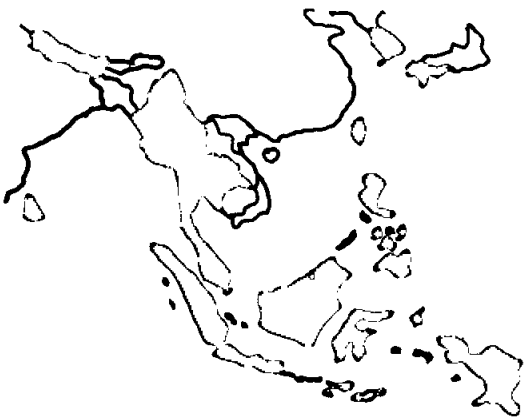
FINANCIAL SYSTEM SOUNDNESS AND RISK-BASED SUPERVISION

SELECTED PAPERS OF THE ELEVENTH MEETING OF SEACEN DIRECTORS OF SUPERVISION
8-10 October 1997
Kuala Lumpur, Malaysia

Foreword by
ANDREW CROCKETT
General Manager, Bank for International Settlements

Edited by
DELANO VILLANUEVA
Deputy Director (Research), The SEACEN Centre



THE SEACEN RESEARCH AND TRAINING CENTRE
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FINANCIAL SYSTEM SOUNDNESS AND RISK-BASED SUPERVISION

Edited by
Delano Villanueva

Selected papers presented at
the Eleventh SEACEN Meeting of Directors of Supervision
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Tel. No.: (603) 758-5600
Fax No.: (603) 757-4616
Telex: MA 30201
Cable: SEACEN KUALA LUMPUR

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Villanueva Delano, editor.

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FOREWORD

In recent years, as financial liberalisation has progressed and economies have become more open, the importance of strengthening domestic financial systems has been underlined time and again. The representatives of the Group of Ten countries and of emerging economies have recently reached an international consensus on the key elements of sound principles and practices needed for financial stability, which are enshrined in ***The Core Principles for Effective Banking Supervision***, published by the Basle Committee on Banking Supervision in September 1997. In November 1997, this document was re-issued by The SEACEN Centre to its member central banks and monetary authorities under the title, *Basle Committee's Compendium on Principles for Effective Banking Supervision.* The challenge for many countries is now to implement these core principles.

The theme of the Eleventh SEACEN Meeting of the Directors of Supervision — *Financial System Soundness and Risk-based Supervision* — and the papers presented at this Meeting provided an excellent opportunity to consider the issues associated with financial systems in general and many of the problems faced by the countries in this region in particular. This volume identifies many of the necessary preconditions to promote a sound banking and monetary system and highlights a number of the prudential rules and supervisory practices needed to foster financial stability.

Despite the progress that has been made with respect to developing consensus as to the formulation of norms, principles and practices, recent events in South-east Asia have demonstrated the importance and the urgency of initiating fundamental reforms. The ultimate health of the financial systems within this region will depend critically on the willingness and ability of governments, central banks and supervisory authorities to adopt and implement the principles and practices needed for financial stability. In my view, the fundamental areas for immediate focus include the adoption and implementation of meaningful accounting standards and disclosure rules, prudential rules requiring that financial and commercial transactions be made on an arms-length basis, and efficient procedures for ensuring prompt remedial action to deal with problem banks.

Andrew Crockett
General Manager
Bank for International Settlements

February 1998

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The Editor

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1.1 OPENING ADDRESS
Tan Wai Kuen

Since the last meeting in 1995 of the SEACEN Directors of Supervision, the role of banking supervision has gained greater prominence in view of the rapid pace of changes that are taking place in financial markets. All at once, bank supervisors are being confronted with the forces of globalisation of capital flows, the emergence of new financial products, competitive pressures from new market entrants and the sweeping changes which information technology can bring to payment systems. Against such a fast moving scenario, it is important for supervisory authorities to be equipped with the authority to ensure financial stability. For the banking institutions, it is the responsibility of the CEOs and directors to manage their banks prudently and to institute good corporate governance.

However, as evidenced by recent events in South East Asia, the health of the banking system is vulnerable to macroeconomic weaknesses and likewise, problems in the banking sector can undermine macroeconomic and monetary stability. Recognising the linkages between banking soundness and macroeconomic policy, The SEACEN Centre felt that this would be a most appropriate theme for this year's Meeting of Directors of Supervision. Using the broad title of "Banking Sector Soundness and Monetary and Supervisory Policies", our thanks should go to The SEACEN Centre's Deputy Director of Research, Dr. Dan Villanueva, for his effort in inviting a very impressive list of keynote speakers and panel discussants to facilitate the sessions on the various issues.

We begin this morning with the Keynote Address on "Banking Sector Soundness and Monetary and Supervisory Policies" by Dr. Carl-Johan Lindgren from the International Monetary Fund. Then we move on to a Panel Discussion on "Risk-Based Banking Supervision", drawing on the expertise of Dr. Lindgren, Mr. William Ryback of the Federal Reserve System, Mr. Guy Saint-Pierre of the Canada Deposit Insurance Corporation, Mr. David Carse of the Hong Kong Monetary Authority and Mr. Les Phelps of the Reserve Bank of Australia.

We end today with an address on "The Case for an International Banking Standard" by Dr. Morris Goldstein, Dennis Weatherstone Senior Fellow of the Institute of International Economics.

For tomorrow, we will spend the day sharing country experiences and receiving training. On Friday, we will have an interesting Panel Discussion on "Issues in Complying with the Amendment to the Basle Capital Accord to Incorporate Market Risks" participated by speakers from Bank Indonesia, The Bank of Korea, Bank Negara Malaysia, the Monetary Authority of Singapore and the Bank of Thailand. This panel will be chaired by Miss Kim P. Olson of the Basle Committee on Banking Supervision.

We are certainly going to have very interesting sessions for this Meeting and I hope that the various delegations will participate actively. Before I conclude, I would like to thank the Directors of Supervision and resource persons for supporting this event of The SEACEN Centre.

I would like also to express my deepest appreciation to the Secretariat of Bank Negara Malaysia for their untiring efforts in making all this happen.

On this note, I wish you a successful and productive Meeting.

1.2 INTRODUCTION
Delano Villanueva

The Eleventh SEACEN Meeting of Directors of Supervision, hosted by Bank Negara Malaysia, was held on 8-10 October 1997 in conjunction with the *Thirtieth SEACEN Course on Examination and Supervision of Financial Institutions.* This biennial meeting provided an exceptional opportunity for the Directors of Supervision of the SEACEN member central banks and monetary authorities to exchange views on the latest concerns and developments in banking supervision. The Meeting was attended by 17 delegates representing the nine SEACEN member central banks and monetary authorities of Indonesia, Korea, Malaysia, Nepal, Philippines, Singapore, Sri Lanka, Taiwan R.O.C. and Thailand, and other countries in the Asia Pacific region including Fiji and Vietnam. Observers at the meeting were senior staff from the Federal Reserve Bank of San Francisco. Resource persons came from the International Monetary Fund, Institute for International Economics, Board of Governors, U.S. Federal Reserve System, Canada Deposit Insurance Corporation, Hong Kong Monetary Authority, Reserve Bank of Australia, and Basle Committee on Banking Supervision. The theme for this meeting was **Banking Sector Soundness and Monetary and Supervisory Policies**.

In her opening remarks to the participants, The SEACEN Centre's Officer-in-Charge Mrs. Tan Wai Kuen observed that financial liberalisation and globalisation of capital flows have brought forth new challenges to bank regulators and supervisors. The financial crisis in Asia has underscored the vulnerability of the banking system to changes in the macroeconomic environment as well as the devastating effects on the macroeconomy of banking unsoundness. Hence, the above-mentioned theme for the 1997 Meeting of SEACEN Directors of Supervision was most appropriate.

In his keynote address, Carl-Johan Lindgren, Assistant Director, Monetary and Exchange Affairs Department, IMF discussed the two-way relationship between bank soundness and monetary and prudential policies, beginning with some general observations on the relationship between bank soundness and macroeconomic policy, what it takes to keep a banking system sound, the relationship between monetary policy and a sound financial system, the issue of whether or not there is a conflict between monetary policy and prudential policy, and finally, the need for coordination between monetary and prudential policies.

The remainder of this overview is organised as follows. The next paragraphs summarise the major issues relating to banking system soundness and monetary/supervisory policies. These include the relationship between the macroeconomy and bank soundness; how to keep a banking system sound; monetary policy and bank soundness; potential conflict between monetary and prudential policy objectives; and coordination of monetary and prudential policies. Then the country experiences on bank soundness and monetary/ supervisory policies are summarised. This is followed by a summary of alternative approaches to risk-based supervision, summary issues in complying with the amendment to the Basle Capital Accord incorporating market risks with particular reference to Korea, and summary features of an international banking standard or IBS.

1.2.1 Financial System Soundness and Monetary and Supervisory Policies

In his keynote presentation, Carl-Johan Lindgren discussed the meaning of a two-way relationship between the macroeconomy and bank soundness by arguing that good macroeconomic policy and a non-inflationary real growth path are required for a healthy banking system, and that a healthy banking system is required for a vibrant macroeconomy and effective macroeconomic policy.

There are five preconditions for a sound banking system: a sound financial infrastructure, including an effective legal, regulatory, judicial, and institutional framework and financial markets; sound macroeconomic management; good internal governance in individual banks, including effective internal information and control systems; market discipline, including a level-playing field, proper accounting standards, loan classification, and valuation systems; and unfettered prudential regulation and oversight.

Since the banking system is the channel through which monetary policy is transmitted, a broken banking system makes monetary policy ineffective. The interbank market malfunctions. It becomes segmented with a few strong banks refusing to lend to the many weak banks. Monetary policy aimed at the system as a whole will not work for the simple reason that the interbank market fails to redistribute liquidity in a normal fashion. As weak banks lose control over their balance sheets and become insensitive to penalty costs, the central bank may have to

accommodate required reserve deficiencies or make advances; thus, attempts at sterilising central bank credit may prove extremely difficult if not impossible, and open-market operations may not work.

The lender-of-last resort function of a central bank may raise an issue of potential conflict between monetary policy and prudential policy. Where banks face temporary illiquidity but are basically solvent, it is possible for a central bank to exercise its lender-of-last resort function without undermining its monetary stability objective through appropriate sterilisation. A timely and accurate recognition of liquidity/solvency problems is critical. That is why it is imperative that the monetary authority work very closely with the supervisory authority, regardless of whether the two are under the same or separate roof.

Another area of close coordination between monetary and prudential policies relates to the capacity of a banking system to intermediate large capital flows. The ability of prudential safeguards and measures to strengthen the credit and other risk management capabilities of individual banks may be overwhelmed by the failure of monetary policy to limit excessive credit expansion or contraction engendered by volatile capital flows. Where monetary policy is effective in smoothing out the credit expansion or contraction, it can help contain the adverse effects on asset quality and bank soundness.

The above issues were addressed effectively by participating supervisors in their narratives of country experiences, validating the close interrelationships between the macroeconomy and banking system soundness. Special mention may be made of the experiences of Fiji, Indonesia, Korea and Sri Lanka, where banking system soundness was compromised by government directed lending through dominant state-owned banks. In the Korean case, government directed lending continued even after the denationalisation of banks in the 1980s.

1.2.2 Approaches to Risk-based Supervision

A panel discussion on "Risk-Based Banking Supervision" was chaired by Delano Villanueva, Deputy Director, The SEACEN Centre, with presentations made on the United States by William Ryback, Associate Director, International Supervision, Board of Governors, U.S. Federal Reserve System, on Canada by Guy Saint-Pierre, Senior Vice-President, Insurance and Risk Assessment, Canada Deposit Insurance Corporation,

on Australia by Les Phelps, Head, Bank Supervision Department, Reserve Bank of Australia, and on Hong Kong by David Carse, Deputy Chief Executive (Banking), Hong Kong Monetary Authority.

William Ryback's description of the off-site/on-site procedures for risk-focused safety and soundness examinations of certain U.S. banks is admirable. Of course, the U.S. is one of the pioneers in risk-based supervision. American supervisors have had to keep pace with rapid IT advances in the banking industry, financial product innovations, and improvements in management systems and techniques, constantly evolving their supervisory procedures, particularly with respect to the assessment of risk management processes and internal controls. The American supervisory framework is a judicious blend of qualitative risk-focused safety and soundness examinations and quantitative transaction or compliance testing. The qualitative element assesses the types and extent of risks a bank faces in its operations, evaluates the bank's procedures of managing and controlling those risks, and determines whether bank management and directors fully understand and monitor the bank's exposure to these risks.

Guy Saint-Pierre and Les Phelps described similar procedures that are in place in Canada and Australia, respectively. In these countries, the CEOs and boards of directors of individual banks have to attest self-assessment on the adequacy and efficacy of risk management systems. Les Phelps noted the "forward-looking" dimension of risk-based supervision, which distinguishes it from the traditional paradigm of pouring over historical statistics "where the bank has been, not where it is going." As Barings exemplified so vividly, a bank may be reporting a healthy capital ratio yesterday but be technically insolvent tomorrow. In a risk-based supervision, supervisors do not merely look at reported data, but more importantly ask where the bank expects itself to be in a year's time and how it plans to identify, measure, and manage the inevitable risks it will face.

A panel discussion on "Issues in Complying with the Amendment to the Basle Capital Accord to Incorporate Market Risks" was chaired by Kim Olson, Secretary of Models Task Force and Co-Secretary of the Capital Sub-Group, Basle Committee on Banking Supervision, with presentations made by Indonesia, Korea, Malaysia, Singapore, and Thailand. Of these countries, Korea came closest to being a relevant case in terms of market risk exposures of Korean banks. However, as

Moon-Ho Lee, Deputy Director, Supervision Policy Department, Office of Bank Supervision, Bank of Korea observed, the extent of market risk exposure of Korean banks remains at a low level in relation to those of large banks in the U.S. and other advanced countries. Therefore, the implementation of market risk capital requirements as enunciated by the Basle amendment beginning 1 January 1998 does not appear to be an urgent task for Korea. Nonetheless, Lee believed that as derivatives continue their rapid growth in Korea, the market risk requirements need to be introduce even at this early stage in order to develop the Korean banks' risk management capabilities.

1.2.3. The Case for an International Banking Standard

Finally, Morris Goldstein, Dennis Weatherstone Senior Fellow, Institute for International Economics presented his *Case for an International Banking Standard,* or IBS. Goldstein argued that, like the BIS standards, "An international standard offered incentives for countries to make improvements that they might not have been able or willing to make unilaterally." Goldstein selected eight priority elements of an IBS for their past and potential contribution to banking crises in developing countries. These are: public disclosure, accounting and legal framework, internal controls, government involvement, connected lending, bank capital, incentive compatible safety net and resisting pressures for regulatory forbearance, and consolidated supervision and cooperation among host- and home-country supervisors.

II. FINANCIAL SYSTEM SOUNDNESS AND MONETARY AND SUPERVISORY POLICIES

2.1 MONETARY AND SUPERVISORY POLICIES AND BANKING SYSTEM SOUNDNESS: AN OVERVIEW

Carl-Johan Lindgren[1]

My presentation will cover the relationship between banking system soundness and monetary and prudential policies. I will start with some observations about the relationship between banking system soundness and macroeconomic policy in general, and secondly talk about what it takes to keep a banking system sound. I will then discuss the relationship between monetary policy and a sound financial system; the question whether or not there is a conflict between monetary policy and prudential policy; and finally, the need for coordination between monetary and prudential policies.

The presentation will focus on the banking sector, which can be used as a proxy for the financial system as a whole — this is also appropriate because the banking sector accounts for the bulk of financial intermediation in all countries (except the United States) and most governments consider the banking system special. And I consider near-banks, like finance companies doing banking business, to be banks — even if they legally are not necessarily treated equally.

2.1.1 The Two-way Relationship Between the Macroeconomy and Bank Soundness

What do we mean by the two-way relationship between the macroeconomy and bank soundness? Good macroeconomic policy and a stable and growing real economy are the preconditions for a sound banking system, and the other way around, a sound banking system is a precondition for a healthy macroeconomy and efficient macroeconomic and policy formulation.[2]

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1. The views expressed in this paper are those of the author and do not necessarily reflect the views of the International Monetary Fund.

2. We have in the IMF studied this two-way relationship extensively in the last few years. These studies have been summarised in a book **Bank Soundness and Macroeconomic Policy** that was published last year. And our Executive Board has concluded that this interrelationship was so strong that maintenance of a sound banking system should become a major economic policy objective in its own right. Accordingly, all IMF surveillance missions to member sountries will intensify their focus on financial sector issues. We have also studied corrective policies for systemic banking distress or crisis, and have recently published a follow-up book **Systemic Bank Restructuring and Macroeconomic Policy.**

If the economy is booming, the banking system typically is doing well. If the economy does poorly, or there are major macroeconomic disruptions — either as a result of policy errors, external shocks or other causes — the banking system suffers. Banks manage risk; they are derivative institutions, which share in the profit- and loss-making of their clients — and they are highly leveraged. Not only do profits and losses in the real economy affect banks forcefully, they do so asymmetrically. When banks' borrowers make losses, banks are forced to share those losses in the form of non-performing loans, loan-loss provisions and eventual loan write-offs — but it does not work the other way around. Because bank contracts are expressed in nominal terms, when banks' clients make exceptional profits, banks do not share in those profits.

Loan losses in the banking system are normally concealed for some time, because of the difficulty of valuing banks' non-performing loans. There is no market for such loans. It is impossible to accurately estimate the value of a future loan repayment stream, when the financial condition and future of the borrower are in doubt, or when the values of collateral are hard to determine. Bankers have incentives to overvalue problem loans and not show losses, because losses could lead not to only reduced bonuses for managers and dividends for owners, but also to a loss of depositor and creditor confidence, and eventually to loss of control of the bank. And banks are different from other companies in that they can stay liquid well beyond the point when they become insolvent (insolvent banks become like pyramid schemes). This is why financial problems in banks can be concealed for quite some time until some external event triggers a liquidity crisis — only then is the full extent of the losses and insolvencies revealed.

The real economy affects banks, but the relationship also works in the opposite way. If banking problems have been allowed to become widespread, the resultant losses can be enormous. In many countries such losses have exceeded 10 percent of GDP, or to cite a couple of Latin American examples, 20 percent in the recent crisis in Venezuela, and over 30 percent in the Chilean crisis of the early 1980s. Banking sector unsoundness can lead to capital flight, balance of payments problems and a general loss of confidence in macroeconomic management. An unsound banking sector may also result in various direct and indirect costs; for example, an unsound system can exert an enormous drag on the economy in the form of inefficient resource allocation, as

financial resources are used to cover losses and capitalisation of interest on non-performing loans, rather than to support new productive economic activity; a weakened system may fail to meet its potential in mobilising savings, and high intermediation margins may stifle economic activity. Adverse selections and moral hazards may distort the incentive structure, as unviable banks gamble for survival, and in the process contaminate sound banks and enterprises.

2.1.2 How to Keep a Banking System Sound?

Let me briefly identify five preconditions for a sound banking system:

(i) A sound financial infrastructure, including an effective legal, regulatory, judicial and institutional framework and financial markets. The legal framework should include not only central bank, banking, securities and insurance laws, but also adequate laws for property, contracts, companies, collateral, bankruptcy, loan recovery, etc. It should be stressed that effective and uniform implementation is more important than the laws. This includes the courts, which should be impartial and routinely enforce loan contracts. The framework should include an accounting and auditing tradition, there should be sufficiently liquid money and capital markets, as well as efficient payments and settlements systems.

(ii) Sound macroeconomic management. Policies should be predictable and consistent with economic stability and growth. Large unsustainable fiscal or balance of payments deficits should be avoided, so should excessive or protracted under- or over-valuation of the exchange rate. High real interest rates affect bank soundness and banks. Policy reversals or shocks can seriously affect banks and can trigger a crisis, especially in a system that already is weak. So, as mentioned before, a sound economy and macroeconomic management are essential.

(iii) Internal governance in individual banks. This is perhaps the most important ingredient. A sound banking system needs competent and professional bankers who can manage and limit risks. Effective internal information and control systems are crucial. Credit risk remains the principal risk in banking in all countries; therefore, banks need to put particular emphasis on credit assessment and

approval procedures, and on close monitoring of all loans, in particular, problem loans. While disbursing credits is easy, making sure that the money will be repaid is often difficult. It is the latter that is called banking, the former is just transfers.

(iv) Market forces should be allowed to work. Market discipline requires common rules that are strictly and uniformly enforced (a level playing field), availability of information and exit of weak institutions. Information is essential for markets to work. But as mentioned before, banks tend to distort their information when they have problems. This means that information is available the least when it is needed the most. Therefore, proper accounting standards, loan classification, and valuation systems are of utmost importance. Furthermore, weak banks are often protected from market forces. Political interference, supervisory forbearance, last resort lending by central banks, and excessive guarantees of banks' depositors and creditors often prolong the life of unviable banks. A swift and preferably rule-based process should be in place for the orderly exit of banks. Actions should be taken early, before losses mount and a bank's networth becomes negative to the point where closure and liquidation would cause substantial losses for its creditors, lead to contagion of other banks and enterprises, and possibly threaten the system as a whole.

(v) Prudential regulation and oversight complement internal governance and market forces. The supervisory authority determines who can operate a bank, seeks to limit excessive risks,[3] determine whether the capital adequacy is real, decides on what corrective actions be taken, and when unsound banks should be forced to exit the market. The objective of supervision is important — the supervisory authority should not be responsible for the soundness of individual banks, but rather for the system as a whole. If all or some of the four previous preconditions are missing, the task of the supervisor may become impossible.

Prudential regulation alone is not sufficient — the rules have to be implemented. In order for a supervisory authority to effectively carry

3. For example, through limits on insider lending and loan concentration, and on exposures to excessive maturity, interest and exchange rate, and other market risks.

out its job, for example, to impose rules, call for additional loan loss provisions, require corrective action, etc., it must be independent from political influence. Needless to say, the supervisory authority should also be held accountable. Effective supervision requires highly professional supervisors, and they must be reasonably well remunerated. Good supervision is expensive, but bad supervision is far more expensive — the former may cost millions or tens of millions, but the financial problems caused by a lack of good supervision may cost hundreds or thousands of millions.

2.1.3 Monetary Policy and Bank Soundness

A sound banking system is crucial for the conduct of monetary policy. The banking system is the channel through which monetary policy is transmitted and if this channel does not work as expected, policy becomes ineffective. It is obvious that this applies to countries that rely on indirect, market-based instruments of monetary policy. But our studies have shown that the effects apply equally to those countries that still apply direct instruments — and those instruments involve other well-known distortions as well.

What form does the malfunction take, when the monetary policy transmission mechanism does not work? First, the price channel: If banks or their borrowers are not interest rate sensitive, then interest rate changes by the central bank have limited effects or no effects at all. For example, banks and their clients may be gambling for recovery and are prepared to borrow at any price; distressed banks may be bidding for deposits regardless of price (and depositors may not care as long as their deposits are insured). Second, the volume channel: Banks may be so weak financially that they cannot control the size of their own balance sheet. A central bank policy aimed at restricting credit simply cannot be implemented, because banks' balance sheets are growing automatically through accruals of losses that are concealed as credit in the form of capitalised interest, and banks may have few good loans to call in or other assets to sell. Therefore, they will be unable to shrink their balance sheets.

When the banking system is weak, it typically becomes segmented. Remaining strong banks are becoming increasingly reluctant to do business with weak banks, first by exacting a premium or lending, but eventually by refusing any exposure. This means that the interbank

market will stop working and not facilitate the clearing necessary for the use of indirect monetary policy instruments. The result is often a situation in which one part of a system is very liquid, while another part has severe liquidity problems. Monetary policy measures aimed at the system as a whole will not work because the interbank market does not redistribute funds in the system as it normally would.

As banks lose control over their balance sheets and penalty costs cease to be deterrents, the central bank may be forced to accommodate shortfalls in reserve requirements, provide automatic overdrafts, or extend outright credit. It may be impossible to sterilise central bank lending as desired. Open market operations may not work as expected. Eventually, reserve requirements, discount rates, and other system-wide monetary control instruments may become so erratic in their effects that the central bank will be forced to rely on direct credits to individual banks, if it wishes to support the system.

The interest rate structure often becomes bipolar, as sound banks flush with liquidity bid down rates on safe instruments like government treasury bills, while the weak banks are prepared to bid almost any price for short-term liquidity in order to avoid defaults in their clearing commitments and possible intervention by the supervisors. Interest rates can also become erratic, and we have seen cases where the policy stance has been to increase interest rates but the market has in fact bid them down — and the central bank in effect has lost control.

Reliability of the monetary data becomes a serious concern. Money and credit may become overstated, relationships with the real economy may become unstable and it may become increasingly unclear what the appropriate monetary stance should be, and what targets to use. For example, in a case of serious market segmentation, a focus on aggregate targets like excess reserves may not work, as they conceal conditions in individual banks that can affect policy implementation.

When a banking system is weak, the scope for monetary policy action also becomes limited. There may be a need to raise interest rates to protect the balance of payments, but any increase in interest rates may lead borrowers to default and thus precipitate a bigger problem and even a liquidity crisis. Similar constraints will apply to exchange rate changes, and, needless to say, if there is uncertainty about the exchange rate that leads to a currency crisis on top of an

already weak banking system, monetary control can easily be lost. Although there are often pressures to relax monetary policy to ease pressures on the banking system, this should not be used as an easy short-term excuse; price stability is a key ingredient for long-term banking system soundness.

Lender-of-last resort policies have to be exercised very carefully in order for the central bank not to become subject to adverse selection that would expose itself to excessive risk and make the situation worse. Only solvent banks should be supported. This should apply regardless of whether or not insolvent banks provide collateral. Any central bank credit to an insolvent bank will allow that bank to continue operations and thus is a measure that will work against market forces.

The determination of which banks are both illiquid and insolvent, and which banks are illiquid but solvent is often put forward as a real dilemma — and it is, given the typical weakness and lack of transparency of the data on non-performing loans in problem banks. But this dilemma is often exaggerated. As mentioned before, banks can stay liquid long after they have become insolvent and experienced supervisors are almost unanimous in their view that protracted liquidity problems in banks is a sign of underlying solvency problems. So when banks show persistent liquidity problems, the central bank should err on the side of caution, assume that it is insolvent and not provide credit. That may be easier said than done if the country has a tradition not to close banks. But it should be stressed that the market exit of individual banks is the way to ensure that the system as a whole stays sound. This course of action may not work if the system already is so weak that any such measure would trigger an outright systemic crisis — in that case a comprehensive restructuring strategy is needed.

As soon as problems in individual banks are becoming known, they should be dealt with quickly and transparently, since supervisory forbearance tends to make the government financially co-responsible and delays in dealing with banking problems almost increase ultimate resolution costs. To the extent the resolution of banking problems involves fiscal costs, they should be given full consideration in the government budget as soon as they become apparent. If such costs or contingency costs become transparent, there will be more pressure for timely action, which will tend to keep the problem from spreading

to other banks, keep the system sound and thus limit the impact on monetary policy management.

2.1.4 Is There a Conflict Between Monetary and Prudential Policy Objectives?

In recent years, the debate on monetary policy and central banking has largely focused on the macroeconomic objective of price stability, while relatively little attention has been paid to the microeconomic foundation to monetary policy, i.e., financial system soundness. It is often argued that there is a conflict between the monetary policy objective of price stability and the prudential policy objective of a sound banking system. This is also used as one of the principal arguments for separating the banking supervision function from the central bank.

As mentioned before, a sound banking system is a precondition for monetary management. In the IMF we see no inconsistency between the two policy objectives, which we regard as mutually supporting: a sound banking system requires price stability and price stability over time requires a sound banking system. At the margin and in the very short run there may be some conflict, but we see no conflict between the two policy objectives over time, as monetary stability is not sustainable without a sound banking system.

Let me elaborate on the implication of this a bit more. In principle, it is possible to operate a lender-of-last resort facility, while holding on to a stable path for monetary growth through sterilisation operations — especially in a situation where banks face temporary illiquidity. However, in cases of protracted illiquidity or insolvency, where repayment of the central bank credit is less likely, sterilisation may not work and the monetary targets may have to be reassessed. This highlights the importance of confining central bank lending to solvent banks; to be able to do so, the monetary authority will need to work closely with the supervisory authority.

This conflict is often used as an argument in favour of keeping the supervision function within the central bank. This is an issue on which we in the IMF have no firm view. Our strong view is that a central bank must always be well informed about the soundness of the banking system through which it operates.

2.1.5 Coordination of Monetary and Prudential Policies

The cyclical swings in an economy are typically accentuated in banks. As mentioned before, when economic activity declines, banks' loan losses increase, often disproportionately. Ideally, prudential policies should be counter cyclical, i.e., increases in capital and reserves (both actual and required levels) should take place when the business is good, so that reserves can be drawn down to meet loan loss provisions when business is bad. But unfortunately this seldom happens. When conditions are good, there is a reluctance among bankers to set aside reserves; they prefer to pay dividends and bonuses (although well-run banks often issue new capital when business is good). Supervisors are also reluctant to tighten capital and other requirements. Instead, prudential requirements are normally kept unchanged regardless of cycles, which means that they are insufficient in cases of serious economic downturns. When a downturn already has begun, it is too late to tighten prudential policies — it simply cannot be done. It is often argued that banks face competitive disadvantages, if prudential requirements are tightened too much. But this is not so clear. I think there are many examples in this region, banks that routinely hold very high capital and still are among the soundest and the most profitable in the region, if not in the world.

In many countries, domestic financial deregulation can unleash competition that leads to overly rapid growth of bank assets, over-indebtedness of borrowers and asset-price bubbles. Such developments are often associated with large private capital inflows and consumption sprees, and can increase banks' exposure to risks for which they are not prepared. Appropriate reforms to strengthen prudential controls would be recommended but are seldom implemented with the necessary urgency.

In countries with thin domestic money and capital markets, greater access to foreign markets can provide more stable funding. But this can also be a source of volatility, since adverse developments or changes in expectations can abruptly cut off banks' bank access to these markets. In cases of heavy reliance on foreign credit lines, a sudden loss of access, or even the threat of such a loss, could trigger a systemic crisis, with substantial monetary, fiscal and balance of payments implications.

Large private capital flows — especially swings in such flows — have become major challenges for central bankers and bank supervisors in many countries, and this region is no exception. The impact of such swings is in many ways similar to the impact of cyclical movements in the domestic economy — a rapid growth of liquidity in the case of capital inflows (a domestic upswing) and a contraction in liquidity in the case of a capital outflow (a domestic downswing). In my view, unless a part of the liquidity growth in the upswing is sterilised, there could be pressure for bank credit to grow rapidly, and experience shows that credit quality tends to suffer in such situation, especially if the credit boom continues for an extended period. Conversely, when liquidity tightens — unless offset by a monetary (re)injection of liquidity — banks would be forced to call in credits, which would expose underlying weaknesses in their loan portfolios. This could cause individual banks to fail and, if widespread, could result in a systemic crisis. This scenario is particularly worrisome if the system is weak at the outset.

Prudential policies alone cannot handle these situations. The design of both prudential and macroeconomic policies, therefore, will need to consider the banking system's capacity to effectively intermediate large credit and capital flows. Prudential measures should seek to foster a strengthening of credit and other risk management capabilities in banks. Other measures such as stricter collateral requirements, or more drastic ones such as cease and desist orders, or perhaps even bank-specific balance sheet/credit limits for prudential purposes could be considered. But there is a limited scope in the short run for using such measures. By limiting excessive credit expansions or contractions, monetary management should be supportive, and help contain the possible adverse effects on asset quality and banking system soundness. Needless to say, this is another reason why close coordination between the monetary and supervisory authorities is essential.

Let me conclude by congratulating the SEACEN Deputy Director of Research for his foresight in the selection of the theme for these meetings. In early 1997, it sure could not have been predicted how relevant the subject would be in this region today. At the recent Annual Meetings of the IMF and World Bank in Hong Kong, banking and financial sector soundness in general and the problems faced by this region in particular certainly were a central theme. For supervisors, this means that you have suddenly been put on centre stage, and that

you will all be in for major challenges in the months and years ahead. Meetings such as this are very useful, because they will enable you to keep abreast of strategies and policies being implemented in other countries and learn from the ways in which they have dealt with their problems. I wish that the meeting will be successful and rewarding to you all.

2.2 FIJI

Sada S. Reddy

2.2.1 Introduction

In Fiji, our first experience in dealing with a problem institution has been with the National Bank of Fiji (NBF), a fully government-owned commercial bank. As part of lessons learnt from that crisis, the Reserve Bank is in the process of documenting procedures on how to deal with problem institutions as part of its contingency plan. Relatedly, we will also be working on designing and introducing procedures for identifying early warning signals to highlight as early as possible an institution which may be experiencing problems. This paper covers the implications of the NBF problems for our monetary policy stance and our banking supervision framework. A summary of the supervision of NBF is contained in Annex 2.a.

2.2.2 Background to the Failure of the National Bank of Fiji

The financial system in Fiji comprises the Reserve Bank of Fiji, seven commercial banks and other non-bank financial institutions including credit institutions and insurance companies. All banks are foreign-owned except for NBF. Of the commercial banks operating in Fiji, the five foreign banks have maintained stable financial positions. The NBF failure is the first case of insolvency since the establishment of a central bank in Fiji in 1973. Banking supervision as a separate function of the Reserve Bank of Fiji was not established until 1989 under technical assistance from the International Monetary Fund.

The Reserve Bank of Fiji became aware that NBF had serious asset quality problems in 1991 and again in 1992 when it carried out on-site examinations of the bank's head office and main branch in Suva. These examinations noted a serious lack of sound lending and loan recovery principles; inadequate internal and management controls and a lack of appropriate accounting standards being followed.

Following these examinations, the Reserve Bank of Fiji became increasingly concerned with several developments at NBF which included a rapid growth in the bank's loan book, the rising level of problem loans not being recognised by the bank, an increasing reliance on volatile wholesale institutional deposits to fund the growth in lending, and an inadequate level of capital.

As a result of continuing concerns raised by the Reserve Bank, a Special Audit and investigation of NBF was commissioned by the Minister of Finance in January 1995. The audit confirmed the serious nature of the NBF's financial position. Since the National Bank of Fiji's deposits were Government guaranteed, the institution was rescued with public funds.

A rehabilitation programme approved in June 1995 after recommendations from a World Bank technical assistance, became effective from August of the same year. The rehabilitation programme was terminated in September 1996 after NBF was restructured into two separate entities. The viable part became the NBF Personal Bank, whilst the Asset Management Bank (AMB) was given a mandate to reschedule the bad loans and repay depositors. The rehabilitation programme also incorporated numerous other measures including the hiring of new senior management, an enhancement of the role of the board of directors, a full asset quality review, and a strengthening of policies and controls within the bank. It is also expected that of some $250 million loan assets originally transferred to AMB, around $160 million is to be written off as irrecoverable. Problem loans had represented 59 percent of all NBF loans in 1994. In contrast, for the other five international banks, they represented 2.6 percent. The direct cost of the bank failure to the economy in terms of funding alone has mounted to around $209m from October 1996 to June 1997, or over 8 percent of GDP.

2.2.3 Implications for Monetary Policy

(1) Pre-restructuring

The banking system is the primary conduit for the transmission of monetary policy in Fiji and there is little doubt that the NBF crisis has affected the stance and implementation of policy over the past few years. At the time of the crisis, monetary policy was conducted within a framework of monetary targeting. The Bank used open market operations in the money market to establish liquidity conditions consistent with low inflation. Growth in domestic credit was used to gauge price pressures in the economy.

In the early 1990s, inflation was relatively high and the aggressive lending policy being pursued by the NBF was reflected in a pickup in

asset growth of the commercial banking sector. During 1991 to 1993, loans and advances of commercial banks grew sharply with NBF's portfolio expanding at an average annual rate of 39 percent and other commercial banks' portfolios growing on average by around 6 percent per year.

The pace of growth in domestic credit should have spurred concerns about a prospective build-up in inflationary pressures and policy should have been tightened. RBF was in fact, at the time, absorbing excess liquidity by issuing RBF Notes. As the crisis developed however, the NBF became a heavy borrower in the interbank market with gross turnover peaking at nearly $300 million during November 1994. Overnight interest rates rose sharply. As some large institutional investors withdrew funds and other commercial banks became more reluctant to lend, the NBF drew more heavily on the Reserve Bank. The Reserve Bank was forced to place special deposits with the NBF, even while it was absorbing excess liquidity in the system by issuing securities.

Monetary policy was complicated by the need to ensure adequate liquidity for the NBF to ensure that its weakness did not result in more widespread systemic problems. In order to maintain confidence, the public was informed that under the NBF Act, all deposits were guaranteed. In addition, the Reserve Bank conveyed to the public their willingness to satisfy the cash flow requirements of NBF.

Although liquidity levels in the system were higher than the Bank would have preferred on anti-inflation considerations alone, it continued to make funds available to the NBF. By 1995 however, the economy had slowed noticeably and inflation had fallen to acceptable levels. In 1995, NBF loans and advances started to decline following a directive from the Reserve Bank to cease all new lending to comply with the guidelines of the rehabilitation program.

(2) Post-restructuring

During the restructuring phase, monetary policy remained geared to providing adequate liquidity to the financial system, while ensuring that liquidity conditions did not generate excessive price pressures. During this phase, the tensions between the two broad responsibilities of the Bank — price stability and financial system stability — were not

apparent. Against a background of a weak economy, low inflation and a positive inflation outlook, an accommodative monetary policy stance was consistent with the temporarily increased liquidity needs of the financial system due to the refunding program, and with the needs of the real economy.

While the accommodative policy stance allowed the restructuring to proceed relatively smoothly without an attendant rise in interest rates, the potential for any policy stimulus for the real economy was limited. Where the fast pace of lending growth of the banking system had fuelled output growth prior to the crisis, the aftermath was characterised by a period of weaker growth. As expected, the NBF problems had a dampening effect on the economy, although other factors, including constitutional and land tenure issues, also added to uncertainty.

With cash flows weaker and collateral values less secure, the commercial banks maintained a relatively large premium for risk in their interest rates; they also became more cautious in their lending. The effect was a continuation of high lending rates and low demand for credit. Despite an accommodative stance of monetary policy, the commercial banks were reluctant to lower interest rates or fund increased lending.

The implementation of monetary policy was further complicated by the distortions that the restructuring program introduced into the monetary and credit aggregates. During the restructuring, funds were withdrawn from the NBF by the bigger investors (particularly the National Provident Fund) reducing the deposit base of the commercial banking system. Although some of these funds were placed in government securities and eventually found their way back to the wind- up part of the bank - AMB - they were not classified as deposit liabilities. The effect was that the monetary aggregates declined sharply. The credit aggregates were also distorted by write-offs. Together this meant that the monetary and credit aggregates became much less useful as indicators of the state of the economy or of emerging price pressures.

After two years the effects on the economy of the NBF crisis are difficult to quantify. It seems clear that production, investment and employment are lower than would otherwise be the case, but other factors have also been at work. The most obvious direct cost has been

the substantial build-up of government debt resulting from the Government's need to meet the deposit guarantee of the NBF. The NBF failure has added an amount equivalent to about 8 percent of GDP to government debt; at current interest rates the servicing burden associated with the debts is over 0.5 percentage point per year.

Monetary policy continues to be hampered by the general uncertainty surrounding the economy and there is no doubt that some legacy of the recent experience remains in commercial bank lending behaviour. Nevertheless, the Bank is continuing to actively pursue monetary policy settings consistent with the needs of the economy as the effects of the NBF crisis are unwound. The two primary targets of the Bank's monetary policy — low inflation and adequate foreign exchange reserves — continue to be met and the Bank is providing adequate liquidity to support growth as the economy moves into the recovery phase.

2.2.4 Implications for Supervisory Policies

With regard to supervisory policies, a lot of issues arising from the NBF problem suggested deficiencies in our powers to handle in an appropriate manner, any concerns which we may have in respect to individual institutions and also systemic stability concerns. For instance, under the previous Banking Act of 1983, the Reserve Bank of Fiji did not have specific powers to conduct on-site examination of licensed financial institutions let alone any powers to enforce findings/ recommendations from those assignments. Our Banking Act has since been revised with a new Act implemented from June 1995 which strives, as far as possible to take account of developments in our domestic financial system and initiatives of the Basle Committee on Banking Supervision and other supervisory authorities.

Financial deregulation and increasing sophistication of markets and market participants are some of the factors continuing to challenge the effectiveness of the Reserve Bank's supervision of the financial system in Fiji. The licensing and supervision of financial institutions carrying on banking business in Fiji are directed at:

- maintaining the soundness of the financial system, and
- minimising detriment to the interests of depositors and creditors of licensed financial institutions.

(1) Prudential policy developments

Arising from the Banking Act of 1995, one of the important tasks that the Reserve Bank is working on is the establishment of policies, standards and guidelines with which licensed financial institutions should comply to ensure safe and sound banking. Financial institutions will continue to have considerable flexibility within which to conduct their business, as the directors and management are primarily responsible for the prudent operations of their institutions.

Some of the prudential policies that have been, or will be developed are:

- *Risk-Weighted Capital Adequacy Ratio*
  This has been formally implemented with effect from 1 July 1996; all licensed institutions are expected to reach the internationally accepted ratio of 8 percent by 31 December 1997. This requirement also applies to branches of foreign incorporated institutions.

- *Guidelines on Loan Classification and Provisioning Requirements for Impaired Assets*
  This has been implemented with effect from 1 July 1996.

- *Limits on Foreign Currency Exposure and Forward Foreign Exchange Contracts*
  This has been implemented with effect from 1 January 1996.

- *Guidelines for Minimum Disclosure Requirements of Annual Audited Financial Statements*
  This is expected to be finalised for implementation by the end of 1997.

Guidelines will be progressively developed on:

- Large Exposures and Credit Concentrations
- Role of External Auditors in the Supervision of Financial Institutions

The Banking Act 1995 now gives the Reserve Bank of Fiji the ability to impose conditions to a licence. The general aim is to reduce

the risk of serious problems through effective prudential standards or guidelines. Among other things, these may encompass:

(i) capital adequacy;

(ii) loan concentration and risk exposures;

(iii) liquidity;

(iv) asset and liability management;

(v) asset quality and provisioning;

(vi) internal controls and accounting systems; and

(vii) other matters as determined by the Reserve Bank from time to time.

The recent experience of banks in Fiji and overseas has shown that asset quality problems can be one of the most critically important factors affecting the strength and ongoing viability of a financial institution. To counter the difficulties of supervising banking groups and their subsidiaries, a new provision clarifies that the Reserve Bank's supervision powers will apply on a consolidated basis to subsidiaries of licensed financial institutions.

In line with the objective of ensuring prudent management of supervised institutions in the interest of soundness of the financial system, the Reserve Bank will be able to review the expertise of: (i) directors and employees of locally incorporated licensed financial institutions; and (ii) employees of foreign incorporated licensed financial institutions. It will have powers to disbar those that the Reserve Bank considers are unfit to hold such positions. Where such appointments are made by the Minister, prior consultation with the Reserve Bank must be made.

(2) Control over financial institutions

Where a licensed financial institution considers that it is likely to become unable to meet its obligations, or is about to suspend payment, it is required to inform the Reserve Bank. In these circumstances or where the Reserve Bank forms its own opinion to this effect, it may, with the interests of depositors and the soundness of the financial system in mind:

(i) issue directives to the licensed financial institution;

(ii) appoint a person to advise the institution;

(iii) where a breach of the Act or directives has occurred, appoint a person to assume control; or itself assume control of the financial institution; or

(iv) revoke or suspend the institution's licence.

(3) Involvement of external auditors

The role of external auditors in the supervision of financial institutions is being extended in a similar manner to that recommended and adopted by overseas supervisory agencies. This will provide the Reserve Bank with independent scrutiny of financial information and returns, and an evaluation of the effectiveness of systems and controls and compliance with prudential standards for each institution. Such reports will also assist in focusing the Reserve Bank's supervision and on-site examination on areas where weaknesses have been identified.

Every licensed financial institution is now required to appoint a chartered accountant who is in public practice, as the auditor of its Fiji operations. The external auditors will be approved by the Reserve Bank. The annual financial statements of all licensed financial institutions in Fiji are now required to be audited, whether the institution is locally or overseas incorporated. Such audited financial statements are required to be published in the local print media, in summary form.

Information and periodic returns supplied to the Reserve Bank may be required to be subject to external audit. Reports on such matters as the Reserve Bank may determine, including an opinion on a financial institution's liquidity, solvency, compliance with statutory provisions, and a review of accounting systems and internal controls, may be required to be prepared by an approved auditor or other person so appointed by the Reserve Bank.

The Act also provides that where the auditor considers that a financial institution is about to fail or is in serious financial difficulties, he may disclose such information as is relevant to the Reserve Bank, after taking reasonable steps to inform the institution of his intention to do so. The auditor will be protected from legal action or censure in respect of these disclosures provided the auditor acted in good faith.

(4) Consultation meeting with banks

An important component of our supervisory function involves regular consultation meetings with banks to discuss issues of a prudential nature. These would also include obtaining feedback from banks on their performance and future business plans, and give us the opportunity to relay any concerns we may have in respect to the business of the licensed institution.

As part of lessons learnt from the experience with NBF, the Reserve Bank of Fiji will be working on documenting procedures to deal with problem institutions. This includes developing procedures on early warning signals to highlight as early as possible an institution which may be experiencing problems. Staff numbers involved in our supervisory function have been boosted and there has been a focus on introducing prudential policies and standards which were absent prior to the NBF crisis.

Further work is needed on a mechanism to measure system-wide bank unsoundness and systemic implications of a problem/failed bank. Recent literature recommends various models which also comprise macroeconomic variables in addition to variables based on institution's financial data.

There will also need to be some discussion on the lender-of-last-resort function of the Reserve Bank of Fiji, including the extent to which public funds are to be committed to rescue an ailing institution.

2.2.5 Conclusions

It is acknowledged that an effective system of prudential regulations which foster a sound banking system will enhance the flexibility and effectiveness of monetary policy. From our own experience, we have learnt the importance of an adequate legislative platform that gives us as supervisors, the flexibility to act decisively when we form a judgement that an institution's soundness is being impaired and hence affecting the stability of our banking system.

As a developing economy, we must strive to learn from more advanced countries in the development of our supervisory policies and standards. Although we take the view that the prime responsibility for

ensuring the soundness of a bank rests with its owners and management, an appropriate and effective system of supervision will help in, for example, limiting excessive risk-taking on the part of banks.

In Fiji, the relative lack of sophistication of users of banking services seems to suggest that the rigours of market discipline will take some time to develop sufficiently to be an additional factor in promoting systemic soundness. This, therefore, places a lot of expectations by the public on the central bank being an effective supervisor. It seems very apparent to us that an important precondition to further financial deregulation and also monetary policy implementation is a sound and safe banking system.

SUMMARY OF DEVELOPMENTS AT THE NATIONAL BANK OF FIJI AND ITS SUPERVISION BY THE RESERVE BANK OF FIJI

Introduction

In January 1974, the National Bank of Fiji ("NBF") was incorporated and established as the successor to the Savings Bank of Fiji under the National Bank of Fiji Act (Cap 213). It is wholly owned by the Government of Fiji and its deposits are fully guaranteed by the State. The Bank is deemed to be licensed and is subject to supervision by the Reserve Bank of Fiji ("RBF") under the Banking Act, 1995.

In August, 1996, the National Bank of Fiji Act was replaced by the National Bank of Fiji Restructuring Act, 1996. On-site examinations of NBF conducted by RBF in 1991 and 1992 highlighted a serious lack of:

- sound lending and loan recovery principles;
- adequate internal and management controls; and
- appropriate accounting standards.

The findings and detailed analysis of the 1991 Examination were discussed with the management of NBF. For the most part, the recommendations for additional loan loss provisioning and other actions to overcome the problems identified were not adopted by NBF at that time. Following the findings of the 1991 Examination, the RBF became increasingly concerned at several developments at NBF including:

- the rapid increases in new lending by NBF each year, with an average annual growth in total loans of 38.6 percent per annum from 1989 to 1993, nearly three times the average annual growth of 13.7 percent for loans by all other commercial banks combined, over the same period;
- the rising level of problem loans which NBF did not recognise in its own management reports or in its provisions for loan losses, and the lack of tight lending policies to improve the quality of new loans written;

- the increasing reliance on volatile wholesale institutional deposits to fund the growth in lending;
- the inadequate level of capital available to support NBF, particularly in view of the unrecognised loan losses.

These concerns were drawn to the attention of the NBF senior management and the Minister of Finance from time to time, in letters and meetings with the Reserve Bank. In the meantime, the published annual accounts of NBF continued to report profits each year, whereas prudent provisions for bad debts and proper policies for writing off interest on non-performing loans would have resulted in reported losses over several years.

It is important to note that NBF's problem loans, which have resulted in large losses, had been written over the previous 10 to 15 years. The management's strategy since the late 1980s of an all-out effort to increase market share and to become the dominant bank in Fiji added to the problem loans. The evidence was clear that NBF controls on the quality of loans written, management's assessment of the borrowers' ability to repay and the true value of collateral offered, and follow up on loans which were not receiving regular cash repayments had been extremely lax. It was also apparent that management had felt an obligation to continue supporting what they perceived to be Government's interest by continuing to provide funding to quasi-government organisations and development projects of questionable economic viability, over a number of years. The provision of branching and agency services in many rural areas had also not been based on profit objectives but on the management's orientation towards market share and Government social policy objectives for rural banking services to be available.

Funding difficulties

In December 1993, NBF's funding difficulties worsened and special funding arrangements were put in place by the Reserve Bank and the Minister. Various conditions were attached to those arrangements, including agreement by NBF to:

- improve its liquidity management and treasury functions; place a cap on new lending so that total loans outstanding remained at the then level of $355m;

- develop new funding strategies to reduce reliance on volatile wholesale deposits; and
- complete a full in-house review of the loan portfolio and identify the necessary provisions for bad and doubtful debts.

Additional funding facilities were arranged by the Reserve Bank for NBF in April 1994 and further still in November 1994. In these cases, other major banks in Fiji and the Fiji National Provident Fund were also encouraged by the Reserve Bank to place deposits with NBF as part of the support package. Despite the conditions placed on the special funding facilities, NBF's loans and advances continued to grow.

Special audit

As a result of continuing concerns expressed by the Reserve Bank, a special audit investigation of the NBF was commissioned by the Minister of Finance in January 1995. The audit was carried out by two nominated private sector auditors and their findings identified major causes for concern, including substantial problem loans, for which provisions or write-offs estimated at around $90m had not been recognised in the financial statements of the Bank up to the time of the audit.

Rehabilitation

In May 1995 the Minister of Finance sought technical assistance from the World Bank to identify options for resolving the difficulties faced by NBF. The World Bank consultant recommended a binding supervisory arrangement between the NBF, the Minister of Finance and the Reserve Bank, to put in place the necessary actions to assist the rescue of the NBF. The arrangement, known as the "Rehabilitation Regime", became effective in August 1995 and achieved the following:

- the appointment of new senior management (Chief Manager, General Manager Asset Management, General Manager Finance and Administration) with required skills and experience;
- the appointment of new Board members and the establishment of Board sub-committees;
- the establishment of an Asset Management Unit for the work-out of problem loans;

- the completion of various diagnostic reviews by the Bank's external auditors including systems, treasury, asset quality and branch audits;
- the review and revisions of policies and procedures by the Bank;
- the tightening of controls by the Bank; and
- the launching of the restructuring of the Bank.

The external auditors' review of asset quality indicated that as much as two-thirds of the loan portfolio was non-performing and that there was a large deficiency of net assets. The Rehabilitation Regime was terminated on 16 September 1996.

Restructuring

A second World Bank Mission was conducted in March 1996 at the request of the Minister of Finance and Economic Development. The purpose of the Mission was to provide technical assistance to the Ministry of Finance and the Reserve Bank on a strategy for dealing with the NBF situation. The World Bank consultant reviewed several possible options for NBF but narrowed these down to three that were considered realistic:

- modest downsizing
- major retrenchment
- liquidation

It was subsequently agreed that NBF be restructured by way of legislation (The National Bank of Fiji Restructuring Act, 1996) splitting the bank into two legal entities, namely:

- the National Bank of Fiji, as a personal banking operation; and
- the NBF Asset Management Bank ("AMB") whose primary function under the Restructuring Act is to manage its assets and liabilities with the objective of disposing of them as soon as practicable, while minimising any loss of value to it.

Under the restructure, NBF's non-performing and commercial loans were transferred to AMB with effect as at 1 July 1996. NBF also

transferred to AMB all other assets, liabilities and staff that were not required for the personal banking operation. Transfer values of loans and advances were equivalent to their book values (before deducting provisions for doubtful debts) as at 30 June 1996.

Funding

The Restructuring Act provides for an agreement to be entered into by AMB, the State and the Reserve Bank under which the State was to fund the shortfall in AMB's assets relative to the deposits and other liabilities. The funding programme, which involved the floating of Government Bonds, commenced on 25 September 1996 and was completed on 4 June 1997 bringing the total debt issuance for AMB to $209m. The funds have been used primarily to repay AMB's depositors.

Social contract

In December 1996, the State entered into an agreement with the National Bank known as the "Social Contract" under which the State subsidises the National Bank for providing non-commercial banking services to account holders outside Suva. This agreement was also provided by the Restructuring Act.

Future plans for National Bank and AMB

The Restructuring Act requires an assessment to be made in the first half of 1998 of the commercial viability of the National Bank and, if appropriate, the corporatisation of the National Bank at that time. A report on the future commercial viability of the Bank will be prepared by a person or firm independent of the National Bank, the Reserve Bank, and the Government. The Act also requires the Reserve Bank to prepare a report on whether or not it would grant a banking licence to the National Bank if such an application was made at that time and, if so, on what terms and conditions such a licence would be granted.

If it is decided not to corporatise the National Bank, the Bank will be dissolved on 1 July 1998 or such later date as the Minister may determine but not later than 31 December 1998. All assets and liabilities of the National Bank will then vest in AMB to be wound down with the rest of AMB's portfolio. The Restructuring Act provides that AMB may be dissolved at any time by regulations made by the Minister

and that, on dissolution, the assets and liabilities of AMB will transfer to the State.

State guarantee

The State's guarantee of all deposits with NBF continues and there is a provision under the Restructuring Act for an equivalent guarantee in respect of deposits with AMB. On corporatisation, the State guarantee for NBF will be progressively reduced.

2.3 INDONESIA
Maman H. Somantri

2.3.1 Financial and Economic Developments

Let me provide you with an overview of the regulation and supervision of the Indonesian financial system, in particular the banking sector. Before 1983, the banking sector in Indonesia was subjected to a broad range of regulations. These regulations included interest restrictions, credit ceilings on individual banks, high reserve requirements (all banks were required to maintain liquid assets equal to 15 percent of current rupiah and foreign exchange liabilities). Credit was allocated by sector, in particular, priority sectors at subsidised rates. The financial market was segmented so that competition among financial institutions was limited. During this period, banking supervision was quite simple, since the major risk faced by the bank was only credit risk.

In order to promote the role of banking in supporting economic development, since the early 1980s, we have been pursuing adjustment policies in all sectors. The central aim is to make our economy responsive to market signals. That is the essence of our deregulation policy. This policy was directed towards promoting both the implementation of export-led development strategy and the resilience of the domestic economy against the uncertain and very competitive world economy. We opened up key economic sectors to competition, reduced licensing requirements and simplified administration procedures, thus providing improved incentives to the private sectors. We have introduced broad trade reforms reducing non-tariff barriers, transforming non-tariff barriers to tariffs, lowering tariffs, simplifying investment measures, and opening up service sectors.

In the banking sector, we began with interest rate liberalisation in June 1983, followed by reforms of the institutional structure in October 1988, then reforms within the credit system in January 1990. Prudential regulations were introduced in 1991 and were improved in May 1993. In addition, a new Banking Act was also set in place in 1992. Since early 1995, Bank Indonesia has issued regulations designed to promote more sound and realistic banking practices, to increase the degree of disclosures, and to establish guidelines for published financial reports and self-regulatory banking.

The thrust of the series of financial reforms is directed toward the achievement of greater efficiency in the mobilisation and channelling of funds to various feasible investment projects. This would entail the development of a safe and sound banking industry. By enhancing its role in financial intermediation, the banking industry is expected to be able to support the bulk of the financing needs for economic development. In the capital market, deregulation measures were directed towards creating and maintaining the confidence and the right environment for investors.

The development of Indonesian banking at least can be expressed in term of number of banks and branch offices, fund mobilisation and development of banks assets. The number of banks rose significantly and almost doubled in the last nine years, from 124 banks and 1,863 branch offices in October 1988 to 238 banks and 7,750 branch offices in July 1997, respectively. At the same time, mobilised funds and loans extended rose from Rp. 36,856 trillion to Rp. 324,581 trillion and Rp. 48,452 trillion to Rp. 368,159 trillion, respectively.

On the macroeconomic front, over a quarter of a century, we have tried to impose the necessary discipline for a sound macroeconomic foundation. One key element is the budget discipline by practising "the balanced budget", which we have maintained for more than two decades. In addition, we have equally maintained prudent and consistent fiscal and monetary policies. The result is a stable and sustained non-inflationary growth since 1993.

Our economy grew at a relatively high average annual rate of 6.9 percent during the last two decades. The role of the manufacturing sector is increasingly important in supporting this growth. In a few short years, non-oil export commodities have turned from minor to major exports, in terms of value and variety. Their value jumped from only 25 percent to more than 75 percent of total export earnings over the past decade. At the same time, within the government budget, non-oil revenues surged from less than 30 percent to around 76 percent of total domestic revenues. Most of the non-oil government revenues come from taxes, a sign of the stronger financial independence of the country. The expansion of non-oil sectors of the economy also marks the growing prominence of the private sector. In line with this development, strong economic growth could also be maintained, enabling incomes to rise appreciably and raised Indonesia into the category of lower middle-income countries.

2.3.2 Some Issues and Policies

Sound macroeconomic policies accompanied by a series of market-oriented reforms which provide a better environment for business activities have attracted international investors to be actively involved in Indonesia's financial market. Consequently, capital inflows increased dramatically in the past few years. For us, these inflows, specifically long-term ones, are much needed for economic activities. But, they also create some problems for the economy. A large influx of capital, particularly, short-term, has complicated Indonesia's monetary management because it tended to strengthen domestic demand, propelling a problem of overheating. In this case, Indonesia is not alone. Other countries in Asia like Malaysia and Thailand are also facing a similar problem.

In a globalised financial market, it is not easy to solve this problem effectively. Increased interest rates might prompt major inflows of capital. This is very distinct from the condition of a closed economy where a rise of interest rates will usually succeed in arresting domestic demand. In dealing with this problem, Indonesia's monetary authority monitors the situation on a daily basis in order to preempt any undue influences from global financial developments. Strong capital inflows would indicate a widening of the spread of domestic and international interest rates. Maintaining the level of equilibrium both on the external as well as internal front has become an important strategic activity.

The rapid progress of domestic capital market also induces another problem. The more integrated our capital market, the more risky the monetary condition will be. We are becoming more aware of this increasing systemic risk. As capital tends to seek higher returns, it will move easily from one country to another. In view of the instability which might occur due to speculative attacks on a currency, the task to maintain current stability becomes more difficult. Therefore, it is imperative that central banks work closely together. The success of efforts to influence the exchange rate depends on coordination among the central banks of the world. A concerted effort might work while an isolated venture is almost a guarantee for failure in influencing the exchange rates. This agreement will enable the countries to work more effectively in using their financial power to contain currency speculation.

2.3.3 Policy Direction Ahead

As we look to the 21st century we can expect that the world economy will be characterised by increased competition. Competition in the world economy will not only be in the trade or service area but will also be in the investment area. Managing monetary policy will be increasingly difficult as capital moves easily from one place to another. Overcoming these challenges of the future will not be simple. We also realise that there are no short cuts. Our strategy in facing those challenges has several basic elements, as follows:

First, we will be guided by the same principles and follow the same basic policy frameworks that have been the foundation of our development progress to date. We will continue to give a very high priority to the maintenance of macroeconomic stability. With interdependence growing more deeply through links such as trade and capital transactions, our efforts to achieve a stable macroeconomic environment will be crucial to attain sustained economic growth. Accordingly, maintaining macroeconomic stability through prudent fiscal and monetary management is very important to support the achievement of a sustained non-inflationary growth. We have aimed over these years for a stable and sustained non-inflationary growth. In the future, we will continue on this path. In addition, macroeconomic stability has been one of the hallmarks of the Indonesian economy over the past 25 years. During the present Sixth Plan, we aim to maintain the inflation rate at a manageable level, the current account deficit at around 2 percent of GDP, and foreign exchange reserves at a level equivalent to 5-month imports. We will continue to maintain a balanced budget, an open capital account, prudent monetary policies, and flexible market-based interest rate policy. In floating or flexible exchange rate regime, we also put more attention to interest rate policy. These policies are vital for keeping inflation low, our debts manageable, and our exports competitive.

Second, continuing our path of structural reform is vital. The results of our deregulation policy as described earlier have shown that we are on the right track. Therefore, we will continue to move in that direction. With an open economy oriented toward the world market, our economy is in global competition. We will be facing an increasingly competitive world even in our own market. Our trade barriers and level of domestic protection will have to be gradually lowered,

along with those of other countries, consistent with the Uruguay Round obligation and our obligation within ASEAN and APEC. We will continue to reduce the remaining high tariffs, remove non-tariff barriers, and ease investment restrictions by reducing licensing requirement, eliminating bureaucratic obstacles, and simplifying administrative procedures. We will continue to upgrade our ability to supervise the banking system and the capital markets. These economic policy reforms will be supported by reforms in our economic laws, especially those governing commerce and competition. Facing the world economy that is characterised by uncertainty and tough competition, we want to keep adjusting to these realities in order to make our nation competitive.

Third, long-term growth in our economy will depend not only on macroeconomic stability but also on increasing productivity and efficiency in the private, market-based economy, providing better infrastructure, and strengthening human resources. Changes in the Government's role, in particular improvements in markets and the regulatory frameworks, greater reliance on private sector, and more efficient public investment and services, will be critical to these efforts. In addition, investment in human resources and physical infrastructure are vital for keeping production costs low, productivity growth high, and for increasing our international competitiveness. Our economy must be competitive in international markets in order to maintain the rapid increase in non-oil exports that are needed for continued broad-based growth and reduction of the large external debt burden.

With respect to Indonesian banking structure in the future, it will be affected by Bank Indonesia current efforts to control the number of banks and to implement banking restructuring, as well as to direct the development of bank offices. The present numbers of commercial banks and rural banks have been considered more than sufficient. Accordingly, Bank Indonesia has recently adopted policies to discourage the establishment of new banks. It is reflected by applying tighter selection process for establishing new banks, especially with respect to the source of capital and persons to hold position as bank shareholders or bank managers.

Recently, there has emerged an important idea to conduct banking restructuring. This is aimed at creating, in the future, a number of banks in Indonesian banking that are not only sound but also big with

strong resistance and high international competitiveness. Subsequently, those banks are expected to be able to compete with international financial institutions. In the meantime, the existence of relatively small banks will be maintained by concentrating their business on certain market segments based on their competitive advantages.

Bank restructuring is an important strategy, not only in view of impressive developments of Indonesian banking, but also of strengthened international cooperation, such as WTO and APEC, that provides more freedom for international banks and other international financial institutions to enter and influence Indonesian banking. International financial institutions are not only big, but are highly resilient, competitive and professionally managed.

The bank restructuring may be implemented through merger, consolidation and acquisition among banks. While the restructuring is implemented, steps to solve problem loans, reward banks that exceed requirements of prudential regulations, and settle problem banks are being undertaken. Furthermore, Bank Indonesia has to improve and adjust current policies and regulations with respect to bank entry, bank operation and conduct, bank recovery, and bank exit.

2.3.4 The Need for Macro-Micro Coordination

Monetary policies conducted by the monetary authority cannot be separated from other policies at micro level that are also under the jurisdiction of the monetary authority. Such micro policies include regulations in the area of foreign exchange, credit, off-shore borrowing, and bank supervision. These policies affect individual banking institutions and their operation in selected areas. These micro policies are aimed at creating and ensuring a sound banking system.

The achievements as well as the effects of each of the macro and micro policies mentioned in the preceding section are closely related. A stable and well managed macroeconomic policy mix will have a positive impact on the development of bank operation. On the other hand, a sound banking system will further increase the effectiveness of monetary policy in achieving its objectives. As a result, the close interrelations should be fully utilised to create an optimal synergy in achieving the desired targets and effects. Moreover, following rapid developments in the financial and banking sector lately, the interrela-

tions between macro and micro policies complicate the conduct of monetary and exchange rate policies.

Past experience showed that without a good coordination in implementing the two policies, the optimal achievement of monetary policy targets will not be possible. This happened because each policy followed a separate route as regard its planning and implementation as well as the achievement of its targets; consequently, the results achieved have been below expectations. For example, to reduce the growth of money supply, macro policies can be assisted by regulations limiting offshore commercial borrowing to reduce monetary leakage arising from rapid capital inflows. The implementation of macroeconomic or monetary policies should also take into consideration the capacity of banks to adapt to a new environment. When banks are not prepared for a change, the implementation of new monetary policies and practices can disrupt bank soundness. For example, adjustment of the reserve requirement is best carried out gradually, providing banks time to adjust their portfolio so as to avoid liquidity problems or interest rate shocks that might affect macroeconomic stability.

To influence the supply of as well as the demand for money, the following eight monetary instruments have been used in the context of macro-micro policies:

(1) In order to control monetary expansion and dampen domestic demand pressures, different monetary instruments have been used, including open market operations (OMO), reserve requirement (RR), moral suasion, interest rate policy, exchange rate policy, foreign exchange transaction, banking regulations, and commercial offshore borrowing (or PKLN) regulation.

(2) The use of OMO directly influences the total amount of reserve money through selling and buying SBIs and SBPUs. Bank Indonesia will sell SBIs to reduce reserve money (monetary contraction), and buy SBPUs to increase reserve money (monetary expansion).

(3) Changes in RR affect the money multiplier and bank reserves. The higher the reserve requirement ratio, the smaller the money multiplier and the larger the required bank reserve. When a smaller money supply (monetary contraction) is targeted, the reserve re-

quirement ratio is increased. Bank Indonesia has already used reserve requirement as a monetary instrument by adjusting the 2-percent reserve ratio into a 3-percent statutory reserve in February 1996 and, subsequently, to 5 percent in April 1997.

(4) Moral suasion is an appeal to banks to implement or not to implement certain actions that will affect monetary policy targets. One of the important channels for moral suasion is through regular meetings with the banking sector, during which we provide a macro picture of our economy and raise some critical issues that banks should take into consideration. Next, we share selected data with the banks showing current vulnerable sectors so as to persuade banks to readjust their lending activity. We then ask banks to submit their credit plans and discuss with them the consequences of their credit expansion plan on both macroeconomic stability as well as their financial condition. Through these steps, we try to achieve better and prudent macroeconomic management through the implementation of prudential principles by banks, a program that links macro and micro management, and better coordination between the central bank and the banking community.

(5) Interest rate policy is aimed at influencing the growth rates of credit and capital inflows. High domestic interest rates relative to foreign interest rates will encourage capital inflows, resulting in an increase in money supply. Therefore, interest rate policies are aimed at maintaining an appropriate interest rate, namely the rate that will not cause excessive capital inflows and outflows.

(6) Exchange rate policy is aimed at maintaining a stable and realistic rupiah exchange rate. This policy will increase confidence toward the rupiah and indirectly maintain macroeconomic stability. Exchange rate policies could also be used to reduce the negative impacts of short-term capital flows on money supply management.

(7) Foreign exchange transactions directly affect claims on the external sector. The tightening of the swap facility, for example, will tighten capital inflows so that claims on the external sector will be reduced, thus directly reducing the money supply.

(8) Banking regulations issued for the purpose of achieving monetary policy targets are aimed at influencing bank credit expansion. For example, to influence credit expansion, relevant banking regulations include the Capital Adequacy Ratio (CAR) and the Loan to Deposit Ratio (LDR). Administrative restrictions on foreign borrowing through commercial offshore borrowing (PKLN) directly limit capital inflows. Lower capital inflows will reduce claim on the external sector, which will then reduce the amount of the money supply. In this respect, to increase the effectiveness of monetary policy, limits on capital inflows are also imposed on financial institutions.

Recently, Bank Indonesia has been dealing with some current banking policy issues for the purpose of sustaining banking performance and development. These include some steps for merger and acquisition for bank restructuring, bank liquidation, finance company supervision for enhancing monetary control and soundness of financial system, bad debt write-offs for solving problem loans, and offshore banking units for increasing the role of foreign banks in promoting competition and economic growth.

2.4 KOREA
Moon-Ho Lee

2.4.1 Introduction

In the 1960s and 1970s, the Korean government fully utilised the financial system as a policy instrument for supporting economic development. The government intervened deeply not only in the credit allocation but also in the internal management of financial institutions through the regulation of interest rates and a policy-based loan system. This development-oriented financial system made a great contribution to the economic growth of Korea. However, it also hurt the autonomy of financial institutions and led to a deterioration in the quality of financial assets. As a result, the fragile banking system has become an obstacle to a further take-off of the Korean economy.

Since the early 1980s, the government has put greater importance on stability rather than on the growth of the economy, and has changed its strategy toward a market-oriented approach that promotes financial liberalisation. In the 1980s, the domestic and international environments surrounding the banking industry were not mature enough to drive financial reform, and the government still regulated the financial institutions through window guidance.

Since the early 1990s, the government has strongly pursued substantial financial reforms in order to enhance the competitiveness of the banking industry. Accordingly, with greater financial liberalisation, all interest rates, except those of demand deposits, were liberalised in 1997. In addition, capital market opening has been substantially extended with the continuous relaxation of foreign exchange regulations.

In line with financial liberalisation and capital market opening, the management of risks of financial institutions has become more complex. Market risk has also expanded with the increasing volatility of interest rates and foreign exchange rates. As a result, increased risks have created instability in the financial system. Facing these problems, the Korean government and the Bank of Korea have been doing their

best to secure stability of the financial system through appropriate monetary and supervisory policies.

2.4.2 Monetary and Supervision Policies for Stability of the Financial System in Korea

(1) Monetary policy

(1.a) Stable management of the macroeconomy

It is a widely known fact that unstable prices, rapid shifts in the business cycle and large current account deficits increase the volatility of interest rates and foreign exchange rates, and thereby destabilise the financial system. Thus, the Korean authorities have tried to secure a stable macroeconomy through a stable money supply and a market average exchange rate system.

A. *Monetary management*

A.1 *Transition to indirect control system*

Throughout the 1960s and 1970s, the Bank of Korea relied mainly on direct credit controls and a reserve requirement policy to maintain money supply at predetermined levels.

Since the 1980s, as the direct control system became inefficient with greater financial liberalisation and market opening, the Bank of Korea has attempted to move toward an indirect system whereby money stock is controlled through market-based policy instruments, primarily open market operations.

A.2 *Adoption of broad monetary aggregates*

The Bank of Korea had used M2 as the main intermediate target, based on the empirical correlation between the M2 and macroeconomic variables. However, it adopted a new target, MCT, instead of M2, following the reform of the trust account system in May 1996. MCT consists of M2, CD and trust accounts.

MONEY SUPPLY GROWTH RATE AND INTEREST RATE TREND (%)

	1993	*1994*	*1995*	*1996*	*July 1997*
M2 1/	18.6	15.6	15.5	16.2	17.9
MCT 1/	22.9	23.5	21.6	21.7	15.1
Market Interest Rate 2/	12.6	14.2	11.7	12.6	12.2 3/

Note: 1/ As compared with the same month of the previous year (average balance basis).

2/ Market rate of corporate bond with 3-year maturity (average of period).

3/ From January to July 1997.

In addition, the Bank of Korea is trying to enhance the effectiveness of monetary policy by looking at all information variables, as the interrelationship between money supply and the actual economy has been weakening with financial liberalisation and capital market opening.

B. *Foreign exchange rate management*

The Bank of Korea adopted the market average exchange rate system in March 1990 to improve the price mechanism of the exchange rate. The market average exchange rate system reflects the economic fundamentals of Korea. The GDP growth rate of Korea declined to 7.1 percent in 1996 from 8.9 percent in 1995. The current account deficit to GDP ratio increased to 4.9 percent in 1996 from 2.0 percent in 1995. Therefore, the won/ US dollar exchange rate depreciated about 8.2 percent in 1996 and 6.4 percent by August 1997. Moreover, the Bank of Korea is trying to secure stability of foreign exchange markets by preventing rapid fluctuations of foreign exchange rates due to any speculation or temporary disequilibrium. Toward this end, in January 1996, the Bank of Korea launched a "Monitoring Desk" to monitor

movements of foreign exchange rates, inflows and outflows of foreign currencies, and trends in foreign exchange markets at home and abroad.

CHANGES IN WON/US$ RATE

	1995	*1996*	*Jan.-Aug. 1997*
Won/US$ Rate (%)	+1.8	-8.2	-6.4
GDP Growth Rate (%)	8.9	7.1	5.6 1/
Current Account Deficit/GDP (%)	2.0	4.9	5.1

Note: 1/ From January to June 1997.

(1.b) The lender-of-last-resort function

The Bank of Korea has played an active role as a lender of last resort to prevent banking panic, which could result from an individual bank facing a temporary liquidity problem. For example, in September 1997, the Bank of Korea provided special loans to temporarily squeezed financial institutions hit by a series of large companies' bankruptcies.[4] Meanwhile, to minimise moral hazard, the Bank of Korea makes it a rule to support only temporarily illiquid but solvent financial institutions. Furthermore, the Bank of Korea's support focuses on liquidity supply rather than on improvement of the institutions' earnings. At the same time, the Bank of Korea encourages self-rescue efforts by financial institutions.

(2) Supervisory policy

Supervisory policy in Korea has been focusing on reinforcement of prudential regulation, market discipline and financial infrastructure, in order to create a more stable financial system.

4. The details will be explained in section three.

(2.a) Strengthening of prudential standards

A. *Promoting capital adequacy*

The Korean financial authorities guide banks to meet the requirements of BIS capital ratio, equity capital ratio on guarantees and other contingent liabilities, accumulation of retained earnings, etc., to secure enough cushion against unexpected losses.

A.1 *BIS capital adequacy requirements*

Since the end of 1995, all Korean commercial banks are required to maintain BIS capital adequacy ratio equivalent to at least 8 percent. If this requirement is not met by a bank, then the supervisory authorities may propose management improvement measures to the bank to increase its equity capital or to limit new investment, dividends, etc.

A.2 *Equity capital ratio on guarantees*

A bank should always maintain an aggregate amount of equity capital equivalent to at least one-twentieth of its outstanding liabilities arising from guarantees or other contingent liabilities.

A.3 *Accumulation of retained earnings*

A bank should credit at least 10 percent of its net profit to a legal reserve until such retained earnings equal to the amount of its total paid-in capital.

B. *Reinforcing guidelines for loan loss provisions*

All commercial banks should set up provisions for future loan losses at the end of each fiscal year. Previously, all commercial banks had to make provisions of 2 percent of their total loans. Since June 1994, they have been required to set up provisions for expected loan losses in line with the five-fold classification of loan asset quality. The provisions consist of 0.5 percent of normal loans, 1 percent of precautionary loans, 20 percent of substandard loans, 75 percent of doubtful loans, and 100 percent of estimated loss loans. In consideration of the difficulty of full and immediate compliance, each bank was allowed to

set up its annual target before full compliance of the requirements by 1998.

C. *Maintenance of adequate liquidity*

Korean banks are required to match the maturities of their assets and liabilities in order to ensure their liquidity. Long-term lending longer than one year should be financed by capital subscriptions, deposits longer than one year, or issuing debentures and other securities. Furthermore, banks should not invest an amount equivalent to more than 100 percent of their equity capital in stocks, bonds or other securities with maturities of over three years. They are not allowed to invest in real estate in an amount exceeding 40 percent of their equity capital.

D. *Control on credit concentration*

In order to prevent credit concentration, no bank may grant loans to a single borrower in excess of 15 percent of its equity capital nor grant guarantees to a single borrower in excess of 30 percent of its equity capital. In addition, under the revised General Banking Act of December 1994, a "Ceiling System on the Sum of Large Exposure" was introduced to control the total amount of loans and guarantees to single borrowers and business groups. Under this system, the sum of large exposures including loans and guarantees by a bank, i.e., the total sum of its credits to single individuals or business groups that exceed 15 percent of its equity capital respectively, must be within five times of its equity capital.

E. *Improving a bank management evaluation system and establishing an early warning system*

In September 1996, the Bank of Korea launched an off-site surveillance system to detect the unsoundness of banks at an early stage through constant observation and analysis of changes in bank management.

In October 1996, the Bank of Korea introduced the CAMEL & ROCA methods to evaluate the overall conditions of bank management for on-site examination. Based on evaluation results using these methods, the Bank of Korea requires banks under a certain grade to take

proper actions, for example, to improve management practices. The intensity of supervision and examination may differ according to a bank's grade.

F. *Intensifying risk management and internal control of financial institutions*

Several policy measures have been put in place to handle the increase in various risks associated with financial liberalisation. Since the end of 1995, to tackle growing credit risks, the Bank of Korea has required commercial banks to observe in full the capital adequacy standards set by the BIS. The Bank of Korea is now preparing to adopt the proposals of the BIS on capital adequacy regulations for market risk, which are to be implemented from January 1998 among the G-10 nations.

Reacting to the increased trading volume of derivatives, the Bank of Korea requires banks to set position limits for each dealer, to set volume limits and stop-loss limits on each deal at an appropriate level in their foreign exchange trading activities. The Bank also requires to set up a mutual checking system which includes the separation of dealers from back office staff involved in accounting, and to monitor periodically the details of each dealer's transactions.

In addition, with a view to preventing financial incidents, the Bank of Korea has encouraged financial institutions to strengthen their internal controls systematically; for example, the enforcement of compulsory vacation which may allow early disclosure of financial incidents.

(2.b) Strengthening market discipline

Financial liberalisation makes it increasingly harder for the supervisory authorities to monitor financial institutions' management and to promptly detect risk factors in financial markets. Thus, market discipline by depositors, shareholders and other market participants to secure the soundness of banks becomes increasingly significant.

A. *Disclosure of bank management performance*

In August 1994 the Bank of Korea introduced the mandatory disclosure of banks' management performances so that the general public,

especially depositors and shareholders, are in a good position to monitor banks. Commercial banks should disclose regularly details about soundness (bad loan ratio, capital requirement ratio), profitability (ROA, ROE), productivity, and sources and uses of funds, etc. Furthermore, commercial banks should immediately disclose any particular development that may hurt the soundness of management. For example, they should disclose as early as possible financial incidents exceeding 2 percent of their equity capital and any bad loans exceeding 5 percent of their equity capital.

B. *Adoption of market price-based accounting standards*

Recently, the increasing volatility of interest rates and foreign exchange rates makes it hard to understand the financial status and management performances of financial institutions by means of historical cost basis accounting. In this context, the adoption of market price basis accounting is popular all over the world. Taking this international trend into consideration, the Bank of Korea has adopted mark-to-market valuation from July 1996 for the bank's derivative products and is preparing for the adoption of this type of valuation system for other securities.

C. *Public disclosure of examination results of financial institutions*

Since May 1996, in order to enhance public monitoring and transparent examination of financial institutions' management, the Korean financial authorities have published the results of examinations. The Bank of Korea announces not only losses or profits, sources and uses of funds, major examination findings and its measures, but also financial incidents and illegal activities of financial institutions following the examination.

(2.c) Improvement of financial infrastructure

To reinforce financial infrastructure, the Korean authorities have improved the payments and settlements system and introduced a deposit insurance scheme. In addition, financial futures markets were partially established.

A. *Upgrading the payments and settlements system*

In December 1994, the Bank of Korea, like other central banks, launched the real-time gross settlement system (BOK-Wire) in order to prevent contagion risk relating to payments and settlements. In September 1997, the Bank of Korea launched the settlement risk sharing system. Under this system, all member financial institutions are required not only to offer collateral for their settlements but also to share the shortage of the settlement funds with any specific member institution.

B. *Deposit insurance system*

The Korea Deposit Insurance Corporation was established in June 1996 in order to protect depositors and maintain the stability of the financial system in the event of a bank failure. Deposit insurance is limited to commercial banks and foreign bank branches in Korea. The ceiling payable to a depositor is Won 20 million (about US$ 25,000), because the main targets of the insurance are small depositors.

C. *Establishing financial futures markets*

The increasing volatility of interest rates and foreign exchange rates owing to financial liberalisation and capital market opening raises the possibility of unexpected losses. Accordingly, Korea launched a stock-index futures exchange in May 1996, and an options market in August 1997 in order to provide hedging opportunity. Korea will also open an interest rate futures market in 1998.

2.4.3 Current Financial Status and Policy Tasks

(1) Current financial status

Recently, the Korean economy has been experiencing some difficulties, owing to the bankruptcies of Hanbo, Sammi, Daenong and Jinro groups as well as the managerial crisis of the Kia group. These large groups had run large amounts of debt-financed investment even during the business recession beginning from 1996. Several large groups' bankruptcies in succession brought about the rapid increase in bad loans of financial institutions, consequently, reducing their credit-

worthiness in international financial markets. As a result, Korean banks are paying a premium in those markets.

(2) Policy tasks

In response, the Korean supervisory authorities have taken various measures to maintain the stability of the financial system and to enhance financial institutions' creditworthiness in the international financial markets.

(2.a) Supporting structural adjustment of ailing companies

Financial institutions have been giving financial support to companies whose normalisation is possible. The support comprises deferment of loan principal and interest payments, banks' cooperated loans, etc. In June 1997, the Bankruptcy Deferment Accord was adopted for those companies experiencing abrupt credit crunch, to prevent bankruptcy. However, if those companies do default, the Accord will take various measures such as court receivership, management by creditor bank, acquisition by third party, liquidation, etc.

(2.b) Supporting early resolution of non-performing loans

The Korean government is in the process of reorganising and enlarging the Korea Asset Management Corporation so that it can fully resolve non-performing loans and assets of financial institutions and companies.

(2.c) Special liquidity support to financial institutions

The Bank of Korea provided the minimum liquidity to the banks that hold a large amount of non-performing loans and experience difficulty in maintaining creditworthiness. The Bank of Korea will also provide liquidity to the merchant banking corporations whose bad loans, covered by the bankruptcy deferment accord, exceed 50 percent of their equity capital. The special liquidity was provided at the average fund-raising cost of domestic financial institutions. The total amount of the special liquidity to the financial institutions will be Won 2 trillion (about US$ 2.2 billion) at an interest rate of 8 percent.

(2.d) Reinforcement of supervisory policy

A. *Strengthening credit concentration control system*

As mentioned before, the Bank of Korea introduced a "Credit Limit System" for each interlinked business group in August 1997 in addition to the "Single Borrower Credit Limit System", and the "Ceiling System on the Sum of Large Exposures". The "Credit Limit System" does not allow any bank to grant to any interlinked business group in excess of 45 percent of its equity capital. On the other hand, to regulate loans from trust accounts which had not been covered by the Single Borrower Credit Limit System, the government imposed a credit limit on trust account loans for a single borrower to 5 percent of each bank's total loans from trust accounts as of the end of 1996.

B. *Improvement of credit analysis system of banks*

Several banks have adopted a Credit Committee System to make decision-making procedures on credit more fair and transparent. Banks without the credit committee system have been advised to introduce it. The Korean financial supervisory authorities advised banks to set up an integrated credit analysis system of the whole interlinked business group rather than a credit analysis of a single member company.

2.4.4 Conclusion

As mentioned earlier, the Korean financial supervisory authorities are making every effort to secure the stability of macroeconomic variables and the financial system through monetary policy and strengthened prudential regulation. In view of recent difficulties in the Korean economy and its financial situation, the supervisory authorities examined all policy measures. Following this review, the authorities put into effect measures to solve some problems in the area of financial supervision. However, the level of prudential regulation in Korea still leaves something to be desired, compared with international supervisory standards such as the "Core Principles" announced by the Basle Committee in November 1996. For example, Korea has yet to adopt the second BIS capital adequacy regulations relating to market risk, which is recommended by the Basle Committee. In addition, Korea has not yet introduced the mark-to-market valuation system on securities, which is recommended by the International Accounting Standard Committee. In

the future, the Korean financial supervisory authorities will try to maintain the stability of the financial system by continuing efforts to stabilise the macroeconomy and adopting those international standards as soon as possible.

2.5 MALAYSIA
Abdul Murad bin Khalid

2.5.1 Introduction

In recent years, the issue of banking sector soundness has received much attention, because of the widespread incidence of banking crises and high cost of banking problems. A study by the International Monetary Fund (IMF) in 1996 has estimated that over 130 countries have experienced significant banking sector problems since the 1980s, resulting in substantial high costs to the economy. This underscores the importance of maintaining a sound and stable banking sector as a condition for achieving sustainable economic growth. At the same time, the experiences also demonstrate that the implementation of macroeconomic policy, in particular monetary policy, as well as prudential and structural policies could influence the soundness of a country's banking sector.

2.5.2 Banking Sector Soundness and Supervisory Policies

Bank Negara Malaysia (BNM) adopts a two-prong approach to supervision, namely, the regulatory and off-site monitoring and on-site examination. While the regulatory aspect deals with the formulation and implementation of specific rules and regulations, off-site monitoring involves the continuous review of the financial condition of the banking institutions through statistical returns and reports submitted by the individual institutions. On the other hand, on-site examination is performed to assess the financial and general condition of an individual banking institution. This includes an assessment of the adequacy of policies, procedures, systems and internal controls, an evaluation of the effectiveness and efficiency of the institution's operations, and the determination of managerial competence. BNM has broadly adopted the U.S. CAMEL rating system in assessing the performance and overall condition of individual banking institutions.

(1) Capital adequacy

Banking institutions in Malaysia, as a whole, can be considered as well capitalised by Basle standards as most of them have risk-weighted capital ratios (RWCR) above the minimum requirement of 8.0 percent. As at end-June 1997, the RWCR of the commercial banks was 14.0

percent while the RWCR of merchant banks and finance companies stood at 13.4 percent and 10.8 percent, respectively. Core capital ratio for the banking industry as a whole was higher than the Basle requirements due partly to BNM's more stringent requirements, that is, the restriction on the inclusion of subordinated term debt as capital. In addition, commercial banks are required to maintain minimum capital funds (unimpaired by losses) of RM20 million, while the requirement for finance companies and merchant banks are RM5 million and RM10 million, respectively.

To develop a core of strong and well capitalised banking institutions that are able to compete effectively in the domestic and regional markets, a two-tier regulatory system has been put in place. The two-tier regulatory system allows stronger and better managed banking institutions greater flexibility in offering new products, business expansion and in conducting their business operations. To qualify for Tier-1 status, the banking institutions must have certain minimum amount of shareholders' funds and must fulfil the CAMEL requirements.

(2) Asset quality

On the assessment of asset quality and adequacy of loan loss provisions and reserves, BNM has introduced uniform guidelines on asset classification and the treatment of non-accrued income, or interest-in-suspense on non-performing loans and provision for bad and doubtful debts. Loans are classified non-performing when the principal or interest repayment is in arrears of six months or more with the exception of credit cards and trade bills. For credit cards, the default period for classification is three months while for trade bills, the default period is reduced to two weeks after the maturity of the bills concerned. All banking institutions have complied with this minimum requirement. Some of the bigger and stronger institutions have adopted more stringent requirements, for example, the biggest domestic institution suspends interest on loans in arrears of three months. Asset quality of the banking sector has improved tremendously as reflected by a sharp decrease in the ratio of non-performing loans to total loans (NPL ratio) over the last few years. The NPL ratio of commercial banks hit a high of 33.0 percent in 1988 and recorded the lowest of 3.6 percent as at end-June 1997.

In assessing the adequacy of loan loss provisions, one of the indicators used by BNM is the ratio of general provision to total loans and advances net of specific provisions and interest-in-suspense. Banking institutions continued to build up their general provision over the years. As at end-June 1997, the ratio of general provision to total loans and advances net of specific provisions and interest-in-suspense for the commercial banks and finance companies has increased to 2.1 percent and 1.7 percent, respectively, well above the minimum of 1.0 percent required by BNM. Another common indicator used is the loan loss provision (specific provision plus general provision plus interest-in-suspense) cover over non-performing loans. The loan loss provision cover for the non-performing loans of the commercial banks and finance companies was about 98.0 percent and 82.6 percent, respectively, as at end-June 1997. In summary, banking institutions in Malaysia have shown improvement in asset quality since the crisis years in the 1980s as reflected by the above key indicators.

Experience has shown that large exposures to a single borrower, or a group of related borrowers and large concentration in any particular economic sectors, industries or geographical regions are common causes of banking problems because they represent credit risk concentrations. To prevent abuse and avert the dangers from the over-concentration of loans to a single customer, BNM imposes specific credit limits to a single customer. The maximum limit for loans to any customer is set at 30 percent of a bank's capital funds. In addition, banking institutions are required to observe an overall limit. The limit is 50 percent of the credit facilities in the form of "large" loans. A large loan is defined as any credit facility granted to any customer, which in aggregate exceeds 15 percent of the banking institution's capital funds.

Concern that excessive exposure of the banking institutions to the property and stock markets would increase the vulnerability of the banking system to financial distress, BNM introduced pre-emptive measures. The main objective was to curb lending for speculative activity and to contain escalation in property prices. As at end-1996, commercial banks' exposure to the broad property sector was about 30 percent of total loans outstanding, while lending for the purchase of shares and units of unit trust funds accounted for 10.1 percent. The measures implemented involved the following:

(2.a) Credit facilities granted for the purchase of stocks and shares and units of unit trust funds

The existing limits on outstanding loans of 15 percent for commercial banks and finance companies and 30 percent for merchant banks for credit facilities secured by stocks and shares are maintained. However, these limits are re-defined to cover credit facilities for the purchase of stocks and shares and unit of units trust funds, including loans to holding and investment companies. Loans extended for the purchase of Amanah Saham Bumiputra, Amanah Saham Nasional, Amanah Wawasan 2020 and unit trust funds established by various State Governments will be exempted from the limits.

(2.b) Credit facilities extended to financing specified types of property

Effective 1 April 1997, banking institutions were required to observe a limit on credit facilities extended to the property sector (excluding houses and apartments costing RM 150,000 and below, infrastructure projects and industrial buildings and factories) of 20 percent of their total outstanding loans. The term "credit facilities" was defined to include all forms of lending, including the issue of guarantees, private debt securities and commercial papers.

BNM monitors the concentration of loans of banking institutions to various economic sectors through the submission of monthly statistical reports. On the part of banking institutions, they must have management information systems that enable management to identify concentrations within the portfolio.

Measures have also been put in place by the Central Bank to prevent lending to connected parties. Experience has shown that much abuse and irregularity can occur through the extension of credit to bank insiders, e.g., directors and their related parties. The insider linkages invariably cloud objectivity in credit evaluation and result in more favourable credit terms than those extended to outsiders at arm's length. To prevent abuses and malpractices by directors and staff, banking institutions in Malaysia are prohibited from granting credit facilities to their directors and staff, except in certain exceptional cases such as when loans are provided as staff benefits under the banking institution's scheme of service.

(3) Management

The first line of defence against unsound banking is competent management. Quantitative regulation, although important, cannot ensure that a banking institution is well run. Management of banking institutions needs to possess a high degree of integrity, and have adequate training and experience to do the job. Before a banking institution appoints a director or a chief executive officer, the institution is required to obtain BNM's approval for the proposed appointment. BNM applies a "fit and proper" person test to ensure that only competent professionals and persons of integrity are appointed to manage the institutions. A financial and security vetting on the proposed director or chief executive is undertaken to check his conduct of financial affairs and that he has no criminal record.

In assessing the quality of management, emphasis is placed on the effectiveness and efficiency of corporate governance processes and practices to ensure managerial efficiency. Such processes include the oversight functions of the board of directors, systems and controls, and internal audit function. Banking institutions should have in place adequate policies, practices, procedures and internal controls that are adequate for the nature and scale of their business. The three primary areas of internal controls are:

- organisational structure (definitions of duties and responsibilities, discretionary limits for approval, and decision-making procedures);
- accounting procedures (reconciliation of accounts, control lists, periodic trial balances, etc.); and
- the "four eyes" principle (segregation of various functions, cross checking, dual control, dual signatories, etc.).

These controls must be supplemented by an effective audit function that independently evaluates the adequacy, operational effectiveness and efficiency of the control systems within the institution. As part of the effort to raise the standard of internal auditing in the banking industry, BNM has issued *Guidelines on Minimum Audit Standards for Internal Auditors of Financial Institutions.* The Guidelines lay down minimum standards covering the organisation of the internal audit function; duties and responsibilities of internal auditors; scope of

audit work; reporting and documentation; and the minimum scope of audit work in critical areas such as credit, treasury, derivatives, investment in debt and equity securities, and information systems. It is envisaged that with the implementation of the Guidelines, the quality and effectiveness of the internal audit function would be enhanced and this would help to improve the operational effectiveness of the banking institutions.

It is felt that the strength and ability of an institution to be able to cope with new businesses and to offer innovative products will depend on availability of sufficient expertise to assess risks and to implement controls to support such activities. On BNM's part, the approach taken is to put in place adequate prudential standards and rules and to ensure banking institutions' risk appetite remains within acceptable levels. In this regard, BNM has come up with a comprehensive guideline on *Minimum Standards on Risk Management Practices for Derivatives.* This Guideline is aimed at ensuring that derivative activities would be conducted in a prudent manner in order to preserve the integrity and stability of the financial system. The Guideline contains the four basic principles of risk management of derivatives, namely:

- Appropriate oversight by the board of directors and management;
- Existence of adequate infrastructure for appropriate risk management;
- Adequate integrated risk management process; and
- Existence of comprehensive internal controls and audit procedures.

Emphasis on greater examination is placed on evaluating the adequacy of risk management system in order to ensure that banking institutions have in place the processes necessary to identify, measure, monitor and control their risk exposures.

(4) Earnings

The potential problems of banking institutions are often reflected in their earnings performance. Some of the common earnings performance indicators used by BNM are return on assets (ROA) and return

on equity (ROE). In the light of rapid expansion in assets, particularly loans, commercial banks and finance companies in Malaysia recorded higher pre-tax profits in 1996, an increase of 29.2 percent and 26.9 percent, respectively, over the previous year. The ROA for the commercial banks and finance companies was 1.8 percent and 1.7 percent, respectively, for the financial year 1996. As for the ROE, it was 23.1 percent for the commercial banks and 25.2 percent for the finance companies in 1996.

(5) Liquidity

To ensure that banking institutions are liquid at all times to meet obligations especially deposit withdrawals of customers, they are required to maintain a minimum amount of liquid assets as a percentage of their total eligible liabilities (EL). EL comprises total deposits, net amount due to banking institutions in Malaysia, net repurchase agreements, amount of negotiable certificates of deposit (NCDs) issued net of NCDs held, all ringgit borrowing from abroad and net foreign currency liabilities. The current liquidity ratio for commercial banks is set at 17 percent while for finance companies and merchant banks, the ratio is 10 percent (12.5 percent for those issuing NCDs). Liquidity is generally not a major problem for sound banking institutions in a reasonably competitive banking system, and weak institutions often can replenish liquidity by bidding up interest rates. In many cases of banking crises, liquidity crises have their roots in solvency problems.

(6) Changes in the legal and regulatory framework

Malaysia's experience in the 1980s has proven that adverse developments in the operations and activities of the various non-bank financial institutions (not regulated by BNM) operating at the fringe of the regulated banking sector could undermine public confidence in the soundness of the country's overall financial structure. Although the operations of these institutions may be relatively small vis-à-vis the size of the banks and the finance companies, their combined operations nevertheless have important implications for monetary and financial stability as a whole. This was amply demonstrated during the period of the infamous deposit-taking companies (DTC) fiasco. The growth of these institutions on the fringe demanded that the Central Bank must have the means and authority to monitor, supervise and regulate the

activities and operations of all such financial institutions to effectively promote monetary stability and a sound financial structure.

Taking into account the need to have the authority to supervise and regulate all deposit-taking activities and the need for banking laws to converge in response to the changing operating environment, the Banking and Financial Institutions Act, 1989 (BAFIA) came into effect. The BAFIA streamlines the laws relating to banking and other financial institutions to provide for an integrated supervisory regime for the financial system. The BAFIA provides a framework which enabled the Central Bank to supervise three broad categories of financial institutions, as follows:

(i) Licensed institutions: Comprising the commercial banks, merchant banks, finance companies, discount houses, money brokers and foreign exchange brokers;

(ii) Scheduled institutions: Comprising the major non-bank sources of credit and finance, which include issuers of charge/credit cards and travellers' cheques, operators of cash dispensing machines, development finance institutions, building societies and housing credit institutions, factoring companies and leasing companies. Also included are representative offices of foreign banks or foreign institutions which carry out the business or activities similar to the scheduled institutions; and

(iii) Non-scheduled institutions: Comprising all other statutory bodies and institutions involved in the provision of finance and credit.

For licensed institutions, the BAFIA provided for stricter regulation and control over their activities and licensing requirements. In the case of scheduled institutions, laws applicable to licensed institutions could be extended to them, should it become necessary, with the consent of the Minister of Finance. Scheduled institutions are only required to register with BNM in order to commence or continue scheduled business. Non-scheduled institutions continue to be governed by their respective statutes. However, the BAFIA provides BNM with the power to investigate and take corrective actions when an order is made to that effect by the Minister of Finance on the recommendation of the Minister or State Authority responsible for the particular non-scheduled institution.

(7) Measures to deal with problem/insolvent banking institutions

One key lesson of the Malaysian experience of the mid-80s in dealing with problem banking institutions is that prompt, decisive action must be taken to address problem areas in ailing institutions. The extent of damage must be determined fairly and accurately and problems of capital adequacy and competent management must be addressed, that is:

- Recognise all losses immediately;
- Replace the bank's management; and
- Require the shareholders to inject as much new capital as possible, while the Central Bank filled any remaining gaps to meet the minimum capital adequacy requirements.

The success of bank restructuring owes much to Malaysia's macroeconomic adjustment. The beneficial effects of fiscal retrenchment and depreciation of the currency brought broadly based economic recovery, which assisted the bank restructuring process. The political will and financial discipline to address the twin effects on the balance of payments and public sector were vital ingredients of the recovery program.

In a crisis, BNM needs to ensure that banking institutions would be able to meet their obligations. In this regard, institutions faced with financial difficulties have the option of obtaining a loan from BNM against the security of its own shares or any other sufficient security.

Under the Central Banking Act 1958 (Revised 1994) and the BAFIA, BNM is empowered with many options in dealing with an insolvent banking institution, including the following:

(i) removal of present directors and officers from office and appointment of their replacements;

(ii) assumption of control of the insolvent institution's entire properties, business and affairs by BNM;

(iii) making application to the court to reduce the capital of the insolvent institution to the extent the capital has been lost or underrepresented by available assets;

(iv) requiring injection of new capital by existing shareholders, new shareholders, or if necessary, by BNM;

(v) making an application to court to appoint receivers to manage the affairs and business of the insolvent institution and to arrange for the operations of the ailing institution to be absorbed by a stronger institution;

(vi) transfer of the assets and liabilities of the insolvent institution of the same type, in a merger; and

(vii) revocation of licence and liquidation after completion of the merger. The liquidator would be appointed by the court on application by the rescuer institution.

2.5.3 Banking Sector Soundness and Monetary Policy

The importance of an effective and comprehensive supervisory framework would be better appreciated given that the banking sector has an important intermediary role in the mobilisation and allocation of resources. In addition to its contribution to the development of the economy, a well-functioning and efficient banking system is vital in ensuring effective and efficient conduct of monetary policy. Banking crises would cause a severe dislocation of economic activity, leading to a slow down in economic growth or even a recession. At the same time, it may render monetary policy ineffective in achieving the ultimate policy objective of maintaining monetary or price stability. These issues are discussed below.

Weak or unsound banking institutions have a greater incentive to take excessive risks in lending operations, with the expectations of higher returns. This is the moral hazard of banking where institutions (shareholders) have everything to gain if their "bet" generates a high return, while depositors (or taxpayers) would have to bear the cost in the event the institutions fail. In this kind of environment, higher interest rates may not deter lending, and subsequently, the monetary authorities may be required to tighten monetary policy more than necessary in order to slow down credit and monetary growth.

Malaysia's experience during the period 1986-1987 illustrates how banking sector unsoundness rendered monetary policy ineffective.

Malaysia was in a severe recession in the middle of 1980s, characterised by falling commodity prices and plummeting stock and property prices. As the recession deepened, the number of bad and non-performing loans increased sharply as many borrowers defaulted and the security values of shares and properties deteriorated. Non-performing loans of the banking system increased sharply from 9.6 percent of total loans (RM6.8 billion) in 1985 to 33 percent (RM25.4 billion) in 1988. In addition, provisions for interest-in-suspense and bad debts also increased substantially. Consequently, the banking sector incurred substantial losses during the 1985-1986 period. The crisis of confidence in the banking sector prompted intervention by Bank Negara Malaysia (BNM). During the period, five commercial banks and four finance companies had to be rehabilitated, while some were taken over by other institutions.

The recent experience of Japan represents a good example where the fragility of the banking sector has been a drag on the economy, preventing a quick recovery of the economy. The lesson is that banking crises have to be dealt with quickly and decisively to restore confidence and provide the necessary environment for the economy to recover.

In a fragile banking system, the effectiveness of monetary policy could be blunted. This is illustrated when BNM relaxed monetary policy in order to help stimulate the domestic economy. The reduction in the SRR and the minimum liquidity requirement in October 1986 had resulted in a marked decline in the interbank and deposit interest rates. However, the decline in the fixed deposit rates of commercial banks for one month to 12-month maturities was not passed on to borrowers as the average lending rates did not fall as much as the fall in the funding cost. The reason was that banks used the opportunity to widen the interest spread to recoup and cover the costs of non-performing loans. As a result, the lower interest rates were unable to stimulate economic recovery. To overcome this, BNM reintroduced interest rate control in September 1987. BNM employed a lead-bank system whereby commercial banks and finance companies agreed, as a temporary measure, to peg their base lending rate (BLR) to within 0.5 percentage point and 1.5 percentage points of the BLR of the two lead banks. In addition, the spread above the BLR charged by banks and finance companies was restricted to a maximum of four percentage points.

While the soundness of the banking system is important for effective implementation of monetary policy, the soundness and stability of the banking system, in turn, is dependent on the existence of sound macroeconomic management, including appropriate monetary policy. Therefore, an important element in the conduct of monetary policy is to ensure stability in the financial and banking system. Volatility in prices, i.e., interest and exchange rates, may lead to a misalignment and misallocation of resources, with adverse implications for the stability of the financial system, which in turn could derail the growth of the economy.

An important principle to bear in mind is that monetary policy can only influence either the interest rate or the exchange rate, but not both at the same time. International experiences have illustrated that the conduct of monetary policy should be based on domestic economic considerations while paying due regard to external developments. This is especially true in a globalised and increasingly integrated financial markets, which in recent years has seen increasingly massive and volatile flows of short-term funds. In this environment, the conduct of monetary policy, especially for a small open economy like Malaysia, cannot be done in isolation and has to take into consideration external developments. The experience of Malaysia in the early 1990s is illustrative of this point. Since 1989, a tight monetary policy stance had been maintained, resulting in high interest rates which widened interest rate differentials in favour of Malaysia. This environment, coupled with market expectation of an appreciation of the exchange rate and the expected potential returns from the buoyant stock market, induced a massive surge in capital inflows. These inflows, by their sheer magnitude and volatility, destabilised the domestic money and foreign exchange markets. After careful consideration, BNM was of the view that it would be more effective to introduce a series of temporary administrative measures in early 1994. These measures were directed entirely at containing the speculative inflow in order to limit their undesirable effects on liquidity, money supply, financial market stability and inflation. As financial stability was gradually restored, the measures were lifted. Since then, the monetary policy stance in Malaysia is effected through influencing the trends in interest rates, while the exchange rate is left to be determined by market forces, reflecting the underlying strength of the economy. Recent international experiences suggest that the use of high domestic interest rates to stabilise the domestic currency is usually not sustainable, and over a prolonged

period, can cause adverse implications for the domestic banking system and the economy.

2.5.4 Conclusion

The existence of a sound banking system is particularly important in the context of developing countries where the banking system is the primary channel to intermediate savings, as their capital market is relatively undeveloped or non-existent. While it is difficult to separate the effects of banking problems on the real economy from an economic decline that may lead to banking problems in the first place, experience has shown that banking crises translate rapidly into a downturn in the economic well-being of a country. Sound macroeconomic management is the other side of the same coin, and the existence of credible, consistent and transparent policies are important, particularly in increasingly market-driven economies.

2.6 NEPAL

J. S. Bohra

2.6.1 Introduction

The banking system in Nepal consists of Nepal Rastra Bank (NRB) (the central bank), eleven commercial banks, and seven development banks (including five regional rural development banks). The banking system is virtually dominated by commercial banks whose aggregate deposits amounted to Rs. 80.7 billion, aggregate loans of Rs. 58.4 billion, and aggregate capital of Rs. 3.9 billion.

Only a well-established banking sector can facilitate the pace of economic development. Weaknesses in the system can threaten financial stability. The lessons learnt from the collapse of BCCI, Barings and the Mexican financial crisis have further heightened the importance of banking sector soundness. A sound banking sector has the following characteristics:

(i) It operates under a competitive atmosphere;

(ii) It has sufficient capital and reserves;

(iii) High quality of earning assets and low level of provisions for possible losses;

(iv) Competent, professional and experienced management;

(v) Sustainable earnings; and

(vi) Sufficient liquidity.

2.6.2 Measurement of Banking Sector Soundness

Measuring banking sector soundness is a qualitative as well as quantitative process. In order to ensure a sound banking system, the NRB has prescribed certain prudential norms which the commercial banks have to comply.

(1) Capital adequacy ratio

Capital adequacy norm has been prescribed to encourage commercial banks to be more risk sensitive with respect to both on- and off-balance sheet exposures. Based on the quality of assets adjusted for

inherent risk, all commercial banks are required to maintain a capital adequacy ratio at 8 percent (as prescribed by the BIS) every year, of which 4 percent should be in the form of tier-1 capital.

(2) Assets quality and loan loss provisions

At the end of each financial year, banks are required to classify their total loan portfolio into six different categories — good, acceptable, indication of substandard, substandard, doubtful and bad, all on the basis of overdue, repayment position, quality of collateral and financial position of borrowers. Based on such classification, banks are required to make provisions at rates ranging from 1 to 100 percent.

(3) Management quality/competency

Prior to approval of an operating licence to a proposed bank, managerial competency of the promoters is to be justified both by their academic qualifications and experience. The NRB has fixed certain managerial qualities such as banking and professional experience, and academic background for the promoters of the proposed bank. Appointments of chief executives, especially in the case of joint-venture banks, require prior approval by the NRB.

(4) Earnings quality

Private sector's participation in the banking sector is possible only when there is an expected reasonable rate of return on capital. A certain part of the operating profit is to be transferred to the capital reserve.

(5) Liquidity management

The purpose of liquidity management is to ensure the bank's ability in meeting its current obligations. Commercial banks are required to hold cash equivalent to no less than 12 percent of the total deposit liabilities.

Of the minimum cash requirement of 12 percent, banks are required to maintain 8 percent as balances with NRB and 4 percent as vault cash. By this mandatory CRR system, the soundness of a particular bank as well as the banking sector as a whole could be measured

through a periodical monitoring under on-site and off-site supervision, supported by relevant financial statements submitted by banks.

2.6.3 Linkages to Macroeconomic Policies

The macroeconomic policies in Nepal are concerned basically in attaining higher economic growth with stability and equity together with an emphasis on poverty alleviation through balanced development. As such, monetary and fiscal policies are simultaneously used to accomplish these objectives. In this regard, the central bank formulates monetary policies in line with macroeconomic objectives:

(i) through financing for economic development;

(ii) maintaining monetary stability; and

(iii) developing a sound financial system.

The process of economic development is affected by the level of investment which ultimately depends on society's propensity to save. The financial sector as a whole mobilises savings and utilises them in productive areas so that economic growth could be enlarged and sustained. A sound banking sector in particular and the overall financial sector in general should be guided by the central bank to help achieve macroeconomic objectives. As is common, maintaining monetary and financial stability is the major concern of all central banks. The effectiveness of monetary policy could be measured through analysing the monetary targets and instruments.

In Nepal, the existence of a parallel and unorganised money market makes the policy instruments less effective. Similarly, the instruments like cash reserve ratio, bank rate and open market operations would be more effective only in a sound and efficient banking sector. Because of the strong unorganised financial market in the Nepalese context, the central bank has a role in the expansion of banking facility throughout the Kingdom. The central bank can play promotional, catalytic, and regulatory roles, with a view to deepening and strengthening the financial system.

The major monetary policy instruments of the NRB include open market operations, under which treasury bills and the NRB bonds are auctioned on a weekly basis, the NRB rate, a refinance facility to the

priority sector, and statutory cash reserve requirements (CRR). The NRB rate is set at 3 percent above the maximum treasury bills yield of the latest auction. In the past, as commercial banks were not fully loaned up, the NRB rate was rarely changed.

The NRB has been using the refinance facility to allocate bank credit to priority sectors, including agriculture, cottage and small-scale industries, small services and exports. At present, the refinance rate is fixed at 11 percent. However, as mentioned above, due to the excess reserves of commercial banks in the past, commercial banks have not made much use of the refinance facility.

The NRB began to use the CRR since 1966/67. At present, the CRR is 12 percent (4-percent cash in vault and 8-percent balances with the NRB) of total deposits of commercial banks. As commercial banks used to hold excess reserves in the past, changes in the CRR have not been effective in bringing about desired changes in money supply. Nonetheless, the use of such an instrument has prevented commercial banks from potential credit expansion and thereby money supply growth in the economy that ultimately helps to stabilise the price level.

2.6.4 Consistent Monetary and Supervisory Policies

The formulation and implementation of monetary policy involve the following steps and objectives:

- estimating the demand for money by different sectors of the economy;
- regulating the overall financial sector to maintain monetary stability; and
- keeping the internal and external stability by guiding a desired level of the interest rate, inflation rate and exchange rate.

Banking supervision has evolved as a reaction to bank insolvencies. The expansion and deepening of the banking system has made the supervisory role in maintaining a sound banking sector of the NRB more complex and challenging. Very recently, many prudential guidelines at par with international standards have been introduced. They include capital adequacy, credit and liquidity exposures, loan classification, definition of risk assets and provisions for non-performing as-

sets, operation of off-balance sheet transactions, accounting disclosures, and reporting standards.

In view of the rapid development of the financial sector, the new risk-based approach of supervision developed by the US Comptroller of Currency is to be implemented to strengthen the supervisory role of the NRB.

While monetary policy is responsible for maintaining price stability, supervisory policy aims at stability of the financial system as a whole. Thus, monetary management and supervision by NRB should be formulated and implemented simultaneously.

2.7 PHILIPPINES
Ricardo P. Lirio

2.7.1 Overview

(1) Background

The history of the Philippine banking system shows that the financial system evolved from being a mere depository of idle funds to an advocate of progress. It has notably contributed to the stability of the economy despite the growing internal as well as external threats like the demand for immediate charter change vis-à-vis its deferment and the attack to the strength of the Philippine peso.

The enactment of RA 7653 or the new Central Bank Act provided the Philippine Central Monetary Authority a firmer ground to stand on and consequently be able to exercise with greater independence the conduct of monetary policy. Policy directions have been refocused considering liberalisation, globalisation, and adherence to free market forces as the basic principles.

The foreign exchange market was emancipated from the controls that continuously envelop it in the past years. Capital inflows surged as manifested by the growing interest in the capital and stock markets. Inflation rate moved to low levels and the foreign exchange rate in accord with the dictates of the market. The banking system formally reopened its doors to foreign banks with the enactment of the Bank Liberalisation Law in 1994. This accepted move became the indicative level of confidence the country has gained from the international banking community.

(2) The Philippine banking industry

The early years of the Philippine banking industry dates back to the late 1500s when the country was still under Spanish control. A series of epochal periods followed, i.e., American, Japanese and the post-war period. In 1949, the Central Bank was established to make the monetary and banking systems of the country responsible for the rehabilitation and development of the Philippine economy.

The banking industry underwent a lot of structural and financial reforms. Significant among these were the reforms instituted starting in 1972 which included the expansion of the scope of Central Bank authority as the entire financial and credit systems were put under its responsibility. The enactment of RA 7653 in 1993 that gave birth to the new Bangko Sentral ng Pilipinas (Bangko Sentral/BSP) facilitated the promotion of competitive conditions for greater efficiency of banks and increased availability of long-term funds.

The opening up of the Philippine economy to global competition brought consequential effects to the banking system as well. Banks grew in size, transactions and services offered, became complex and sophisticated. Today's rules on the establishment of new banks and branches have been eased in order to mobilise savings and allocate resources to the appropriate sector. The minimum capital requirement was increased and the reserve requirements rationalised.

As new financial products and services were introduced, banks coped with the highly competitive environment characterised essentially by fast-paced changes in technology and the increasing trend towards globalisation.

The vigilance against unscrupulous and unprofessional transactions remains the primary concern of the BSP. It closely works hand in hand with bank directors and management but at the same time indispensably retains the independence, proficiency and ability to determine how well these guardians manage public funds.

(3) Types of banking institutions

The three basic groups of banks supervised by the BSP are the following:

(i) Expanded and non-expanded commercial banks: Banks doing the business of commercial banking by accepting drafts and issuing letters of credit, by discounting and negotiating promissory notes, drafts, bills of exchange and other evidences of debts; by receiving deposits; by buying and selling foreign exchange and gold or silver bullion, and by lending money against personal security, among

others. Expanded commercial banks are further allowed to invest in non-allied undertakings and perform investment house functions.

(ii) Thrift banks: Banks primarily concerned with the mobilisation of savings and investing them together with capital, in loans and readily marketable securities, commercial papers, etc. They provide short-term working capital, medium- and long-term financing and diversified financial and allied services for their chosen market and constituencies especially for small and medium enterprises and individuals.

(iii) Rural banks: Banks that provide adequate credit facilities to farmers and merchants, or to cooperatives of such farmers and merchants, and to people of rural communities in general.

(4) Status of the Philippine banking system

The liberalisation, deregulation and globalisation policies of the BSP resulted in the unprecedented growth of the industry. The entry of new banks and the facility of establishing bank branches increased the number of banking institutions to 6,745 as at 30 June 1997, of which 998 are head offices and 5,757 are branches. These compare with 5,269 banks of which 924 were head offices two years ago. Expanded commercial banks have the fewest number of head offices at 21 but however have the most number of branches aggregating 3,239.

As at 30 June 1997, the system's aggregate resources amounted to ₱2,432.9 billion, compared with ₱1,365.0 billion two years earlier, an increase of 78 percent. Loans and discounts, making up the bulk of total assets, as at same dates corresponded to ₱1,576.8 billion and ₱787.5 billion, respectively, a 100-percent increment.

The required increased capitalisation manifested a more stable financial condition and improved performance. Total capital was recorded at ₱301.0 billion with expanded commercial banks comprising 75.7 percent of the banking sector data (see accompanying box). A comparison with the 30 June 1995 statistics is shown in Annex 2.b (peso value in billions).

	Commercial Banks				
	Expanded	Non-Expanded	Thrift Banks	Rural Banks	Total
Total Resources	₱ 1,729.3	₱ 436.4	₱ 217.7	₱ 49.5	₱ 2,432.9
Loans/Discounts (net)	1,132.0	268.4	142.8	33.6	1,576.8
Deposits	1,068.0	187.7	142.9	32.5	1,431.1
Capital	228.0	34.5	31.0	7.5	301.0
No. of Offices of which:	3,260	549	1,341	1,594	6,745
Head Offices	21	31	113	823	924
Branches	3,239	518	1,228	772	4,345

2.7.2 Supervisory Policies

Over the years, the Bangko Sentral has always adapted to the changing times. Rules and regulations issued conform to the requirements and dictates of current practices and developments.

(1) Board of directors

The progress and growth of banks and any type of company depend fundamentally on how well the institution is cautiously managed. Banks thrive basically on trust, unlike any other corporation. Their management, therefore, must strictly comply with tenets of skill, proficiency and dedication which directors of the other corporations may not possess. Thus, banks' success basically depends on the professionalism of the core of people who run the bank.

To ensure prudent and efficient administration of banks, the BSP has prescribed the following basic responsibilities and duties of their board of directors:

(i) To select and appoint officers who are qualified to administer the bank's affairs effectively and soundly. Integrity, technical exper-

tise, experience, and competence must at all times be the considerations in choosing the key personnel of the bank. The relationship of the board and the chosen officers must be based solely on mutual trust.

(ii) To provide a clear framework of objectives and policies within which management must operate. Objectives should be clearly set out and policies should cover all major business activities so that management may be guided on how to make choices between risks and rewards.

(iii) To effectively supervise the bank's affairs to ensure that the bank is soundly managed. Directors of banks must exercise a higher degree of prudence and better judgement and must have a high level of wisdom and competence than directors of other types of companies as the business of banking rests in handling of public funds.

(iv) To establish an Audit and Examination Committee of Directors comprising of non-executive directors. There should be proper evaluation of the board's performance based on policies instituted and actions taken.

(v) To set up an internal audit department with qualified internal audit personnel and to strengthen internal audit functions. The bank's internal auditor must report directly to the Audit Committee set up by the board to assure his independence.

(vi) To ensure that the bank has beneficial influence on the economy. As banks play a very salient role in the development of the economy, the board has the continuing responsibility to ensure that banking services and facilities will work towards balanced economic growth.

(vii) To be generally informed of both the bank's business environment and legal and regulatory framework controlling its activities. In order to effectively compete with other banks, directors should be well informed of industry developments and business trends. They

must be constantly aware of relevant rules and regulations and ensure that these are not violated.

(vii) To devote time and attention necessary to do their job. Directors must be diligent and must give time and attention to the demands of their work. They must be aware of the bank's condition and must be knowledgeable of its activities so that they may actively participate in board and committee meetings.

(ix) To exercise independent judgement in overseeing the bank's affairs. Management recommendations should be carefully reviewed and any disagreements should be articulated, formally registered and explained.

(x) To conduct fair business transactions with the bank and to ensure that personal interest does not bias board decisions. The director should not use his position to make any profit for himself or to acquire personal benefit or advantage.

(xi) To keep the directors' authority within the powers of the bank as prescribed in the articles of incorporation, charter, by-laws and in existing laws, rules and regulations. If directors wilfully do an act which they know or ought to know to be unauthorised, they are clearly liable to the institution for resulting damages.

Complementing the above guidelines is the recent requirement of prior approval by the Monetary Board of the BSP on the appointment of bank officers with the rank of Senior Vice President and up before assuming their positions and the Monetary Board's confirmation of appointments of the incumbents.

(2) Capital requirements

A primary requisite to determine soundness of any financial institution is the ability of its capital to absorb losses. For a bank to be formidable, sturdy and sound, it must have a strong capital base.

As the Philippine economy began to grow and after a refocus of policy directions, the BSP issued Circular No. 117 dated 24 December

1996 amending the minimum capital requirements for banks as follows:

Expanded Commercial Banks (EKBs)	₱ 4.5 billion
Non-Expanded Commercial Banks (KBs)	2.0 billion
Thrift Banks	
With head offices located within Metro Manila	250.0 million
With head offices located outside Metro Manila	40.0 million
Rural Banks	
In the cities of Manila, Kalookan, Quezon, Pasay, Mandaluyong, and Makati and the municipalities of Malabon, Navotas, San Juan and Parañaque	20.0 million
In the cities of Cebu and Davao	10.0 million
In first, second and third class cities and in first class municipalities and selected parts of Metro Manila (Valenzuela, Marikina City, Pasig City, Muntinlupa City, Las Piñas City, Taguig and Pateros)	5.0 million
In fourth, fifth and sixth class cities and in second, third and fourth class municipalities	3.0 million
In fifth and sixth class municipalities	2.0 million

Existing expanded and non-expanded commercial banks were allowed to meet the required capital in two phases, the first to be complied with the first twelve months from the date of the circular or on or before 24 December 1997. The second is within the next twelve months from the first anniversary date of the circular or by 24 December 1998.

Expanded Commercial Banks		
First phase	₱ 3.5	billion
Second phase	4.5	billion
Non-Expanded Commercial Banks		
First phase	1.625	billion
Second phase	2.0	billion

Compliance of thrift banks with head offices located in Metro Manila shall be as follows:

₱ 150 million	- on or before 21 February 1997;
₱ 200 million	- within the next twelve months from 22 February 1997; and
₱ 250 million	- within the next twelve months after 22 February 1998.

All thrift banks located outside Metro Manila must comply with the ₱40 million capital requirement by 21 February 1997.

(3) Networth-to-risk assets ratio

Risk assets are defined as total assets minus the following:

(i) Cash on hand;

(ii) Amounts due from the Bangko Sentral;

(iii Evidences of indebtedness of the Republic of the Philippines and of the Bangko Sentral and any other evidences of indebtedness or obligations the servicing and repayment of which are fully guaranteed by the Republic of the Philippines;

(iv) Loans to the extent covered by hold-out on, or assignment of, deposits maintained in the lending bank and held in the Philippines;

(v) Loans or acceptances, under letters of credit to the extent covered by margin deposits; and

(vi) Other non-risk items which the Monetary Board may, from time to time authorise to be deducted from total assets like bank premises

and furniture, fixtures and equipment (net), deferred income tax, and real estate mortgage loans insured by the Home Financing Commission to the extent of the amount of insurance or outstanding loan whichever is lower.

The ratio of net worth (combined capital accounts) of a bank shall not be less than an amount equal to ten percent (10%) of its risk assets. The Monetary Board may authorise a bank to maintain a net worth to risk assets ratio lower than 10 percent if the bank complies with specified levels of capital.

(4) Loans and other risk assets

(4.a) Loans

Loans remain the major earning asset of a bank and therefore will definitely affect the bank's soundness and stability. Banks are therefore required to establish a system of identifying and monitoring existing or potential problem loans and other risk assets. It should be able to evaluate credit policies vis-à-vis prevailing circumstances and emerging portfolio trends.

In the evaluation of loans, these are categorised and defined as follows:

(i) Not classified: Loans that do not have a greater-than-normal risk and do not possess the characteristics of a classified loan.

(ii) Classified:

(a) Loans especially mentioned - Loans or portions thereof which are superior in quality to those classified substandard but which are potentially weak, e.g., where there is lack of collateral, credit information or document and thus would require closer management supervision.

(b) Substandard - Loans or portions thereof which appear to involve a substantial and unreasonable degree of risk to the bank because of unfavourable record or unsatisfactory characteristics:

- Unsecured
- Secured

(c) Doubtful - Loans or portions thereof which have the weaknesses inherent in those classified as substandard with the added characteristics that existing facts, conditions, and values make collection or liquidation in full highly improbable and in which substantial loss is probable.

(d) Loss - Loans or portions thereof which are considered uncollectible or worthless and of such little value that their continuance as bankable assets is not warranted although the loans may have some recovery or salvage value.

The allowance for probable losses on loan accounts that must be set up shall be as follows:

Not Classified	-	0 %
Loans Especially Mentioned	-	0 %
Substandard Unsecured Portion	-	25 %
Doubtful	-	50 %
Loss	-	100 %

In a recent decision by the Monetary Board, all banks are required to set up a general loan loss provision not linked to individually identified uncollectible accounts equivalent to 2 percent of total gross loan portfolio.

Newly established banks or banks operating for not more than 5 years shall initially set-up an amount equivalent to 1 percent of their gross loan portfolio within 1 year and the remaining 1 percent in the second and third year in equal amounts. All other banks shall set up the reserves within 1 year from the date of the circular.

(4.b) Investments and other risk assets

Temporary investments in stocks and bonds should be valued at lower of cost or market. A valuation reserve should be set up to reflect a material or major market decline.

Real estate property acquired are not sound bank assets as these are non-liquid and non-productive and should therefore be immediately disposed. Valuation reserves shall be 10 percent annually and shall start at the expiration of the statutory redemption period. Valuation reserves for acquired personal properties shall start from the date

of foreclosure or from the perfection of the contract, if acquired through payment at 50 percent at the end of the first year, 30 percent by the second year and 20 percent at the end of the third year.

(5) Reserve requirements

The soundness of a bank is affected to a great extent by its liquidity position. The amount of required reserves to cover deposit and deposit substitute liabilities will definitely affect its financial stability in the long run. In December 1996, the Monetary Board decided to gradually lower the required reserves for deposit and deposit substitute liabilities of banks. The amendment was geared towards bringing down the cost of bank intermediation and was fully implemented on 4 July 1997. However, because of the recent major attacks against the Philippine peso, the Monetary Board has decided to use reserves as the major tool to stabilise its value.

The following are the required regular reserve ratios for different types of banks and deposit accounts offered:

Type of Bank	Type of Account					
	Demand	Now	Savings	Cert. of Time Deposits (CTD)	Negotiable CTDs	Deposit Substitutes
			(In Percent)			
EKBs/KBs	13	13	13	13	13	13
Thrift Banks	13	13	13	11	11	13
Rural Banks	13	13	5			

On top of the regular reserve requirements, a liquidity reserve against deposit and deposit substitute liabilities is imposed on EKBs and KBs at 6 percent and on thrift banks at 5 percent. The reserve may be maintained in the form of short-term market-yielding government securities purchased directly from the BSP-Treasury Department. The regular reserves shall be maintained in the form of deposits with the Bangko Sentral (at least 25 percent) and the remaining portion in government securities and cash in vault.

2.7.3 Conclusion

The Philippine government took significant steps in the recent past to achieve an economic climate that augurs well to the stability of the financial system. Policies adopted by the Bangko Sentral to improve the condition of banks included safeguards that should continually ensure that banks maintain their viability. Limits and ceilings set are periodically reviewed and improved to adapt to the terms of the changing times. The performance of bank directors and officers is regularly assessed.

The demands of the new millennium continuously challenge the world of banking. Banking laws should be modernised so that they address the demands of international standards like the BIS capital adequacy. Assessment of risk management and evaluation of controls should be the major emphasis in all bank examinations. Technology support should be a primary concern as well.

THE PHILIPPINE BANKING SECTOR
AS OF 30 JUNE 1997

	Commercial Banks				Thrift Banks		Rural Banks [b]		Total	
	Expanded		Non-Expanded [a]							
	1997	1995	1997	1995	1997	1995	1997	1995	1997	1995
Total Resources	1729.3	876.1	436.4	345.9	217.7	113.8	49.5	29.2	2432.9	1365.0
Loans and Discounts (net)	1132.0	507.0	268.4	187.6	142.8	73.2	33.6	19.7	1576.8	787.5
Deposits	1068.0	606.3	187.7	165.8	142.9	69.8	32.5	18.7	1431.1	860.6
Capital	228.0	105.6	34.5	42.4	31.0	16.0	7.5	4.8	301.0	168.8
No. of Offices	3260	2353	549	750	1341	869	1595	1297	6745	5269
Head Office	21[c]	17	31	22	113	99	823	786	988	924
Branches	3239	2336	518	728	1228	770	772	511	5757	4345

a/ Includes foreign banks.
b/ As at 31 March.
c/ Includes one foreign bank.

2.8 SINGAPORE
Foo-Yap Siew Hong

2.8.1 Banking Sector Soundness

The Monetary Authority of Singapore (MAS), the defacto central bank of Singapore, established in 1971, is responsible for the supervision of the financial sector and the conduct of monetary policy. The Banking Act was enacted in 1970 to empower MAS to license banks, and to set minimum capital standards and prudential controls to regulate their activities.

Over the years, MAS had continued to fine-tune the legislations in response to increased globalisation of financial markets, and development of new financial activities in Singapore. In line with recommendations by the Bank of International Settlements (BIS), MAS has reduced the single customer lending limit for banks from 60 percent of capital funds to 30 percent in 1984 and to 25 percent in 1993. The Banking Act was revised in 1993 to prescribe minimum financial requirements along the capital adequacy requirements recommended by the BIS. To further strengthen the financial position of Singapore-incorporated banks, MAS required them to maintain minimum capital adequacy ratios of 12 percent based on tier-1 capital, above the 8 percent (based on tier-1 and tier-2 capital) recommended by the BIS. In July 1996, the minimum capital requirement of Singapore-incorporated banks was raised from S$800 million to S$1.5 billion to ensure they have adequate capital to support their growth.

Singapore's financial sector has come a long way since 1971. Despite the volatility of international financial markets, Singapore has been spared of bank failures. In 1985, our stockbroking industry was plunged into a severe financial crisis following the failure of the Pan Electric group, a company listed on the stock exchange. Singapore's regulatory framework stood the test and the banks could provide the necessary financial support to nurse the stockbroking industry back to health. Following that experience, supervision of the securities industry and prudential requirements for stockbroking firms were strengthened. In 1987, the stockbroking and banking industries in Singapore were unscathed by the global stock market crash because of their strong financial positions. Singapore's banking system has been rated as the most secure amongst the newly industralised countries in Asia by Standards & Poor's, a U.S. credit rating agency.

The financial sector has expanded by an average of 14 percent annually over the last two decades. As at 31 March 1997, total assets in the Asian Dollar Market grew by 11.6 percent to US$534.3 billion while total assets in the Domestic Banking Units of banks rose 13.7 percent to S$265.9 billion. Singapore is the fourth most active foreign exchange trading centre in the world, after London, New York and Tokyo, with an average foreign exchange turnover of US$188 billion a day.

2.8.2 Supervisory Policy

Our fundamental tenet in the supervision of the financial sector is to have a sound and effective regulatory framework. The main elements of our supervisory philosophy are as follows:

(i) We adopt a selective licensing policy admitting reputable banks with established track records. They should also be duly supervised by their parent supervisory authorities;

(ii) Prudential limits to curb excessive exposure such as single customer loans limit, substantial loans limit, investment limit, etc. were established. We had also established limits on the quantum of financing for housing loans for the purchase of residential properties in Singapore to ensure greater prudence in the granting of housing loans by financial institutions, and revised guidelines on the issue of credit and charge cards to curb excessive credit expansion in the economy;

(iii) Clear and transparent regulations are established to govern the conduct of participants in the financial sector and are applied consistently and fairly;

(iv) On-site examinations of financial institutions are conducted to assess their internal control systems, evaluate their financial soundness and check their compliance with relevant regulations. Off-site supervision involves the review of statistical returns submitted by banks and dialogue with bank management;

(v) Reliance is also placed on the work of internal and external auditors of financial institutions. The appointment and reappointment of external auditors are subject to MAS' approval; and

(vi) Senior management of financial institutions are expected to uphold high standards of professionalism and integrity in the financial system.

2.8.3 Monetary Policy

Sound monetary policy is also important for the development of the financial sector in Singapore. The objectives of Singapore's monetary policy are to maintain a low rate of inflation, as the basis for sustained economic growth.

In its conduct of monetary policy, MAS monitors the value of the Singapore dollar in terms of a trade-weighted basket of currencies of its major trading partners. The rate of appreciation of Singapore dollar is dependent on the underlying rate of inflation, particularly the imported component of inflation and the current economic growth rate as compared to the long-term sustainable rate of growth of the economy.

Persistent fiscal surpluses in the past have absolved MAS of the need to finance the government budget and thereby accorded MAS the freedom to focus on its primary objective of price stability. While our exchange rate policy has been effective in containing consumer price inflation, it has not been as effective against asset price inflation, particularly in the property market. This is explicable in light of our rapid growth in real income and the fact that land is scarce in Singapore. Our dilemma is that we cannot raise interest rates to dampen asset inflation because our monetary policy is centered on the exchange rate. In May 1996, we introduced a package of fiscal and prudential measures to curb excessive price inflation in the property market. MAS will continue to monitor both consumer and asset prices as part of its mission to ensure a stable macroeconomic environment in which the country can grow and prosper.

2.8.4 Conclusion

Singapore has so far been able to avert major financial crises as we have a consistent macroeconomic policy in terms of exchange rate stability, and a sound regulatory framework which is prudent and of international standard. Sound monetary and supervisory policies have helped maintain Singapore's economic and financial stability, which have been a significant factor in providing international depositors' and

investors' confidence in the Singapore financial market and in the Singapore dollar, thereby contributing to the steady development of the financial sector.

2.8.5 Recent Supervisory Developments

A summary of supervisory developments in Singapore in recent years is attached at Annex 2.c.

SUPERVISORY DEVELOPMENTS IN RECENT YEARS

1. Amendments to the Banking Act

The Banking Act was amended in July 1996. The major amendments were as follows:

(i) *Increase in minimum capital funds*
To boost the financial strength of locally-incorporated banks, the minimum capital funds of locally-incorporated banks was raised from S$800 million to S$1.5 billion. Local banks were given 5 years to meet the new benchmark.

(ii) *Inspection by foreign supervisory authorities*
The Banking Act was amended to allow foreign supervisors to conduct on-site examination of their banks' branches in Singapore subject to MAS' approval and terms and conditions.

(iii) *Transmission of data for overseas processing*
The Banking Act was amended to allow for transmission of data by the Singapore branch to its Head Office and other overseas branches for processing.

2. Directive on housing loans

In view of the sharp increase in housing loans over the last few years, MAS had, on 15 May 1996, issued a Directive on Housing Loans to ensure greater prudence in the granting of housing loans by financial institutions.

The Directive limits the quantum of financing for housing loans (whether in Singapore dollar or foreign currency) for the purchase of residential properties in Singapore to 80 percent of the purchase price or valuation of the property, whichever is lower, including their Central Provident Funds.

Singapore permanent residents are allowed only one Singapore dollar loan each to purchase residential property in Singapore, which must be for owner-occupation subject to the 80-percent financing limit.

3. Guidelines on unsecured credit facilities to individuals and on car loans

Credit facilities extended by banks and finance companies to individuals had risen sharply in 1994 due mainly to the availability of easy credit terms.

To curb excessive credit expansion in the economy, and to discourage individuals from borrowing beyond their means, MAS had on 6 February 1995 issued guidelines on unsecured credit facilities to individuals and on car loans:

(i) *Unsecured credit facilities to individuals*
Banks and finance companies may grant unsecured credit facilities only to individuals whose annual incomes are at least S$30,000. Such credit facilities shall not exceed 2 months' salary of the borrower.

(ii) *Car loans*
Banks and finance companies may grant car loans with repayment period of not more than 7 years. The quantum of financing for car loans shall not exceed 70 percent of the purchase price of the car.

4. Revision to the guidelines on the issue of credit and charge cards in Singapore

In February 1996, MAS revised the guidelines on the issue of credit and charge cards to limit the aggregate amount that a cardholder can charge to all the credit and charge cards issued to him by the same card issuer to not more than 2 months' income of the cardholder.

5. MAS guidelines on banks' treasury and financial derivatives activities

The rapid growth in the size and complexity of the treasury and financial derivatives markets, coupled with the increased linkages among the major financial centres, has heightened the possibility of systemic disruptions in financial markets.

To maintain the soundness and integrity of the financial system, MAS had, on 4 April 1995, reminded banks to be circumspect and prudent when engaging in treasury and financial derivatives trading.

Banks' board of directors and senior management should fully understand the risks associated with their treasury and financial derivatives activities, exercise effective management oversight over the activities, and institute sound internal risk management procedures and systems to ensure that such activities are conducted prudently.

In addition, there should be adequate, independent and regular internal and external audits of the banks' treasury and financial derivatives activities by competent professionals.

6. Offshore banks' Singapore dollar lending limit

The offshore banks' Singapore dollar lending limit was raised from S$120 million to S$150 million with effect from 21 June 1996, and to S$200 million from 25 June 1997.

7. Tax deduction for general provisions made by banks and merchant banks

To encourage banks and merchant banks to raise their level of general provisions to further strengthen the financial soundness of Singapore's financial system, the tax deduction made by banks and merchant banks would be raised from 2 percent of qualifying loans and investments to 3 percent with effect from year of assessment 1998.

8. Year 2000 issue

MAS had, on 14 May 1997, issued a circular to banks and financial institutions to highlight to them the potential disruption to their business operations caused by the year 2000 issue.

MAS asked banks and financial institutions to adequately address the risks associated with the year 2000 issue as the lack of proper planning and action could result in major business disruptions.

Banks and financial institutions should review their entire inventory of computer hardware, software and systems, developed both internally and externally, to assess the potential problems relating to the century change, if they have not already done so.

They should institute sound internal risk management procedures and systems to resolve the year 2000 compatibility issue.

External auditors could, in their audit of banks and financial institutions, highlight any concerns relating to the year 2000 issue in their reports submitted to MAS.

2.9 SRI LANKA

Y. A. Piyatissa

2.9.1 Introduction

Banking sector soundness may be defined as the ability to remain solvent. Solvency is measured by the positive networth of the bank. The likelihood of remaining solvent will depend, inter alia, on banks being profitable, well-managed and adequately capitalised to withstand adverse events. A corollary to this is that ill-managed and inadequately capitalised banks will make losses and eventually will become illiquid and insolvent.

Banks are in a sense a mirror image of the health of the economy, in that their soundness depends on the health of their customers. Any macroeconomic shocks particularly in the monetary domain will affect the banking sector soundness, through the reduced ability of their customers to respond to fluctuations in the real sector, and service their loans.

In Sri Lanka, the macroeconomic shocks due to civil disturbances and natural adversities had their impact on financial institutions especially finance companies during the second half of 1980s. The civil disturbances, in particular, took a heavy toll on the economy through widespread damage to property and capital stock and loss of output due to work stoppages and prolonged shutdowns. The worst of course was the atmosphere of uncertainty and gloom that surfaced, which seriously blunted the initiative and drive for investment and growth. Consequently, the average growth rate during the period 1986-1989 slumped to 3 percent. Meanwhile, in a background of continued and sustained fiscal expansion since 1986 with the annual budget deficit exceeding 11 percent of the GDP, there were major macro imbalances with most indicators imparting distress signals. Some of the worst signals related to such macro variables are the rate of monetary expansion (33 percent), inflation rate (14 percent), trade and payment deficits, level of foreign exchange reserves and import capacity. By the end of 1988, official foreign exchange reserves had fallen to the equivalent of only 6 weeks imports while the service payments on the external debt had risen to 28 percent of exports of goods and services.

Consequent to these macroeconomic imbalances, several finance companies failed and the Central Bank had to provide assistance to pay the depositors of failed companies. The relief scheme to depositors of failed finance companies which became operational in 1989 is being continued to date. Under this scheme, the total relief payments made to depositors up to end of 1995 amounted to Rs. 525.5 million. By providing these relief schemes to depositors, the Central Bank was able to contain the spill-over effects of the failure of finance companies into the banking sector.

In Sri Lanka, however, banking sector soundness has been mainly affected due to government directed lending. The commercial banking system is dominated by the two state-owned banks, the People's Bank and the Bank of Ceylon. Together they control about 60 percent of the banking sector. The two state-owned commercial banks have been used by the Government to advance large sums of money to state monopolies, that have defaulted on their loans, and to other sectors of the economy that are not commercially viable. Thus, government pressure to lend to enterprises as well as a number of weaknesses in management of the two state-owned commercial banks have mainly contributed to the financial problems of the two state-owned commercial banks. In 1991, an external audit of the two state-owned commercial banks revealed that both institutions had incurred large losses and were technically bankrupt. Subsequently, in March 1993, the Government of Sri Lanka recapitalised the state banks with about Rs. 26 billion to meet central bank standards modelled along BIS guidelines and in October 1996, the Government had to issue bonds worth Rs. 20 billion to the two state banks to compensate for losses due to defaults on directed credit.

Despite efforts by the Government of Sri Lanka to improve the state-owned commercial banks' operations by introducing profitability targets and international accounting and disclosure standards, these efforts are frustrated due to the large levels of non-performing loans, high administrative costs and weaknesses in the management of the two state-owned commercial banks.

2.9.2 Monetary Policy

The most important function of the Central Bank of Sri Lanka (CBSL) is the implementation of a national monetary policy with the

objectives of promoting monetary stability, preserving the value of the Sri Lanka rupee, and promoting sound economic growth. Thus, whenever there is a threat to the domestic monetary stability or there are sharp movements in the money supply or in the price level or there is a sharp decline in the international reserve that is considered to be a threat to the external value of the rupee, the Central Bank is expected to take appropriate remedial measures. The Monetary Law Act provides for a wide range of powers to be used as instruments of monetary policy. These involve controls on the Bank's transactions with commercial banks especially those relating to the grant of loans and advances to commercial banks. For instance, the Bank can suspend its credit facilities to the banking sector thus forcing the commercial banks to cut down on their credit operations if in the view of the Monetary Board, there is an excessive expansion in the money supply. It could also restrict its accommodation to a fixed proportion of their assets in certain specified items.

Monetary policy involves both the control of the volume and the direction of credit. The CBSL has been operating both types of controls fairly extensively since both the rate of monetary expansion which was considerably higher than the rate of growth of volume of goods and services, and the developments in the balance of payments necessitated the application of such controls on a fairly rigorous scale. In this regard, the flexible reserve requirement became the Central Bank's most effective means of credit control in view of the relative ineffectiveness of the traditional instruments of control such as the discount rate and open market operations in the context of Sri Lanka's economy. The reserve ratio, apart from its direct impact on liquidity and therefore on the volume of bank credit, helped to make monetary policy more effective because it tends to make commercial banks dependent on central bank accommodation.

In terms of the Monetary Law Act, the commercial banks are required to maintain reserves against their deposit liabilities. These generally take the form of rupee deposits at the Central Bank on which no interest is paid. Section 94 of the Act empowers the Central bank to prescribe and modify the reserve ratios against different types of deposit liabilities subject to a minimum of 5 percent and a maximum of 20 percent in the case of time and savings deposits, and a minimum of 10 percent and a maximum of 40 percent in the case of demand deposits. While an increase in the reserve ratios in respect of existing

deposit liabilities should be made in a gradual manner subject to a ceiling of 4 percentage points in any one month and 14 days' notice to commercial banks, the reserve ratio with respect to an increase in deposit liability from a given date can be made in any manner. In special circumstances such as during inflationary periods, the reserve ratio can be increased up to 100 percent of any increase in deposits after a specified date.

Up to 1996, the statutory reserve requirement was maintained at 15 percent for all deposits except for foreign currency deposits placed abroad for which a ratio of 5 percent was applicable. This has now been reduced to 12 percent for rupee deposits and 15 percent for foreign currency deposits which are not placed abroad.

The high reserve ratios had negative effects on the profitability of banks especially the two state-owned banks by freezing a part of their deposits and on which no interest is paid. Thus, it constitutes an indirect tax on the banking system. In addition, due to directed lending by the Government of Sri Lanka, the two state-owned banks carry a high proportion of non-performing advances, on which no income is received. These and other weaknesses of the management of the two state-owned banks resulted in the erosion of capital of these two banks, which had to be recapitalised in 1993.

2.9.3 Banking System in Sri Lanka

The banking system of Sri Lanka consists of three broad groups:

(i) licensed commercial banks;
(ii) licensed specialised banks; and
(iii) regional rural development banks.

The licensed commercial banks consist of two state-owned banks, six private indigenous banks and 18 branches of foreign banks. The licensed specialised banks are the National Development Bank of Sri Lanka, the Development Finance Corporation, State Mortgage and Investment Bank, National Savings Bank and two other private specialised banks established recently. The regional rural development banks are district level financial institutions and each bank has full autonomy with regard to its operations and management. At present, there are 17 regional rural development banks.

The banking industry in Sri Lanka is dominated by the two state-owned banks, which together account for approximately 60 percent of the market share of loans and deposits.

2.9.4 Regulatory and Supervisory Policy

Any effective regulatory and supervisory policy must address three key issues relating to entry, operations and exit of commercial banks. The regulatory framework in Sri Lanka governing entry, operation and exit of banks are contained in the Banking Act No. 30 of 1988 as amended by the Banking Act No. 33 of 1995. The entry requirements are governed by Section 3 of the Banking Act and these relate to integrity of the persons who control and manage the business of a bank and the minimum capital requirement to ensure that the business of the bank is conducted prudently and it possesses adequate financial resources to cushion against losses.

The operations of banks are governed by directions issued by the Central Bank. These directions are based on international standards. Sri Lanka has adopted the Basle standard for capital adequacy of 8 percent based on risk-weighted assets. The international standard for classifying loans as non-performing and setting up realistic provisions for bad debts has also been adopted. In addition, directions on suspension of interest accrued, but not collected on non-performing, have been imposed. Prudential controls on insider borrowings and connected lending are also in place. Similarly, loans to single borrowers have been limited to 30 percent of capital funds. The minimum liquidity ratio that should be maintained by commercial banks is fixed at 20 percent of total liabilities, less liabilities to Central Bank and to the shareholders.

In addition to above directions, the Central Bank relies on the management of any bank, through its Board of Directors, to conduct bank business in a prudent manner. One of the pre-requisites in this regard is the establishment and operation of an effective international audit function, which is independent and reporting directly to the Board of Directors.

The Central Bank also relies on the Audited Financial Statement of External Auditors of Banks. The complimentary role of the work of the external auditors and bank supervision requires the regulatory authorities to rely on the auditors' opinion. In this regard, regular consulta-

tions are being held with external auditors and if necessary, they are requested to undertake additional and specific tasks. In terms of Section 39(4) of the Banking Act, the Director of Bank Supervision is legally empowered to appoint a new external auditor if he is not satisfied with the report of the external auditor.

The exit of banks is governed by Part VIII of the Banking Act. In order to ensure the orderly exit of banks without causing disruption to the financial system, no voluntary liquidation of a commercial bank is allowed without the prior authorisation of the Central Bank. In addition, the Director of Bank Supervision is empowered to issue, cease or desist orders if he is of the opinion that a licensed commercial bank is engaging in unsafe or unsound practices. The Director of Bank Supervision is also empowered to commence proceedings for the compulsory liquidation of commercial banks, if necessary.

Supervision of banks is carried out through a combination of off-site monitoring and on-site examinations. The off-site monitoring provides early warnings to enable the Central Bank to take prompt corrective action and set priorities for on-site examinations. The primary objective of on-site examination is to verify the accuracy and reliability of data included in a bank's financial reports and assess the quality of management and internal controls. An evaluation of the condition of the bank is thereafter made on the basis of CAMEL rating.

The compliance with prudential standards is monitored. In cases of non-compliance or unsafe and unsound banking practices, banks are advised to comply with directions issued in the first instance, as they may be due to negligence or being unaware of the central bank requirements. If, however, the banks fail to comply despite Central Bank's advice, a penalty is imposed. Continued non-compliance would normally invite legal action and in extreme situations, action to liquidate the bank.

2.9.5 Conclusion

In the context of Basle core principles that need to be in place for an effective supervisory system, the CBSL is continuously attempting to strengthen the current supervisory regime by strengthening the capability of its supervisory staff. In this regard, great emphasis is placed on improving the skills of examiners through continuous training programmes.

2.10 TAIWAN

Yi-Hsiung Hsu

2.10.1 Introduction

Economic conditions and policies are key determinants of the soundness of the banking system. The R.O.C. government has during the past few years been faced with some very significant challenges. Not only has the economy been confronted by some disturbances, but financial markets and domestic investment have been hampered to varying degrees. Nevertheless, as a result of the government's policies in responding to the situation, the adverse impacts have been minimised and gradually phased out.

There are four primary objectives of the R.O.C.'s banking supervisory agencies: streamline banking business; provide protection to depositors; facilitate the development of productive enterprises; and coordinate the operation of bank credit with national financial policy. In order to achieve these goals, the R.0.C. government has adopted various policies and measures, of which maintaining the soundness of the banking system is the most important.

2.10.2 Overview of the Banking System

The R.O.C.'s banking system comprises domestic general banks (commercial banks and specialised banks), medium business banks, local branches of foreign banks, and community financial institutions (credit cooperatives and the credit departments of farmers' association and fishermen's associations). As of the end of June 1997, there were 470 monetary institutions, operating a total of 3,675 branches in Taiwan. In terms of the total number of head offices and branches, domestic general banks accounted for the largest market share in both deposits and loans. In addition, Taiwan also has a large Postal Savings System (deposit-taking only). As of 30 June 1997, the total deposits of the Postal Savings System amounted to NT$2,295 billion, equivalent to about 16.6 percent of aggregate deposits of all monetary institutions.

THE BANKING SYSTEM IN TAIWAN
(Unit: NT$ billion)

Classification	Total Loans *(June 1997)*	Market Share *(%)*	Total Deposits* *(June 1997)*	Market Share *(%)*
Domestic General Banks	9,329	72.3	9,131	66.2
Medium Business Banks	1,306	10.1	1,503	10.9
Foreign Banks	479	3.7	354	2.6
Credit Cooperatives	953	7.4	1,492	10.8
Credit Depts. of Farmers' & Fishermen's Associations	839	6.5	1,307	9.5
Total	12,906	100	13,787	100

* Excluding Postal Savings System deposits.

2.10.3 Reasons for Problem Financial Institutions

Generally speaking, the financial system in Taiwan has remained stable in recent years. However, for macroeconomic reasons, and also owing to the operating environment and internal control of these financial institutions, the ratio of past-due loans in Taiwan reached a record high, increasing from 3.10 percent at the end of 1995 to 4.26 percent at the end of 1996. Furthermore, there have been more than 30 instances of runs on various financial institutions within the last two years. Although most panic runs involved community financial institutions, the major reasons for them may be described as follows:

(1) Macroeconomic reasons

(i) The economy registered a growth rate of 5.7 percent in 1996, this being the first year since 1991 in which the economic growth rate had fallen below 6 percent.

(ii) The sudden decline in stock prices and the continued lacklustre performance of the real estate market following the bursting of the financial bubble led to higher past-due loan ratios. Fortunately,

the loans extended by Taiwan banks for housing purchases usually account for only around 50 ~ 70 percent of each property's market value. For this reason, the sharp swings in asset prices have meant that the banking crisis in Taiwan was by no means as severe as in the case of Japan.

(2) Operating environment and internal control systems

(i) Only two private banks became embroiled in panic runs on a total of three occasions in recent years. Each panic run was settled within a few days after the authorities intervened and offered support.

(a) Owing in part to the effect of a lack of public confidence sparked by a financial scandal regarding "related party" lending, two banks experienced panic runs that lasted about two days each. The incidents were settled after the authorities required that one bank replaced its president and chairman and the other bank replaced its chairman and managing director.

(b) Because of improper dealing in financial derivatives, one bank suffered substantial losses. After the news was disclosed, the bank encountered an unusual withdrawal of deposits. The event was resolved shortly after the Central Deposit Insurance Corporation offered explanations and financial support.

(ii) The major reasons why credit cooperatives and the credit departments of farmers' and fishermen's associations experienced failures and panic runs were as follows:

(a) Employees formed alliances with outsiders, allowing them to borrow illegally.

(b) Both management and employees used their own names or their relatives' names to borrow large amounts of money.

(c) Wrongfully construed accounts were used to bolster operating performances.

(d) Internal management and controls were slack, with institutional assets being mixed up with management's personal assets.

(e) Management became involved in local politics. Consequently, political opponents disclosed adverse information or spread rumours against the institutions.
(f) One employee's embezzlement resulted in a crisis of confidence among depositors.

2.10.4 Measures in Resolving an Individual Problem Financial Institution

In order to avoid "moral hazard", certain basic countermeasures may be taken to deal with problem financial institutions. The role of the central bank in such an instance should be that of lender of last resort.

(1) During the initial stage, if the business or the financial condition of an institution is such that it is unable to pay its debts or there develops a situation where the interests of its depositors may be in jeopardy, the authorities may adopt any of the following measures:

(i) The authorities may order the institution to suspend parts of its business.
(ii) The authorities may require that the institution replaces its erring officer(s).
(iii) The authorities may assign a designated officer(s) to provide special assistance.
(iv) The authorities may investigate the responsibilities of related staff or of management and impose penalties as required by law.
(v) Other related measures.

(2) During the second stage, if the situation in which an institution finds itself deteriorates or any significant incidents happen, the institution will not be in a position to handle a panic run. In the light of the following procedures, an institution may seek external support. Problem institutions may be classified according to two categories:

(i) *Community financial institutions*
(a) An institution could apply for accommodation from banks through deposit placements.

(b) An institution could apply for external support from a mutual assistance organisation consisting of a peer group.
(c) An institution could ask for assistance (including special accommodation) from the Central Deposit Insurance Corporation (CDIC), if it is an insured institution.
(d) If a problem institution is still unable to maintain its solvency, the central bank as lender of last resort will inject liquidity into a particular institution or set of institutions.

(ii) *Banks*
(a) A bank could ask for assistance (including special accommodation) from the CDIC, if it is an insured bank.
(b) If a problem bank is still unable to maintain its solvency, the central bank as lender of last resort will inject liquidity into a particular bank or set of banks.

(3) During the third stage, the authorities will conduct regular appraisals and set a timetable for implementation. If a problem institution's conditions do not improve, the authorities will take further supervisory action. This may involve:

(i) Appointing CDIC or a designated bank to supervise the conduct of the business or take over the business of the problem institution.
(ii) Encouraging the problem institution to merge with other financial institutions.
(iii) Consulting with other financial institutions to see if they would consider acquiring the problem institution.
(iv) Assigning an institution to assume a problem institution's assets and liabilities.

2.10.4 Policies for Maintaining a Sound Banking System

The maintenance of a sound banking system depends on numerous factors, the more important including the operating environment, internal governance, market discipline, regulation and supervision, international cooperation, and so on. The following policies are aimed at achieving both monetary and financial stability:

(1) Monetary policies

The major consideration in the execution of our monetary policy is the stabilisation of our domestic financial markets. When faced with an economic slowdown, we adopt the following measures to improve current macroeconomic conditions:

(i) Lowering the rediscount rate and the interest rate on accommodations against secured loans;
(ii) Lowering required reserve ratios on deposits;
(iii) Engaging in open market operations; and
(iv) Extending accommodation to banks in respect of their loans to domestic enterprises for technological upgrading and also to assist troubled financial institutions.

(2) Supervisory policies

The banking supervisory system in our country comprises the Ministry of Finance, the District Supervisory Authorities, Central Bank of China, and Central Deposit Insurance Corporation. In order to integrate the work of financial supervision, a Financial Institutions Examination Committee has been set up to review relevant issues.

In order to strengthen the financial systems, we have adopted and implemented the following policies:

(i) *On-site examination and off-site monitoring*
As banking business evolves, the management function of financial institutions has become the most important focus of supervision. Day-to-day off-site monitoring needs to be strengthened to complement on-site examination.

(ii) *Establishing market discipline*
Banking supervision has shifted from reliance on monitoring of banks by banking supervisors to a greater role of market discipline. This is further facilitated by the disclosure of bank information. With this objective in mind, a new disclosure regime will be established.

(iii) *Assigning CPAs when conducting field inspection*
In order to make up for the insufficiency of supervisory manpower and to monitor financial institutions comprehensively, it is necessary to propose applicable measures for assigning CPAs to conduct bank examinations and to put such measures into practice.

(iv) *Encouraging mergers and acquisitions among financial institutions*
In order to enhance effective operating performance and benefit from the synergistic effects of large banks, the authorities encourage mergers and acquisitions among financial institutions. Mergers and acquisitions are also one of the major means used to help problem financial institutions upgrade their business operations and capitalisation.

(v) *Revising the Deposit Insurance Act in order to enhance supervisory function of the CDIC*
The Central Deposit Insurance Corporation (CDIC) is one of the main supervisory agencies that assist in handling problem or failed financial institutions. When the deposit insurance system is made compulsory as opposed to being operated on voluntary basis, it will be important to enhance the supervisory function of the CDIC.

(vi) *Implementing a more consolidated regulatory regime*
In order to increase the effectiveness of our supervisory function, we are planning to implement a new Financial Supervision and Management Improvement Program. Under this reform program, a new single financial regulatory agency, say, a General Office (or Ministry) of Financial Supervision, is to be established to integrate the supervision of banks and other financial intermediaries. However, the Central Bank will continue to exercise the right to examine monetary, credit and foreign exchange policies as well as the national payment system, etc., in accordance with the powers conferred upon it by the Central Bank of China Act and other related regulations.

(vii) *Strengthening international banking supervisory cooperation*
At the end of June 1997, there were 15 Taiwanese banks operating 53 branches and 13 subsidiaries overseas. We also have 44 foreign banks that operate 67 branches in Taiwan. It is, therefore, important to ensure that a cooperative relationship exists between the

home country and the host country. To this end, "The Supervision of Cross-Border Banking" and other related concordats issued by the Basle Committee on Banking Supervision will be strengthened in the future.

2.10.6 Conclusion

Effective bank supervisors help to keep the banking system sound and protect small depositors. Supervision should complement and not replace good corporate governance and the constructive force of market discipline. Although the financial system in Taiwan has continued to remain stable in recent years, we look forward to enhancing international cooperation and to reinforcing effective monetary and supervisory policies that are appropriate for robust banking systems.

2.11 THAILAND

Samart Buranawatanachoke

These past few years, Thailand has had to tackle problem financial institutions arising from both the macroeconomy and unprofessional management. Economic downturn brings about huge bad loans, depletes capital and engenders financial instability and unsoundness of banks and finance companies. Moreover, it also weakens the baht, causing exchange rate speculation. Central bank policies aimed at stabilising the exchange rate by raising interest rates bring about even more trouble to financial institutions. They face higher cost of funds and severe liquidity problems. Unprofessional management covering both incompetence and lack of integrity has added to the problem, as in the case of the Bangkok Bank of Commerce.

12.11.1 Sources of Problems of the Thai Financial Institutions

The major causes for the instability of Thai financial institutions are as follows:

(1) Insufficient preparation for financial liberalisation

Financial liberalisation started in 1990 and was aimed at promoting greater efficiency in financial institution management and preparing domestic institutions for greater competition as well as paving the way for their expansion abroad. Prior to 1990, exchange controls had been removed, interest rate ceilings lifted, rules that required financial institutions to buy government bonds eased, and domestic financial market to foreign institutions opened.

Following financial liberalisation, substantial foreign capital surged into the short-term money market, pushing the interbank rate down to as low as 2-3 percent per annum. This excessive capital inflow led to excessive investments in two interest rate sensitive sectors — the real estate and stock markets, causing rapid price appreciation and, in turn, inducing speculation and yet more inflow. Economic bubbles started and supply in the property market exceeded demand. Unaware of the danger of bubble economy, financial institutions kept on increasing their lendings at even higher rates.

The Bank of Thailand (BOT) — as the central bank — decided to control the increase in money supply by limiting credit extended by

financial institutions, especially to consumers via credit cards, credits to real estate sector and credits for car purchases. These credits were risky, and carry no value-added to the overall economic system.

In 1996, international rating agencies downgraded Thailand's long-term debt rating due to a large amount of short-term borrowings from abroad. The BOT tried to solve the problem by lowering the loan to deposit ratio and requiring financial institutions to submit credit plans. However, whenever the central bank tightens monetary and supervisory policies, the private sector will always find a way to evade those policies. In this case, finance companies and corporations found that they were able to tap foreign funds quite readily by issuing B/E in the domestic market. Foreign investors brought in funds, converted them into baht, invested and traded in these bills freely. Eventually, the problem was still unresolved.

(2) Shifting economic environment

In 1996, due to the cyclical drop in demand in the Asian export markets coupled with the increase in domestic labour and production costs, economic growth significantly slowed down to 6.7 percent, following 15 years of average growth rate of 8.2 percent per annum. Export growth, which averaged 19 percent per annum in the previous five years, declined to zero in 1996. In addition to the expectation of high rate of non-performing loans in the real estate sector, the stock market took a sudden downturn in 1995; the thinness of the stock market made the price movement very rapid. Some finance and securities companies were caught off-guard, unable to successfully make margin calls or force the sales of their clients' shares. These losses, although not significant for the whole system, did pose severe problems for some finance and securities companies. The oversupply in the property market gave rise to the quality problem of financial institutions' assets.

(3) Failure of the Bangkok Bank of Commerce (BBC)

The BBC case was a fraud on a large scale that involved collusion by the bank's top management and personnel of some well-known international real estate appraisers. Some of the properties that were put up as collateral for loans were grossly overvalued. There were also losses arising out of fraudulent activities involving several take-over deals of companies in the stock market.

The BOT seized control of the bank in May 1996. Legal action was taken against the top bank management as well as the appraisers. The bank has been resuscitated with money from the Financial Institutions Development Fund (FIDF). The FIDF is a government entity managed by the BOT. Its function is to safeguard the stability of the financial system. Besides being funded through yearly contributions from financial institutions at the rate of 0.1 percent of deposit (which can be raised to 0.5 percent if necessary), FIDF can issue unlimited amount of bonds, considered a sovereign risk, to the general public.

2.11.2 Liquidity and Capital Inadequacy of Finance and Securities Companies

Due to the economic slowdown and significant declines in export activities, most economic sectors face difficulties, especially the real estate sector. The stock market plummeted. Substantial bad loans put the soundness of financial institutions in jeopardy.

Because of economic problems and rising external current account deficits, the Thai baht became vulnerable and was attacked by speculators. The BOT decided not to devalue the baht but to raise interest rates further in order to stabilise the exchange rate. However, after a month-long battle with the speculators, foreign currency reserves were depleted. In order to cope with the foreign currency reserve crisis, BOT eventually floated the baht, which depreciated immediately by 30 percent against US dollar.

High interest rates and exchange rate fluctuations caused problems for financial institutions in managing their liquidity and costs of funding. On 3 March 1997, ten finance and securities companies were ordered by the BOT to increase their capital immediately due to their liquidity and solvency problems. The central bank encouraged the merger between Finance One (largest finance company) and Thai Danu Bank, but the deal fell through because neither could agree on the stock price. Then the panic started.

On 27 June 1997, 16 finance and securities companies, including the above 10 companies and Finance One, were ordered to cease their operations temporarily for a month. They would be allowed to resume their businesses if they were able to find new equity participation by local or foreign partners or merge with stronger finance companies.

2.11.3 Measures to Resolve the Problem in 1997

The suspended financial institutions had only two choices — merging with stronger and healthy ones or find new partners in order to increase their competitive advantage and to regain public confidence. The government took some measures to facilitate the merger or the investment. For example, on 24 June 1997, as an incentive for them to invest in financial institutions, foreign investors were allowed to hold shares in local banks over the 25-percent limit on a case-by-case basis. To help speed up the merger process, finance companies were permitted to transfer debt rights without having to notify borrowers. Moreover, fees and taxes on asset transfers in a merger were waived.

To stimulate mergers, merging companies with certain amount of paid-up capital requirements were allowed to undertake foreign exchange business, open new branches or accept public deposits through passbook accounts. Merging groups that meet minimum capital and asset-size requirements can apply for a commercial banking licence. To help the new banks in attaining highly qualified management, incumbent commercial bank executives were allowed to stand as directors of any new bank established as a result of a merger of finance companies, for up to five years.

To strengthen financial institutions and to restore public confidence, starting from the half-year period ending June 1997, the BOT required reserves for sub-standard assets — 15 percent for banks, 20 percent for finance companies, and 100 percent for doubtful debts for both. Sixteen problem finance companies were ordered to increase their capital to fully cover non-performing loans (real estate loans, margin loans).

To help financial institutions sell off non-performing assets or problem assets, the government allowed special institutions to be established with the authority to buy those assets and issue securities. In the securitisation process, these special institutions were needed to transform claims on assets into securities and sell them to the public.

The BOT tightened prudential supervision by requiring financial institutions to improve public disclosure of information about their status in order to increase market discipline. In addition, BOT required an improvement of valuation standards to prevent overvaluation of collateral.

On the basis of IMF's recommendations, the BOT is just about to issue more stringent measures covering the monthly disclosure of 90 days' non-performing loans, instead of 180 days' non-performing loans. The recognition of interest on non-performing loans as income would stop after three months and the accrued amount must be reversed. Loan classification would be conducted by financial institutions and reviewed by external auditors. The emphasis would be on the borrowers' capability to pay and not on the value of collaterals. Provisioning for sub-standard and doubtful loans is set at 20 and 50 percent, respectively, of the outstanding amount of the loans. Financial institutions that are formerly permitted to make provision for sub-standard loans over five-year period would now be immediately required to meet the new requirement; if there is not enough capital, the shareholders will be required to put in more capital. The examiners would review the effectiveness and integrity of the financial institutions' classification systems and procedures.

The IMF and the World Bank recommendations focused on: (i) strengthening financial institution resolution processes; (ii) improving the capacity to identify future problem financial institutions in an appropriate timeframe; (iii) strengthening the capability for early detection of problem institutions; (iv) establishing procedures and capacity for prompt corrective actions; (v) diagnostic review to augment regular examinations; (vi) improving methodologies for off-site assessments of financial institutions; (vii) strengthening the financial institution supervision function and market discipline; (viii) improving the bankruptcy and collateral foreclosure processes; and (ix) implementing financial infrastructure and institution changes.

2.11.4 Baht Flotation and Future of Thailand

After the baht flotation, there were questions of what would happen next. The Thai government asked all relevant agencies to suggest plans for action to boost up the Thai economy and regain confidence from foreign investors. The National Economic and Social Development Board drafted various proposals to change the country's economic structure within three years. The details are as follows:

(i) Improve productivity by:
- reducing the production of agricultural products which are not competitive and improve post-production processes such as preservation and marketing;

- using financial and technological policies to support local industries in boosting production of import substitutes for intermediate goods;
- speeding up the process in establishing the country as a centre of service industries such as tourism, education, entertainment, food and shipping, streamlining export procedures in special economic zones and providing quicker tax refunds and removing all barriers to exports; and
- promoting the country as a regional hub of telecommunications, energy, tourism and air transport, expanding exports to neighbouring countries and South Asia, promoting Thai-owned shipping services to reduce reliance on foreign lines, and improving international trade links.

(ii) Strengthen the capacity of the financial system by introducing more monetary tools, streamlining supervision of the system and ensuring protection for depositors.

(iii) Boost income from exports and services.

(iv) Control wage rate and soften problems of unemployment.

(v) Boost liquidity in the financial sector by attracting foreign investment and allowing foreigners to hold shares in state enterprises, real estate projects and financial institutions.

(vi) Ease the foreign debt burden of the private and state sectors by providing low-interest loans and tax privileges to exporters.

(vii) Promote savings through state spending cuts, and by encouraging the use of local materials and products.

(viii) Maintain fiscal discipline through improvements in efficiency of government spending and careful review of all investment plans that rely on foreign loans.

The board also suggests that the government establish an Economic Affairs Screening Committee to set up a reserve fund to cushion the impact of the float.

The Economic Affairs Screening Committee has issued several measures to reduce the impact of the floating of the baht, including:

- the removal of taxes on raw materials, the immediate refund of the value-added tax, and the opening up of more goods distribution channels;
- the industries that will receive assistance are textiles, food, footwear, electrical goods and electronics, steel and petrochemicals; and
- no state funds would be granted to subsidise export industries.

III. APPROACHES TO RISK-BASED SUPERVISION

3.1 OFF-SITE/ON-SITE PROCEDURES FOR RISK-FOCUSED SAFETY AND SOUNDNESS EXAMINATIONS

William Ryback [5]

Keeping pace with technological advances in the banking industry, financial product innovation, and improvements in management systems and techniques requires that supervisory procedures constantly evolve, especially with respect to the assessment of risk management processes and internal controls. To meet this requirement, over the last several years, the Federal Reserve has taken a number of steps to enhance the effectiveness of its examinations by sharpening their focus on the areas of greatest risk to the soundness of banking organisations. These efforts have been directed at adapting examination processes so that they remain responsive to changing market realities, while retaining those practices that have proven most successful in supervising institutions under a variety of economic circumstances and industry conditions. The purpose of this paper is to summarise and place in context these changes.

Risk-focused supervisory reviews emphasise effective planning and scoping in order to customise examinations to suit the size and activities of financial institutions and to concentrate examiner resources on areas that expose an institution to the greatest degree of risk. In addition, under a risk-focused approach, the resources directed to assessing a banking organisation's management processes are generally increased, while the degree of transaction testing that is conducted during an examination is adjusted depending on the quality of management practices and the materiality of the activities or functions being reviewed. This approach results in comprehensive examinations that minimise supervisory burdens by better focusing on transaction testing activities. An appropriate level of transaction testing, nonetheless, is still performed to verify: (i) the adequacy of, and adherence to, internal policies, procedures, and limits; (ii) the accuracy and completeness of management reports and financial records; and (iii) the adequacy and reliability of internal control systems.

5. This paper was adapted from the supervisory letter, "Risk-Focused Safety and Soundness Examinations and Inspections," issued by the Director of the Division of Banking Supervision and Regulation in May 1996.

3.1.1 Overview of Examinations

In its supervisory capacity, the Federal Reserve is responsible for promoting the safe and sound operation of banking organisations and for ensuring stability in the overall financial system. The Federal Reserve fulfils these responsibilities through a wide range of activities, including the distribution of supervisory guidance to financial institutions' management and directors, the review and approval of regulatory applications filed by banking organisations, the monitoring and surveillance of banking activities, the conduct of on-site examinations, the holding of meetings with the management and directors of financial organisations, and, when warranted, the initiation of formal and informal enforcement actions to require corrective actions by individual institutions. Most important among these activities, however, are on-site safety and soundness examinations. Examinations are intended primarily to evaluate the condition, management processes, and prospects of financial institutions; to identify deficiencies that may threaten their soundness; to assess compliance with applicable laws and regulations; and, when necessary, to develop recommendations for corrective action.

Full scope examinations under a risk-focused approach do not follow a fixed set of routine procedures. Rather, the procedures that must be performed to fulfil the objectives of a full-scope examination must be adjusted depending on the circumstances of the institution being evaluated. The business of banking is fundamentally predicated on taking risks. Consequently, the procedures of full-scope examinations focus to a large degree on assessing the types and extent of risks to which a banking organisation is exposed, evaluating the organisation's methods of managing and controlling its risk exposures, and ascertaining whether management and directors fully understand and are actively monitoring the organisation's exposure to these risks. Given the Federal Reserve's responsibility for assuring compliance with banking laws and regulations, examinations also include an appropriate level of compliance testing.

3.1.2 Evolution of Examinations

Historically, Federal Reserve examinations have placed significant reliance on transaction testing procedures. For example, to evaluate the adequacy of the credit administration process, assess the quality of

loans, and ensure the adequacy of the allowance for loan and lease losses, a high percentage of loans traditionally have been individually reviewed. Similarly, the assessment of the accuracy of regulatory reporting often has involved extensive reconciliations of a banking organisation's general ledger to supervisory reports, such as the Reports of Condition and Income. Other similar procedures typically have been completed to ascertain compliance with applicable laws and regulations, to determine whether institutions are following their internal policies and procedures, and to evaluate the adequacy of internal control systems.

Transaction testing remains a reliable and essential examination technique for use in the assessment of a banking organisation's condition and the verification of its adherence to internal policies, procedures, and controls. In a highly dynamic banking market, however, such testing by itself is not sufficient for ensuring the continued safe and sound operation of financial institutions. Indeed, as evolving financial instruments and markets have enabled banking organisations to rapidly reposition their portfolio risk exposures, it has become clear that periodic assessments of the condition of financial institutions based on transaction testing alone cannot keep pace with the moment-to-moment changes occurring in financial risk profiles.

Consequently, in order to ensure that institutions have in place the processes necessary to identify, measure, monitor, and control their risk exposures, examinations have increasingly placed a greater emphasis on evaluating the effectiveness of such processes and have been evolving away from a very high degree of transaction testing. Under a risk-focused examination approach, the degree of transaction testing should be reduced when internal risk management processes are determined to be adequate or risks are considered minimal. It is important to note, however, that when risk management processes or internal controls are considered ineffective, such as when there is an inadequate segregation of duties, or when they are determined to be lacking as a result of on-site testing, additional transaction testing sufficient to assess fully the degree of risk exposure in that function or activity must be performed. In addition, in the event that an examiner believes that a banking organisation's management has provided false or misleading information, or has omitted material information, then substantial on-site transaction testing should be undertaken, and appropriate follow-up actions should be initiated, including the requirement of additional audit work and appropriate enforcement actions.

3.1.3 Off-site Monitoring and Disclosure

As the speed with which financial institutions can reconfigure their balance sheets has accelerated, the Federal Reserve has also supplemented its techniques for off-site monitoring of the condition of financial institutions between on-site examinations. For instance, within the last few years, the surveillance programs for banks and bank holding companies have both been considerably improved through the adoption of a more rigorous screening techniques for the identification of troubled institutions and the evaluation of investment activities.

In addition, the Federal Reserve has actively promoted sound disclosure and accounting standards, particularly for newer products and services. Recent efforts in this area include revisions to publicly available regulatory reports to collect additional information on trading activities, derivatives, structured notes, mortgage securities, and mutual funds and investment management activity. Furthermore, the Federal Reserve has consistently advocated improvement in public annual report disclosures about trading activities and, more broadly, about credit and market risks. Such information can allow market discipline to foster sound practices at financial institutions, without the need for direct regulatory intervention.

3.1.4 Off-site Procedures for Risk-focused Examinations

The Federal Reserve has long relied on examiners to demonstrate the judgement, expertise, and initiative necessary to select the procedures appropriate to the evaluation of the risks faced by each institution. Recent developments in the business of banking that have increased the range of activities at many financial institutions and correspondingly heightened demands on examiner resources have made the need for examiners to effectively focus their activities on areas of the greatest risk even more crucial. Recent experience and surveys of bankers and examiners have further suggested areas in which efficiencies can be gained in conducting on-site examinations through improved planning. As a result, the Federal Reserve has been increasing the amount of time allocated to planning and preparing for examinations. In-office planning results in more effective examinations that are focused on risks particular to specific institutions and, thus, minimises supervisory burdens. Further, such planning facilitates the close coordination of the efforts of the Federal Reserve with those of the other

state and federal banking agencies. Moreover, this planning allows information requests to be better tailored to specific institutions and, in many cases, makes possible the completion off-site of certain procedures that have typically been conducted on-site. This, too, can help reduce supervisory burden without compromising the quality of the evaluation process.

In order to focus procedures on the areas of greatest risk to financial institutions, a risk assessment is performed in advance of on-site supervisory activities. The risk assessment process highlights both the strengths and vulnerabilities of an institution and provides a foundation from which to determine the procedures to be conducted during an examination. Risk assessments entail the identification of the financial activities in which a banking organisation has chosen to engage, the determination of the types and quantities of risks to which these activities expose the institution, and the consideration of the quality of the management and control of these risks. At the conclusion of the risk assessment process, a preliminary supervisory strategy for the institution and each of its major activities can be formulated. Naturally, those activities that are most significant to the organisation's risk profile or that have inadequate risk management processes or rudimentary internal controls represent the highest risks to the institution and should undergo the most rigorous scrutiny and testing.

Identifying the significant activities of an institution, including those conducted off-balance sheet, is the first step in the risk assessment process. These activities may be identified through the review of prior examination reports and workpapers, surveillance and monitoring reports generated by Federal Reserve staff; regulatory reports, and other relevant supervisory materials. Where appropriate, reviews should also be conducted of strategic plans and budgets, internal management reports, board of directors information packages, correspondence and minutes of meetings between the banking institution and the Federal Reserve, annual reports, press releases and published news stories, and stock analysts' reports. In addition, examiners should also hold periodic discussions with management to gain insight into its latest strategies or plans for changes in activities or management processes.

Once significant activities have been identified, the types and quantities of risks to which these activities expose the institution are

determined. This allows identification of the high risk areas that should be emphasised in conducting examinations. The types of risk that may be encountered in banking activities individually or in various combinations include, but are not limited to, credit, market, liquidity, operational, legal and reputational risks. For example, lending activities are a primary source of credit and liquidity risks. They may also, however, present considerable market risk if an institution is originating mortgage loans for resale, interest rate risk if an institution is granting fixed-rate loans, or legal risk if loans are poorly documented. Similarly, the asset/liability management function has traditionally been associated with exposures to interest rate and liquidity risks. There are also, however, operational risks associated with many of the transactions undertaken by this function and other market risks associated with investments and hedging instruments commonly used by the function. The quantity of risks associated with a given activity may be indicated by the volume of assets and off-balance sheet items that the activity represents or the portion of revenue for which the activity accounts. Activities that are new to an institution or for which exposure is not readily quantified, however, may also represent high risks to an institution that should be evaluated at examinations.

A number of analytical techniques may be used to estimate the quantity of risk exposure depending on the activity or risk type being evaluated. For example, in order to assess the quantity of credit risk in loans and commitments, the level of past due loans, internally classified or watch list loans, non-performing loans, and concentrations of credit exposure to particular industries or geographic regions should be considered. In addition, as part of the assessment of credit risk, the adequacy of the overall allowance for loan losses may be evaluated by considering trends in past due, special mention, and classified loans; historic charge-off levels; and the coverage of non-performing loans by the allowance for loan losses. Analytical techniques for gauging the exposure of a banking institution to interest rate risk as part of the evaluation of asset/liability management practices may include a review of the historic performance of net interest margins, as well as the results of internal projections of future earnings performance or net economic value under a variety of plausible interest rate scenarios. The measurement of the quantity of market risk arising from an institution's trading in cash and derivative instruments may take into account the historic volatility of trading revenues, the level of capital and earnings

at risk, as computed by internal models under various market scenarios, and the market value of contracts relative to their notional amounts.

Once the types and quantities of risk in each activity have been identified, a preliminary assessment of the process in place to identify, measure, monitor, and control these risks is completed. This evaluation is based on findings from previous examinations, supplemented by the review of internal policies and procedures, management reports, and other documents that provide information on the extent and reliability of internal risk management systems. Sound risk management processes vary from institution to institution, but generally include four basic elements both for each individual financial activity or function and for the organisation as a whole. These are: active board and senior management oversight; adequate policies, procedures, and limits; adequate risk measurement, monitoring, and management information systems; and comprehensive internal audits and controls.

The preliminary evaluation of the risk management process for each activity or function also assists in determining the extent of transaction testing that should be planned for each area. If the process appears appropriate and reliable, then a limited amount of transaction testing may well suffice. If, on the other hand, the risk management process appears inappropriate or inadequate to the types and quantities of risk in an activity or function, examiners should plan a much higher level of transaction testing. They should also, of course, plan to conduct the most testing in those areas that comprise the most significant portions of a banking organisation's activities and, thus, typically represent high potential sources of risk.

Once the examination planning and risk assessment processes are completed, a scope memorandum that provides a detailed summary of the supervisory strategy for an institution and assigns specific responsibilities to examination team members is prepared. A scope memorandum is tailored to the size and complexity of the institution subject to review and defines the objectives of each examination, and generally should include:

(i) a summary of the results of the prior examination;
(ii) a summary of the strategy and significant activities of the banking organisation, including its new products and activities;

(iii) a description of the institutions organisation and management structure;
(iv) a summary of performance since the prior examination;
(v) a statement of the objectives of the current examination;
(vi) an overview of the activities and risks to be addressed by the examination; and
(vii) a description of the procedures that are to be performed at the examination.

3.1.5 On-site Procedures

The amount of review and transaction testing necessary to evaluate particular functions or activities of a banking organisation generally depend on the quality of the process used by the institution to identify, measure, monitor, and control the risks of the activity. When the risk management process is considered sound, then further procedures are limited to only a relatively small number of tests of the integrity of the management system. Once the integrity of the management system is verified through limited testing, conclusions on the extent of risks within the function or activity are drawn based on internal management assessments of those risks rather than on the results of more extensive transaction testing by examiners. On the other hand, if initial inquiries into the risk management system — or efforts to verify the integrity of the system — raise material doubts as to the system's effectiveness, then no significant reliance should be placed on the system and a more extensive series of tests should be undertaken to ensure that the banking organisation's exposure to risk from a given function or activity can be accurately gauged and evaluated. More extensive transaction testing is also generally completed for activities that are very significant to an institution than for other areas, although the actual level of testing for these significant activities may be reduced commensurate with the quality of internal risk management processes.

For example, given the risk exposure associated with a bank's commercial lending activities, a relatively high number and dollar volume of commercial and industrial loans and commercial real estate loans has traditionally been reviewed. However, if credit administration practices are considered satisfactory, fewer loans need be reviewed to verify that this is the case than would be reviewed if deficiencies in credit administration practices were suspected. This review may be achieved through a valid statistical sampling technique, when

appropriate. It should be noted, though, that if credit administration practices are considered sound, but loans reviewed to verify this raise doubts about the accuracy of internal assessments or the compliance with internal policies and procedures, then the number and volume of loans subject to review are generally expanded to ensure that the level of risk is clearly understood, an accurate determination of the adequacy of loan loss reserves can be made, and the deficiencies in the credit risk management process can be comprehensively detailed.

An institution's internal control structure is critical to the safe and sound functioning of the organisation in general and to its risk management system in particular. When properly structured, internal controls promote effective operations and reliable financial and regulatory reporting, safeguard assets, and help to ensure compliance with laws, regulations, and internal policies and procedures. In many institutions, internal controls are tested by an independent internal auditor who reports directly to the board of directors or its audit committee. In some smaller institutions whose size and complexity of operations do not warrant an internal audit department, reviews of internal controls may be conducted by other institution personnel independent of the area subject to review.

Because the audit function is an integral part of the institution's own assessment of its internal control system, examiners include a review of the institution's control assessment activities in every examination. Such reviews assist in the identification of significant risks and facilitate a comprehensive evaluation of an institution's internal control structure. These reviews also provide information for determining the procedures to be completed in assessing internal controls for particular functions and activities and for the institution overall. When conducting such a review, examiners evaluate the independence and competence of the personnel conducting control assessments and the effectiveness of the assessment program in covering the institution's significant activities and risks. In addition, examiners meet with the internal auditors or other personnel responsible for evaluating internal controls and review internal control risk assessments, work plans, reports, workpapers, and related communications with the audit committee or board of directors.

Depending on the size and complexity of the activities conducted by the institution, the examiner may also consider conducting a similar

review of the work performed by the institution's external auditors. Such a review often provides added insight into key risk areas by detailing the nature and extent of the testing of those areas that have been conducted by auditors in the course of their work.

Since a critical aspect of ensuring that risk management and control procedures remain adequate is ongoing testing of the strength and integrity of procedures and the extent to which they are understood and followed throughout an institution, examiners also assess the adequacy of efforts to ensure that procedures are being followed. Such validation efforts must be conducted by individuals who have proper levels of organisational independence and expertise, such as internal or external auditors, internal risk management units, or managers or other professionals within the institution with no direct connection to activities for which procedures are being assessed.

Compliance with relevant laws and regulations are assessed at every examination. The steps taken to complete these assessments, however, will vary depending on the circumstances of the institution subject to review. When an institution has a history of satisfactory compliance with relevant laws and regulations or an effective compliance function, only a relatively limited degree of transaction testing are conducted to assess compliance. For example, in evaluating compliance with regulatory appraisal requirements at an institution with a formal compliance function, compliance may be ascertained by reviewing the scope and findings of internal and external audit activities, evaluating internal appraisal ordering and review processes, and sampling a selection of appraisals for compliance as part of the supervisory loan review process. On the other hand, at institutions that have a less satisfactory compliance record or that lack a compliance function, more appraisals may be tested to assess the overall compliance with the appraisal requirements.

Effective and open communication between supervisors and financial institutions is essential to ensuring that banking organisations understand fully the results of examinations, are aware of any identified deficiencies, and, when necessary, take appropriate corrective actions. The Federal Reserve has established a number of standards for the communication of supervisory findings to the management and directors of financial institutions.

In order to ensure that supervisory findings are communicated to financial institutions in a concise and effective manner, the Federal Reserve has also consistently directed its examiners to focus supervisory report comments on the discussion of material deficiencies. In light of the increasing risk focus of examinations, the Federal Reserve is continuing to review its report formats in order to identify opportunities for further enhancements.

While the Federal Reserve's current supervisory processes are comprehensive and tested, further enhancements will likely be warranted to ensure that they remain adequate as innovation and technological change continue within the banking industry. As a result, the Federal Reserve has initiated several projects designed to identify its key supervisory challenges and to determine the additional steps that must be taken. Consistent with the steps that have already been taken, the supervisory initiatives that are currently underway, and the dramatic changes continuing to take place in the banking industry, our efforts to make the supervisory/examination function more risk-focused, process-oriented, and burden sensitive will continue.

3.2 RISK-BASED SUPERVISION: CANADA

Guy L. Saint-Pierre

First of all, I would like to say how pleased I am to be here this morning with such a distinguished group of people. Given the degree of globalisation taking place in the financial services industry, I consider it particularly appropriate that the organisers of this conference have decided to draw on the expertise and experience of people from around the world, who have an interest in seeing that the industry grows and prospers in a safe and efficient manner. I look forward to sharing some of my own thoughts on Canada's experience with risk-based banking supervision, and to hearing the ideas and experiences others have to offer.

Let me say at the start that the financial sector is developing in new and exciting ways and it is these developments that lie at the core of the evolution of Canada's supervisory system. Canada's financial institutions are today offering their customers an increasingly broad array of financial products, and, with the aid of technology, are able to provide these services more efficiently than ever before. Many of the traditional barriers to competition have been removed allowing banks and other financial intermediaries to better serve their customers' needs. These innovations coupled with an ever-increasing level of competition, raise significant public policy questions and challenge financial supervisors to develop effective supervisory methods that provide for a safe and secure financial system, while at the same time allowing productive competition to take place.

3.2.1 Overview of Canada's Regulatory System

Canada has a federal system of government and the financial supervisory and regulatory structures reflect the division of governmental powers. Each of Canada's ten provinces has its own regulatory agency that conducts regular examinations of provincially incorporated deposit-taking institutions. At the federal level, there are four primary agencies with a role in financial sector supervision. The Department of Finance is responsible for developing financial sector policy, the Bank of Canada oversees the payments system and provides lender of last resort facilities, and the Office of the Superintendent of Financial Institutions (OSFI) acts as the primary regulator of all federally incorporated financial institutions, including insurance companies.

The fourth is my organisation, the Canada Deposit Insurance Corporation. CDIC was created in 1967 as a Crown Corporation of the Federal Government to provide insurance against loss, in whole or in part, of deposits with banks, trust and loan companies (member institutions), in the event of insolvency. Since then, our mandate has changed somewhat to acknowledge that the objectives of CDIC include contributing to the stability of the Canadian financial system, minimising CDIC's exposure to loss and promoting standards of sound business and financial practices. Regulatory functions are the responsibility of the Office of the Superintendent of Financial Institutions and provincial authorities, although their responsibilities are clearly linked to CDIC's supervisory role. Membership in CDIC is a requirement for all deposit-taking institutions, and currently CDIC has 112 deposit-taking institutions as members.

3.2.2 Risk-based Supervision

In traditional economic theory, the basic function of deposit-takers is to "intermediate" between lenders and borrowers by using the proceeds of liquid, short-term liabilities to fund largely illiquid, longer-term loans. Thus banks and other intermediaries provide their customers with liquidity, but as part of this process banks pool risky assets and thereby provide risk diversification benefits to themselves and their depositors. An important and closely related function is the provision of a variety of payments services that often involve banks accepting and managing significant amounts of credit and market risk. As our introductory economics textbooks tell us, traditional financial intermediation can essentially be viewed as simply the measurement, management, and acceptance of risk.

Financial intermediaries still perform these traditional functions. But today, we are increasingly recognising that intermediation also involves understanding, processing, and using massive amounts of information regarding the credit risks, market risks, and other risks inherent in a vast array of products and services, many of which do not involve traditional lending, deposit taking, or payments services. In every sense, our financial sector is part of a technological revolution in risk information processing. A crucial difference between the financial institutions of today and those of our traditions, however, is that risk information processing now lies more viably closer to the core of their business because new financial products and services are based on rapid and high quality risk information and risk analysis.

While the industry wrestles with this new complexity in risk measurement and management, the industry's supervisory authorities also must deal with the complexity of it all. The traditional supervisory strategy for dealing with risk has been to employ a combination of capital requirements, the supervision of individual institutions and an analysis of specific transactions. In this respect, the establishment of uniform minimum regulatory capital standards which culminated in the Basle Accord in 1988, has had an important influence on the industry's behaviour. In Canada, all banks have risk-rated capital levels above the minimum 8 percent and it is common to see the "maintenance of adequate capitals" among the list of strategic objectives for banking corporations.

Regulatory standards have also been evolving as a result of increasing complexity. In Canada, our financial supervisors are now relying less on written quantitative rules, such as capital rules, and are now considering a composite of factors such as: the economic and legal environment in which the firm operates, the soundness and prudence of its business and risk management activities, and the institutions' operating and financial performance. Ultimately, we are looking towards the development of supervisory procedures that can accurately distinguish risks on an institution-by-institution basis. Essentially, the evaluation and stress testing of an institution's overall risk exposure and management should become, within the supervisory process, as important as the assessment of the value of capital via examination of asset quality and the adequacy of loan loss reserves.

None of these statements will come as a surprise to people at this conference. Indeed, risk-based supervision is now being utilised in one form or another in many places in the world. For example, the Federal Reserve Board and the Office of the Comptroller of the Currency in the United States have established various categories of risk assessment. They use a Risk Assessment System that provides a consistent basis for judgements about the quantity of risk, the quality of risk management, the level of supervisory concern and the direction of risk assessment. Moreover, I recently read a consultation paper distributed by the Bank of England titled *A Risk-Based Approach to Supervision.* In the paper, they propose a system based on quantitative and qualitative measures which would lead to the development of an overall risk profile for each supervised bank. Finally, the Basle Committee on Banking Supervision released a consultation paper this past spring

which contains 25 core principles for effective banking supervision that emphasise the role of bank policies and procedures in effective risk management.

A common element in all these supervisory systems is that they emphasise qualitative measures as well as quantitative ones. However, there is one other common element that I would like to stress. That is: no matter how good we become at bank supervision, we must always keep in mind that the first line of supervisory defence must be the quality of the risk management systems used by the banks themselves. It is in this respect that my organisation, the Canada Deposit Insurance Corporation, has played a pioneering role. I would like to now discuss our risk-based supervisory process and, in particular, our Standards of Sound Business and Financial Practices and the role these Standards play in ensuring that Canada's banks have the ability to adequately judge and manage on an on-going basis, the risks inherent in their business.

3.2.3 CDIC's Risk-based Strategy and Process

As I mentioned earlier, the role of deposit insurer and regulator are separate in Canada. As deposit insurer, CDIC is responsible and accountable for the assessment and management of the risk to the deposit insurance fund, the protection of insured depositors, and the promotion of standards of sound business and financial practices. Regulatory functions are the responsibility of Office of the Superintendent of Financial Institutions for federally incorporated member institutions, and the responsibility of provincial regulatory authorities for provincially incorporated members. Although CDIC and the regulators have different responsibilities, such responsibilities have common concerns. This is particularly true with respect to the assessment of the safety and soundness of Canada's deposit-taking financial institutions.

CDIC does not typically perform bank examinations. Instead we obtain information from four principal sources:

(i) Annual bank examination reports by the Federal Office of the Superintendent of Financial Institutions;
(ii) On-going off-site assessments of financial performance;
(iii) On-going discussion and dialogue with the bank's regulator; and

(iv) Annual assessments of a bank's adherence to CDIC Standards of Sound Business and Financial Practices.

From CDIC's perspective, the primary objective of this risk-based assessment process is to establish whether or not:

(i) there has been any change in the circumstances of the institution that might materially affect the position of CDIC as an insurer;
(ii) the institution is in a satisfactory financial condition;
(iii) the institution is complying with the requirements of its governing Act of Incorporation; and
(iv) of course, whether the operations of the institution are being conducted in accordance with CDIC Standards of Sound Business and Financial Practices.

Annual bank examinations and related regulatory reports are a requirement under our legislation and form an important component of the information gathered for the CDIC risk assessment process.

3.2.4 CDIC Standards of Sound Business and Financial Practices

To avoid having the supervisors resort to burdensome micro-management, we are now insisting that banks put in place systems that allow management to have both the information and procedures needed to be aware of their own risk exposures and to take appropriate actions when the need arises. CDIC's Standards of Sound Business and Financial Practices represent a critical element of CDIC's early-warning and risk assessment capabilities. The eight Standards came into force on 19 August 1993, and concern Liquidity Management, Interest Rate Risk Management, Foreign Exchange Risk Management, Credit Risk Management, Real Estate Appraisals, Securities Portfolio Management, Capital Management and Internal Control.

CDIC Standards relate to practices and processes, rather than the financial condition of an institution as measured by its published financial results. What we have done is codify the corporate governance practices of the best-run deposit-taking institutions as they relate to the management of business activities and the risks to which banks are exposed. The Standards are intended to provide reasonable assurance that our member institutions are managed and operated in a sound and prudent manner, and employ suitable risk management policies and

procedures to address and appropriately control the institution's exposure to risk. It has been our experience that institutions not following these practices have represented a significant risk to the deposit insurance fund. Essentially, if CDIC Standards are followed, then Canada's financial intermediaries will be well-run and less likely to fail.

3.2.5 Standards Assessment and Reporting Program

To ensure the Standards of Sound Business and Financial Practices are followed, CDIC developed a Standards Assessment Reporting Program ("SARP") in consultation with the regulatory authorities and deposit-taking institutions. In July 1995, banks were required, for the first time, to report on their adherence with each of CDIC's Standards by performing a self-assessment and filing their results through a SARP report.

The focus of the SARP report is on the answers to three questions:

(i) Does the member have a well-defined program of policies and procedures in place with respect to each of the Standards?
(ii) Is the program sound and prudent?
(iii) Is the program being followed in practice?

To provide answers to these questions, member institutions are asked to assess themselves. Generally, members meeting certain conditions need only submit a simplified descriptive self-assessment report, based upon an appropriate evaluation method they themselves choose. Others are required to complete a more detailed self-assessment report. Full responsibility for adherence with CDIC's Standards rests with the senior officers and the board of directors of each member institution.

As part of the filing requirement under SARP, the senior management and board of directors of each company are required to confirm that the member is following CDIC's Standards by signing a representation letter and passing a board of directors resolution. These requirements provide CDIC with some assurance that management and the board of directors understand their responsibilities and that the member institution is addressing and managing its risk exposure.

The SARP process begins January 31 of each year, when CDIC notifies those member institutions who will be required to file a de-

tailed report on all or some of the Standards. Typically, institutions on our watch list are required to file detailed reports as are institutions which do not meet certain minimum financial requirements. SARP reports are due on or before July 31 of each year. The number of institutions required to file detailed reports has declined over the last three years from 23 in 1995 to 14 in 1997.

As each report is received, it is reviewed to ensure that the documentation submitted is complete, that management's representation letter has been properly completed, and that the resolution of the member institution's board of directors has been included. The reports are further reviewed to ensure that appropriate statements as to the soundness and prudence of policies is detailed, and that materiality is addressed, as are the criteria set out in the reporting requirements. If a report has documentation or content inadequacies, the member institution is requested to supply the appropriate information within a specified and relatively short time-frame.

The next step in the process is an analysis of reported Standards deficiencies, as well as the target dates for rectification of the deficiencies. If we are not satisfied with the projected date for correction of a Standard deficiency, we will communicate with the institution to set an acceptable target date.

The final step in the analysis takes place when we receive the examination results from the regulator. These results will usually fall into one of five categories:

- Category 1 - the institution reports no deficiencies, and the examiner finds nothing to indicate that the member institution is not following the Standards;

- Category 2 - the institution has reported deficiencies and there is nothing to indicate that other than as reported, the institution is not following the Standards;

- Categories 3, 4 and 5 are addressed on a case-by-case basis because they reflect situations where the member institution is not conducting an adequate self-assessment. Generally, however, Category 3 indicates that the institution reported deficiencies, and the examiner has identified further deficiencies;

Category 4 indicates the institution identified no deficiencies but the examiner identified one or more; and Category 5 indicates that due to inadequate supporting documentation, the examiner is unable to reach a final conclusion.

In all but Category 1, the examiner will conclude that the member institution is not following the Standards.

In cases where institutions have conducted inadequate self-assessments, the examiner includes additional information explaining the reasons why they have reached their conclusion. After a review of the member institution's response, CDIC communicates directly with the institution to confirm or alter the target dates for correcting deficiencies, or advise the institution of any other actions required. As well, we may remind the member institutions which are not in compliance with the Standards of the remedies available, such as the imposition of a premium surcharge or the termination of deposit insurance. Termination of deposit insurance would result in the institution ceasing operations because deposit insurance is a requirement for operating a deposit-taking financial institution in Canada. We have had to resort to sanctions on only two occasions during the past few years.

In just three years, indications are that our Standards and SARP program are having an impact. There was a 57-percent reduction in the number of reported deficiencies in 1996 over 1995. In 1995, 55 percent of current CDIC member institutions reported deficiencies. For 1996, this number was reduced to 40 percent and for 1997, the number has again decreased to 23 percent of current deposit-takers reporting deficiencies. As well, most of the banks that had reported deficiencies in 1995 had either corrected them by 1996 or had reduced the number of outstanding deficiencies significantly. Very few continued to report the same number of deficiencies in 1996 as in 1995.

In 1995, the largest number of deficiencies were reported in the categories of Internal Control and Credit Risk Management. The following year, improvements to credit risk management systems reduced the number of deficiencies in this category by almost half. Unfortunately, the improvement in internal controls was not quite as marked. Areas causing non-compliance with the internal control standard included: the absence of sufficient board of directors oversight, shortcomings in internal inspection and oversight, missing policy or control

elements, and inadequate management information and reporting systems. The other area where we saw a substantial number of deficiencies carried over from 1995 to 1996 was in the area of compliance with the liquidity standard.

In all this, the emphasis is on processes and procedures rather than on financial indicators. In dealing with failed institutions in the past, we have found that many reported a satisfactory financial condition, measured in terms of capital adequacy, earnings and so on, until shortly before they closed. Financial statements alone failed to reflect how vulnerable these institutions were. Most of the decisions eventually causing problems were made when times were good and the firms were prospering. Failures mainly reflected the absence of prudent policies and procedures which are needed to assess and manage risks arising from business activities. A lack of sound and prudent policies and procedures or failure to follow them is an early indicator of potential problems which require the attention of financial institution supervisors.

3.2.6 Concluding Remarks

I would like to conclude by mentioning again that it is the fundamental purpose of financial intermediaries to assess, assume and manage risks. By doing so, these institutions contribute to economic growth and create jobs. However, it is the role of financial institution supervisors to ensure that financial intermediaries manage their risks properly, and in so doing, do not jeopardise the well-being and trust of individuals. To quote the Chairman of the Federal Reserve Board, Mr. Alan Greenspan: "We can expect our banking systems to be sound only by ensuring that directors and managers provide guidance regarding their appetite for risk; that they bring personnel to the bank with integrity and skills to do the job; and that they monitor compliance with their own directives."

In this respect, I think the Canada Deposit Insurance Corporation will be looking towards expanding its Standards Program. We are finding that certain issues such as trust and agency arrangements and information technology deficiencies continue to cause concern about the risk management capabilities of individual institutions. I also think we will begin to consider the risks associated with conglomerates and the interdependencies that exist between separate affiliates contained

within a large corporate group. In my opinion, it may make sense to begin developing new standards that address these issues.

Designing appropriate supervisory regimes is crucial to ensuring that the right balance is struck between risk-taking and competition on the one hand, and a safe and secure financial system on the other. The approach we have decided to take at CDIC is to focus on the Canadian bank managers as the first line of prudential supervision by encouraging and promoting sound qualitative risk management and internal controls. This is not to say that quantitative prudential standards are a thing of the past. Instead, as our banks become more advanced in their operations, supervisors need a more sophisticated and nuanced way of supervising deposit-takers if we are to fulfil the responsibilities given to us. Three years after the implementation of our Standards of Sound Business and Financial Practices, I think we are now beginning to see the results in terms of better-run deposit-taking institutions and fewer failures.

3.3 RISK-BASED SUPERVISION: AUSTRALIA
Les Phelps

Bank supervisors, the world over, are espousing the merits of *risk-based supervision*. This is especially true of those supervisors who previously had devoted the bulk of their energy to checking the compliance of banks with regulatory requirements and making assessments of the grading of individual loans. But it is also very evident in the work of supervisors (should I say ex-supervisors) like the Bank of England who have prided themselves on the flexibility of their approach to supervisory issues. Somewhat ironically, while the "examination" oriented supervisors are honing their techniques for assessing banks' own risk management systems, formerly off-site supervisors like ourselves are finding that visiting banks is an essential element in judging how a risk management system works in practice. The two camps of "on-site examiner" on the one side and "off-site assessment of high level controls" on the other are converging on the model which relies on assessment of high level controls but involves plenty of time on the ground in the bank, kicking the tyres.

In the Reserve Bank of Australia, we often feel that the fanfare which has heralded this conversion to "risk-based supervision" is a little overdone. For the past decade, without using the current jargon, we have collected risk management system descriptions from banks and received assurances from external auditors that those risk management systems were adequate. In 1997, we reformed these long-standing arrangements with the external auditors and shifted the onus for attesting to the efficacy of risk management systems from the external auditor to the chief executive and the board. The chief executive must attest, with the endorsement of the board, that key risks have been identified, that systems have been designed to manage those risks, that the descriptions of those systems held by the Reserve Bank are current, and that the systems are working effectively.

There have been some important side benefits of getting the chief executive to make this attestation and getting the board directly involved in the process. A much more robust set of disciplines has been placed around the quality of the risk management system descriptions which banks submit to the Reserve Bank. We are finding that chief executives and boards now want to see those descriptions, whereas formerly they were often regarded as an administrative inconvenience

for those who handled liaison with the Reserve Bank. In some cases, boards have signed off on these descriptions and adopted them as their own. This helps to answer the eternal question we have had to field from banks of how detailed these risk management descriptions should be. The Reserve Bank never wanted a "truck load" of procedures manuals and neither do board members. They expect a document on credit risk for example which explains the framework within which the bank decides the type and size of loans it makes, the extent to which the power to approve credit exposures is delegated through the bank, the type of analysis to which loan portfolios will be subject, arrangements for handling delinquent and failed loans, and the means by which the board will be kept informed of developments in the credit portfolio and credit quality. It is increasingly common that boards do not get involved in the approval of any individual loans. If the loan fits board policy, it can be approved by executives; if it does not comply with board policy no one can approve it.

These descriptions of risk management systems submitted to the Reserve Bank are tangible evidence of our commitment to "forward looking" supervision. As Barings illustrated so graphically, it is possible for a bank to be reporting a very healthy capital ratio one day and be technically insolvent the next. Looking back at reported data is becoming a smaller and smaller proportion of the work of the supervisor. The major emphasis is now on where the bank expects to be in a year's time (that is when today's depositors might want their money back) and how the bank plans to identify and manage the inevitable risks along the way.

Investors in banks also recognise the need to understand how each bank plans to manage the future, and annual reports now include summaries of the main risks facing that bank and how those risks have been, and will be managed. One definition of a deposit taker is a firm which can borrow your money without telling you what they intend to do with it, i.e., without issuing a prospectus. These annual reports are moving towards a greater emphasis on how things will be done in the future. I always keep an eye on the North American banks' annual reports since they are at the forefront in providing detailed descriptions of risk management processes. A recent example was the Royal Bank of Canada which devoted 20 pages to these descriptions covering credit, liquidity, market and operational risk in turn.

The benefit in summarising systems in this way is that it forces the bank to write it down in a way which might convince regulators, rating agencies, counterparties, and investors (and hopefully themselves) that they know what they are doing.

In keeping with this global warming to the concept of risk-based supervision, I have organised the rest of my comments today under four headings — credit risk, market risk, liquidity risk and operational risk

3.3.1 Credit Risk

I start with credit risk because despite the experiences in the last couple of years of Barings, Daiwa, Sumitomo, and more recently NatWest in the U.K., with concealment of huge losses in trading books, a longer sweep of history would still put credit risk as the number one threat to a stable banking system. Banks make loans based on forecasts of the borrower's ability to repay. The one thing which is certain for all forecasts is that they are wrong, so that margins for error and protection against error are integral parts of a credit risk management system. Banks attempt to protect themselves against mistakes by taking security, by limiting the size of individual exposures, and avoiding concentrations of risk. The key relationship to recognise in a commercial loan is that when the security is effectively the business, both the value of the business and the ability of the borrower to repay will be functions of the revenue being generated by the business - if the business fails, the loan will not be repaid and often the security will be next to worthless. Australian banks which finished up with television stations and newspaper companies as their security in the last credit cycle were amazed by how much the value of the business had fallen since the loans were made to buy them just a few years before. Similarly, in loans for property development taking the property as security does not provide much in the way of a hedge to the risk that the bank's analysis of the potential cash flows will prove wrong. If the demand for those type of properties dries up and the finished product does not sell or the costs escalate and the building is not finished, there is no cash flow and very little value in the security. I labour these points about business and commercial property lending because they illustrate that any portfolio of loans will suffer in an economic downturn - it is not a question of whether the portfolio will suffer but how much?

This means that a credit risk management system needs to be exactly what it says - a system for managing risks which cannot be avoided; a system which is cognisant that some sets of economic circumstances will affect borrowers who share a common industry or geography in the same way at the same time; a system which promotes early recognition of borrowers whose circumstances are deteriorating and provides for more intensive management of those exposures often by a specialist group within the bank; a system which acknowledges the value of a second pair of independent eyes from a group within the bank whose job it is to detect risk rather than make loans.

The growing realisation that risks in a portfolio of loans cannot be avoided - only managed - is producing a watershed in credit risk management. Banks are devoting substantial resources to the measurement of credit risk with the management intent of pricing properly for risk and taking a charge to profit for the inherent risk in a portfolio of various types of loans when loans are made rather than when some of the loans, inevitably, go bad. Measuring risk, of course, encourages research into past default and loss ratios and the data in Australia is not good. Australian banks got off fairly lightly in all recessions prior to the last one and hence not much effort was put into trying to predict future bad debt experience or document previous experience. Much of the data that is now available starts around 1988/1989 when boards, regulators and rating agencies began to demand from bank management the sort of information which allowed some analysis of where all the bad loans were coming from, how many more were coming, and whether the provisions were anywhere near sufficient. Data on defaults and losses which contain a couple of years of catastrophe and then five/six years of few problems do not provide a base for confident prediction. Hence, a lot of serious work is devoted to trying to knit together what we do know about Australia with delinquency and loss ratios compiled by rating agencies in the U.S. based on much longer runs of data.

This type of analysis of past experience encourages credit scoring which is another important feature of credit risk management among banks. The comment that I found most telling in this area is that the good scorecards do not measure ability to repay but willingness to repay. Another outgrowth of the mathematical and portfolio approach to credit risk management is credit derivatives. This allows the portfolio manager who decides there is too much exposure to some

counterparty, geography or industry in the portfolio to shed that risk and replace it with another without disturbing relationships with the customers. Some of what gets called credit derivatives sounds a lot like guarantees but markets in credit derivatives are developing, particularly where the borrower has issued securities in the market and hence there is a reference point for the market's day-to-day assessment of that borrower's credit risk.

One of the tools the Reserve Bank of Australia has which it did not have in previous cycles is a good set of data on impaired loans. Much time and energy was devoted by the Reserve Bank to consultation with banks and accounting firms to agree on definitions designed to ensure that next time borrowers falter, banks are much quicker to discern the beginnings of a deterioration in the quality of their loans. The level of impaired loans has been falling consistently from a peak of 6 percent of assets in 1992 to under 1 percent now. But this tells us more about the disciplined approach banks took to extending credit between 1990 and 1995 and the relatively benign economic conditions of recent years, than it tells us about where that level of impaired assets might be in five years' time.

The quality of portfolios of bank loans in the future depends on the quality of new loans being made now. The main tools available to us to make some judgement about the future stock of impaired assets are:

(i) the rate at which loans are being added to that stock. We collect information on new impaired assets. They have been flat for the past eight quarters;
(ii) information we collect from banks on loan grading. Again there is no evidence of a quality slide in data received to-date; and
(iii) anecdotal evidence of declining loan standards combined with the knowledge we accumulate as we go from bank to bank assessing credit risk management practices and a relatively small sample of actual loan files.

It is under the third heading that current concerns fall. In some areas of lending, particularly the big end of town, competition has whittled away margins and led to less onerous conditions on borrowers. Measuring lending standards is a more complex task than measu-

ring the level of bad loans. In the housing and personal markets, simplistic measures such as loan to valuation ratios and comparisons between loan repayments and income can be used to assess standards. However, as loans increase in size, the range and complexity of loan conditions also increase and their appropriateness differs from loan to loan. The Bank believes that some current lending practices do risk sowing seeds of future credit quality problems. While the most intense competition to-date has been for big loans to customers of "undoubted quality" and housing loans, it is only logical that the fine spreads in these areas will push banks into other areas. Some will be drawn to areas of lending where their lack of expertise could prove an Achilles heel. We insist that banks acquire expertise and develop risk management frameworks commensurate with efforts to develop new business.

3.3.2 Market Risk

A key project involving almost everyone in my Bank Supervision Department in 1997 is preparation for the introduction of a capital charge for market risk from the beginning of 1998. This is a major task as anyone will confirm who has seen the 80 pages of guidelines describing how to do the calculations. Fortunately, we have in a sense been preparing for the big event since 1992 when the first tentative details of this major extension to the capital regime were circulated by the BIS. We decided that a pro-active role in seeking views from the Australian banks, road testing the draft rules on real portfolios supplied by banks, and providing plenty of feedback to the BIS was the best strategy for being ready when the starting gun was eventually fired. There will be precious few countries on that starting line come 1 January 1998 but we are confident we will be one of them.

The big breakthrough in supervisory thought with the market risk exercise is recognition of banks' internal models. Banks' own calculations of their Values at Risk (popularly known as VAR) in their various trading portfolios can be used to perform the capital calculations provided:

- they can be calibrated to the 99-percent confidence level on the equivalent of a 10-day holding period;
- the supervisor is satisfied that the models are an integral part of the bank's own risk management system (if we are to rely

on the output of the models, the bank must also rely on them for their own purposes); and

- the trading activities are subject to a robust and independent risk management framework.

We are the ones who have to sign off on that the bank's risk management system meets the quantitative (i.e., the measurements are accurate) and qualitative (i.e., the risk management environment is robust) requirements set out in the guidelines.

Assessment of the adequacy of a risk management environment is a much more complex approach to supervision than monitoring compliance with prudential ratios. For example, it is one thing to dictate that back office and risk management staff should be independent of those involved in trading - the so-called front office. It is another thing altogether to judge whether effective independence is being achieved. Independence can be sought by physical separation, but risk managers cannot be effective if they become remote from developments in the market place. Independence can be sought by clearly separate reporting lines for front office and back office staff but these lines have to come together somewhere in the organisation. The risk managers' understanding of markets and credibility within the organisation need to be such that they are neither bamboozled nor outranked by the front office staff.

"Marking to market" on a daily basis requires the back office to obtain market prices. This process needs to be conducted independently of the front office. For simple trading instruments, independent valuations can be achieved by back office staff having access to electronic news services. For more complex instruments, discovery of a true market price will not be so easy - the instrument may not be traded frequently. In such circumstances, there is a natural tendency for back office staff to turn to their front office staff for advice. This immediately prejudices the independence of the risk management systems. The Bank's supervision staff can observe, comment and seek remedies where they see deficiencies but it remains the responsibility of the board and management of a bank to achieve true independence in their risk management systems - the staff who avoid the losses need to be treated equally to those who make the profits.

3.3.3 Liquidity Risk

Risk management system descriptions in the area of liquidity might be expected to be exceptionally simple. The board may simply decree that the financial institution shall keep liquid assets at least equal to some minimum percentage of liabilities. But that requirement in itself immediately throws up a need for a day-to-day management system which ensures that outflows are met without the minimum imposed by the board being breached. This requires systems for monitoring known outflows and estimating possible outflows from call accounts. The resources to meet these outflows are a mixture of call deposits, marketable securities and standbys, the best recipe for which will vary according to the prevailing structure of interest rates. Liquidity management extends into plans for limiting the volatility of the institutions deposits by ensuring no individual deposit is too large, seeking diversification between retail and wholesale markets, managing the term structure of the deposits, and seeking new sources of deposits internationally. A liquidity risk management plan also needs to address the unexpected - the stupid rumour, the ill-informed press comment. It is quite common for banks to have a crisis committee which would come together in such a situation. One of the first things to think of in such planning is out of hours telephone numbers. Most of the work in resolving crises occurs at night or over the weekend and having an up-to-date list of contact numbers for regulators, the press, rating agencies, banks where standby lines are held, etc., is an absolute necessity.

The fact that liquidity management is so much more than imposing a minimum liquidity ratio needs to be borne in mind when analysing the Reserve Bank's decision in June 1997 to reduce the minimum Prime Assets Requirement (PAR) from 6 percent to 3 percent.

The PAR arrangements require banks to hold a minimum level of Commonwealth securities, notes and coins and balances with the Bank. It was becoming clear that these arrangements could become the source of market tensions in coming years as the supply of Commonwealth Government securities diminishes. A similar problem had arisen in the late 1980s when the Government budget last moved into surplus; at that time, the Bank reduced the minimum PAR ratio from 12 percent of banks' liabilities (excluding capital) to 6 percent. On this occasion (June 1997), the ratio was reduced to 3 percent and the range of eligible assets widened to include Australian dollar-denominated secu-

rities issued by the central borrowing authorities of State and Territory Governments.

Prime assets are a source of liquidity for banks in an emergency. The reduction in the PAR ratio did not reflect any lessening in the need for a bank to be prepared for a run on liquidity; the PAR arrangements form only one element of liquidity management. As part of its annual cycle of consultations, the Bank discusses with banks their plans for meeting predictable day-to-day needs for liquidity, as well as for handling unexpected strains on their cash flows. The Bank will be placing greater emphasis on banks' internal management practices; in some cases, the Bank may require a bank to hold liquid assets (more broadly defined than for PAR) in excess of the PAR ratio. Its assessments will also take into account how banks manage their liabilities, including maturity structure, the wholesale/retail split and access to international markets.

3.3.4 Operational Risk

When the Reserve Bank came to the world of bank supervision around 20 years ago, its emphasis was on the capacity for financial loss due to poor financial decisions. The risks addressed by the supervisor were the risks of bad loans, bad investment, concentrations of risk, and inadequate capital or liquidity. The banks of which the Reserve Bank became the supervisor had all been around for a long time (there had been no new banks since before World War II) and had sizeable branch networks. It was a reasonable assumption that they knew something about the operational risks to their business. In recent times, however, the more disciplined regimes of managing credit, market and liquidity risk have inspired some banks to investigate whether the same disciplines can be applied to operational risk. One response is that the technique of trying to measure the probability of an operational breakdown and put a dollar value on its impact on the bank is just not applicable. Disasters either happen or they do not - the impact on the bank will vary depending on the time of day that disaster strikes.

Despite these measurement difficulties, we think there are clear benefits in trying to apply this framework. How else do you decide how much it is worth spending to avoid or minimise these operational risks if you do not attempt to put a dollar value on their potential

impact? This is really not as new an approach as some might think. Banks have always had to decide whether they would insure against this or that operational risk and how else do you decide whether the premium is worth paying without an intuitive grasp of the likelihood of the event and its cost to the bank if its happens.

Our new arrangements under which the chief executive attests to the efficacy of the risk management framework includes a specific reference to operational risk. I have to concede however that we do not hold succinct descriptions from each bank on how they manage operational risk. Many argue that management of operational risk of necessity must devolve to the operational level which distinguishes it from market, credit and liquidity risk where management can be centralised. This misses the point that as supervisors we are interested in the plans for combating those operational risks which have the potential to have a serious impact on the interests of depositors.

Some of the major operational issues where we have been involved recently are the Year 2000 problem, outsourcing of IT, and securitisation.

The Year 2000 problem is something we would expect all banks to have been addressing for some time but as we moved into 1997, we felt we should make absolutely sure this was happening. Accordingly, we surveyed all the banks to find where they had reached in the process of scoping the problem and planning remedial action. The results of that survey are pretty much as expected but there are some laggards and the beauty of the survey as a regulatory tool is that we can prove to these banks they are lagging.

Outsourcing of IT has hit the headlines in recent months with two of our larger banks announcing that they are outsourcing their whole IT function to specialist IT companies. This raises some potential in the minds of supervisors like us for the bank to lose control over the integrity of its data for example, or say, the amount of resources devoted to keeping software up with the latest developments. Banks of course argue the opposite: that specialist, global IT companies will do a much better job over the long run, and have access to better staff and a bigger R&D spend than the bank. We have had a deal of earlier experience with outsourcing - a smaller bank did the same in 1994 and many of the foreign banks work off computers in Singapore and Hong Kong with information transmitted by satellite.

We have a set of guidelines which we provide to banks contemplating outsourcing of the IT function and seek an annual assurance from their external auditors that our guidelines are being observed.

You might think it odd that I mention securitisation as an operational risk. The point I want to make is that the documentation and procedures for selling the securities are supposed to be such that the bank sheds the credit risk to the holder of the securities. The operational risk is that either through a documentation lapse or the way the securities are promoted to investors, the bank will assume risks on the securities it thought it had shed. Funds management activities of banks throw up similar risks. The investor is supposed to understand that even though they made the investment at the bank, it is an investment with all the attendant risk and not a deposit. The operational risk is that at the point of sale, promises or assertions will be made because the staff member is on a commission, which render the bank liable for the performance of that investment. This is not just supervisory theory. We had a clear example in London with Deutsche Morgan Grenfell being bailed out by Deutsche Bank because proper investment procedures were not followed by the fund manager.

3.3.5 Conclusion

Risk-based supervision has the enormous advantage of being forward-looking. Continually scanning the horizon for potential dangers and then assessing how each bank is likely to cope is a much safer way of progress than pouring over out-of-date statistics which show where the bank has been, not where it is going.

3.4 ISSUES IN COMPLYING WITH THE AMENDMENT TO THE BASLE CAPITAL ACCORD TO INCORPORATE MARKET RISKS: THE CASE OF KOREA

Moon-Ho Lee

3.4.1 Introduction

Details on how and when to implement the amended Basle Capital Standards to incorporate market risks in Korea have not yet been determined. Nonetheless, we have reached the conclusion that the introduction of the market risk adjusted capital requirements will be necessary in the near future. Before implementing the new capital requirements, we need to consider why and how far we should introduce these new supervisory tools. In particular, we need to review whether these new supervisory tools correspond to the financial circumstances and supervisory system of Korea even though they are based on the advanced financial systems of G-10 countries, which are all members of the Basle Committee. In addition, the benefits and costs in implementing these new supervisory tools should be compared. The benefits include the enhancement of the managerial stability of banks, while the costs include the accompanying burden to both the banks and the supervisory authority. In this regard, I would like to review the position of Korea on the introduction of the new Basle Capital Standards, and briefly present the plan to implement them.

3.4.2 Conditions for Introduction of New BIS Capital Standards

To introduce the new capital standards reflecting market risks, we need to consider the following two conditions:

(i) how much banks are exposed to market risks, an issue that is related to the necessity or the timing of the introduction; and
(ii) whether banks have the requirements such as well developed accounting systems, and available financial markets to manage market risks efficiently.

(1) The market risks

In the U.S.A., where capital adequacy regulations have already been amended according to the new Basle Accord, the new framework for market risks applies only to a few large banks whose trade involves

more than US$1 billion, or more than 10 percent of their total assets, while the existing capital adequacy rules for credit risk apply to all banks. In this regard, the size and characteristics of market risks, to which banks in Korea are exposed, need to be examined first.

(1.a) Derivatives transactions

Recently, the volume of derivatives transactions at Korean banks has increased rapidly. It rose from $246 billion in 1994 to $348 billion in 1996, showing an annual increase of 17.1 percent ~ 20.5 percent. Thus, the ratio of derivatives transactions to total foreign exchange transactions rose from 19.6 percent in 1994, to 21.4 percent in 1995 and 25.8 percent in 1996.

FOREIGN EXCHANGE TRANSACTIONS OF KOREAN BANKS 1/
(Billion US Dollar)

	1994	*1995*	*1996*
Spot Exchange Transactions	1,012.4 (80.4)	1,062.5 (78.6)	998.0 (74.2)
Derivatives Transactions	246.3 (19.6)	288.5 (21.4)	347.7 (25.8)
Forward Transactions	192.4 (15.3)	240.2 (17.8)	255.1 (19.0)
Financial Futures & Others	53.9 (4.3)	48.3 (3.6)	92.6 (6.9)
Total	1,258.7 (100.0)	1,351.0 (100.0)	1,345.7 (100.0)

1/ Foreign exchange banks.
2/ Figures in parentheses are composition ratios (%).

Source: Press Release of the Bank of Korea, International Department, 5 March 1997.

However, the outstanding amounts of derivatives transactions of Korean banks are very small in comparison with those of major banks of advanced countries. As of the end of 1996, the total outstanding amounts of derivatives transactions of 25 Korean commercial banks, in terms of face value, was Won 39.6 trillion, which is equivalent 8.4 percent of total assets of Won 472.6 trillion.

The ratio of outstanding amounts of derivatives to the total assets of the Korea Exchange Bank, which showed the largest of the derivatives transactions among 25 banks, was only 0.2 percent, while the ratios of four large banks in the U.S.A. range from 11.9 to 21.2 percent, and those of Deutsche Bank of Germany and Tokyo Mitsubishi Bank of Japan are 5.1 and 2.5 percent, respectively.

VOLUME OF DERIVATIVES TRANSACTIONS OF MAJOR BANKS AS OF END 1996

(Unit: Million USD, Million DM, Billion Yen, Billion Won)

	U.S.A.					*Germany*	*Japan*	*Korea*
	Chase	Citibank	JP Morgan	BTC	Average	Deutsche	Tokyo-Mitsubishi	K.E.B.
Total Assets (A)	336099	211474	222026	120235	227900	886090	81104	48919
Derivatives (B)	57121	25221	47163	18034	36884	45470	1995	97
B/A (Percent)	17.0	11.9	21.2	15.0	16.2	5.1	2.5	0.20

Source: Annual report of each bank.

The ratios of the credit risk portion of derivatives transactions to the total risk-weighted assets also differ remarkably between Korean banks and others. In the U.S.A., for example, these ratios of J.P. Morgan and Bankers' Trust reached 18.3 percent and 10.0 percent, respectively, while that of the Korean Exchange Bank remained at 0.30 percent.

In summary, the volume of derivatives transactions at Korean banks remains at a relatively very low level although it is increasing.

(1.b) Trading activities

The new supervisory framework for market risks covers basically the trading book. In Korea, however, as the concept of the trading

book is not yet defined, it is difficult to estimate the size of the positions to be covered by market risks tools.

In general, the trading book is thought to have the following requisites. First, it could be marked-to-market periodically. Secondly, the efficient financial markets should exist to allow banks to hedge their trading book positions at any time. Lastly, there should be a firewall between the trading book and the banking book used for investment purposes.

It is difficult to regard the bonds invested by Korean banks as the trading book because the secondary bond market does not function well in Korea. In addition, it is almost impossible to hedge the bond positions with derivative instrument positions since no interest rates derivatives market in Korean won exists. Korean banks rarely hold bonds for trading purposes.

But trading securities denominated in foreign currency and trading stocks might be regarded as trading book. The Korean Stock Exchange is a liquid market and banks can hedge the stock positions easily because the futures and the option markets for stocks are established in Korea.

If all traded securities in foreign currencies and traded stocks are included in the trading book, the average ratio of volume of trading book to total assets (including trust account) is 2.6 percent (Korea Exchange Bank, 3.7 percent), as of the end of 1996. Compared to the ratios of four large banks in the U.S.A., ranging from 22.6 percent to 64.3 percent, and that of Deutsche Bank of Germany at 20.0 percent, the volume of trade at Korean banks appears to be relatively small.

Moreover, this volume of trade at Korean banks is far below the level of 10 percent, which was set by the American supervisory authorities as the minimum in applying the new capital adequacy rules. It means that most Korean banks would not be subject to the new capital adequacy rules by the criteria of the U.S.A.

VOLUME OF TRADING ACTIVITIES OF MAJOR BANKS AS OF END 1996

(Unit: Million USD, Million DM, Billion Yen, Billion Won)

	U.S.A.					*Germany*	*Japan*	*Korea*
	Chase	Citibank	JP Morgan	BTC	Average	Deutsche	Tokyo-Mitsubishi	K.E.B.
Total Assets (A)	336099	211474	222026	120235	227900	886090	81104	48919
Trading Book[1/] (B)	98092	52788	142849	72632	91510	177172	1178	1243
(Assets)	(59956)	(30785)	(91330)	(48919)	(57748)	(177172)	(1178)	(1243)
(Liabilities)	(38136)	(22003)	(51519)	(23713)	(33842)	(-)	(-)	(-)
B/A (Percent)	29.2	22.6	64.3	60.4	40.2	20.0	1.5	3.7

[1/] U.S.A.: "Trading book"; Germany: "Assets held for dealing purposes"; Japan: "Trading securities".

Source: Annual report of each bank.

(1.c) Foreign exchange risks

Foreign exchange risks are subject to capital requirements, even though the position of foreign exchange does not belong to the trading book. Besides foreign exchange risks, commodity risks are also subject to capital requirements under the Basle Accord; but no Korean bank deals in commodities.

The foreign exchange risks are measured as 8 percent of the higher of either the aggregated net long positions or aggregated net short positions of all currencies under the standardised method. As Korean banks are subject to rigid limits on foreign exchange positions by regulations, the foreign exchange risks of Korean banks measured under the standardised method are only 0.2 percent of their capital.

According to the Basle Accord, the bank with negligible business in foreign currency could be exempted from capital requirements at the discretion of its national authority, if it meets the following conditions:

(i) the foreign currency business (greater of the sum of the gross long position or the sum of the gross short position in all foreign currencies) does not exceed 100 percent of capital; and
(ii) the overall net open position does not exceed 2 percent of capital.

As the total foreign assets of Korean banks are 380 percent of their total capital, most banks do not meet the first condition. But as the ratio of overall net open position of Korean banks to their capital is 1.1 percent on average, most banks meet the second condition, which is more closely related to market risks.

(2) Accounting system and financial market

(2.a) Division of trading book and accounting principle of mark-to-market

In principle, the management of market risks covers the trading book based on the mark-to-market accounting system. Mark-to-market provides the common way to measure risk exposures of banks. If banks do not need to stop the size of investment loss owing to the absence of the mark-to-market accounting system, the market risk exposure measurement on the basis of market value would not be useful.

In Korea, the mark-to-market accounting system and the division of the trading book were introduced into derivatives transactions in accordance with internationally accepted accounting standards. However, securities are classified and managed by issuing type rather than by holding purposes. Moreover, the valuation of securities is subject to "the lower of cost or market value method", which only allows valuation losses to be realised instantly, not counting unrealised gains.

We are now planning to improve the accounting system with regard to valuation of securities as follows:

(i) to adopt the classification of securities according to holding purposes (trading or investment purposes), not by types of securities; and
(ii) to introduce the mark-to-market valuation system of securities.

(2.b) Liquidity and efficiency of financial market

The effective management of market risks requires efficient and liquid markets where the position of banks can be easily offset and hedged by opposite transactions at any time.

In Korea, the interest rate risk sector has the least developed financial market among the risk sectors which the new capital adequacy rules cover. In order to enhance the liquidity and efficiency of interest rate markets, the authorities should encourage the growth of the government and corporate bond markets, which are the pivotal components of interest rate markets, as follows:

(i) the yields of government bonds should become a benchmark for market interest rates by way of simplifying various types of government bonds and issuing them regularly; and
(ii) corporate bonds need to be issued and traded actively without the guarantee of banks through the development of credit agency services capable of making accurate credit analysis of firms based on objective information.

In addition, the Korean won futures markets for interest rates and foreign exchange need to be established to meet increasing hedging needs in the context of the internationalisation of domestic financial markets. In addition, banks should be guided to devise and trade the over-the-counter derivatives denominated in both foreign and domestic currencies.

3.4.3 Plan to Implement New Capital Standards in Korea

(1) Timing of implementation

Although we are not obligated to implement the new capital adequacy standards as Korea is not a member of the Basle Committee, we will implement them, taking the following into consideration:

(i) it is expected that the Basle Committee will recommend that major banks conducting international business conform to the new Basle Accord;

(ii) some countries with well-developed international financial centres may impose the same requirements on domestic banks and foreign banks;
(iii) Korean banks need to enhance their credibility in the international markets and their efficient management of risks; and
(iv) it will be necessary for the international cooperation in bank supervision.

In deciding when to introduce these new standards, practical issues should be considered. The need for the management of market risks has increased recently among Korean banks as many banks recorded large unrealised losses in their stock holdings owing to the bearish stock market. However, market risk exposures of other than equity, such as interest rates and foreign exchange, remain at very low levels compared to those of large banks of advanced countries where trading transactions are active.

Thus, the whole implementation of market risk requirements does not seem to be an urgent task because of low market risks. Moreover, the overall financial condition has not fully matured yet to introduce these standards. For example, the accounting system in Korea is different from internationally accepted standards. Additionally, the bond and derivatives markets are not yet efficient. Finally, it would take a considerably long time to launch the computerised system to calculate the market value and capital requirements of bonds and derivatives.

Therefore, it is necessary that the Korean implementation of the new capital adequacy rules be a little beyond the end of 1997, the deadline for the members of the Basle Committee. The definite timing will be decided in consideration of the level of the capital ratios and the general state of computerisation of banks. (The existing Basle Capital Accord was fully implemented in 1995, three years after the deadline of 1992.)

(2) Applicability

The existing capital adequacy rules for credit risk apply to all commercial banks uniformly. It will be appropriate that the new capital standards also apply to all banks to ensure regulatory standards on banks and the consistency of supervisory tools. On the other hand,

the alternative approach can be considered that only a limited number of banks with relatively big market risks are subject to the new capital regulations like in U.S.A., as the burden and cost to small banks in conforming to the new capital regulations may exceed the benefits.

(3) Measures for market risk

The internal model is better than the standardised method in measuring accurate market risks and inducing banks to develop advanced techniques for risk management. However, it is difficult to accumulate data on market prices in Korea since interest rates were liberalised only recently. In addition, it will take considerable time and money to develop an internal model for Korean banks.

Therefore, at the current stage, banks will be allowed to adopt the standardised method or the internal model to measure market risks in the same way as the Basle Accord. For the future, it may be desirable to induce banks toward the use of internal models gradually with the growth and sophistication of Korean banks.

3.4.4 Conclusion

Since market risk exposures of Korean banks remain at a low level compared to those of large banks of advanced countries, the implementation of market risk requirements does not appear to be an urgent task in Korea. But, as the volume of derivatives transactions of Korean banks has shown rapid growth recently, we need to introduce the market risk requirements in order for Korean banks to develop and enhance medium- and long-term risk management. For the implementation of the market risk requirements, the financial environment needs to be improved first. For example, the accounting system should be revised according to international standards and the efficiency of financial markets should be also improved gradually. Therefore, the official implementation of the new capital adequacy rules will take place a little beyond the end of 1997, the deadline for members of the Basle Committee. The definite timing will be decided in consideration of the level of the capital ratios and the general state of computerisation of banks.

IV. THE CASE FOR AN INTERNATIONAL BANKING STANDARD

4. THE CASE FOR AN INTERNATIONAL BANKING STANDARD
Morris Goldstein[6]

4.1 Alternative Approaches to Banking and Supervisory Reform in Developing Countries

How can we improve on the existing international banking agreements we already have, with emphasis on quickly bringing more developing countries up to a minimum level of sound banking practice and strong banking supervision?

One approach would be to stand pat with existing international agreements and accept (if only grudgingly) the proposition that the threshold motivation needed for serious banking reform may only occur after a banking crisis. To be sure, there have been cases, e.g., Argentina, Chile, Hong Kong, and the United States where banking crises were followed by the adoption of an improved incentive and/or supervisory framework. The disadvantages here are twofold:

- because banking crises are so costly, approaches that can motivate reform before a crisis takes place should be favored, and
- most banking crises are not followed by significant banking reform.

On the latter, Caprio and Klingebiel[7] studied 64 episodes of bank restructuring, involving 55 developing countries. Four criteria (financial deepening, development of real credit, real deposit interest rates, and recurrent problems in the banking system after restructuring) were used to evaluate these restructuring exercises. Only Chile and Malaysia were judged to be clear successes.[8] Twenty-four restructuring exercises achieved mixed success, and 27 were evaluated as either unsuccessful or not yet resolved.

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6. This article is excerpted from Morris Goldstein, *The Case for an International Banking Standard,* Policy Analyses in International Economics, No. 47, Washington: Institute for International Economics, April 1997.
7. Caprio, Gerard, and Daniela Klingebiel. "Bank Insolvency: Bad Luck, Bad Policy, or Bad Banking?" In Michael Bruno and Boris Pleskovic, *Annual World Bank Conference on Development Economics.* Washington: World Bank (1996).
8. Caprio and Klingebiel regard the bank restructuring exercise as a clear success if the country receives good performance on all four criteria. Good performance on two to three criteria elicits a grade of mixed results, and a score of zero or one puts the country into the unsuccessful or not yet resolved category.

A second approach would count on expanded bilateral and multilateral technical assistance cum market discipline. The difficulty here is that technical assistance, helpful though it is, will not likely overcome the domestic political resistance to reform. That is, poor banking supervision is not simply a matter of knowing how to do it; it is also a matter of overcoming the political resistance to doing the right thing. Market discipline can be a powerful incentive for errant banks to get their house in order. But experience suggests that market discipline does not operate effectively where there is little/poor publicly available information on the creditworthiness of a borrower or a strong expectation that the public sector will bailout a troubled borrower. As indicated above, the quantity and quality of publicly available information on banks and on their customers are still significantly poorer in developing countries than in the industrial world. In addition, incentives for banks to leverage risk on the official safety net are probably even more pervasive in developing countries than in industrial ones. Calomiris,[9] for example, recounts the tales of Chile during the 1980s and Venezuela during the early 1990s, where political will to limit safety net protection melted away in the heat of bank adversity.[10] Even in the United States, the empirical literature has found it difficult to identify a reliable link between measures of the riskiness of bank assets and interest rate spreads on banks' subordinated debt.[11] An expanded role for market discipline in many developing countries therefore awaits prior or simultaneous progress on disclosure and on limiting public-sector bailouts. In short, while technical assistance and market discipline are an important part of the banking reform package, they cannot be the whole package.

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9. Calomiris, Charles. "Building an Incentive-Compatible Safety Net: Special Problems for Developing Countries." Unpublished. New York: Columbia University Graduate School of Business (1996).

10. It is because of these two shortcomings that I remain skeptical that a proposal to require banks to hold a certain percentage of capital as subordinated debt , as proposed by Calomiris, could, at this stage, serve as the centerpiece of market discipline for banks in most developing countries.

11. Flannery, Mark, and Sorin Sorescu have more success at finding a link between subordinated debt prices and banks' default risks. They note, however, that such a relationship was stronger in some periods (1989-91, when conjectural guarantees no longer covered many bank debentures) than during others (1983-90). In addition, Flannery and Sorescu conclude that "our results provide no indication that market discipline could (or could not) entirely replace government supervision of bank risk taking (p. 1374)." See Flannery and Sorescu, "Evidence of Bank Market Discipline in the Subordinated Debenture Yields: 1983-1991." *Journal of Finance* 51, no. 4 (September 1996): 1347-78.

A third tack would be to rely on host countries where developing-country banks want to do business. The Basle Committee's *Minimum* Standards, as well as some national banking legislation (e.g., the United States, permits the host country, inter alia, to prohibit foreign banking offices within its borders if it is not satisfied that the home country is implementing effective supervision. This too carries a good deal of potential leverage, at least for banks whose business strategies would be seriously damaged by exclusion from certain large foreign markets. But actual leverage in apt to be much lower. If countries that already have banking offices in the host country are grandfathered, only new entrants will be affected. And concerns about misuse of such a policy for protectionist purposes are likely to constrain its use only to the most flagrant cases of weak supervision. In addition, it has become much less politically acceptable for one country to try to impose conditionality on another.

This brings us to the fourth approach, namely, the setting and monitoring of an International Banking Standard, or IBS. Such an IBS would go beyond existing international agreements in an attempt to tackle more of the factors underlying banking crises in developing countries. Although a bank's participation in an IBS would be voluntary, market participants' knowledge of who is or is not meeting the standard would establish market penalties for slow movers. Peer pressures should also operate in the desired direction. Other incentives for signing on to an IBS might be offered by the official sector to reward crisis prevention measures.[12] For example, the terms at which countries gain access to international lender-of-last resort facilities (e.g., the IMF's New Agreement to Borrow or access limits under the IMF's general resources) could depend in part on IBS participation; similarly, the risk weights in the Basle capital standard might be made more favourable for IBS signatories.

12. The principle here is the same as that commonly applied to the purchase of insurance. If you are a smoker and very overweight, you can still get life insurance, but you will pay more for it than if you take measures to reduce your risk.

A cue might be taken from recent efforts by the public and private sectors to strengthen other elements of the international supervisory and regulatory regime.[13]

Perhaps the most significant recent official-sector initiative is the IMF's Special Data Dissemination Standard (SDDS), established in April 1996 following lapses in the publication of economic and financial data prior to the Mexican crisis. Countries subscribing to the SDDS agree to meet specific requirements with respect to coverage, periodicity, and timeliness of economic and financial data, public access to these data, and the integrity and quality of the data. Also, the IMF is to maintain an electronic bulletin board that will list the countries subscribing to the standard, along with relevant explanatory material about the data series. Countries on the list subscribe to, and intend to meet, certain tenets of good statistical citizenship; serious and persistent non-observance is cause for removal. As of February 1997, 42 countries (including 18 developing countries) had subscribed to the SDDS.

In a similar vein, a consensus developed in the late 1980s that existing standards and practices for clearance and settlement in the world's securities markets were deficient and uneven across countries, with adverse effects for international investment flows and management of systemic risk. It was agreed that global market infrastructure could be improved if countries had a set of international benchmarks/standards against which they could evaluate their own clearance and settlements systems, along with a target date for implementation. This time it was a private-sector organisation, the Group of Thirty (G-30), that took the lead in laying out these best-practice guidelines; the guidelines were then updated in 1995 by the International Society of Securities Administrators (ISSA).[14] According to a recent World Bank (1997) report, emerging markets had made major strides in meeting many of the G-30 standards.

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13. On-going efforts to agree on an investment code for OECD countries, harmonize payments systems within the European Union, and discourage corruption via an international agreement on tax deductibility provide examples of using international or regional standards to overcome national inertia in dealing with commonly perceived problems. The International Organization of Securities Commissions (IOSCO) also is currently at work on a set of guidelines for international securities markets.

14. See World Bank, *The Road to Financial Integration: Private Capital Flows to Developing Countries* (1997), for a description of the ISSA revised guidelines for clearance and settlement.

A similar exercise, again spearheaded by the G-30, took place in the early 1990s when rapid growth of derivative markets raised concerns the dealers and users of these products had not established appropriate risk management systems. Approximately a year after launch, a follow-up survey by the G-30 suggested that from 20 to 50 percent of market participants implemented the various recommendations.

Last but not least, the Basle Committee's 1988 Capital Adequacy Accord was a direct response to a need for both a better safety cushion for internationally active banks and a more level playing field. Warts and all, the 1988 accord has probably induced internationally active banks to be better capitalised and has focused greater attention on the riskiness of bank assets. By 1993, all industrial countries had adopted the accord's standard (after incorporating it in national legislation), and, by now, 80-90 other countries (most of them developing countries) have either adopted the standard outright or followed a Basle-type approach in setting their national capital standards.

In each case, an international standard offered incentives for countries to make improvements that they might not have been able or willing to make unilaterally. Regulatory and supervisory reforms involve both costs and benefits, and coordination difficulties and asymmetric information can affect the incentives for undertaking such reforms. Increases in minimum capital adequacy standards are a good example of this incentive problem. Because equity holders are generally less protected from bank insolvencies than either creditors, they typically demand a higher rate of return than depositors or bond holders. As such, it is costly for banks to go to the market to increase their capital. Regulators' attempts to unilaterally increase minimum capital adequacy standards for national banks are likely to meet resistance because of charges that national banks will lose competitiveness to banks in other countries. But if authorities in the major financial centres agree to coordinate increases in bank capital requirements, then that opposition from national banks is apt to be much reduced (since the level playing field will be maintained).

It was apparently just such considerations that led to the 1988 Basle Capital Adequacy Accord. In the aftermath of the developing-country debt crisis, then-Federal Reserve Chairman Paul A. Volcker (along with other US banking regulators) was concerned that US money-

centre banks were undercapitalised. Also, US banks were losing business to internationally active Japanese banks — in part because the latter were subject to more lax capital requirements and lower funding costs. Volcker saw that a unilateral effort to increase capital requirements for US banks was encountering sharp domestic opposition (especially in the US Congress) because of considerations of international competitiveness. Meanwhile, the UK regulatory authorities were coming to the same diagnosis on capital, but were not happy with a bank capital proposal then being floated within the European Community. The result was first (in 1987) a US-UK agreement on minimal bank capital requirements, followed soon after by a G-10 agreement (i.e., the Basle Accord). This is another example of the broader proposition that international coordination can sometimes achieve outcomes that are not available with uncoordinated policy measures.

Turning to the payoff from regulatory reforms, a country that can convince creditors that such reforms have improved banking safety and soundness may be rewarded by a lower risk premium on its obligations. However, it may be difficult for creditors to verify on their own that the borrower has really undertaken serious reform — particularly if the borrower operates primarily in unfamiliar overseas markets. "False" reformers will be tempted to claim they have reformed their banking systems so that they too can benefit from lower funding costs. If the "true" reformers cannot somehow differentiate themselves from the impostors, the former will not be able to obtain the appropriate market payoff from regulatory reform, and, hence, may be discouraged from undertaking these reforms in the first place.

One potential solution to this asymmetric information or "lemons" problem is for true reformers to join voluntarily a "club" with demanding entry conditions and international monitoring of reforms. The club will then certify that its members are true reformers, enabling members to obtain the full market payoff. This rationale is often advanced to explain why borrowers might seek a credit rating from internationally recognised, private credit-rating agencies. But the same reasoning would apply to the IMF's SDDS, the G-30's guidelines, or an IBS. After all, one way to interpret a voluntary IBS is as a club for countries undertaking reforms of their banking systems and their supervisory arrangements. An IBS lends further credibility to banking reform efforts — much in the same way that IMF support lends credibility to national stabilisation programs. If the geographic coverage of private credit-

rating agencies continues to expand and if those firms prove adept at evaluating banks' creditworthiness, it may eventually become possible for the private sector to take over this certification process — but in the interim the best solution may be an IBS.

An IBS, with a reasonable transition period for implementation, would give those developing countries that are still in the planning stages of banking reform some concrete benchmarks and a fixed timetable to follow. For countries that were in the process of reform, it would provide a way of gauging progress. Countries whose banking systems and supervisory regimes already met or exceeded the standards would not be constrained by them and would receive assurance that their counterparts had taken measures to improve their creditworthiness. Together, these groups ought to make up a powerful constituency for an IBS.

4.2 What Should an IBS Include?

To be truly comprehensive, an IBS would need to specify guidelines for all the important aspects of banking supervision, including, inter alia: deposit insurance; lender-of-last resort operations; bank licensing and permissible banking activities; external audits; internal controls and internal audits; information requirements of bank supervisors; public disclosure; limits on large exposures and connected lending; capital adequacy; asset valuation and provisioning; foreign-exchange exposures; on-site banking inspections; legal powers and political independence of bank supervisors; the mix between rules and discretion in the implementation of corrective actions; globally consolidated supervision; cooperation (including exchange of information) between home- and host-country supervisors; and measures to combat money laundering. In addition, one would want to offer some guidance on the relevant infrastructure for good banking, including: interbank and government securities markets; payments, delivery, and settlement systems; and the legal and judicial framework.

Clearly, analysis of each of these elements would go beyond the scope of this study. I will therefore concentrate on *eight priority elements of an IBS, selected primarily for their past and potential contribution to banking crises in developing countries.* For each element, I attempt to convey the flavour of what should be required, along with some indication of which provisions might be reserved for the stricter

(upper-level) standard (if an IBS were designed as a two-level standard rather than a unitary one).

4.2.1 Public Disclosure

IBS participants should be required to publish timely and accurate information on the financial condition of banks so that both sophisticated professional investors and less sophisticated retail depositors can make an informed assessment of bank performance and profitability. At a minimum, such information should include a balance sheet, income statement, large off-balance-sheet exposures, and summary of major concentrations of credit and market risk.

This material should be prepared on a globally consolidated basis, in accordance with international accounting standards, and should be audited by a reliable independent external auditor.[15] There should be enough detail so that readers can gauge the breakdown between interest and non-interest income and expenses, the relationship between non-performing loans and loan-loss provisions, how well or poorly the bank is capitalised, and how profitable the bank is relative to its competitors (as revealed by traditional indicators, such as the return on equity, the return on assets, etc.). If a common format for such public disclosure of banks could be agreed, this, like a common international accounting standard, would be most welcome (since it would both reduce transaction costs and facilitate comparisons among banks within and across countries). IBS participants would agree to review their legal codes to ensure that banks are liable for serious penalties if they are found to have been issuing false or misleading information to the public.

For upper-level status, banks could also be required to display prominently their most recent ratings from internationally recognised credit-rating agencies (including any downgradings). If they have not

15. One problem here is that there are presently two competing international accounting standards: International Accounting Standards as drawn up by the International Accounting Standards Committee and Generally Accepted Accounting Principles (GAAP) used in the United States. Discussions are on-going among accounting bodies in the major industrial countries to see if agreement can be reached on a single international accounting standard. In the interim, use of either GAAP or international accounting standards might be acceptable for an IBS.

been rated, banks should disclose that fact. Upper-level participants would also commit to adopting public disclosure recommendations (jointly agreed by the Basle Committee, IOSCO, and the Eurocurrency Standing Committee) on the trading and derivative activities of banks and securities firms.

4.2.2 Accounting and Legal Framework

The aim here should be to move closer to internationally recognised loan classification and provisioning practices and remove undesirable legal impediments to the pledging, transfer, and seizure of loan collateral and to the statutory authority of supervisors to carry out their mandate.

IBS participants would agree to set out clearly the criteria and rules/practices they employ to classify loans, provision for loan losses, and suspend accrual for overdue interest. In classifying loans, participants would agree to give appropriate weight to an assessment of the borrower's current repayment capacity, to the market value of collateral, and to the borrower's past record, and they would not rely exclusively on the loan's payment status. Participants would also pledge to discourage and monitor accounting devices that facilitate the "evergreening" bad loans. The time a loan could be in arrears before it was classified as non-performing would be no longer than 150 days. For upper-level status, that time period could be 90 days. Each participant should have mandatory provisioning rules against bad loans. For upper-level status, participants would agree to meet an international provisioning standard (if one can be agreed); pending such an agreement, upper-level participants would maintain a provisioning coverage ratio (of loan-loss reserves to non-performing loans) not more than 10 percent below the Organisation for Economic Cooperation and Development (OECD) average for the previous five-year period.

On the legal side, IBS participants would review their legal and commercial codes to certify that laws governing bankruptcy and recovery and pledging of collateral (for bank loans) do not impose undue costs on banks. In addition, participants would confirm the legal authority of bank supervisors to carry out their responsibilities (e.g., issuance and revocation of banking licenses, requests for information, setting of prudential guidelines/

regulations, conducting on-site inspections, closure of insolvent banks, etc.).[16]

4.2.3 Internal Controls

Because of increased bank involvement in trading activities and the tremendous growth of complex financial instruments over the past decade, it is more difficult for bank supervisors and creditors to monitor accurately the risk profile of banks. During the same period, there have been several notable failures at financial firms (e.g., Barings, Daiwa, Sumitomo) where time-honoured principles of prudent risk management (e.g., separation of authority as between front- and back-office operations and awareness by senior management of the size of exposures) were violated. These developments underscore the importance of good internal controls at banks as the first line of defence against excessive risk taking — be it market risk, credit risk, legal risk, or operational risk.

Participating banks would agree to have available for inspection a clear written account of what procedures and safeguards are in place as part of their internal risk management. It should address how risks are measured and tracked in real time, which members of senior management and the board are responsible for oversight and for "pulling the plug" if actual exposures exceed prespecified limits, how exposure limits in the loan book and trading book are set, how different functional risks within the firm are segregated, how the consistency and accuracy of internal record keeping is cross-checked, the amount of capital that is available to cover losses in various risk categories, what backup there is in case of computer breakdowns or other information technology problems, and what safeguards have been introduced to discourage and detect fraud and money laundering. In addition, IBS participants should certify that a reliable, independent internal audit function is in operation. For upper-level status, participants would certify that banks with significant involvement in derivative markets are implementing the G-30 guidelines on risk management of derivatives, as well as the recommendations for combating money

16. A particularly important area here is the ability of supervisors to get the data they need to evaluate a bank, including data on off-balance-sheet and off-shore activities.

laundering promulgated by the Financial Action Task Force on Money Laundering.[17]

4.2.4 Government Involvement

State-owned banks and burdensome developing-country government involvement in privately owned banks have drained public finances and generated inefficient resource allocation in banking services. Despite this dismal track record, it is neither realistic nor desirable that an IBS call for immediate privatisation of all state-owned banks or mandate an end to all policy-directed lending in developing countries. After all, almost all countries have at some time intervened to influence the allocation of bank credit for what they deemed socially desirable purposes. Also, there may well be situations in developing countries where some government involvement can be legitimately defended.

But what an IBS can do is bring greater transparency and accountability to government ownership and involvement in the banking system. This should subject such operations to greater public scrutiny and make it more difficult to use the banking system as a quasi-fiscal device to circumvent legislative and political constraints on the budget. Moreover, an IBS can encourage financial institutions that operate with policy-based lending constraints to give greater weight to commercial considerations in their credit decisions, to avoid costly future bailouts. And an IBS can even ask governments to consider more carefully whether privatisation of some or most of their state-owned bank would not be in their long-term interest.

Toward this end, IBS participants would agree to:

- include in the government budget all government costs and quasi-fiscal operations that involve the banking system;
- annually publish data on non-performing loans in state-owned banks (on a basis that permits comparison with privately owned banks);

17. See Group of Thirty (G-30), Global Derivatives Study Group, *Derivatives: Practices and Principles,* Washington: Group of Thirty (1993); and Financial Action Task Force on Money Laundering (FATFML), *Report,* Paris (February 1990).

- disclose the nature and extent of government instructions to banks on the allocation of credit (be it in state-owned or privately owned banks);
- subject state-owned banks to an external audit by a private independent external auditor and publish the results of that audit; and
- direct state-owned banks to give due attention to creditworthiness in their lending decisions.[18]

For upper-level status, countries where state-owned banks account for a significant share of total banking assets would agree to review the costs and benefits of their state-owned banks, with an eye toward assessing the scope for privatisation of such institutions.

4.2.5 Connected Lending

IBS participants would establish an exposure limit on lending to connected parties, endorse the principle that lending to connected parties should be on terms that are no more favourable than those extended to non-related borrowers of a similar risk class, outlaw practices that make it difficult or impossible for supervisors to verify the accuracy of reported connected-lending exposure (e.g., use of fictitious names, dummy corporations, etc.), and publicly disclose the share of loans going to connected parties and the identity of large shareholders and their affiliations.[19] For upper-level status, participants would establish below-maximum-limit threshold reporting limits (to bank supervisors) off connected lending (to give supervisors advance warning of rapidly rising exposure to connected lending).

18. Kaufman urges developing countries where state-owned banks account for an important share of total bank assets to recapitalize all banks so that they are market -value solvent, privatize to improve the incentives for banks and to reduce political pressures, put in place an incentive-compatible safety net, and resist or minimize non-prudential regulations that focus on political, social, or other objectives. See Kaufman, George, "Lessons for Transitional and Developing Economies from US Deposit Insurance Reform", unpublished, Chicago: Loyola University of Chicago and Federal Reserve Bank of Chicago, 1996.
19. Exposure limits on connected lending should be additional to those on maximum exposure to a single borrower. According to a recent survey of the Basle Committee, 90 percent of countries do not allow lending to a single customer to exceed 60 percent of the bank's capital, and roughly two-thirds of countries maintain the stricter exposure limit of 25 percent of capital.

4.2.6 Bank Capital

Signatories to an IBS would adopt the existing 8 percent risk-weighted capital standard for credit risk, along with the recent amendment for market risk. To reflect the need for higher capital when the operating environment is relatively volatile, countries seeking upper-level status would apply a "safety factor" if their recent history of loan defaults, restructured loans, and/or government assistance to troubled banks was significantly higher than the OECD average over say, the past five years. This safety factor could possibly involve multiplying the level I capital requirement by 1.5, so that "volatile" countries would apply a minimum risk-weighted capital standard for credit risk of 12 percent. This approach would respect the principle of equal treatment. Any country — industrial or developing — that had a relatively volatile operating environment for its banks would apply the higher requirement if it wanted to meet the upper-level standard. Also, a country's actions to reduce that volatility (e.g., more stable macroeconomic policies) would, if sustained, eventually be reflected by a lower capital requirement. Much of this parallels the Basle Committee's approach to determination of regulatory capital for market risk.

4.2.7 An Incentive Compatible Safety Net and Resisting Pressures for Regulatory Forbearance

The aim here should be to retain the positive features of an official safety net for banks (i.e., discouragement of bank runs and limitation of systemic risk) while reducing its negative (moral hazard) effects (i.e., less market discipline from bank creditors, excessive risk taking by banks, increased costs for taxpayers, and delay in enforcing corrective actions on undercapitalised banks by financial regulators). To do that, the safety net must incorporate incentives that tilt the behaviour of the main players in the right direction.

The most promising approach to-date for designing an incentive-compatible official safety net is the system of structured early intervention and resolution (SEIR), put forward by Benston and Kaufman in the late 1980s and incorporated with some modifications in US banking legislation in the early

1990s.[20] The losses (at least $150 billion) incurred in the saving and loan debacle and the prospect of similar difficulties for US commercial banks supplied the political motivation for reform. The key legislative vehicle was the Federal Deposit Insurance Corporation Improvement Act (FDICIA) of 1991. The underlying strategy has two pillars: first, to maintain deposit insurance for banks but to use regulatory sanctions to mimic the penalties that the private market would impose on banks (as their financial condition deteriorated) if they were not insured, and second, to reduce greatly the discretion that regulators have in imposing both corrective actions and closure of a bank.

The safety-net reforms embodied in FDICIA legislation can be summarised as follows: (1) government deposit insurance is retained for small depositors;[21] (2) deposit insurance premiums paid by banks are risk weighted (depending on their capital and bank examination rating); (3) banks become subject to progressively harsher regulatory sanctions (e.g., eliminating dividends, restricting asset growth, and changing management) as their capital falls below multiple capital-zone tripwires; (4) by the same token, well capitalised banks receive "carrots" in the form of wider bank powers and lighter regulatory oversight; (5) regulators' discretion is sharply curtailed (with respect to initiating "prompt corrective actions" and resolving a critically undercapitalised bank at least cost to the insurance fund (least cost resolution); (6) effective 1 January 1995, the insurance fund is generally prohibited

20. Benston and Kaufman argue that while FDICIA was a big step forward in deposit-insurance reform, it should have set the capital-zone thresholds higher, used a simple leverage ratio to measure capital (rather than using both this ratio and the Basle risk-weighted one), embraced market-value accounting, established stiffer penalties for Federal Reserve lending through the discount window to banks that subsequently failed, made wider spreads between the deposit insurance premiums paid by the safest and riskiest banks, and given even less scope for discretion in applying prompt corrective action and least cost resolution. See Benston, George, and George Kaufman, "FDICIA after Five Years: A Review and Evaluation," paper presented at the Brookings Conference on FDICIA: Bank Reform Five Years Later and Five Years Ahead, *Journal of Economic Perspectives,* Washington, 19 December 1996.

21. The rationale for covering small depositors is that they might otherwise run into currency when banks get into trouble, they are generally less adept than large bank creditors in evaluating the true financial condition of banks and they have enough political muscle anyway to force the government to bailout their losses if they were not covered by insurance.

from protecting uninsured depositors or creditors at a failed bank if this would increase the loss to the deposit insurance fund; and (7) provision is made for a discretionary, systemic-risk override to protect all depositors in exceptional circumstances (when not doing so "would have serious adverse effects on economic conditions or financial stability") — but activation of this override requires explicit, unanimous approval by the most senior economic officials and subjects any bailout to increased accountability. Table 4.1 summarises the prompt-corrective action features of FDICIA.

Proponents of SEIR argue that it improves incentives on at least five counts. Because uninsured creditors of banks realise they will be at the end of the queue if a bank gets into trouble, they will monitor banks more assiduously, thereby enhancing market discipline. Because bank owners and managers know the penalties in advance if losses are sustained and banks become undercapitalised, they will be less inclined to engage in excessive risk taking and will not allow bank capital to fall too low. Because bank supervisors are largely obliged to prompt corrective action and least cost resolution, they will be less susceptible to pressures for regulatory forbearance. Because the most senior economic officials know that granting "too large to fail" assistance requires unanimous approval and involves increased public scrutiny, they will be dissuaded from doing so unless there is a clear systemic threat at hand. And because the explicit closure rule calls for resolving a failed bank while it still has positive net worth, losses to the deposit insurance fund should be small (thereby making it less costly to keep the fund fully funded).[22] In contrast, safety-net regimes that do not incorporate SEIR often leave a key question unanswered: What happens when bank capital drops below the regulatory standard?

FDICIA has been in operation for only five years, the US economy has not undergone a major cyclical downturn during that period, and no US money-centre bank has become critically undercapitalised during this period. In addition, broader economic factors have no doubt contributed to the recovery of the US banks and S&Ls. It is, therefore, too early to come to a definitive verdict on the effectiveness of FDICIA.

22. If the deposit insurance scheme lacks sufficient financial resources, even insured depositors may be tempted to run during periods of bank weakness; moreover, regulators will be more inclined to grant regulatory forbearance because there are insufficient resources to liquidate the bank.

Table 4.1

SUMMARY OF PROMPT-CORRECTIVE-ACTION PROVISIONS OF THE FEDERAL DEPOSIT INSURANCE CORPORATION IMPROVEMENT ACT OF 1991

Zone	Mandatory Provisions	Discretionary Provisions	Risk-Based Total	Risk-Based Tier 1	Leverage Tier 1
1. Well capitalised			>10	>6	>5
2. Adequately capitalised	1. No brokered deposits, except with FDIC approval		>8	>4	>4
3. Undercapitalised	1. Suspend dividends and management fees 2. Require capital restoration plan 3. Restrict asset growth 4. Approval required for acquisitions, branching, and new activities 5. No brokered deposits	1. Order recapitalisation 2. Restrict interaffiliate transaction 3. Restrict deposit interest rates 4. Restrict certain other activities 5. Any other actions that would better carry out prompt corrective action	<8	<4	<4
4. Significantly undercapitalised	1. Same as for Zone 3 2. Order recapitalisation a/ 3. Restrict interaffiliate transactions a/ 4. Restrict deposit interest rates a/ 5. Pay of officers restricted	1. Any Zone 3 discretionary actions 2. Conservatorship or receivership if it fails to submit or implement a plan or recapitalise pursuant to order 3. Any other Zone 5 provision, if such action is necessary to carry out prompt corrective action	<6	<3	<3
5. Critically undercapitalised	1. Same as for Zone 4 2. Receiver/conservator within 90 days a/ 3. Receiver if still in Zone 5 four quarters after becoming critically undercapitalised				<2

a/ Not required it primary supervisor determines action would not serve purpose of prompt corrective action, or if certain other conditions are met.

Source: Board of Governors of the Federal Reserve.

Nevertheless, the preliminary signs are encouraging. Not only are bank failures and bank problems down and bank capital and profitability up, but as shown in Table 4.2, a much higher share of uninsured depositors has gone unprotected since FDICIA came on stream. This is a strong signal that market discipline is beginning to bite.

Some exporting of FDICIA is already going on. In drawing lessons from its recent/on-going banking difficulties, Japan plans to establish a prompt-corrective-action system in April 1998, and the banking laws of some developing countries (e.g., Chile) contain significant precommitment features. With no superior alternatives out there for reforming official safety nets, FDICIA-like features (to combat moral hazard and regulatory forbearance) ought also be included in an IBS. For example, IBS participants could agree to make some corrective actions mandatory if bank capital dropped below the regulatory minimum, ensure there is a well defined closure rule/procedure for banks, make it publicly known that uninsured creditors (including sellers of interbank funds) stand behind insured depositors and the deposit insurance fund in being protected from bank losses, and require that granting of "too large to fail" emergency financial assistance to banks be publicly approved by both the governor of the central bank and the minister of finance.

4.2.8 Consolidated Supervision and Cooperation Among Host- and Home-Country Supervisors

The Basle Committee on Banking Supervision has been on target in insisting that: (1) all international banks be supervised on a globally consolidated basis by a capable home-country supervisor; (2) home-country supervisors be able to gather information from their cross-border banking establishments; (3) before a cross-border banking establishment is created, it receives prior consent from both the host- and home-country authorities; and (4) host countries have recourse to certain defensive actions (e.g., prohibit the establishment of banking offices) if they determine that conditions (1)-(3) are not being satisfied. Participants in an IBS should therefore agree to implement the 1992 Basle Minimum Standards.

Table 4.2
FDIC BANKS' RESOLUTIONS, 1986-1995
(by protection of loss of uninsured depositors)

Year	Number of Banks				Total Assets *(billions of dollars)*			
	Total	Protected	Not protected	Percentage not protected	Total	Protected	Not protected	Percentage not protected
1986	145	102	40	28	7.6	6.3	1.3	17
1987	203	152	51	25	9.2	6.7	2.5	27
1988	221	185	36	16	52.6	51.3	1.3	3
1989	207	176	31	15	29.4	27.2	2.2	8
1990	169	149	20	12	15.8	13.3	2.5	16
1991	127	106	21	17	62.5	60.9	1.6	3
1992	122	56	66	54	45.5	25.0	20.5	45
1993	41	6	35	85	3.5	0.2	3.3	94
1994	13	5	8	62	1.4	0.6	0.8	57
1995	6	0	6	100	0.8	0.0	0.8	100

Source: Benson, George, and George Kaufman. "FDICIA After Five Years: A Review and Evaluation." Paper presented at the Brookings Conference on FDICIA: Bank Reform Five Years Later and Five Years Ahead, *Journal of Economic Perspectives*, Washington, 19 December 1996.

V. CONCLUSION

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Delano Villanueva

In his Foreword to this volume, Andrew Crockett observed that the recent developments in Southeast Asia have underscored the importance and urgency of instituting fundamental reforms of the financial sector. He highlighted three areas for immediate action by governments, central banks and supervisory authorities: "(1) meaningful accounting standards and disclosure rules; (2) prudential rules requiring that financial and commercial transactions be made on an arms-length basis; and (3) efficient procedures for ensuring prompt remedial action to deal with problem banks."

The main themes of this volume are:

- financial system soundness and monetary and supervisory policies; and
- risk-based banking supervision.

5.1 Bank Soundness And Monetary And Supervisory Policies

It was clear from the presentations and discussions that price stability and financial stability as objectives of monetary management are mutually reinforcing. Banking activity in an inflationary environment tends to produce inefficient banks, and inefficient banks tend to be unsound. Conversely, a sound financial system is required for an effective and efficient transmission of monetary policy to the economy.

5.2 A Framework For Bank Soundness

The keynote address by Carl-Johan Lindgren identified the three pillars of banking soundness: market discipline, internal governance, and official prudential regulation and supervision. There is a consensus that official oversight should complement market forces, as illustrated by the Basle Committee's *Core Principles for Effective Banking Supervision*, referred to by Andrew Crockett in his Foreword.

Critical to the three pillars for financial stability are the timely availability of good data and information, international accounting and disclosure standards, the absence of government direct involvement in the banking system's credit decisions, and strict controls on connected

lending (accorded top priority by both Andrew Crockett and Morris Goldstein). The latter was forcefully illustrated by the presentations on Fiji, Indonesia, Korea, and Sri Lanka.

5.3 Risk-Based Banking Supervision

The contributions by William Ryback, Guy Saint-Pierre and Les Phelps emphasise the forward-looking character of risk-focused supervision. Standard quantitative measures such as the capital adequacy ratio are not forward looking; besides, they require a well-developed infrastructure, such as accounting, loan valuation, classification, provisioning, and legal standards, which are often lacking in developing economies. Thus, more emphasis should be made on not just what happened yesterday, but on what will likely happen tomorrow. Such a qualitative assessment of an individual bank's risk management and internal control systems is critical in bank supervision. As soon as the supervisor identifies weaknesses of those systems, Andrew Crockett's third piece of advice should kick in, that is, implement prompt remedial action to strengthen them. This is to minimise the ultimate costs of "fixing" the banking system and to safeguard systemic stability. Further, weaknesses in the internal control and risk management systems call for more extansive "transaction testing" (to use William Ryback's terminology) of significant activities of banking institutions.

5.4 The Case for an International Banking Standard

The last decade and a half have seen one banking crisis after another in developing countries. As a way to increase the scope and pace of banking reform in both developing and industrial countries, Morris Goldstein has argued reasonably well his case for a voluntary International Banking Standard or IBS. In evaluating the merits of an IBS in comparison with existing international agreements/standards, the following questions way be asked: (1) Is public disclosure encouraged?; (2) Are strict asset classification and provisioning practices recommended?; (3) Is there a strong advice to reduce excessive government involvement in the banking sector?; (4) Is there a recommendation to raise minimum capital higher than the minimum BIS requirements (8 percent) in developing countries and others with volatile enviroments?; (5) Are there incentive-compatible official safety nets?; (6) Is there protection against pressures for regulatory forbearance? Other issues relate to international monitoring of the standards and mechanisms to disqualify non-complying countries.

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LIST OF PARTICIPANTS

Moderators

Kim Olson
Secretary of Models Task Force and Co-Secretary of the Capital Sub-Group
Basle Committee on Banking Supervision
Basle, Switzerland

Delano Villanueva
Deputy Director (Research), SEACEN Research and Training Centre
Kuala Lumpur, Malaysia

Authors

J. S. Bohra
Chief Manager, Inspection and Supervision Department
Nepal Rastra Bank

Samart Buranawatanachoke
Deputy Director, Finance Companies Examination Department
Bank of Thailand

Andrew Crockett
General Manager
Bank for International Settlements
Basle, Switzerland

Foo-Yap Siew Hong
Director (Foreign Institutions), Banking and Financial Institutions Group
Monetary Authority of Singapore

Morris Goldstein
Dennis Weatherstone Senior Fellow
Institute for International Economics
Washington, D.C.

Yi-Hsiung Hsu
Director-General, Bank Examination Department
The Central Bank of China, Taipei

Abdul Murad bin Khalid
Assistant Governor
Bank Negara Malaysia

Moon-Ho Lee
Deputy Director, Supervision Policy Department
Office of Bank Supervision
The Bank of Korea

Carl-Johan Lindgren
Head, Banking Supervision and Regulation Division
Monetary and Exchange Affairs Department
International Monetary Fund

Ricardo P. Lirio
Managing Director (In-charge of Thrift Banks, Rural Banks and Non-Bank Financial Institutions)
Bangko Sentral ng Pilipinas

Les Phelps
Head of Bank Supervision Department
Reserve Bank of Australia

Y. A. Piyatissa
Director of Bank Supervision
Central Bank of Sri Lanka

Sada Reddy
Deputy Governor
Reserve Bank of Fiji

William A. Ryback
Associate Director, Division of Banking Supervision and Regulation
Board of Governors, U.S. Federal Reserve System

Guy Saint-Pierre
Senior Vice-President, Insurance and Risk Assessment
Canada Deposit Insurance Corporation

Maman H. Somantri
Deputy Director, Banking Regulation and Development Department
Bank Indonesia

Tan Wai Kuen
Officer-in-Charge
SEACEN Research and Training Centre

Delano Villanueva
Deputy Director (Research)
SEACEN Research and Training Centre

Participants

Mohd. Razif Abd. Kadir
Director, Bank Regulation Department
Bank Negara Malaysia

David Carse
Deputy Chief Executive (Banking)
Hong Kong Monetary Authority

Chan Yoon Cheong
Deputy Director, Banking and Financial Institutions Group
Monetary Authority of Singapore

Cheong Kwok Yew
Assistant Director (Training and Administration)
SEACEN Research and Training Centre

Do Van Kha
Assistant Manager, Bank Supervision Department
State Bank of Vietnam

Mohamad Daud bin Haji Dol Moin
Assistant Governor
Bank Negara Malaysia

Zakaria Ismail
Director, Banking Supervision I Department
Bank Negara Malaysia

Ricardo Tan
Executive Vice-President
Philippine Deposit Insurance Corporation

Wong Yew Sen
Director, Banking Supervision II Department
Bank Negara Malaysia

Observers

Teresa M. Curran
Asia Regional Manager
International Banking Supervision
Federal Reserve Bank of San Francisco

Joyce Cocker Mafi
Assistant Manager
Financial Institutions Department
National Reserve Bank of Tonga

Terry S. Schwakopf
Senior Vice-President
Banking Supervision and Regulation
Federal Reserve Bank of San Francisco