extent of regulation required is largely a function of the nature of the financial system and the adequacy of other measures in place to promote systemic stability. For example, if strong corporate governance and financial disclosure arrangements are in place, and market disciplines are operating effectively, then this would suggest the scope to have fewer regulations on banks' risk taking. Conversely, in an economy with poorly developed corporate governance and transparency arrangements, and inadequate macroeconomic and microeconomic policies, a greater degree of

prudential regulation may be necessary. It is preferable to develop a policy environment where market disciplines, transparency and sound corporate governance provide strong incentives for banks to prudently management their business risks, without the need for an intensive array of prudential regulation.

- Supervisors need to be aware of the risks associated with excessive prudential regulation of banks, so that they can seek to get the balance right. The risks associated with excessive regulation of banks can include the imposition of excessive compliance costs on banks, distracting senior management from their management responsibilities. There is also a risk that prudential regulation, if poorly designed, can stifle financial activity and innovation, to the detriment of the financial sector and the real economy. Inappropriately designed or implemented prudential regulation can also give rise to unintended consequences – e.g., in some cases, by encouraging banks to channel their energies into riskier activities than would otherwise have been the case. And excessive prudential regulation and supervision can reduce the effectiveness of bank management and market disciplines, by creating the impression that effective management of banks rests with the supervisory authorities, rather than the directors and management of banks. It is therefore important to get the right balance in designing supervisory arrangements.

9. The importance of robust payments systems

Another important element in the promotion of a sound financial system is the implementation of robust payments system arrangements. This is because very large inter-bank exposures can occur in payments systems, as banks seek to settle obligations with other banks in the system. The failure of one bank can therefore expose other banks to large losses, potentially triggering multiple bank failure. In addition, systemic disruption can occur where there is a failure in one of the payments clearing houses or "switches" – perhaps due to a technological fault in the switch itself or in the interface between a bank and one of the switches. Sustained disruption to the payments system can cause severe difficulties for the broader economy, by preventing businesses from meeting obligations to counterparties, suspending the payment of wages and salaries and causing interruptions to foreign exchange trading.

For these reasons, it is important that payments systems be as robust as possible. This suggests the need for appropriate policy responses, including:

- The development of robust failure-to-settle arrangements. The nature of these arrangements will depend on the structure of the payments system and other institutional and legal factors. However, it is generally acknowledged that, for large value transactions, real time gross settlement provides an effective option for eliminating an important source of inter-bank risk. Similarly, robust netting arrangements coupled with failure-to-settle rules, such as loss sharing agreements, can also provide an effective means of reducing inter-bank exposures and reducing disruption to the financial system. What ever approach is adopted, it is important that governments take steps to minimise the level of inter-bank exposures arising within the payments system, and implement failure-to-settle arrangements that enable the payments system to continue functioning in the event of a bank failure.

- It is also important that the payments system be competitive, so that it can efficiently perform its functions. This suggests the need for a contestable system, where the entry rules are restricted to those required to ensure that payments system participants can meet appropriate prudential and technical requirements to exchange and settle payments instructions.

- Payments clearing houses should be subject to appropriate corporate governance and transparency arrangements, to encourage sound management of risks.

- In some cases there may also be a need for an appropriate set of supervisory arrangements to ensure that the various payments switches are well managed, that the risks within each switch have been clearly identified and are being managed effectively, and that banks and other participants are complying with any prudential and technical requirements specified by the payments switch operators.

10. The need for effective insolvency arrangements

Inadequacies in insolvency law can lead to unnecessarily high losses by lenders and disorderly market conditions, by impeding effi-

cient debt restructuring in insolvent companies and by obstructing orderly debt workout or liquidation processes. Inadequate insolvency law can also impede the efficient disposal of corporate assets, including the enforcement of security arrangements by banks and other lenders. Introducing robust insolvency arrangements is therefore an important ingredient in promoting a sound financial system. Although insolvency rules will vary depending on policy objectives and legal and institutional arrangements, some broad principles can be distilled, including:

- The need for insolvency law to be clear and for the rules to be known ex ante by all relevant parties, so that they can contract efficiently in the knowledge of the effects that insolvency law can have on their contractual positions.

- The desirability of minimising the capacity for the judiciary or regulatory authorities to over-turn or suspend contractual arrangements between debtors and creditors.

- The creation of legal structures and processes to enable secured creditors to enforce their security arrangements efficiently.

- The creation of a legal framework to facilitate alternative debt workout arrangements (in addition to liquidation and wind-up), subject to creditor agreement.

- The need for liquidation or other insolvency procedures to be implemented speedily in an insolvency situation, so as to minimise creditor losses and enable appropriate restructuring or liquidation procedures to be invoked.

- The need for well resourced judicial and regulatory authorities to facilitate the efficient implementation of insolvency law.

11. Financial safety nets and the management of bank failures

As discussed earlier in this paper, inappropriately designed financial safety nets and bank failure management arrangements have the potential to weaken financial systems. Explicit or implicit government guarantees of banks have reduced the effectiveness of market disciplines on banks and, in some cases, encouraged moral hazard. As a

result, it is likely that explicit or implicit government guarantees have contributed to a decline in banks' capital ratios over much of this century and may have weakened incentives for the management of risks.

An important challenge for governments is therefore to structure financial safety nets and bank failure response arrangements in ways that minimise moral hazard and strengthen market disciplines on financial institutions, while still ensuring that financial distress situations are effectively resolved. In this context, a number of issues arise, including:

- Consideration of whether the benefits associated with deposit insurance necessarily outweigh the longer term costs. In this regard, there needs to be an assessment of whether, in the absence of deposit insurance, banks might have incentives to hold higher levels of capital and better manage their risks than in the case where depositors are protected by insurance, thereby enhancing the soundness of the financial system. And there should be an assessment of the alternative means of reducing contagion risk and the risk of depositors running on a bank in distress – such as the use of temporary debt standstills pending a resolution of the distress situation. If the primary reason for providing deposit insurance is to shelter small depositors from credit risk, then there is merit in assessing the alternative means of delivering that kind of protection – such as providing a transaction-capable safe haven facility for risk-averse depositors for example.

- If deposit insurance is considered to be necessary, then there needs to be a careful assessment of the design features that would assist in maintaining market disciplines on banks and in reducing moral hazard risks. These might include:

    - Setting relatively low caps on deposit insurance, so that only small deposits are protected, thereby retaining incentives for larger depositors to exercise appropriate scrutiny over their banks, and ensuring that the caps are not able to be circumvented (e.g., by splitting deposits into small parcels or spreading deposits over a number of banks).

- Creating some form of co-insurance – whereby depositors remain exposed to the possibility of loss on a proportion of their deposit.

- Ensuring that insurance is priced to take into account the risk profile of the bank in question.

- Ensuring that the directors and management of banks remain fully responsible for the management of risks within their bank, and that they are held accountable in the event that their bank fails.

- There is a need to ensure that the regulatory authorities responsible for supervising the financial system are well prepared to respond effectively to financial distress at the earliest sign of its emergence. This has a number of facets to it:

  - The objectives of the regulatory authorities' powers for responding to financial distress need to be clearly specified and disclosed. Desirably, the objectives should not only include the need to restore financial stability as soon as practicable, but also to ensure that the response to financial distress does not weaken market disciplines on financial institutions. Indeed, financial distress situations provide important opportunities to strengthen market disciplines, by ensuring that depositors and other creditors of failed financial institutions bear their fair share of losses and that the directors and management are held to account for any mismanagement of their financial institution.

  - Regulatory authorities need to have appropriate legal powers to respond to financial distress. The powers might include the ability to investigate the affairs of a financial institution, the power to give directions to the management of an institution in difficulty, the power to act as lender of last resort, the power to assume management control of a financial institution in acute distress, the power to suspend the institution's financial obligations in extreme situations, the power to restructure the liabilities of the institution, the power to sell the financial institution (partially or wholly) to another party, and so forth. The legal powers should be clearly stated and

transparent. The grounds upon which the powers may be invoked should also be clearly specified.

- To the extent practicable, regulatory authorities should develop in advance their strategies for responding to different types of financial distress – such as a bank facing liquidity difficulties, a single bank failure, a multiple bank failure, payments system dysfunction, etc. This might include the development of:

  - The criteria to be used for determining whether a distress event is likely to threaten financial system stability. This implies the need for defining what a regulatory authority would regard as financial instability.

  - The criteria to be applied for determining when lender of last resort actions would be taken.

  - The criteria to be applied for determining when other emergency powers are to be invoked (such as placing a bank into liquidation or some form of controllership).

  - The principles applicable to the use of lender of last resort (LLR) powers – such as whether LLR would be invoked where a bank is of questionable solvency, whether security would be taken and if so what form of security, whether a penal rate would be applied to LLR funding, and so forth.

  - The process by which the regulatory authority would assess the solvency of the bank in distress, including the possible engagement of financial experts to assist in that assessment.

  - The actions that would be taken where a bank is insolvent – including whether a moratorium would be imposed, whether the bank's obligations would be suspended, the treatment of depositors and other creditors, the treatment of off-balance sheet obligations, the handling of correspondent banking arrangements, the handling of payment system transactions, and so forth.

- Pre-identification of the persons who could be appointed to assume temporary control of a bank in acute distress should the need arise.

- Determination of how losses in an insolvent bank will be borne – i.e., by shareholders, subordinated creditors, depositors, other senior creditors, and the government. The approach taken will depend in part on whether deposit insurance arrangements are in place.

- The process for determining whether an insolvent bank's liabilities could be restructured to effectively absorb losses and to facilitate a recapitalisation of the bank.

- The strategy for, and modality of, arranging for a bank in distress to be sold to another financial institution, including with regard to the treatment of losses in the bank, the issuance of warranties to the new buyer and so forth.

- The strategies for communicating with the various interested parties in a bank distress situation.

The development of a framework for effectively and expeditiously responding to financial distress is a critically important element in promoting financial stability.

VI. Conclusion

Financial system instability is generally attributable to a combination of different causal factors. It follows, therefore, that the policies required to promote a robust financial system will involve a combination of policy prescriptions.

Although the nature and combination of policies will necessarily vary from country to country, certain core elements will generally need to be present. These will include:

- sound, sustainable and credible macroeconomic and microeconomic policies;

- ensuring that financial sector and capital account liberalisation is preceded by measures to strengthen financial markets;

- robust corporate governance and financial transparency arrangements;

- an appropriate degree of prudential regulation and supervision;

- measures to reduce moral hazard and strengthen market disciplines on banks; and

- strategies for responding effectively and quickly to financial distress.

The adoption of policies consistent with the principles listed above will go a long way towards the promotion of robust financial systems and stronger economies.

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