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# Policy lessons on promoting financial stability

This article sets out a slightly amended version of a paper issued in November 2001 under the auspices of the APEC Finance Ministers' process. The article contains a summary of policy lessons that emerged from a Policy Dialogue on Banking Supervision, held in Mexico in June 2001, as part of an ongoing programme of capacity-building seminars and workshops held in the APEC Finance Ministers' process. The Policy Dialogue was co-chaired by the Reserve Bank of New Zealand and the National Banking and Securities Commission of Mexico.

## 1 Introduction and background

In September 2000, APEC Finance Ministers endorsed a report produced by central bank and finance ministry officials from APEC economies under Part 1 of the Voluntary Action Plan for promoting freer and more stable capital flows (the VAP). That report set out a relatively comprehensive assessment of the policies needed to facilitate progressive capital account liberalisation and to promote more open and robust economies.

Finance Ministers also approved a programme of annual policy dialogues under Part 2 of the VAP. The purpose of this programme is to provide opportunities for APEC economies to exchange views and experiences on policy issues relevant to the issues covered in Part 1 of the VAP. In particular, it is seen as a framework for assisting economies in the implementation of international standards and codes relevant to promoting financial stability.

The first of the VAP policy dialogues focused on banking supervision, given the importance of banking system stability. The Policy Dialogue on Banking Supervision was held in Acapulco, Mexico in June 2001, and was co-chaired by the Reserve Bank of New Zealand and the National Banking and Securities Commission of Mexico.

The Policy Dialogue focused on a number of policy issues relating to the implementation of the Core Principles for Effective Banking Supervision and the proposed changes to the Basel Capital Accord, promulgated by the Basel Committee on Banking Supervision. In particular, the Policy Dialogue covered issues relating to:

- an overview of the policies needed to promote financial stability;

- the supervision of banks' capital;
- the mechanisms available for promoting the prudent management of risks within the banking system, drawing on the relevant principles from the Core Principles; and
- the mechanisms available for supervising banks' exposures to related parties.

This article is a slightly amended version of the Policy Lessons paper issued by central bank and finance ministry officials in the APEC economies in November 2001 and summarises the issues discussed in the Policy Dialogue. The article is structured as follows:

- Section 1 - Setting the context – the policies needed to promote financial stability.
- Section 2 - Overview of the attributes for effective banking supervision.
- Section 3 - Supervision of banks' capital.
- Section 4 - Promoting the prudent management of risks within the banking system.
- Section 5 - Supervision of banks' exposures to related parties.
- Section 6 - Assessing financial sector vulnerabilities and external surveillance of financial sector policies.

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## Section 1 - Setting the context – the policies needed to promote financial stability

Financial stability requires a broad range of policies, including policies to promote non-inflationary sustainable economic growth and to minimise the risk of structural imbalances in the economy, to foster effective risk management within the financial system, to keep investors well informed about an economy's and financial system's condition and risk profile, and to minimise the potential for financial contagion. Financial stability also requires a capacity for the authorities to detect and respond effectively to incipient financial distress before it threatens the stability of the financial system.

In addition to the need for effective banking supervision arrangements, the main policies needed for promoting financial stability, as discussed in the Policy Dialogue, are as follows:

- the creation of the conditions for financial stability through sound, sustainable and credible macroeconomic policies, particularly monetary policy and exchange rate policy;
- ensuring that financial sector and capital account liberalisation are preceded or accompanied by appropriate economic and financial reforms, particularly reforms that strengthen the capacity to manage risks in an environment of more volatile cross-border capital flows;
- the importance of microeconomic reform in fostering efficient and productive resource allocation and in reducing the potential for poor asset quality in the financial system;
- encouraging better risk management by banks, including through enhanced disclosure and stronger corporate governance;
- 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;
- strengthening market disciplines on banks, including through the ownership structure of banks, enhanced

financial disclosure and reduced government underwriting of banks' liabilities;

- detecting incipient financial distress and maintaining a capacity to stress test the financial system;
- 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;
- building structures to promote a robust payment system so as to reduce the risk of inter-bank contagion and disruption to commercial transactions resulting from a bank failure;
- recognising the importance of effective insolvency arrangements in the banking and corporate sectors; and
- recognising the need for effective coordination of financial sector monitoring and regulation.

This section of the paper elaborates on these policy issues.

### Sound monetary policy

Given that systemic instability is often associated with large swings in asset prices, unproductive resource allocation and periods of high real interest rates, one of the important ingredients in promoting a stable financial system is the adoption and maintenance of a credible and effective monetary policy. Monetary policy aimed at achieving and maintaining general price stability can play a helpful role in promoting financial stability, by reducing volatility in asset prices, reducing the level of nominal and real interest rates over the longer term, creating a more stable environment for investment decision-making, and providing a basis for greater overseas and domestic confidence in the economy. Low and stable inflation also reduces the risk of distortions to resource allocation and structural imbalances in the economy. However, for these benefits to be achievable, monetary policy should not be burdened with conflicting economic objectives; the objectives for monetary policy should be clear, achievable and transparent. Desirably, the authority responsible for monetary policy should have sufficient independence to be able to pursue monetary policy objectives effectively and credibly. Monetary policy needs to be supported by complementary economic policies,

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particularly a compatible exchange rate policy, prudent and sustainable fiscal policy and financial sector policies designed to promote and maintain a robust and efficient financial system.

### Exchange rate policy

In the Policy Dialogue, it was agreed that the nature of a country's exchange rate arrangements has important implications for financial stability. In particular, it was noted that an exchange rate regime that is sustainable and credible is an important aspect of promoting financial stability. Most participants agreed that pegged exchange rates (particularly exchange rate regimes that are seen as "soft" pegs) can pose risks for financial stability. These include a reduction in the incentive for banks and their clients to hedge against currency risk. If the peg collapses, unhedged currency exposures can result in large losses for the banking system, potentially undermining the solvency of the system. Moreover, an exchange rate peg that is viewed by the market as unsustainable can trigger or exacerbate capital outflows and can foster the conditions for destabilising currency speculation.

### Policies to reduce vulnerability to short-term capital flows

Cross-border capital flows have played a major role in recent economic and financial crises. It is therefore important that steps be taken to reduce the vulnerability of economies to the volatility of short-term capital flows. The policies required for sustainable capital account liberalisation include the issues covered in this paper, such as the need for sound and credible economic policies, a strong degree of policy transparency, policies to promote effective risk management within the banking system, and structures to keep investors well informed of economic developments and of the risk profile of the financial system.

### The importance of microeconomic reform

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 imbalances, 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 noted in the Policy Dialogue include the following:

- 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 regulatory framework.
- A framework to discourage poorly designed and inadequately targeted regulation – such as a system requiring new regulations to be screened to ensure that the rationale for regulation is fully justified, that the regulation is well targeted to the objectives it is seeking to meet and goes no further, that compliance costs are identified and minimised, and that the regulations are carefully vetted for possible unintended regulatory distortions.
- Measures to free up the mobility of capital, labour and other factor resources from sector to sector within the economy, to enable resources to move with minimum regulatory friction to those parts of the economy where they can add greatest value.
- 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 progressively to expose the economy to greater international competition, so that input costs can be reduced and resources allocated to those sectors with a comparative advantage.
- A framework to promote a tax system that minimises unintended distortions to resource allocation and investment decision-making, that is competitively neutral in its impact on business, and that minimises compliance costs for the business community.

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## 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 OECD Principles on Corporate Governance set out a useful framework for thinking about the key aspects of corporate governance. In addition, various APEC reports have dealt with issues relating to corporate governance.

The key points emerging from the Policy Dialogue included a recognition of the need for:

- clearly defined duties for directors, including the need for directors to act in the best interests of the company 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 these penalties. The authorities responsible for the enforcement of corporate governance requirements should be subject to appropriate transparency and accountability arrangements;
- structures to promote 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. The CEO and senior management team should be held accountable for the veracity of their company's financial disclosures. Directors also bear responsibility for satisfying themselves that their bank's disclosures are complete, accurate and not misleading;
- a structure that requires directors to be satisfied with the adequacy of their company's systems for identifying, monitoring and managing risks. This could involve requiring bank directors to attest to the adequacy of their bank's risk management systems on a regular basis; and

- the need for at least some of the directors on the board to be non-executive and independent of any related parties.

It was agreed that corporate governance in the financial sector can be fostered in a number of ways, including through:

- well-designed and enforced legislative requirements;
- the development of a corporate governance culture (including through director training programmes, encouragement of implementation of the OECD and other relevant corporate governance standards, and the development and promotion of corporate governance principles);
- leading by example, whereby government-owned enterprises and government departments and agencies are subject to rigorous corporate governance, disclosure and accountability arrangements; and
- promoting strong market disciplines in the financial and corporate sectors.

## Financial disclosure and accounting standards

A 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 monitor the performance and soundness of financial institutions effectively 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 the opportunity to protect their own interests, particularly in the absence of 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, as follows:

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- An effective set of disclosure requirements will need to be underpinned by robust accounting standards. These standards should desirably meet or exceed international accounting 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, for the recognition of income and losses, for determining loan loss reserves and provisioning, 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 economic substance, rather than on the basis of accounting or legal contrivances.
  - There needs to be an effective means of enforcing compliance with accounting standards, including an appropriate legal framework and a body responsible for monitoring compliance and taking action where companies appear not to be complying with relevant accounting standards. Such a body needs to be well resourced, with a clear mandate and powers, and subject to robust transparency and accountability arrangements.
  - Financial disclosures should be subject to rigorous external auditing requirements, based on a set of auditing standards promulgated by an appropriately qualified body. The auditing standards should desirably be consistent with best international practice. 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 and desirably quarterly.
  - Disclosure of financial and risk-related information should be in respect of the parent bank and consolidated group. In some cases, holding company disclosures may also be appropriate.
  - In the case of banks and other financial institutions, disclosures should generally be made both on a solo and consolidated group basis, where consolidation rules comply with international accounting standards or an acceptable alternative.
  - The types of information required to be publicly disclosed will vary depending on the type of entity making the disclosures, and the particular needs of the jurisdiction. Disclosures might include:
    - capital, disaggregated by type of capital, and the percentage of capital relative to credit exposures, probably using the Basel Capital Accord as the measurement framework;
    - 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 where such exposures are above a specified percent of the bank's or banking group's capital;
    - exposures to particular economic sectors or industries;
    - detailed information on asset quality, including the amount and nature of non-performing and restructured assets and the level of specific provisioning in relation to such loans;
    - information on market risk (ie interest rate risk, exchange rate risk and equity risk), desirably using the Basel market risk methodology or a credible alternative;
    - information on exposures to related parties, desirably disaggregated into type of exposure (maturity, nature of security, etc) and the identity of the related parties;
    - 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; and
    - information on the bank's systems for managing its business risks, including information on the nature

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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 a bank's 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 disclose publicly:
  - directors' qualifications and experience;
  - the board's rules for handling directors' conflicts of interests; and
  - attestations signed by each director as to whether they are satisfied (on the basis of the advice they have received, but having made due enquiry) that the bank's/financial institution's risks are being soundly 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. The enforcement agency should be subject to appropriate transparency and accountability arrangements to reinforce their incentives to discharge their obligations in a professional manner.
- 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 information disclosed, so that they can make the most effective 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 to be

provided to depositors to assist them to interpret a bank's disclosures.

### **Increasing the presence of overseas banks**

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. However, it is important to ensure that foreign banks meet appropriate quality standards before being allowed into the financial system (such as balance sheet quality, strength of capital, quality of parentage where relevant, quality of public financial disclosures in the home jurisdiction, quality of management and market reputation). It is also important to ensure that the entry of new banks does not occur in the absence of measures to strengthen the capacity of the existing banks to manage their risks prudently in a more competitive banking environment.

### **Strengthening market disciplines in the financial sector**

It was agreed in the Policy Dialogue that an important aspect of promoting financial stability is the strengthening of market disciplines on the financial system. Effective market disciplines can encourage prudent risk management by banks and other financial institutions by rewarding those with strong balance sheets and high quality risk management, and penalising those with balance sheet weaknesses and poor risk management.

It was noted that market disciplines can be impeded by various forms of government intervention. In particular, government interventions that insulate creditors and investors from risks can weaken the effectiveness of market disciplines. In addition, the government ownership of financial institutions, regulatory impediments to the development of

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capital markets, and regulatory distortions to interest rates and other market prices can dilute the ability of markets to exert appropriate discipline over financial market participants. Excessive regulatory impediments to the entry of new participants into financial markets and the adoption of competitively non-neutral regulatory frameworks also tend to dull the effectiveness of market disciplines.

This suggests the need for governments to adopt measures to strengthen the ability of the market to exert appropriate disciplines on financial market participants and encourage prudent risk management within banks and by those providing funding to financial institutions. Possible policy options can include:

- Promoting competitive and contestable financial markets by avoiding excessive regulatory barriers to entry and by maintaining a level playing field among different categories of financial institution.
- Designing deposit insurance arrangements in ways that do not completely insulate depositors from losses, and that assist in maintaining market disciplines on banks and in reducing moral hazard risks. Options 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.
  - Creating some form of effective market discipline, possibly including co-insurance – ie whereby insured depositors remain exposed to the possibility of loss on a proportion of their deposit.
  - Ensuring, where possible, that deposit insurance is priced to take into account the risk profile of the bank in question.
  - Ensuring that the directors of banks are responsible (subject to their ability to rely on professional advice, but having made due enquiry) for the management of risks within their bank, and that they are held accountable, within the limits of their legal duties, in the event that their bank fails.
- Responding to bank failures and other financial system distress events in ways that do not insulate creditors from

losses – eg by minimising government bail-outs of failed banks.

- Removing where possible any regulatory or statutory impediments to the efficient functioning of financial markets – including regulatory distortions to interest rates and tax structures that impede the development and functioning of capital markets.
- Ensuring that government-owned banks are subject to rigorous governance arrangements. Where feasible, there may be merit in privatising government-owned banks in order to strengthen market disciplines on them (and the banking system as a whole) and to reduce the fiscal and moral hazard risks associated with government ownership of banks. However, any privatisation needs to be carefully timed and managed, including the need for effective governance and disclosure arrangements and other risk management structures to be in place prior to privatisation.

### Detecting incipient financial distress

It was agreed that an important element in promoting financial stability is the detection of incipient financial system distress and taking action early enough, where feasible, to reduce the risk of distress becoming a threat to financial stability. This suggests the need for central banks and other relevant authorities to maintain effective monitoring of a range of macro-prudential indicators and other barometers of potential financial system distress. These might include such factors as:

- The level, maturity, currency composition and source of private sector foreign currency debt.
- The extent of currency risk hedging in relation to private sector foreign currency debt.
- Interest rate spreads in various categories of debt.
- Indicators of financial system soundness, both in the aggregate and broken down into relevant categories of financial institution, including measures of capital adequacy, asset quality, non-performing and restructured loans, market risk positions, exposure concentration, specific and general provisions, profitability, and liquidity.

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- Extent and composition of foreign reserves relative to external debt (particularly short-term debt).
  - Composition of cross-border capital flows and developing a sound understanding of the considerations that influence capital flows.
  - Trends in asset prices and other potential leading indicators of asset quality in the banking system.

### Stress testing

It was also recognised that stress testing can be a useful way of understanding the nature and dynamics of risks within the financial system and the possible impact of them on financial system stability. Stress testing has the potential to provide important insights into the capacity of a financial system as a whole, and individual institutions within it, to withstand various types of shocks, including shocks arising from major shifts in interest rates, exchange rates, asset prices and economic activity.

Stress testing can be applied both at the aggregate system-wide level and to individual financial institutions. It can be conducted using models developed by the central bank or supervisory authority, or by the IMF and other international bodies. Equally, banks and other financial institutions can be encouraged to conduct their own stress testing, either using models provided by the supervisory authority or their own models. In the latter case, comparability across different banks and institutions could be assisted, at least to some extent, by providing banks and other financial institutions with basic parameters for stress testing models and with suggested assumptions for the stress scenarios. Requiring or encouraging banks to apply stress tests to their own balance sheets and off-balance sheet positions can be a useful way of engaging bank management and directors in the process of better understanding risks and the possible impact of particular risk events on their bank's financial condition. In this way, stress testing can assist bank senior management and directors to assess the adequacy of their bank's capital buffer and other shock absorption capacity, and the adequacy of their systems for managing risks.

### Responding to financial system distress

The development of a framework for effectively and expeditiously responding to financial distress is an important element in promoting financial stability. In particular, it is essential that the authorities maintain a capacity to detect incipient signs of financial distress and to respond promptly to those signs before financial distress grows into a threat to the stability of the financial system. It is equally essential that the authorities maintain a capacity to respond to bank failures in ways that minimise inter-bank contagion and disruption to the payment system and that assist in restoring confidence in the banking system. It is strongly desirable that the strategies for responding to financial system distress are designed to minimise moral hazard risks. One way of doing this is to respond to bank failure or other distress events in ways that do not fully insulate depositors and other creditors from losses, while ensuring that the failure or distress event is resolved quickly and in ways that minimise disruption to the financial system. In the longer term, one of the most effective ways of promoting a robust financial system is to ensure that bank creditors are not fully protected by the taxpayer from losses arising from a bank failure. This will encourage stronger market disciplines on survivor banks and foster more prudent risk management in the banking system.

### 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. 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 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.

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For these reasons, it is important that payments systems be as robust as possible. The payment system principles issued by the BIS Committee on Payment and Settlement Systems provide useful guidance in this respect, setting out broad principles on desirable design features of payment and settlement systems. Drawing on these and other principles, some of the key points emerging from the Policy Dialogue was agreement on the need for:

- A payment system and a legal infrastructure within which the legal status of payment transactions is clear and certain from the point of initiation to the point of final settlement.
- The development of robust settlement and 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.
- Payments clearing houses to be subject to appropriate corporate governance and transparency arrangements, to encourage the sound identification, monitoring and management of risks.
- In some cases there may also be a need for an appropriate set of supervisory arrangements to ensure that the risks within each payment switch or clearing house 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.

### **The need for effective insolvency arrangements**

Inadequacies in insolvency law can lead to unnecessarily high losses by lenders and to disorderly market conditions, by impeding efficient 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 need for bankruptcy 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.
- It is generally desirable for the law to provide scope for a company or group of companies experiencing severe financial difficulties to be restructured, with the approval of the companies' creditors and shareholders. This offers the potential to minimise losses for creditors and economic disruption by facilitating various forms of corporate re-organisation, including the possibility of a re-capitalisation by way of a debt/equity swap.
- 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 well resourced judicial and regulatory authorities to facilitate the efficient implementation of insolvency law, and structures to ensure accountability for those responsible for insolvency/bankruptcy processes.

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## Effective coordination of financial sector regulation

One of the themes to emerge from the Policy Dialogue was the importance of effective coordination of financial sector regulation across the full breadth of the financial system. It was noted that a fragmented system of supervision, where different agencies have responsibilities for different aspects of the financial system, can create difficulties, including the possibility of unlevel playing fields, gaps in the regulatory framework, regulatory arbitrage, duplication of regulation, and excessive regulatory compliance costs (particularly for entities that are supervised by more than one supervisory authority). In the case of some APEC economies, these difficulties have been addressed to some extent by consolidating the regulatory processes into just one or two regulation agencies. An example of this is where one agency takes responsibility for the prudential regulation and supervision of all categories of financial institution, while another agency takes responsibility for the supervision of financial markets. In other cases, different regulatory agencies remain in place but coordinate their actions and share information with other regulatory agencies.

It was agreed that there is no one "right" model for financial sector regulation, but that, whichever model is adopted, it is important that structures are put in place so as to ensure that:

- there is effective coordination of regulation and supervision across the financial sector, to minimise duplication, to avoid regulatory arbitrage, to close regulatory gaps and to promote a level playing field where feasible;
- the objectives and functions of each regulatory agency are clearly specified and understood, and that the boundaries of their jurisdiction are clear;
- the regulatory agencies cooperate with one another, particularly in terms of exchanging information (subject to ensuring protection of confidentiality) and sharing their respective thinking on policy issues; and
- there is effective oversight of the financial system as a whole, and not just of the various components within it.

## Section 2 - Overview of the attributes for effective banking supervision

It was agreed that 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, stage of development, the adequacy or otherwise of corporate governance and transparency arrangements, and the broader economic policy environment. In general, prudential regulation and supervision will need to be more comprehensive and intensive where there are substantial inadequacies in the other factors required to promote systemic stability.

The Basel Core Principles for Effective Banking Supervision and associated methodology documentation set out a comprehensive framework to assist authorities to review and develop their banking supervision arrangements.

The main general points on banking supervision to emerge from the Policy Dialogue are as follows:

- The objectives of banking supervision should be clearly stated, achievable and transparent.
- Banking supervision powers should be clearly specified, preferably in statute or regulation, and be sufficient to enable the banking supervisors to perform their functions effectively. These functions will usually include the power to: assess applications for bank licensing; license banks; impose prudential regulations; obtain information from supervised institutions; examine financial institutions; require financial institutions to issue public disclosures and have them externally audited; investigate an institution or require it to undergo audit or review by an appointed person; impose sanctions on financial institutions for breach of supervisory requirements; give directions to a supervised institution in specified circumstances; and de-license a bank in specified circumstances.
- The banking supervision authority needs to be sufficiently resourced to perform its functions effectively, with an appropriate degree of political independence. This includes the need for the supervisory authority to have

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staff with relevant skills, knowledge and experience to perform their supervisory duties, including a sound understanding of banking risks and the structures needed to manage those risks effectively.

- It is also essential for supervisory agencies to maintain well designed training programmes for staff. In this context, one of the ideas to emerge in the Policy Dialogue was the potential benefit of seconding banking supervision staff to other supervisory agencies and to commercial banks, as part of a programme to broaden and deepen the skills and knowledge of staff.
- The banking supervision authority should be subject to appropriate transparency and accountability arrangements, to encourage high quality, efficient and impartial decision-making by the banking supervisors.
- 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 financial 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. However, a balance needs to be struck between the banking supervisor satisfying itself that banks are managing their risks appropriately, while not going so far as to take responsibility for the management of those risks. 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, corporate governance and market discipline arrangements can be put in place. In the longer term it is desirable for supervisors to encourage the adoption of structures that will eventually minimise the need for supervisors to play an intensive day-to-day role in this area.
- A number of the participants in the Policy Dialogue represented economies in which many of the banks are

foreign-owned and operate in the economies in question either as branches or subsidiaries of a parent bank. It was agreed that a significant presence of foreign-owned banks in a banking system requires the host supervisor to closely monitor the parent banks and the banking systems of the parent banks, particularly if the banks in question have substantial market share in the host economy's financial system. This recognises the contagion risk that can arise for the host economy where the parent banks or the parent banking system gets into financial difficulties. It was also agreed that the presence of foreign-owned banks in the banking system might suggest the need for limits on exposures from the subsidiary bank to the parent bank, so as to minimise contagion risks. In some cases, there may also be a need to require foreign-owned banks to operate in the host economy as subsidiaries rather than branches, so as to strengthen the capacity of the host supervisor to adequately supervise risks in the host banking system.

- It was further agreed that the increasing internationalisation of the banking system suggests the need for an increasing degree of cooperation between national supervisory authorities, including through memoranda of understanding and similar agreements. In particular, it was recognised that there will be a need for supervisory authorities increasingly to cooperate on the sharing of bank-specific and banking system information and to develop mechanisms for effectively coordinating the response to financial crises involving international banks. There are also considerable benefits in sharing views and experiences on policy issues and approaches to particular banking sector issues, in order to reduce "re-inventing wheels" and to enhance understanding. And it was agreed that, in some cases, an increasing internationalisation of the banking system might point to the need for greater harmonisation of regulatory arrangements.
- Supervisors need to be aware of the risks associated with excessive or poorly designed prudential regulation and supervision of banks. These risks can include the imposition of excessive compliance costs on banks, unintended regulatory distortions to economic behaviour by supervised institutions, the risk of regulations creating

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an unlevel playing field and impeding competition in the financial sector, and the creation of incentives for disintermediation of financial activity into unregulated parts of the financial sector. There is also a risk that excessive prudential regulation and supervision can create or exacerbate moral hazard risks and weaken market disciplines. For all these reasons, it is important that authorities give careful thought to the design and implementation of banking supervision and regulation.

## Section 3 - Supervision of banks' capital

An adequate level of capital relative to a bank's risks is an essential requirement for a stable financial system. Capital provides a buffer to absorb losses arising from a range of risks, including credit risk, exchange rate risk, interest rate risk, equity risk and operational risk. The capital buffer not only provides protection to depositors and other creditors of a bank, but also reduces the risk of a bank becoming insolvent and "closing its doors" in the event of a severe loss. In this way, capital assists in the promotion of systemic stability, by reducing the probability of disruption to the financial system and contagion effects that can result from the failure of a bank.

A number of issues emerged in the discussion of capital:

### Level of minimum capital ratio

The appropriate level of the capital ratio will vary depending not only on the risk profile of the bank in question and its capacity to manage its risks, but also the risk features of the banking system and the wider economy in which the bank operates or has its principal business. For example, the 8 per cent international standard is likely to be far too low for banks that operate in countries with a proneness to financial and economic instability, or where a country's frameworks for promoting financial stability are under-developed (eg such as the quality of economic policy, corporate governance, disclosure requirements, banking supervision frameworks, etc). Therefore, regulatory authorities need to be attentive to these considerations when setting the minimum capital ratio for banks operating in their jurisdiction. In some cases, capital ratios of well in excess of 8 per cent may be justified.

### Quality of capital

There was a discussion of the quality of a bank's capital, particularly the balance to be struck between tier one and tier two capital. It was acknowledged that tier one capital, particularly core equity, is generally superior quality than tier two capital, given that it is more difficult to withdraw and is more likely to "keep a bank's doors open" in the face of losses. In contrast, tier two capital is generally not effective in keeping a bank's doors open in the face of economic shocks, given that it generally does not count for the purposes of determining a bank's solvency. However, tier two capital can be useful in sheltering depositors and other bank creditors from losses.

### Stress testing of capital

It was noted that there are various stress testing techniques than can be used to test the sufficiency of a bank's capital to absorb the impact of shocks. For example, stress tests can be devised (and have been developed by the IMF and others) for exchange rate shocks, interest rate shocks, liquidity shocks and asset price shocks.

However, although stress tests are a potentially very useful tool for assessing a bank's and a banking system's vulnerability to particular shocks, participants noted that there are many practical difficulties in testing for shocks and that the models used rely on various assumptions that might not always hold true. Therefore, it is important that stress tests are not applied in a rigid manner and that the users of stress testing models have realistic expectations as to the limitations of the results of stress testing.

### Uniform or bank-specific capital ratios

There was a discussion of whether capital ratios should be applied uniformly across all banks or whether the supervisor should apply different minimum capital ratios to particular banks, having regard to their risk features. A uniform capital ratio approach has the merit of relative simplicity and avoids the complexities associated with determining bank-specific capital ratios (and therefore assessing the different risk profiles and risk management structures of each bank). It also arguably reduces the risk that the banking supervisor might be seen as the ultimate manager of each bank – a risk that

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could be heightened where the supervisor makes specific judgements about the appropriate minimum capital level for each bank. In this way, a uniform minimum capital ratio requirement could be seen to reinforce the need for bank directors and management to satisfy themselves as to the appropriate level of capital for their bank, having regard to its particular risks. However, a uniform approach to setting the capital ratio can increase the risk of some banks being under-capitalised unless other measures are taken to encourage banks to ensure that they do hold sufficient capital to absorb shocks (eg such as maintaining strong corporate governance and disclosure requirements and ensuring that the financial system is subject to robust market disciplines). Where a uniform minimum capital ratio requirement is used, bank supervisors must have the power and authority to require higher capital standards for higher risk institutions.

### **Solo and group capital requirements**

Capital requirements can be imposed either on a solo or consolidated group basis, or both. The approach depends in part on the objectives of banking supervision – such as whether capital is intended to protect depositors of the bank itself or to protect creditors of the banking group as a whole, or to meet broader system stability objectives. The most prudent approach is generally to apply minimum capital ratio requirements on both a solo and consolidated group basis. Applying minimum capital ratio requirements on a consolidated group basis ensures that the group as a whole has an adequate level of capital in relation to its risks and reduces the scope for banks to move risks off-balance sheet. In the case of consolidated capital, it is especially important that the boundaries for group consolidation are well defined and that they provide for the consolidation of all entities within the group that are owned or substantially controlled by the parent entity. Particular care is needed to assess whether associated parties, special purpose vehicles (eg securitisation vehicles) and other similar entities that are not subsidiaries in an explicit sense, but may be under the substantive control of the parent bank, should be consolidated into the group.

### **Reliability of capital ratio calculations**

The capital ratio for a bank is only as reliable as the underlying

exposure data on which it is calculated. This suggests the need for care to be taken in ensuring that banks have the systems in place, and are applying the systems reliably, to recognise all material credit and market risk exposures and to value them appropriately. It also points to the need for sound accounting standards and practices, particularly in respect of loss recognition and the valuation of assets and off-balance sheet exposures. In particular, there is a need for accounting conventions, and if necessary, supplemental prudential requirements, to ensure that banks prudently identify and classify non-performing, sub-performing and restructured credit exposures and value them at realistic economic values. It recognises the importance of effective external audit arrangements.

### **Encouraging bank director responsibility for capital adequacy**

Although supervisors have an important role to play in ensuring that banks are adequately capitalised relative to their risks, it is essential that bank directors and senior managers take ultimate responsibility for their banks' capital adequacy. This suggests the need for structures to strengthen the incentives for bank directors and managers to ensure that their banks are well capitalised, including robust corporate governance arrangements, disclosure requirements and strong market disciplines. It is also important that banking supervisors remind directors of their responsibilities in these areas, including by ensuring that newly appointed directors are apprised of their statutory duties and any additional duties imposed on them by the supervisors. And there is merit in requiring directors to sign regular public attestations as to whether (upon due enquiry and on the basis of placing reasonable reliance on professional advice) they are satisfied with the adequacy of their banks' capitalisation, and the basis on which they have reached that view. Moreover, in some cases there may be merit in providing training to bank directors on the nature of their duties and on issues relating to banking risks.

### **Capital alone is not sufficient**

Although capital is an important buffer for absorbing the impact of shocks, it is not sufficient in itself to safeguard the banking system. Of primary importance is to ensure that

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banks have the capacity to identify, monitor and manage all of their business risks. The next part of this article summarises the lessons relating to the supervision of banks' capacity to manage their risks.

## **Section 4 - Promoting the prudent management of risks within the banking system**

Much of the Policy Dialogue focused on the options available for enhancing banks' ability to identify, monitor and manage their risks. This recognises that risk management lies at the heart of promoting systemic stability. In that context, a number of policy lessons were identified:

### **There is a wide range of risks in the banking system**

Banks need to have systems in place to identify, monitor and manage a wide range of risks. These include: credit risk, exposure concentration risk, interest rate risk, basis risk, exchange rate risk, equity risk, legal documentation risk, settlement risk, payment system interface risk, liquidity risk, operational risk, IT risk, fraud and defalcation, reputation risk, business continuity risk and related party exposure risk. It was generally agreed that of these risks, the ones that warrant particular attention by bank management and directors and supervisory authorities are credit risk, market risk, related party risk and operational risk, given that these tend to be the main sources of bank distress and failure.

### **Methods available to promote effective risk management**

There are a number of ways in which risk management within the banking system can be strengthened. At a broad level, the main channels for promoting improved risk management in the banking system is through a combination of supervisory discipline, bank self discipline and market discipline.

The options available (in various combinations) include: requiring banks to make regular prudential disclosures of their risk positions to the supervisors; requiring banks to publicly disclose their risk positions and financial condition; on-site examination of banks' risk management systems and

loan portfolio by supervisors; setting prudential limits on banks' risk positions; requiring banks to maintain well-resourced internal audit and risk management functionality; requiring banks' internal auditors to provide regular reports to the supervisor on their assessment of the bank's risk management systems; requiring banks to undergo periodic external assessments in respect of their risk management systems; and requiring bank directors to sign regular public attestations as to their assessment of their bank's risk management systems.

### **Specifying prudential limits**

As noted above, one option for promoting effective risk management is for supervisors to impose limits on banks' risk positions. For example, limits (in dollar terms and in relation to bank capital) can be imposed on banks' exposures to individual counterparties or groups of related counterparties; on exposures to related parties; on open foreign exchange positions; on interest rate positions; on equity exposures; on inter-bank exposures; on exposures to particular industry sectors; maturity mismatches between assets and liabilities; and in relation to particular types of collateral (eg commercial property or equities). And minimum requirements can be imposed in respect of such matters as capital, liquid assets, and holdings of "hard" currency (where appropriate, having regard to exchange rate arrangements).

Compliance with exposure limits and minimum requirements needs to be monitored by the supervisor on a regular basis, desirably both in respect of end-of-period positions and peak intra-period positions. In addition, there is value in requiring banks publicly to disclose their exposure positions relative to limits on a regular basis (eg six monthly or quarterly).

Although specifying limits for risk positions can be a desirable feature of a supervision framework, there is a need for supervisors to be cognisant of the risks associated with placing excessive reliance on prudential limits. In particular, it is important that prudential limits are not viewed as a substitute for ensuring that banks have robust risk management systems in place. And it is important that the need for banks to ensure they comply with regulatory limits does not distract bank directors and senior managers from satisfying themselves that all of the bank's risks are being adequately managed. It also important to recognise that

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prudential limits can impose unintended regulatory distortions to a bank's economic behaviour, sometimes to the detriment of a bank's overall financial condition. And prudential limits, if taken too far, can excessively constrain a bank's and the banking system's ability to meet the needs of the economy. Therefore, it is important for supervisors to give careful attention to the design of any regulatory limits to be imposed on banks. It is generally recognised that, ultimately, the most effective means of encouraging sound banking practices is by ensuring that bank directors and management face strong incentives for prudent risk management, rather than placing too much reliance on prudential regulation.

### Off-site and on-site monitoring by the supervisor

It was agreed that supervisors have an important role to play in monitoring and assessing the adequacy of a bank's capacity to identify, monitor and control its risks. In particular, there is a need for supervisors to:

- monitor compliance with prudential requirements;
- satisfy themselves that banks have structures in place to manage risks effectively (ie risk management systems, internal controls, internal and external audit arrangements, effective systems for non-executive director scrutiny of their bank's risks, etc);
- be well placed to identify any emerging signs of distress in a bank, including in respect of deteriorating asset quality or a vulnerability to particular shocks; and
- be well placed to react quickly and effectively to minimise the consequences of an emerging distress situation.

This suggests the need for the supervisor to monitor banks regularly on the basis of prudential information provided to them by banks. This information could be based on publicly disclosed information (where banks are subject to comprehensive public disclosure requirements covering a wide range of prudential matters) or private prudential information, or both. The information would generally relate to: a bank's and banking group's capital adequacy (assessed using the Basel methodology); large credit exposures; related party exposures; market risk positions (both in respect of

the trading book and bank balance sheet/off-balance sheet as a whole); profitability; liquidity; inter-bank exposures; asset quality; provisioning; lending growth; and a range of leading indicators of potential distress. In order to increase the reliability of the information provided to the supervisor, there may be a need for the supervisor to require bank directors or senior executives to sign attestations as to the completeness and accuracy of the information (and to impose legal sanctions for breaches of this requirement). And there may be a need for the supervisor to require prudential information to be externally audited.

In addition to off-site monitoring, there may be a need in some cases for the supervisor to conduct some form of on-site assessment of banks, particularly where other risk management structures (such as disclosure, corporate governance and market disciplines) cannot be fully relied on to ensure adequate management of risks. The nature of on-site examinations will vary depending on policy preferences, the nature of the banking system, the extent of off-site monitoring, and the reliance that can be placed on corporate governance and market disciplines. Depending on these factors, on-site examinations can:

- be conducted by the supervisory authority itself or by an appointed external auditor or other suitably qualified external agency;
- be conducted by resident examiners (who are based in a particular bank for a lengthy period of time) or by examiners who are based outside the bank being examined;
- be undertaken on a regular basis (eg annually or throughout the year) or on an ad hoc basis;
- be in respect of the entirety of a bank's business (eg risk management systems, governance arrangements, asset quality, provisioning, etc) or in respect of only particular aspects of a bank's business;
- be conducted as a routine part of the supervision process or only when particular concerns arise (eg where a bank's financial condition may be of particular concern to the supervisor); or
- take the form of higher level discussions with a bank's

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directors or senior management team on the bank's strategic direction.

On-site assessments can be beneficial in a number of ways. If well structured and managed, on-site assessments can considerably deepen the supervisor's understanding of a bank's financial condition and risk management capacity. They can also better equip the supervisor to detect incipient financial distress and to take pre-emptive action where necessary. For on-site examinations to extract maximum value, they require well defined objectives, carefully thought through methodologies and well trained staff with a depth of experience and a maturity of judgement.

But there are some important considerations associated with on-site assessments. In particular, depending on how on-site examinations are structured, supervisors need to be mindful of the dangers of their examiners becoming so closely involved in the details of a bank's operations that the examiners lose sight of the bigger picture or compromise their objectivity. In some cases, there may be a risk that the supervisor is so closely involved in making judgements about a bank's business that it diminishes the incentives for the bank's board of directors and senior management to take ultimate responsibility for the management of the bank's risks. Supervisors also need to be aware of the compliance costs associated with on-site examinations and the diversion of banks' management from their primary duties.

### **Encouraging bank directors and senior managers to focus on risk management**

In addition to the use of prudential limits and supervisor monitoring to enhance the management of risks, it is important for the authorities to take other steps to reinforce the incentives for bank directors and managers to ensure that their bank's risks are being appropriately controlled. There are many ways of doing this, including to:

- require banks to make regular (eg quarterly or six monthly) public disclosures of their risk positions and financial condition;
- require public attestations from a bank's directors and/or senior management team on the adequacy of the bank's risk management systems;

- ensure that banks are subject to effective corporate governance arrangements, with particular emphasis on the duties of directors with respect to risk management and on the need for the board of directors to have a strong involvement in overseeing the internal and external audit arrangements in their bank; and
- require banks to have a minimum number of non-executive and fully independent directors.

## **Section 5 - Supervision of banks' exposures to related parties**

Many banking system distress episodes have been triggered or exacerbated by banks' exposures to related parties, particularly where the loans were not subject to the usual processes of credit approval and review. In recognition of the importance of effectively supervising banks' related party exposures, a number of policy lessons emerged, as follows:

### **Placing a limit on related party exposures**

An important mechanism for avoiding excessive related party exposures is to impose a limit on a bank's ability to incur credit exposures (of any form) to related parties. The limit can take a number of forms, including a limit on aggregate related party exposures (relative to the bank's or banking group's capital); sub-limits on exposures to particular categories of related party (such as bank directors or related parties in a position of effective control over the bank or banking group); varying the nature of the limit depending on the type of exposure and the maturity of exposure; making allowance for collateral (subject to who controls the collateral); and making allowance for enforceable netting arrangements between related parties.

At the Policy Dialogue, it was agreed that the supervisor needs to monitor compliance with related party exposure limits closely. This might suggest relatively frequent reporting by banks of their exposure positions, including reporting exposures on a peak end-of-day basis where feasible. It might also suggest the need for regular external audit of related party exposures, including in respect of the measurement of the exposures and compliance with the details of the rules relating to the limit.

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### Lending to directors

Some participants in the Policy Dialogue considered that a bank should be prohibited from lending to directors of the bank or of a company within the banking group. Others saw scope for allowing loans to bank directors within specified limits, provided that specific controls are established to ensure that any such loans are on strictly commercial terms and are subject to standard credit scrutiny, and that structures are in place to verify compliance with those controls.

### Independent directors

Independent directors can play an important role in managing the risks associated with related party lending, particularly in respect of lending to controlling shareholders or shareholders in a position of significant influence. One option is to require a bank to have a majority or substantial minority of non-executive, fully independent directors and to require the directors to sign regular statements attesting that they have examined the bank's exposures to related parties, are satisfied that the exposures are within any limits specified by the supervisor, are on strictly commercial terms, have been subject to standard credit scrutiny and are not in conflict with the best interests of the bank and the banking group.

### Scrutiny of risk management systems for related party exposures

Another option for promoting improved management of related party risks is to require a bank's systems for identifying, monitoring and managing exposures to related parties to be subject to external scrutiny. This could involve periodic assessment by the supervisors and/or review by other external parties, such as the bank's external auditors or possibly another firm of auditors. Factors to assess might include: whether a bank has systems in place to ensure that all related party exposures are subject to standard (or even more stringent) credit approval and review processes; whether the bank's independent directors (if any) have particular responsibilities to scrutinise related party exposures; whether the bank has systems to require all related party exposures to be reviewed at specified frequency; and whether the bank requires external auditors to undertake particular review of related party exposures and associated control systems as part of the annual audit process.

### Directors' and managers' conflicts of interest

It is also important that the supervisor ensures that a bank has effective systems in place for requiring the bank's directors and senior managers to declare any potential conflicts of interest and to have these appropriately recorded and managed.

## Section 6 - Assessing financial sector vulnerabilities and external surveillance of financial sector policies

At the Policy Dialogue, there was a discussion on the role of the IMF and World Bank in assessing countries' compliance with international standards and codes and in evaluating the vulnerability of economies to financial distress via the FSAP and ROSC processes. The main points to emerge from this part of the Policy Dialogue were as follows:

- The FSAP and ROSC processes provide very useful vehicles for externally assessing economies' compliance with relevant international standards and codes and for assessing the overall quality of financial sector policies. Participants in the Policy Dialogue noted the value of these surveillance processes, but noted the need for a flexible approach to the assessment of compliance with standards and codes. In particular, participants made the point that there is little sense in applying standards and codes as rigid templates, and that there needs to be a recognition that the nature of a country's financial sector policies will necessarily vary depending on its stage of development, the nature of the risks in the economy, and the structure of the financial system. Therefore, it was agreed that FSAP and ROSC assessments should not be conducted in a "ticks and crosses" manner and that there needs to be an explicit recognition by the assessors that there are many alternative viable policy options to meet or exceed international standards and to achieve financial stability objectives.
- Participants indicated that it would be helpful if the IMF and World Bank could ensure that the authorities of a country scheduled to participate in an FSAP or ROSC

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assessment are given comprehensive briefings on the FSAP and ROSC assessment procedures well in advance of the assessment commencing. It was also agreed that the authorities should be well briefed on the use of stress testing techniques and the nature of the stress testing models to be used by the IMF/World Bank in conducting FSAP assessments.

- Self-assessments are an important part of the FSAP and ROSC processes. Countries participating in FSAP and ROSC assessments are expected to complete comprehensive self-assessments of compliance with specified international standards and codes, using templates provided by the IMF/World Bank for the purpose. The self-assessments not only assist the IMF/World Bank in assessing a country's compliance with standards and codes, but also enable the authorities in the country to assess for themselves the extent of

compliance, the adequacy of their policy frameworks and the points of possible vulnerability. If prepared with a high degree of objectivity and in a comprehensive manner, self-assessments can provide a very useful mechanism for authorities to assess the adequacy of their financial sector regulation and to prepare for the FSAP/ROSC in a way that makes it more productive for all parties concerned.

There is a need for follow-up after the completion of FSAP/ROSC assessments, so that issues raised in the assessments are appropriately addressed by the authorities. In some cases, it may be necessary for the IMF/World Bank, in conjunction with the ADB/IADB, to provide well targeted technical assistance to the authorities in developing and emerging economies to assist them to design, formulate and implement reforms to address issues raised in the FSAP/ROSC evaluations.