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STRENGTHENING THE BANKING SYSTEM IN CHINA: ISSUES AND EXPERIENCE

A joint BIS/PBC conference held in Beijing, China, 1–2 March 1999

BANK FOR INTERNATIONAL SETTLEMENTS
Monetary and Economic Department
Basel, Switzerland

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PREFACE

This conference was held in Beijing on 1 and 2 March 1999 and was organised jointly by the Bank for International Settlements and the People's Bank of China. The purpose of the conference was to bring together speakers who would not only be familiar with the experiences of many different countries, but who could also approach these policy issues from many different angles. Several pressing issues were addressed and the discussions, both in the conference itself and in the fringes of the meeting, were lively and frank. Its success owed much to the dedicated and very professional preparation by staff in the Training Centre and in the International Department of the People's Bank of China.

With the financial system undergoing radical reform, the authorities in China face important policy choices, both strategic and technical. In his opening address, *Governor Dai Xianglong* outlined the main issues facing China, explaining that (i) a healthy macroeconomic environment was indispensable; (ii) the nature of supervision of the financial system depended on a country's specific circumstances; and (iii) the developing financial industry had given rise to certain risks which the authorities were addressing in a forward-looking way. He outlined the important reforms of the administrative organisation of the People's Bank of China. He told the delegates that the discussions would be of great help to China's policy-makers in framing policy.

The pervasive linkages between macroeconomic policies and the banking system provided the focus for the first session. *Nicholas Lardy* traced the roots of the bad debts that weigh heavily on China's banks and said that recapitalisation raised several issues: how the underlying causes that had generated bad loans are being addressed; whether enough public funds are being devoted to deal with the true scale of the problem and how could this be financed; whether enough competition is being injected into the banking system; and, finally, what can be done to reduce the taxation of banks. *Rudi Dornbusch* and *Francesco Giavazzi* echoed Lardy's questions about the true size of bad loans in China and argued that restructuring should be accompanied by the development of

a deeper national capital market for both debt and equity. Enunciating a number of principles for successful bank restructuring, they stressed three needs: the need to separate money and credit creation from the finance of public sector deficits; the need for not-too-gradual reform; and the need for a strengthened supervisory system to precede any significant opening up of the external capital account. *Lawrence Lau* explored various ways of strengthening banks' balance sheets and suggested that China had adequate fiscal resources for this task: even including the entire stock of banks' non-performing loans, the public debt/GDP ratio would still be well below that in many other countries. He argued that banks should be wary of maturity mismatches and that they should balance long-term loans with long-term sources of finance. *YK Mo* argued that additional resources needed to be devoted to removing bad and doubtful loans from banks' balance sheets.

Lu Baifu stressed the need for self-development in a stable social and political environment. He said that macroeconomic powers belonged to the central government able to take decisions concerning the big picture but that microeconomic decisions could be decentralised. *Wu Jinglian* discussed policy options in the light of the macroeconomic conjuncture. But he put the emphasis on supply-side, rather than demand-stimulatory, measures: to encourage the development of small and medium private business; to strengthen the financial system; and to reform the state-owned enterprises.

The second session examined certain microeconomic issues, including the appropriate framework for financial supervision. *Chen Yuan* explained what the State Development Bank was doing to mitigate policy-oriented financial risks. He said that the SDB's project appraisal had been improved and more projects were now being rejected. *Roberto Zahler* drew on his experiences in Latin America, suggesting that the opening of capital markets had to be gradual. The speed, timing, intensity and sequencing of liberalisation policies made all the difference to success. *Jeffrey Carmichael* drew on Australia's recent experiences in redesigning its framework for financial supervision to argue that the regulatory structure should fit the country's stage of economic development. *Andrew Sheng* looked at financial supervision in a risk management framework and emphasised the dangers of leverage in finance. Stressing the importance of taking full account of financial institutions' vulnerability to macroeconomic risks that are hard to control in a global economy,

he raised the need to develop systems for national and sectoral risk management.

The third session examined the methodology of supervision of the financial sector. *Cai E-sheng* highlighted four major areas for attention: the unsound governing mechanisms of many financial institutions; the need to educate investors about financial risks; the quality of supervisory staff; and the mechanisms for problem institutions to exit. *Carol Sergeant* outlined the main causes of bank difficulties (e.g. management strategies that were misconceived, business that was not understood and organisational structures that did not work) and said that a supervisory system had to make sure that risks were properly managed. She suggested that the removal of "policy lending" from China's state banks was crucial if these banks were to operate on a commercial basis. *Michael Pomerleano* argued that off-site supervision had an important role to play and that there were many ways open to supervisors of verifying information about credits. *Danièle Nouy* explained some of the methodological issues raised in the Basel Committee's "Core Principles of Effective Banking Supervision". She said that a world-wide survey had shown that the shortage of skilled human resources was the most acute problem to be addressed and that supervisory agencies needed to be autonomous. *Nicholas Ketcha* summarised the FDIC's experiences with designing a deposit insurance scheme. Any insurance system, he warned, had to be designed to minimise moral hazard risks. *Brian Peters* focused on two risks particularly important for small and medium-sized institutions: credit risk and operational risk. He outlined the principles that can serve to evaluate a bank's internal control system.

The fourth session focused on the management of banking crises. *Kazuo Ueda* explained the difficulties that had beset policy-makers in dealing with Japan's bad loan problem: he warned about the dangers of undue delay. He argued that policy-makers had to choose between achieving a market-friendly regulatory framework (e.g. allowing bank depositors to lose money) and the maintenance of short-run stability in the financial system. *Yung Chul Park* analysed banking reform in Korea, and delineated several of the dilemmas that the Korean government is grappling with: he said that bank restructuring required effective corporate restructuring, which was proving difficult. He warned that the privatisation of commercial banks could lead to the foreign dominance of the banking system, raising sensitive social and political issues.

Stijn Claessens drew some general lessons from the experiences of Eastern Europe, Latin America and Scandinavia and outlined some of the constraints on systemic bank restructuring in China. *Liu Shiyu* examined China's experiences in the resolution of difficulties of small and medium financial institutions: he presented two case studies, one involving closure and the other financial assistance and rehabilitation.

A panel discussion chaired by *Tommaso Padoa-Schioppa* summarised perspectives on options for China's financial system. *Edgar Meister* considered several important requirements for effective bank supervision and suggested that a Central Credit Register could enhance transparency. *Akira Nagashima* repeated Kazuo Ueda's admonition that China avoid repeating the mistake of delay that Japan had made; he also said that foreign creditors of failed financial institutions should be treated transparently and equitably. *Roberto Zahler* warned that China should reform its banking system and develop a deeper capital market before further economic development led to a more open capital account. *John Heimann* explained how the Financial Stability Institute would work to help strengthen supervisory processes world-wide. He pointed out that foreign financial institutions could contribute much to China. *Xie Ping* outlined the key choices facing China including the ownership structure of financial institutions, the degree to which bank deposits by households should be guaranteed and the means of disposing of bad assets. *Dai Genyou* fully recognised the scale of the problems China faced but drew comfort from three favourable elements – the scope for strong and effective action by the State, China's dynamic growth rate and the high rate of private saving. The key task was to use these savings productively. *Tommaso Padoa-Schioppa* said that the effective supervision of banks was essential in a market economy and that the priority in China was to stop the losses of state-owned enterprises that produced the bad loans for banks.

Speaking at the closing of the conference, *Andrew Crockett* drew several conclusions. Dealing with the problem of non-performing loans required a comprehensive strategy that combined the willingness to use fiscal resources to clean up banks' balance sheets with the determination to make banks fully responsible for future lending. If reform and restructuring is pursued quickly and effectively, he was confident that the Chinese economic miracle would continue. In reply, *Liu Mingkang* thanked both Andrew Crockett, who had sponsored and initiated the meeting, and the speakers for their rich contributions. He said that the seminar had been very valuable for those responsible in China for banking reform, who would have to combine what they could learn from foreign experiences with what they knew of China's specific situation. In describing the challenges supervisors faced, he underlined China's strong commitment to the Basel Committee's Core Principles. "China tomorrow", he said "can be better only if we think harder, we learn harder and we respond quicker".

Participants in the meeting

Foreign experts

Jeffrey Carmichael, Chairman, Australian Prudential Regulatory Authority

Stijn Claessens, World Bank

Rudi Dornbusch, Professor, MIT

Francesco Giavazzi, Professor, Bocconi University

Nicholas Ketcha, former director of Supervision of the FDIC

Nicholas Lardy, Senior Fellow, Brookings Institution

Lawrence Lau, Professor, Stanford University

Edgar Meister, Member of the Board, Deutsche Bundesbank

Akira Nagashima, Executive Adviser, The Tokio Marine and Fire Insurance Co. Ltd

Tommaso Padoa-Schioppa, Executive Board Member, European Central Bank

Yung Chul Park, Professor, Korea University

Brian Peters, Vice President, Federal Reserve Bank of New York

Michael Pomerleano, Senior Capital Market Specialist, The World Bank

Ciro Schioppa, Senior Professional, International Relations Division, European Central Bank

Carol Sergeant, Director, Financial Services Authority

Andrew Sheng, Chairman, Securities and Futures Commission of Hong Kong

Kazuo Ueda, Member of the Board, Bank of Japan

Roberto Zahler, President, Zahler and Co.

Bank for International Settlements

Andrew Crockett, General Manager

John Heimann, Chairman, Financial Stability Institute

Robert McCauley, BIS Hong Kong Office

YK Mo, BIS Hong Kong Office

Danièle Nouy, Secretary General, Basel Committee

Luo Ping, Basel Commitee

Philip Turner, Head, Emerging Markets Secretariat

The People's Bank of China

Dai Xianglong, Governor

Liu Mingkang, Deputy Governor

Cai E-sheng, Assistant Governor

Dai Genyou, Director, Monetary Policy Department

Li Ruogu, Director, International Department

Wang Weiqiang, President, the PBC Chengdu Branch

Wang Xiaoyi, Director, Statistics Department

Wei Benhua, Director, International Department

Xie Hangsheng, Director, Training Center

Xie Ping, Director, Research Department

Guo Ligen, Deputy Director, Human Resources Department

Han Ping, Deputy Director, Banking Supervision Department I

Jin Qi, Deputy Director of International Department

Liu Shiyu, Deputy Director of Banking Supervision Department II

Tang Xu, Deputy Director, Training Center

Wang Ke, Deputy Director, Cooperative Financial Institutions Department

Zhang Xiaohui, Deputy Director, General Office

Government ministries

Gao Hucheng, Assistant Minister, Ministry of Foreign Trade and Economic Cooperation

Gui Shiyong, Minister, Research Office of the State Council

Jin Liqun, Vice Minister, Ministry of Finance

Li Jiange, Vice Minister, the Office of System Restructuring Office, the State Council

Lu Baifu, Vice Minister, Development and Research Center of the State Council

Shi Wanpeng, Vice Minister, the State Economic and Trade Commission

Wu Jinglian, Senior Research Fellow, Development and Research Center, the State Council

Zhai Ligong, Deputy Director-General, State Statistics Bureau

Zhou Daojiong, member of the Finance and Economic Subcommittee of NPC Standing Committee

Other financial institutions in China

Chen Yuan, President, State Development Bank

Dong Wenbiao, Vice President, Minsheng Banking Co.

Chen Xiaoping, Assistant President, China Everbright Bank

Meng Xiaobin, Vice President, China Agricultural Development Bank

Shi Chungui, Vice President, China Construction Bank

Wang Lianfu, Assistant President, CITIC Industrial Bank

Wei Shiwu, Assistant President, Agricultural Bank of China

Wu Xiaoping, Vice Chairman, China Insurance Regulatory Commission

Xiang Min, Vice President, Huaxia Bank

Yang Kaisheng, Vice President, Industrial and Commercial Bank of China

Yin Jieyan, Chairman, Board of Directors, Communications Bank

Zhao Ange, Vice President, Bank of China

Zhu Degui, Vice President, China EXIM Bank

OPENING ADDRESS

Governor Dai Xianglong

First of all, may I on behalf of the People's Bank of China express the warmest welcome to the foreign experts and Chinese participants attending this conference. My sincere gratitude goes to General Manager Crockett of the Bank for International Settlements, Professor Dornbusch from the Massachusetts Institute of Technology and Professor Giavazzi from Bocconi University for their enormous efforts for the successful convening of this conference.

The theme of the conference is experience sharing among the countries represented in the area of financial supervision and the discussion of how to deal with problem banks. The seminar, if well conducted, will be of great significance in strengthening China's financial supervision and promoting international cooperation among central banks and regulatory and supervisory authorities. I hereby wish you a successful conference. In reviewing the experiences and lessons in financial supervision, I believe several issues deserve much attention.

The financial industry can only develop in a healthy macroeconomic environment

The economy sets the tune, whereas financial developments interact with the economy. Although the central bank may adjust the money supply through monetary policy instruments, monetary aggregates eventually reflect the composite fund flows of the households, enterprises, commercial banks and the government agencies. Therefore, sound financial developments call for a healthy macroeconomic environment, in which the behaviour of the households, enterprises, commercial banks and the government is legally defined.

In creating such an environment, it is most important to maintain a reasonable relationship between the growth and structure of the economy and a sustainable level and structure of the external debt. The principle of gradualism should be applied to local currency convertibility.

During 1993–95, China managed to bring the serious inflation under control by tightening monetary policy and increasing effective supply. Since 1 May 1996, the People's Bank of China has cut interest rates on six occasions. Last year, the money supply was increased appropriately while more proactive fiscal policies were adopted. Both helped in fending off severe deflation and maintaining steady growth of the national economy. China encourages foreign direct investment, while striving to control the size and structure of its external debt and to increase its foreign exchange reserves. In 1996, China declared the current account convertibility of the renminbi and adopted the principle of gradualism with regard to capital account convertibility. These measures played an important role in promoting the steady development of the financial sector in China and staving off the direct blast of the Asian financial crisis. On the other hand, the legacy of the overheated real estate markets in 1992 and 1993, the abusive asset stripping and repayment evasion in the recent couple of years, citing enterprise restructuring as an excuse, and the high leverage ratio for state-owned enterprises are major sources of financial risk.

The financial supervision system should be developed in consistency with the specifics of the country in question

In recent years, against the backdrop of innovation and conglomeration in the financial industry, countries such as the United Kingdom, Japan and Korea have unified the various supervisory functions within a single agency. However, China chose a different approach. In a short period after 1987, we allowed securities houses, trust and insurance agencies to be set up within banks, amounting to a comprehensive banking system. Later the rules were revised to allow banks to invest in trust, securities and insurance companies. However, the practice proved to be unfair to smaller financial institutions and resulted in securities markets' risks spreading to the banking business of the same institution. In 1993, the segregation principle for the financial industry was formalised in the "Resolution on Financial System Reform" of the State Council. It was later documented as a legal provision in the Banking Law in 1995. Under the principle of business segregation, and in order to meet demands imposed by the development of the industry, the China Insurance Regulation Commission was established in 1998. At the same time, the

People's Bank of China transferred the duty to supervise the securities companies to the China Securities Regulation Commission. Thus, the three agencies under the State Council carry out their respective regulatory and supervisory responsibilities in the banking, securities and insurance industries.

In addition, the People's Bank of China underwent major reforms in its administrative organisation. At the headquarters, the supervision departments were reorganised so that the supervised are overseen from market entry, through business operation to market exit by the same supervisory group. The 31 provincial branches were replaced by nine regional ones to ensure the independence and fairness of the central bank in executing its duty. In this way, the supervisory resources can be deployed within a larger jurisdiction in a more unified and consolidated manner, with strengthened authority and improved efficiency.

China's financial industry has developed steadily with commensurate reforms

A comprehensive and forward-looking perspective is necessary in analysing the status of the financial industry. It is generally acknowledged that China's financial industry is developing with commensurate reforms. First, the financial system consistent with the socialist market economy has begun to take shape. Second, the financial industry has played an active role in controlling inflation and avoiding deflation. Third, the foreign exchange reserves are sufficient to more than cover one year's import payments. Fourth, public expectations are stable.

However, it should be noted that the financial industry is not at all free of problems and risks, the major ones being the excessively large proportion of savings in the money supply (RMB 5.4 trillion out of RMB 10.5 trillion), the high leverage ratio of the state-owned enterprises, the high ratio of non-performing loans of the state commercial banks and the insolvency of a handful of small- and medium-sized financial institutions.

The resolutions of the State Council lay down that China will adopt a number of measures to address these financial risks. First, the capital market will be developed to increase the capital of the SOEs and improve their creditworthiness and ability to fulfil their civil liabilities. Second, China will forge ahead with the reform of state commercial banks. Supervisory committees will be established to strengthen the external oversight of the state commercial banks. Prudential accounting

standards and the five-category asset classification approach will be adopted. A pilot project will be carried out to look into ways to recover non-performing assets through financial asset management companies so as to substantially reduce the ratio of non-performing assets by a large margin. Third, the urban and rural credit cooperatives will be properly managed and serve as cooperative financial institutions with the major equity holders, management team and clients from the local community. They will therefore be better placed to support the private sector and to resolve the financial risks. A deposit insurance scheme for the urban and rural credit cooperatives will be established. Fourth, the trust and investment companies will be rehabilitated under the principle of "trust as the core competence, business segregation, economy of scale and restructuring on a case-by-case basis". Fifth, the market exit mechanism for financial institutions will be improved. For financial institutions with payment difficulties, rehabilitation and rescue should take priority over closure and restructuring over bankruptcy. The closure and liquidation of Guangdong International Trust and Investment Company (GITIC) have evolved into a bankruptcy procedure. At any event, liquidation and repayment will be fair and transparent in compliance with relevant laws and regulations. Finally, international cooperation in financial supervision will be strengthened.

Recently, the East-Asian financial crisis and the consequent financial and economic panic have stimulated a heated discussion in the financial community on the pros and cons of financial globalisation. As a matter of fact, financial globalisation has helped as well as hurt the relevant countries, regions and the international community. The crux of the matter is that we should identify and weigh the pros and cons so as to make full use of the advantages and contain the disadvantages. We believe that facing the challenge of financial globalisation, the international community should join the efforts to build a new mechanism to fend off and address global financial risks, and that countries should strengthen their cooperation in financial supervision.

First, the International Monetary Fund, the World Bank and other international financial organisations should be reformed so that they manifest to a larger extent the principle of transparency and openness. The new system could thus facilitate effective communication, open dialogues and cooperation among the governments, the private sector and international organisations.

Second, in the course of economic and financial globalisation, the specifics of the developing countries should be taken into consideration and gradualism should be applied. On the other hand, the developed countries should, in the interest of the overall and long-term prospects of the world, shoulder more responsibilities in line with their economic strength to fend off the financial risks in the global arena.

Third, the oversight of international capital flows should be strengthened and a monitoring mechanism for short-term cross-border capital movements should be established. Sufficient financial resources should be made available to tackle the tremendous capital movements and short-term liquidity problems.

Fourth, the supervisory system of respective countries should be strengthened, with the Basle Accord at the core. Special attention should be paid to multinational financial institutions and cross-border operations. Not long ago, the Finance Ministers and Central Bank Governors of the G7 countries decided in their Bonn meeting to set up the Financial Stability Forum and the early warning mechanism for financial risks. We hope that this will pave the way for concrete results of international cooperation in financial supervision. Meanwhile, may I congratulate Mr Crockett on his appointment as the Chairman of the Financial Stability Forum. To conclude, I wish you a successful conference.

The challenge of bank restructuring in China

Nicholas R Lardy*

Creating a modern financial system is essential if China is to meet the central goal of its economic reform program – improving the efficiency with which capital is allocated and utilised. In the prereform era the rate of investment increased from about 25% of gross domestic product in the first Five-Year Plan (1953–57) to an average of just over 30% in the 1960s and 1970s. But the average annual rate of real growth fell from about 7 to 8% in the first Plan to only about 4% in the 1960s and 1970s, suggesting a marked deterioration in the efficiency of resource use. Deng Xiaoping began the process of economic reform in the late 1970s in order to raise economic efficiency.

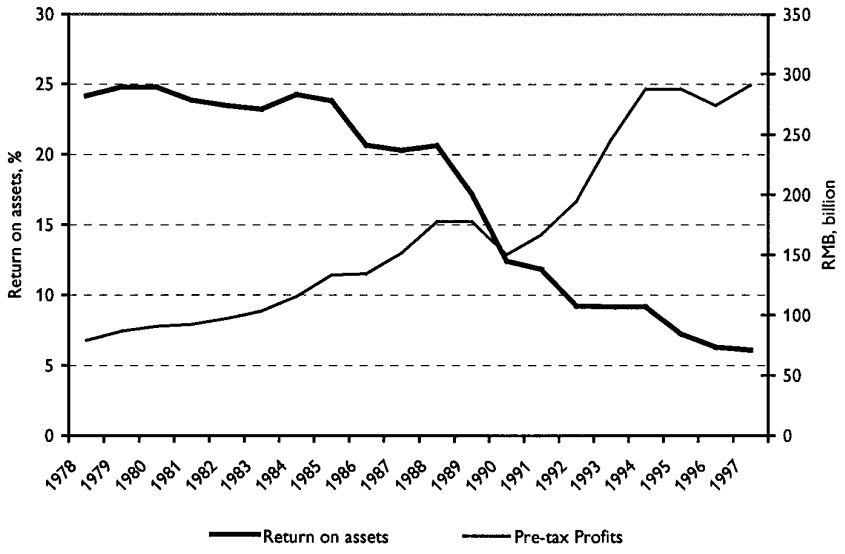
There is little doubt that the economic reforms initiated under Deng's leadership raised the efficiency of resource allocation and use in agriculture and in parts of the non-agricultural sector of the economy, contributing importantly to the marked acceleration of economic growth in the reform period. But a growing body of evidence suggests that state-owned manufacturing firms have not achieved comparable gains in the efficiency of resource use. Indeed, as shown in Diagram 1, while the absolute level of profits has increased significantly, efficiency has declined dramatically over time. The rate of return on assets (measured by pre-tax profits divided by the sum of the depreciated value of fixed assets plus working capital), which averaged 24–25% in the early years of reform, has declined continuously since 1985 and stood at only 6% in 1997.

The declining rate of return on assets in state-owned manufacturing firms has major implications for the health of China's financial system. Most obviously, a large and growing share of state-owned firms are

* This paper draws on Nicholas R Lardy, *China's Unfinished Economic Revolution* (Washington: Brookings Institution Press, 1998). A translation of this book has been completed by economists at the State Council's Development Research Center and will be published by the Development Press under the title *Zhongguo wei wancheng jingji de geming*. Except when other sources are cited, all data in this paper are taken from primary Chinese sources cited in full in this book.

Diagram 1

Profitability of state-owned industrial enterprises

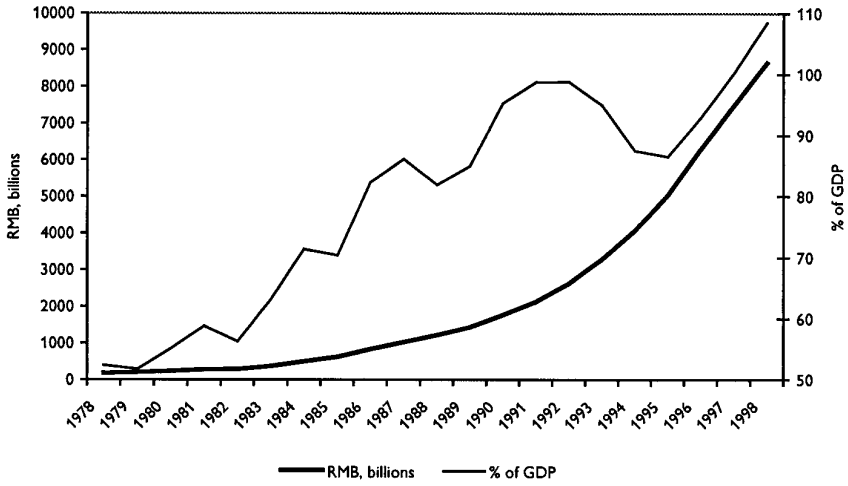


unable to service their borrowing, contributing to declining profitability, declining capital adequacy and an increasing share of non-performing loans for the largest state-owned banks. Less noticed, this negative feedback from a declining rate of return on assets to diminished performance of the financial system has increased over time. The reason is that state-owned firms have become increasingly dependent on credit to finance their activities. As recently as 1987, state-owned manufacturing firms were able to finance about three-fifths of the sum of their reported investment in fixed assets and increased working capital from their after-tax retained earnings. By 1996, because the return on assets had plummeted, the share of investment these firms could finance from their after-tax retained earnings had dropped to only one-tenth. Thus, these firms have become ever more dependent on credit to finance their activities. I use the word activities rather than investment because it appears that a significant share of the funds state firms borrow from banks is used to pay for workers' wages and pensions, taxes and other items that are not normally financed with loans for fixed asset or working capital investment.

The growing demand by state-owned firms for credit is so great that state-owned banks have not been able to diversify their lending away from state-owned firms towards private firms. At the end of 1995, for example, the outstanding borrowing of state-owned enterprises stood at RMB 3.36 trillion, 83% of all bank loans outstanding. Bank lending for fixed asset investment is especially highly directed to state-owned firms. For example, more than 90% of all fixed asset lending by the Industrial and Commercial Bank of China from 1980 to end-1995 was to state-owned firms. While the share of industrial output produced by state-owned firms has fallen dramatically since the onset of reform, these firms continue to have a disproportionately large claim on lending by banks and most other financial institutions. Indeed, the massive fixed asset investment program the Chinese government initiated in 1998 has substantially increased the share of investment flowing to state-owned firms.[1]

Diagram 2

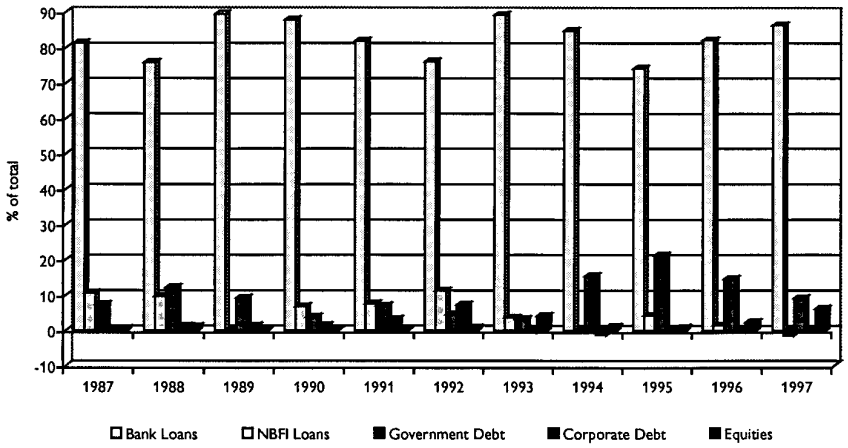
Loans by financial institutions (1978–98)



[1] Fixed asset investment undertaken by state-owned units in 1998 was RMB 2,150 billion, or 75%, of total fixed asset investment of RMB 2,868 billion. In 1997, the comparable numbers were RMB 1,762 billion, of a total of RMB 2,494 billion, or a 71% share. *People's Daily Online*, 31 December 1998.

Diagram 3

Domestic financial intermediation in China by type



The confluence of these factors underlies the more than doubling in domestic credit outstanding relative to China's gross domestic product, from about 50% in 1978 to an estimated 108% at year-end 1998. As can be seen in Diagram 2, almost half of this increase came in the last three years.

One critical step in improving the efficiency of resource allocation and use is the creation of a modern, commercially oriented banking system. The reasons are simple. First, China's existing financial system is dominated heavily by banks. As shown in Diagram 3, their share of financial intermediation is almost nine-tenths and shows no declining trend over the past decade; indeed, it actually increased slightly between 1987 and 1997. Nine-tenths is a ratio higher than that found anywhere else in Asia, a region where banks generally dominate financial systems. The role of capital markets in China is unusually small. Equities and corporate debt combined accounted for only 0.7% of all financial intermediation in 1994–96. The role of equity markets expanded somewhat in 1997 but appears to have fallen back in 1998.

Second, the eventual development of capital markets depends critically on a financially healthy, commercially oriented banking system. Capital markets rely on well-functioning banks to process payments and act as custodians. China also needs to create a capital market to

compete with banks in the allocation of investment resources. Bonds can be a more effective instrument than bank loans in providing long-term capital for infrastructure and other projects with long gestation periods. For manufacturing enterprises, equity markets can provide an alternative to bank financing, the latter usually geared more to providing short-term funding, thereby allowing enterprises to achieve a more balanced financing structure. Bonds and equities can offer a better return to savers, helping to maintain a high saving rate. Under some institutional arrangements, the role of capital markets can be quite large, even exceeding that of banks. Even when capital markets are small, their presence can increase competition in financial markets and stimulate banks to allocate investment resources more efficiently.

Performance of the financial sector

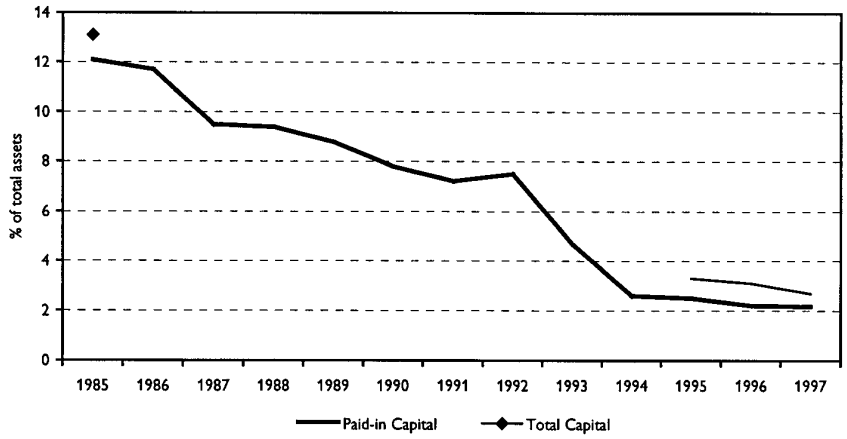
By every available measure – capital adequacy, loan loss reserves relative to assets, profitability, the magnitude of non-performing loans – the performance and health of China's financial sector has deteriorated dramatically in recent years. The deterioration is particularly clear for the largest state-owned banks, which despite the creation of a large number of new banks and other financial institutions still account for more than three-fifths of the assets of the entire financial system. Although it is less well known, some of the newest banks, as well as a broad range of non-bank financial institutions, are also extraordinarily weak. This was reflected in the failure of the China Agricultural Development Trust and Investment Company in January 1997, the Hainan Development Bank in June 1998, and the Guangdong International Trust and Investment Company (GITIC) in October 1998. The data reviewed below suggest similar problems exist in other types of non-bank financial institutions as well.

Capital adequacy

The officially reported paid-in capital of China's four largest state-owned banks has been declining relative to bank assets for years and is now surprisingly small. Between 1985 and 1997, the assets of these banks grew more than five times as rapidly as their paid-in capital. Thus, paid-in capital, which in China corresponds closely to Tier 1 capital in the Basel

Diagram 4

Capital of specialised banks (1985–97)



Accord, fell from 12.1% of assets at year-end 1985 to 2.2% of assets at year-end 1997.[2]

The story is the same if one adds retained profits and other surpluses to paid-in capital, creating a measure of net worth that is roughly comparable to the sum of Tier 1 and Tier 2 capital. In 1985, the four largest state-owned banks had a net worth of RMB 84.8 billion, an amount equal to 13.2% of assets. By year-end 1997, their net worth had risen to RMB 273.9 billion, but was equal to only 2.7% of the much larger stock of bank assets.

The trend of declining capital adequacy, measured by both Tier 1 capital and the sum of Tier 1 and Tier 2 capital relative to assets, is reflected in Diagram 4.

The total capital of the Agricultural Development Bank, one of the three more recently created policy banks and now China's fifth largest financial institution, is even smaller, only 1.85% of assets at year-end 1996.[3]

As will be seen below, even these figures provide an optimistic assessment of the financial health of the banking system. Bad debt on the

[2] All capital adequacy figures cited in this paper are capital divided by assets, i.e. they are not risk-weighted.

[3] *Almanac of China's Finance and Banking 1997*, p. 502.

balance sheets of the banks substantially exceeds the reserves that are available to write off non-performing loans, implying that such write-offs would have to come out of the banks' own capital.[4] Second, not all of the largest state-owned banks report their financial results on a consolidated basis, allowing them to conceal losses in the profit and loss statements of subsidiary companies.[5]

Provisions for loan losses

Provisions set aside by the four largest state-owned banks to cover potential loan losses are minuscule. Cumulative provisions at the Construction Bank and the Agricultural Bank of China at year-end 1996, for example, were 0.58% and 0.47%, respectively, of these institutions' outstanding loans. Provisions relative to outstanding loans fell sharply in 1997 to 0.13% and 0.39% for the two banks, respectively.[6] For the largest bank, the Industrial and Commercial Bank, the figures are only slightly higher, 0.70% and 0.39% in 1996 and 1997, respectively.

Profitability

As shown in Diagram 5, profitability reported by China's largest financial institutions has been falling for more than a decade. Reported profits rose from RMB 13.103 billion in 1985 to RMB 20.518 billion in 1997. Return on assets, however, fell from an average of about 1.4% in 1985–87 to an average of well under 0.3% in 1995–97.[7] In short, loans and thus assets have grown rapidly while profits have grown much more slowly.

[4] All of the reserves for non-performing loans Chinese banks hold are included in their net worth. Thus, Chinese practice diverges substantially from the international norm, under which only reserves not ascribed to particular non-performing assets are counted as part of a bank's own capital.

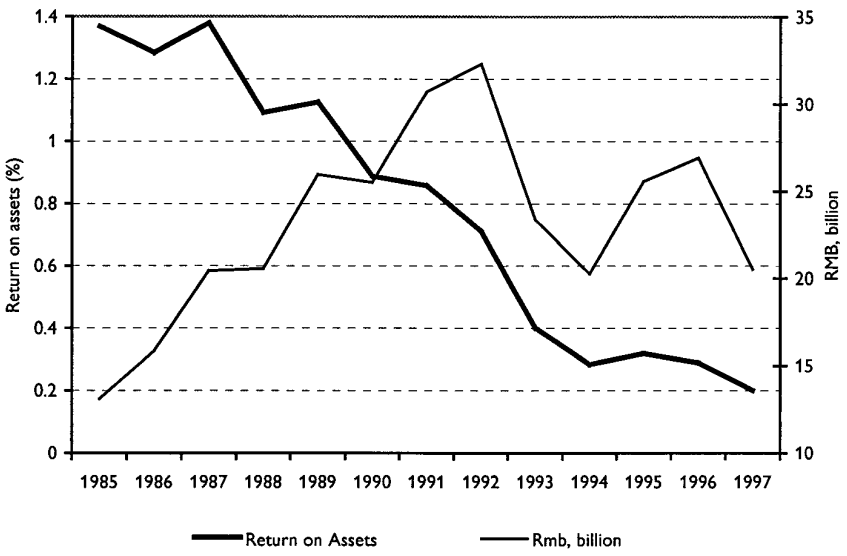
[5] The Bank of China has historically reported its results on a consolidated basis. The Agricultural Bank began doing so in 1996, the Construction Bank in 1997. The Industrial and Commercial Bank has yet to report its results on a consolidated basis.

[6] The numbers for both banks for 1997 are on a consolidated basis. In the preceding year, provisions of the Construction Bank were 0.62% on a consolidated basis, slightly higher than the 0.58% previously cited, which was on an unconsolidated basis. The 0.47% and 0.39% figures are directly comparable since both are on a consolidated basis. China Construction Bank, Annual Report 1997, p. 48. Agricultural Bank of China, *Annual Report 1997*, p. 35.

[7] The analysis here is based on rate of return on assets. Since Chinese banks have relatively little equity, rates of return on equity that could be calculated would be somewhat misleading. Nicholas R Lardy, *China's Unfinished Economic Revolution*, p. 100.

Diagram 5

Pre-tax profits of China's specialised banks (1985–97)



Moreover, Chinese banks vastly overstate their profits. This arises primarily because of the practice of capitalising interest payments and accruing interest on non-performing loans. For example, while loans are classified as "past due" (yuqi daikuan) as soon as any scheduled interest payment or repayment of principal has been missed, the largest state-owned banks have been required to accrue interest for two years after a loan is classified as "past due".[8] Recording accrued interest as income results in a vast overstatement of income and thus real profits as well. It appears that the banks do not go back and restate their earnings, even when the actual interest payments are never forthcoming from borrowers. Equally common, loans are rolled over and the interest due is capitalised and recorded by the banks as income.

[8] Some of the newer, smaller institutions have more conservative accounting practices. The Bank of Communications, for example, only accrues interest on loans overdue for less than one year. Bank of Communications, *Bank of Communications 1997 Annual Report* (Shanghai, 1998), pp. 29 and 32. It appears that the largest state-owned banks reduced the accrual period to one year beginning in 1998.

The most systematic evidence on this practice is for the China Construction Bank (CCB). For the four years 1993–96, the CCB reported annual profits that cumulated to RMB 11.608 billion. If income is reduced by the amount of accrued interest, however, over this period the bank actually lost RMB 22.410 billion. In 1994, the year of the greatest disparity, actual losses (i.e. the level of reported profits minus interest income recorded but not actually received) were almost three times reported profits.[9]

For one year, more comprehensive information on unpaid interest is available. In 1996, state-owned firms paid only RMB 134.2 billion of RMB 468 billion in interest that was due on loans from banks. I estimate that the portion of this unpaid interest that the four largest state-owned banks may have accrued under the regulations then in effect was equivalent to five times their reported pre-tax profits.[10]

A second reason income is overstated is inadequate provisioning for non-performing loans. If the four largest state-owned banks had made additional annual provisions as small as 1% of their new loans in 1995, that would have reduced reported pre-tax profits by one-quarter.

Third, China has no deposit insurance scheme. If China's four largest state-owned banks in 1995 had made deposit insurance contributions of only 0.2% of their deposits, the same proportion the Japanese Ministry of Finance has required of Japanese banks since late 1995, that would have reduced their reported pre-tax profits by one-third.

Fourth, in the absence of universal consolidated financial reporting, some banks continue to overreport their profits if their subsidiaries have lost money. This is not unlikely since bank subsidiaries include securities

[9] Li Xinxin, "Looking at China's Hidden Financial Danger from the Perspective of the East Asian Financial Crisis: An Analysis of the Utilisation and Management of Assets by China's State-Owned Commercial Banks", *Gaige (Reform)*, 1998, No. 3, p. 33.

[10] Total unpaid interest was RMB 333.8 billion. I assume that the amount that was unpaid to the four largest banks was proportional to their share of total credit extended by the financial system, which was about three-quarters. Of this amount, RMB 250 billion, about 55% was eligible for accrual (overdue for less than two years). Thus the amount of unpaid interest due from state-owned firms to the four largest banks that should have been accrued was five times their reported pre-tax profits of RMB 26.9 billion. This is probably an underestimate since state-owned firms borrow disproportionately from the four largest state-owned banks, and thus three-quarters is probably an underestimate of the share of unpaid interest that was due to those four large banks.

firms, trust and investment companies, and other institutions that in recent years have increasingly engaged in risky businesses.[11]

Fifth, in recent years as much as one-half of reported bank profits have been due to special injections of funds provided by the Ministry of Finance to the banks to help offset the increased interest expenditures they have incurred as a result of an indexing scheme introduced in 1993 to prevent disintermediation in the face of substantial inflation.[12]

Taking all these factors into account, there is little doubt that China's four largest banks, as a group, have operated heavily in the red beginning in the mid-1990s, if not earlier.

Non-performing loans

The quality of the loan portfolios of most Chinese financial institutions has deteriorated dramatically in the 1990s. The best data available to outside observers are for the four largest state-owned banks. Central bank governor Dai Xianglong and other high ranking officials in China's financial system have stated that "non-performing loans" (buliang diakuan), as a share of their total loans, increased from 20% at year-end 1994 to 22% at year-end 1995, and then to 25% at year-end 1997. Moreover, it appears that the share of non-performing loans that is accounted for by the most impaired categories of non-performing loans has increased. Specifically, the sum of the share of loans that are outstanding to firms that have already gone through bankruptcy and been liquidated without the banks recovering any of their outstanding loans, so-called "dead loans" (daizhang daikuan), and loans that are two years or more overdue, so-called "doubtful loans" (daizhi daikuan), increased by at least

[11] This is not true for the Bank of China, the only major bank that has regularly reported its results on a consolidated basis. The bank's subsidiaries appear to be highly profitable. For example, in 1997 the after-tax profits of the bank alone were RMB 3,935 million. Inclusive of wholly owned subsidiaries, after-tax profits were RMB 9,338 million (Bank of China, *Bank of China Annual Report 1997* (Beijing, 1998), pp. 31 and 35). The main wholly owned subsidiaries of the bank are involved in investment banking outside China. These include the Bank of China International in London and the China Development Finance Co. (HK) Ltd. the Bank of China Group Securities Co. Ltd., the Bank of China Group Investment Co. Ltd. and the China Construction Investment Management Co. Ltd., all in Hong Kong.

[12] For example, the message of the president of the Construction Bank in the bank's 1995 annual report stated that although the bank's profits were only RMB 3.38 billion, deposit index subsidies received from the treasury allowed the bank to report total pre-tax profits of RMB 6.3 billion.

half between year-end 1994 and year-end 1997.[13] The share of non-performing loans falling into the least impaired category, "overdue loans" (yuqi daikuan), loans on which interest or principal has not been paid for up to two years, fell correspondingly.

Data available to outside observers that reflect the quality of assets at other banks are more limited. But it appears almost certain that the quality of assets in some of these institutions is even lower and has deteriorated even more rapidly than in the four largest state-owned banks. For example, the Agricultural Development Bank, created only in 1994, has grown extremely rapidly and emerged as China's fifth largest bank, with assets in excess of RMB 710 billion by year-end 1996. But as its assets have expanded, their quality has deteriorated even more rapidly. The acknowledged share of non-performing loans surged from 20% at year-end 1995 to 26% at year-end 1996 and then reached 27% by end-February 1997.

Although most of them do not report any information on the quality of their assets, some of the new smaller national and regional banks may also have high ratios of non-performing loans. This assessment is based on the riskiness of the loan portfolios of these institutions. One example of a small national institution is the Huaxia Bank, which was established as a wholly owned subsidiary of the Shougang Group in 1992. As such, it functioned as the financial arm of Shougang, a widely diversified conglomerate with interests spanning shipping, mining and electronics as well as steel. Prior to the bank's reorganisation in late 1995, related-party lending amounted to 60 to 70% of Huaxia Bank's total loan portfolio, a ratio that is not believed to have shrunk significantly, at least in the first year after its reorganisation in November 1995.[14] As has frequently been noted, "connected lending compromises objectivity in credit assessment and produces undue concentration of credit risk" and has been an important contributory factor to past banking problems in many countries.[15]

[13] Ye Hongyan, "Recognising the Current Crisis of Bad Loans in China's Financial Structure," *Ta Kung Pao* (Hong Kong), 20 January 1998. Ye's article is based on an extensive interview with Dai Xianglong, Governor of the People's Bank of China.

[14] Thomson Bankwatch, *Hua Xia Bank-Company Report*, 24 January 1997.

[15] Morris Goldstein, *The Case for an International Banking Standard* (Washington: Institute for International Economics, 1997), p. 15.

Examples of weak regional banks include Pudong Development Bank, Shenzhen Development Bank and Guangdong Development Bank. Each of these institutions appears to have substantial loan exposure to property developers in local real estate markets that are vastly overdeveloped, as reflected in unusually high vacancy rates. Because their loan portfolios have little or no geographic diversification, they are quite vulnerable to the real estate shakeouts that appear to be inevitable, particularly in Pudong and Shenzhen.

Asset quality of China's non-bank financial intermediaries, which account for about one-fifth of the assets of the financial system, is significantly lower than that of the large state-owned banks. By the end of 1996, their non-performing assets were about 50% of their total assets.[16] Asset quality of these institutions, particularly trust and investment companies and rural credit cooperatives, appears to be worsening rapidly.[17] Many trust and investment companies in the 1990s reduced their traditional lending and investment activities and increased their exposure to property development and stock brokerage. In addition to shifting into these riskier activities, most trust and investment companies have significantly increased their off-balance sheet exposures, mostly in the form of loan guarantees. GITIC, for example, by year-end 1997 had extended guarantees equal to almost five times its own capital! Finally, most international trust and investment companies have built up huge unhedged foreign currency exposures. Most of their lending is denominated in foreign currencies. But most of their borrowers have insignificant foreign exchange revenues, meaning that a currency devaluation that eroded the repayment ability of the borrowers would ultimately be reflected in the financial soundness of the trust and investment companies themselves. These problems are acute, in part because of inadequate supervision and regulation of trust and investment companies. Although they are nominally regulated by the central bank, in Moody's judgement the trust and investment companies exist "largely in a regulatory vacuum".[18]

[16] Li Xinxin, "Looking at China's Hidden Financial Danger from the Perspective of the East Asian Financial Crisis", p. 31.

[17] Moody's Investors Service, *Banking System Outlook: International Trust & Investment Corporations (ITICs) in China, Awkwardly Embracing a New Reality* (New York, April 1998).

[18] Moody's Investors Service, *Banking System Outlook*, p. 11.

This judgement is borne out by a number of failures of trust and investment companies, including most notably the China Agriculture Development Trust and Investment Company, which was directly controlled by the Ministry of Agriculture. When it was closed by the People's Bank in January 1998, it was China's second largest trust and investment corporation, with assets of RMB 29.9 billion at year-end 1995.[19] Although it was established in 1988 to oversee the disbursement of loans from the World Bank and other international agencies, it later moved into a range of riskier activities, including property development, securities trading and commodity speculation. Its demise was reported to be due in part to losses on speculation on the price of sugar in the international market.[20]

Rural credit cooperatives are yet another little-noted example of weak non-bank financial institutions. By year-end 1996, their non-performing loans comprised 38% of their total loan portfolios. Twenty-six thousand cooperatives, over half of the total of 49,692 rural credit cooperatives then in existence, were running in the red, with reported losses of more than RMB 14 billion in the same year.[21] The central bank has sought to improve its supervision and regulation of this sector and "comprehensively deal with those rural credit cooperatives facing high risk exposure and insolvency".[22] It is difficult for outside observers to judge the progress of this effort.

Any assessment of the magnitude of non-performing loans in the financial system must also take into account the leniency of China's loan classification system compared with standard international practice. The People's Bank began to introduce important reforms of the loan classification system in 1998. The data cited above are based on the old system, which had several obvious shortcomings. First, the loan classification system was based on payment status, rather than risk.[23]

[19] 1995 was the last year for which financial results were reported. *Almanac of China's Finance and Banking 1996*, p. 518.

[20] Ian Johnson, "Beijing Plans to Shutter Some 150 Trust Companies", *Asian Wall Street Journal*, Weekly Edition, 12 January 1998, p. 11.

[21] "The Green Book Points Out: Take Precautions Against and Resolve Rural Financial Risk", *Zhongguo xiangzhen qiye (China's Rural Enterprises)*, No. 8, 1998, p. 38.

[22] People's Bank of China, *China Financial Outlook* '98, p. 32.

[23] A risk-based classification scheme is reportedly already in use in the State Development Bank and is to be broadly adopted by all banks by the end of 1998. Yang Shuang, "Renhang banbu 'daikuan fengxian fenlei zhidao yuanze' (shi xing)" (People's Bank Promulgates "Guiding Principles in Risk-Based Loan Classification" (Implementing Provisions)), *Jinrong shibao (Financial News)*, 24 April 1998, p. 1.

Thus, in the case of multiple loans to a single borrower, individual loans were classified as non-performing only as the contractual terms of each loan were violated. By contrast, in a risk-based system all loans to a single borrower are classified as soon as the borrower is out of compliance with the terms of any single loan agreement.

Second, compared with international standards, Chinese banks were allowed to delay classifying loans as non-performing, primarily because classification was generally tied only to repayment of principal and many loans were bullet loans on which no repayment of principal was required until the end of the loan term.

Finally, the most glaring discrepancy compared with international practice was that the most impaired category of non-performing loans was loans on which banks had recovered no funds, even after the borrower had declared bankruptcy and had gone through liquidation. Two per cent of all loans outstanding fell into this category in the mid-1990s. The practice of delaying the complete write-off of loans not repaid from the proceeds of the liquidation of a borrower is unknown in financial systems in which banks are solvent.

The net effect of these shortcomings is that at least until end-1997 China's own published figures on non-performing loans were biased downwards, possibly by a large margin. Particularly during a period of declining asset quality, China's long-standing methodology almost certainly understated the rate at which non-performing loans were accumulating in the banks.

Implications

The data on capital and non-performing loans reviewed above suggest that in the mid-1990s China's four major banks as a group had a negative net worth and thus were insolvent.[24] The officially reported total net worth of the four big state-owned banks at year-end 1995 was only RMB 269 billion. If we deduct the value of "dead loans" (daizhang daikuan), on which the recovery rate is already known to be zero, the net worth of these institutions would be only RMB 191 billion. Not taking into account any off-balance sheet liabilities, if the ultimate

[24] Li Xinxin ("Looking at China's Hidden Financial Danger from the Perspective of the East Asian Financial Crisis", p. 32) is one of the few Chinese authors who has explicitly acknowledged that the liabilities of the four largest state-owned banks exceed their assets.

recovery rate of the remaining classified loans was less than three-quarters, the magnitude of loans remaining to be written off would exceed the net worth of these banks. Based on international experience with banking crises and the low recovery rate that Chinese banks have achieved in recent years when enterprises have gone through bankruptcy and liquidation, it is extremely unlikely that the ultimate recovery rate on the past due and doubtful loans of Chinese banks will even approach three-quarters.[25]

Liabilities also exceed assets in large portions of most of the rest of China's financial system. China's largest policy bank – the Agricultural Development Bank of China – had acknowledged non-performing loans at year-end 1996 that were 12.3 times the bank's own capital, almost certainly making it insolvent.[26] Many non-bank financial institutions, where non-performing assets average 50%, are almost certainly bankrupt. This problem is most clearly evident for rural credit cooperatives and trust and investment companies. For example, at year-end 1996 the non-performing loans outstanding from rural credit cooperatives were equal to 4.37 times the cooperatives' own capital, implying a high probability of insolvency for the system as a whole.[27] Some finance companies and securities firms probably also have liabilities exceeding their assets.

While large parts of China's financial system, particularly its largest state-owned banks, are insolvent, they are not illiquid. Three factors in combination have thus far allowed insolvent banks to continue to operate. The first is the rising rate of national saving in the reform period. The rate was about 30% of gross domestic product at the outset of reform but had risen to 40% or slightly more by the mid-1990s. Second, the sources of savings have shifted dramatically, so that by the mid-1990s households accounted for about half of all savings, compared with their negligible share at the outset of reform. Third, given the tiny

[25] In 1995 and the first three quarters of 1996, for example, the Industrial and Commercial Bank recovered only about 15% of its outstanding loans to more than 5,000 enterprises that went bankrupt and were liquidated.

[26] The bank's total loans, of which 26% have been acknowledged to be non-performing, were RMB 624.8 billion while its total capital was only RMB 13.2 billion. *Almanac of China's Finance and Banking 1997*, p. 502.

[27] Loans outstanding at the end of 1996 from rural credit cooperatives were RMB 628,984 billion, of which 38%, or RMB 239 billion, were non-performing. The own capital of the rural credit cooperative system was only RMB 54.77 billion. *Almanac of China's Finance and Banking 1997*, pp. 452 and 563.

size of China's bond and equity markets and the absence of capital account convertibility, households have had little choice but to hold financial assets either in currency or bank savings deposits denominated in local currency. The combination of these three factors has meant that ever growing amounts of household savings flow into the banks each year. For example, in 1997 households added RMB 787.99 billion to their savings accounts in banks, which reached a cumulative year-end value of RMB 4,693.65 billion.[28]

China's bank recapitalisation programme

Chinese leaders clearly recognise that the combination of insolvent but not illiquid banks and other financial institutions is not sustainable. Since they do not contemplate allowing state-owned banks or other state-owned financial institutions to default on their financial obligations to households, they plan to restructure and recapitalise the financial system. Indeed, some steps have already been taken, including a RMB 270 billion partial recapitalisation of the four largest state-owned banks in the late summer of 1998 and a number of important institutional reforms. The analysis below focuses on several aspects of this programme – its timing, its size and its fiscal implications. It also briefly considers the need to increase competition in the financial system and overhaul the taxation of banks.

Timing

Based on international experience with banking crises, there is a widespread consensus that one of the greatest risks is that a government's recapitalisation of banks can undermine the incentive of banks to adopt prudent lending criteria. The reason is simple. Recapitalisation "can foster the expectation that, having bailed out troubled banks once, governments would do so again".[29]

This problem appears to be particularly acute in China. There was some evidence, particularly after mid-1993, that banks were beginning to curtail the flow of new lending to money-losing state-owned enterprises.

[28] People's Bank of China, *Quarterly Statistical Bulletin*, 1998, No. 1, p. 9.
[29] World Bank, *From Plan to Market* (Oxford University Press, 1996), p. 101.

This policy was reinforced in the spring of 1998 when the National People's Congress endorsed the goal of encouraging commercial behaviour on the part of state-owned banks. But by mid-year this policy appeared to have been significantly modified when the central bank directed these banks to continue to extend additional loans to money-losing state-owned companies.[30] Shortly thereafter, the central bank completed the RMB 270 billion injection of capital into the four largest state-owned banks. Requiring banks to lend additional funds to firms that have only limited prospects of amortising their loans creates the expectation on the part of banks that additional recapitalisation funds will inevitably be forthcoming. That expectation seriously undermines the prospect for a fundamental change in bank lending behaviour.

Size

A second lesson from international experience with banking crises is that there are substantial costs to succumbing to the natural tendency of trying to minimise the cost of bank recapitalisation by underestimating the magnitude of non-performing loans or by overestimating the amount that can ultimately be recovered from borrowers whose loans have already been classified as non-performing. The experience of transition economies in Eastern Europe shows that a key pitfall of recapitalisation can be the failure to make the first injection of capital into the banking system sufficiently large. When recapitalisation is inadequate to restore banks to financial health, it erodes the credibility of the government's claim that there will be no further bailouts.[31] Like premature recapitalisation, this erodes any incentive for a change in bank lending behaviour.

The CCB in early 1999 announced a tentative plan to establish a separate entity, the Cinda Asset Management Company, to take over RMB 300 billion in non-performing loans, one-quarter of the bank's total loans outstanding.[32] The large magnitude of the loans to be purchased by

[30] People's Bank of China, State Economic and Trade Commission, and State General Bureau of Taxation, "Guanyu jinyibu zhichi guoyou kuisun gongye qiye you xiaolu, you xiaoyi chanpin shengchan de tongzhi" (Notice Concerning Further Supporting State-Owned Industrial Enterprises that Are Losing Money which Have Saleable and Efficiently Produced Products), June 1998. Wang Baoqing, "Points on Supporting Money-Losing Enterprises To Cultivate Winning Increased Profits", *Jinrong shibao (Financial News)*, 25 June 1998, p. 1.
[31] Andrew Sheng, *Bank Restructuring: Lessons from the 1980s* (World Bank, 1996), p. 101.
[32] Ian Johnson and Perter Wonacott, "China is Set to Begin Tackling Biggest Bank's Bad-Loan Problem", *Wall Street Journal Interactive Edition*, 14 January 1999.

Cinda suggests that the RMB 270 billion recapitalisation of the four largest state-owned banks undertaken in August 1998 fell far short of the recapitalisation amount that they will ultimately require.[33]

Although there are obviously uncertainties in any estimate based on the fragmentary information available to outsiders, in my judgement recapitalisation of the financial system will currently require an injection of an amount equivalent to about 25% of the loans outstanding from all financial institutions. With loans outstanding at year-end 1998 equivalent to 108% of gross domestic product, the required recapitalisation can be calculated to be about 27% of GDP, or RMB 2.15 trillion (about US$ 260 billion at the current exchange rate).[34] This estimate recognises that the financial condition of the largest policy bank, several of the regional development banks, the system of rural credit cooperatives, the majority of trust and investment companies, and probably some finance and securities firms is at least as weak as that of the CCB. The estimate also takes into account the laxity of the criteria used for classifying loans. In particular, continuing to count as assets loans to firms that have already gone through liquidation on which banks have had no recovery and allowing banks to classify loans as "doubtful" on an indefinite basis, regardless of how long a borrower has failed to make any interest or principal payments, has led to an understatement of the magnitude of China's non-performing loan problem.

Fiscal implications

There are two elements in the fiscal cost of bank recapitalisation. The first is the cost of paying a market rate of interest on the government bonds sold to provide the funding of the asset management companies, which in turn will presumably purchase non-performing loans from the banks at face value. If the bonds sold were 27% of gross domestic product and the real interest rate 6%, this cost would amount to 1.6% of gross domestic product annually. If China's economic growth remained fairly robust (i.e. 6% or more in real terms), this incremental interest

[33] The CCB received RMB 43 billion, about one-sixth of the capital injected into the four big banks in 1998. Du Deqing, "How Much will This Year's Government Debt be?" *Jinrong shibao (Financial News)*, 9 November 1998, p. 8.

[34] Based on the preliminary estimate of the State Statistical Bureau that GDP in 1998 was RMB 7,974.8 billion. *People's Daily Online*, 31 December 1998.

expenditure could be financed indefinitely by the sale of additional government bonds.

This would be possible because the existing stock of government debt relative to gross domestic product is low by international standards, about 14% at year-end 1998. A one-time 27% increase in government debt relative to GDP would put China's domestic debt ratio at about 40%, a level that is not high by the standards of either emerging market or transition economies. As long as the economy continued to grow at a rate at least equal to the real rate of interest on government bonds, the ratio of the stock of debt relative to gross domestic product would not rise, even if the entire interest cost were financed from additional annual sales of bonds. Thus, the debt would be sustainable. That is, creditors would not be likely to fear that the government was becoming unable to finance its expenditure program, and thus the real interest rate necessary to finance the debt would not rise over time and thereby possibly cause the burden on the debt to rise to a level that could not be financed.

In practice, the ultimate success of any financial reform package will depend on subjecting enterprises to hard budget constraints. But that is an economically rational approach only if enterprises are absolved of all of their quasi-fiscal expenditures. This will require increased government fiscal outlays for education, health and other social expenditures that properly should be borne by the government budget rather than being financed from enterprise income. I estimate that these additional fiscal outlays amount to about 3.3% of gross domestic product.[35]
Thus, the annual fiscal cost of recapitalising the financial system can be estimated to be about 5% of gross domestic product, substantially more than the increased expenditures required by the need to service a larger government debt.[36]

Indeed, an additional 5% of GDP is so large relative to current budgetary revenues that it raises serious questions about the feasibility of bank recapitalisation. Very inelastic growth of taxes and other revenue has meant that total government revenue relative to gross domestic product fell continuously from 31.2% in 1978 to only 10.7% in 1995.

[35] Nicholas R Lardy, *China's Unfinished Economic Revolution*, p. 161.

[36] In addition, China's primary budget deficit in 1998 (the deficit net of the interest cost of servicing the existing stock of government debt) was about 0.6% of GDP.

Introducing a major tax reform and increasing the coverage of the value-added tax has led to slightly more buoyant revenue growth since 1994. By 1997, revenues were 11.5% of gross domestic product, up 0.6 percentage points from 1996, which in turn was up 0.2 percentage points over 1995, when the revenue share of gross domestic product reached an all-time low.[37] Only if the trend of a rising revenue share is sustained over time is there a realistic prospect of financing the recapitalisation program sketched out above.

Competition

Recapitalising the existing large state-owned financial institutions is a necessary but insufficient condition for ensuring that they operate on commercial terms. A substantial increase in competition is a prerequisite to the successful commercialisation of the banking system.

All possible steps to increase competition should be pursued. First, the People's Bank must allow those banks created since the reform began that have accumulated sufficient experience in evaluating credit risk to expand their operations more rapidly, once the recapitalisation of the major state-owned banks has created a more level playing field. The candidates for expansion are the stronger institutions such as CITIC Industrial Bank, Bank of Communications, Everbright Bank, Merchant's Bank and Minsheng Bank, rather than weak institutions such as Huaxia Bank and the increasingly fragile regional development banks such as Pudong Development Bank, Shenzhen Development Bank and Guangdong Development Bank.

Second, the central bank should allow foreign banks and other foreign financial institutions to expand their domestic currency business by further easing the geographic and other constraints it imposed on the handful of foreign banks it initially allowed to enter the domestic currency business in 1997. The expansion of the domestic currency lending business of these banks might initially be through the continued use of the interbank market as a source of short-term funds. But foreign banks should be allowed to sell domestic bonds to Chinese financial institutions to finance longer-term lending. Within two, or at most three,

[37] Finance Minister Liu Zhongli, "Report on Implementation of Central and Local Budgets for 1997 and on the Draft Central and Local Budgets for 1998", Xinhua News Service, 21 March 1998.

years the central bank should allow foreign banks to take domestic currency deposits directly from Chinese enterprises, institutions and households. This approach, which liberalises most rapidly on the lending side, takes immediate advantage of the greater ability of foreign financial institutions to assess credit risk, while giving domestic institutions a short period of time before they would have to compete head-to-head on the deposit-taking side of the banking business. That should alleviate the concern that allowing unrestricted foreign bank access would lead to substantial disintermediation.

Third, the state should allow the creation of genuinely private banks. They should be subject to an appropriate minimum capital requirement and standards that ensure their independent control and management.

Fourth, the People's Bank should allow foreign banks and international financial institutions to purchase shares of existing banks. The Asian Development Bank's purchase of a stake in Everbright Bank in 1997 is a promising precedent, but other proposed purchases have been unnecessarily delayed.

Fifth, the state should more strongly encourage a reconfiguration of the largest state-owned banks. This process has already started modestly, largely in response to increased competitive pressure on banks. After more than a decade of rapid expansion, in 1996 the largest state-owned banks actually began to reduce their excessive physical presence in many localities. In 1996, these banks shut 2,138 of their local offices. The reduction, however, cut the number of offices by only 2%, an extremely modest proportion. Their cost structures remain extremely high. In 1996, costs absorbed an amazing 86% of bank income – the highest ratio of costs to income in the banking systems of 40 countries for which *The Banker* made the calculation in 1997.

The People's Bank should encourage substantial reductions in the office networks and staffing of the largest banks. This could take the form of an accelerated voluntary shutting of offices or the sale of some sub-branches and offices to newer institutions that wish to expand.

Finally, the authorities should allow the more rapid expansion of equity and corporate bond markets and simultaneously encourage the more rapid development of alternative channels of intermediation, such as pension funds, insurance, investment funds and mutual funds. In particular, China would benefit from the development of a long-term debt market that could be used to finance infrastructure and other

projects with long gestation periods. Currently some of these projects are financed offshore, largely because of the absence of long-term funding in China. Since most of these projects have no foreign exchange earnings and there are no markets in which foreign exchange risk can be hedged, this offshore financing entails substantial currency risk. For the corporate sector the availability of equity markets could make possible a more balanced financial structure than the current one, which, as discussed above, has come to rely excessively on debt.

Taxation of banks

Even after they are recapitalised and subject to competition, there is little prospect that China's major state-owned banks could operate on a commercial basis under the existing tax system. Because the current rates of taxation are confiscatory, banks would be unable to add to their capital as their lending business grew. As a result, their capital adequacy would shrink and within only a few years they would require another injection of fresh capital. If such an injection is only a matter of time, it seriously undercuts the incentives banks have to operate on commercial terms. In short, current rates of taxation are so high that they effectively deplete banks' capital.

The current system of taxing Chinese banks is confiscatory for two reasons. First, banks have to pay taxes on phantom profits, particularly on interest that they have been required to record as income but which has not actually been paid. Second, the largest state-owned banks are required to pay a business tax of 8% (plus surtaxes), which is treated as an above-the-line operating expense and thus a deduction from income. The burden of this tax is extraordinarily high since it is assessed on gross income from interest and fees. Most large state-owned banks pay more in business taxes than they do in income taxes, which are now levied at a rate of 33%. For example, in 1997 the Agricultural Bank of China paid RMB 5.332 billion in business taxes and surtaxes but only RMB 259 million in income taxes. The bank's effective rate of taxation in 1997 exceeded 91%.[38]

[38] Calculated based on the assumption that the business tax did not exist (leading to an increase in pre-tax operating profit equal to the business taxes paid) but that the bank then paid an income tax fixed at the rate required to generate the amount of taxes, business plus income, that the bank actually paid. Agricultural Bank of China, *Annual Report* 1997, p. 34.

Conclusion

China's leadership faces a substantial challenge in recapitalising its financial system. In addition to the issues analysed above, a successful bank restructuring program will require a substantially strengthened central bank that can exercise effective supervision and prudential regulation of banks.[39]

If China fails to transform its banking and financial system, the consequences are predictable. The intermediation of funds between savers and investors by banks and other financial institutions would probably continue to be marked by the inefficiencies already apparent. As the contribution to economic growth of various once-for-all factors winds down, one would expect the rate of growth of the economy to slow. An inefficient banking system would also impede the development of stock and bond markets which, as per capita output rises and appropriate regulatory structures are developed, normally come to play an important supplementary role in the allocation of investment resources. The continued fragility of the financial system would also limit the ability of the People's Bank to use monetary policy to dampen the marked fluctuations in economic activity that have characterised the reform era.

Ultimately, the failure to transform the banking system on a timely basis increases the possibility of a domestic banking crisis. A crisis could be triggered if domestic savers lose confidence in the government's implicit guarantee of their bank deposits. This loss of confidence could be triggered by a growth slowdown that obviously further weakened the domestic banking system; the prospect of a major devaluation of the renminbi in response to an emerging current account deficit and sharp fall in inward foreign direct investment; or a premature move to capital account convertibility or opening-up of domestic financial markets. Such a crisis would probably lead to an inflationary spiral, a dramatic curtailment of the growth of bank credit, and a sharp recession. It would also be highly adverse for maintaining the high rate of domestic saving that has been the major source of rapid growth in the reform era.

[39] Nicholas R Lardy, *China's Unfinished Economic Revolution*, pp. 170–6.

Heading off China's financial crisis

Rudi Dornbusch and Francesco Giavazzi

For many observers, the Chinese banking problem is one of the most serious in the world and perhaps the most serious. The situation of the Chinese currency is seen by many observers as precarious, with devaluation almost inevitable. These views may be entirely unfounded, exaggerated or wrong but they surely affect the stability and economic prospects of the Chinese economy. It would be a mistake to dismiss them with the argument that capital controls shelter the economy. The urgent need to deal with the banking problem is difficult to exaggerate, a view obviously shared by the Chinese authorities.

Around the world, emerging market economies have experienced currency crises in the aftermath of imprudent credit policies, neglectful supervision and poor regulation of politicised financial systems. Even in those cases where problems of the financial system were not the immediate cause of the currency collapse, financial sector weakness prevented an effective defence of the exchange rate and added to the fireworks of the collapse and the depth and duration of the post-crisis distress. Conversely, in Argentina or Hong Kong the strong financial system has made the effect of a dramatic regional crisis far more sustainable. In sum, countries have an overarching interest in establishing a sound financial system with great haste.

A sound financial system is also a first-order issue for sound investment and sustained growth. The case of Japan manifests dramatically that neglect of financial regulation and supervision leads to appalling balance sheets and a serious credit deterioration and credit crunch. The politics is decidedly difficult when a government has to own up to the fact that the population has worked hard and saved for years only to find that their accumulated assets are seriously impaired. In Japan, banks and insurance companies are bust because they invested poorly for a long period of time; the same is true throughout Asia. China has a great interest in preventing its high saving ratio from ultimately showing a payoff for savers in the form of productive capital accumulation rather than high taxes to bail out depositors and investors.

Politicians respond to a troubled financial system by cover-up. That is a sure way to let the rotten apples in the barrel take over and spoil the entire credit system. A decisive intervention early on, starting up a sound and transparent system of regulation and supervision, and a system of accountability and performance-oriented management rewards is the right strategy.

The cost of bad banks

In this section we discuss what banking problems around the world have cost and what the numbers in China might be.

Banking crises around the world

Systemic banking problems arise as a result of three possible sources. They can in fact all come together to make a very bad story much worse. First, finance is repressed with *directed lending* and hence not scrutinised on grounds of profitability and spreads between active and passive rates not reflecting performance prospects.[1] These conditions emerge, of course, quite naturally when banks are connected to the public sector and are an arm of a development strategy or when high deposit rates are part of a mobilisation of saving effort while loan rates are compressed to favour privileged borrowers.

A second possibility is that a basically sound banking system is exposed to a severe *macroeconomic* shock. If the cost of funding suddenly rises while loan rates are locked in, losses are made and disintermediation forces the banks into high cost and short maturity funding at a loss. If the situation lasts, it is only a question of time before the capital is eaten up. The same possibility arises if there is a severe and lasting recession that brings systemic defaults on the portfolio on a scale that cannot be dealt with by traditional spreads. Finally, there is the possibility that a currency crisis drives the banking system under, either because loan customers in other funding suffer dramatic capital

[1] With L and D denoting loans and deposits, l^* the active rate and l the deposit rate and α the fraction of loans that are non-performing, the bank breakeven spread, $i^*–i$, is given by $(1–\alpha)(1+i^*)L = (1+l)D$. Hence the presence of non-performing loans creates the need for a spread that increases with default risk. Other factors are of course the cost of operating the banking system, etc.

losses or because the banks themselves, having borrowed offshore in unhedged foreign currency positions, experience a funding shock that wipes out the capital base.

The third possibility of systemic banking crisis is associated with *deregulation enhanced by poor supervision*. The typical situation is that the banking system is sheltered from both competition of the cross border kind and domestic competition from non-bank financial intermediaries. Once competition is opened up, as in the United States in the early 1980s, the newcomers will be relatively unregulated and have a low cost of capital and strong balance sheets. The established banks will have less perfect balance sheets and be locked in loans at unattractive rates. Good customers will leave, the loan quality will deteriorate, the funding costs will rise, and it is only a question of time before the equity is gone.

The deregulation story may also play out in another way where new intermediaries open up to serve a neglected segment of the credit market, say household loans, and without diversification of the loan portfolio extend credit oblivious of lending standards. While the credit boom lasts, profitability is dramatic and fuels a rapid expansion of lending. The house of cards crashes once a slowdown leads to a skyrocketing of defaults. Exactly the same story applies to real estate lending. In each case it is important to remember the banker's adage: "It is not speed that kills, it is the sudden stop." That is what happens when the low-cost funding that underpins the credit bubble suddenly vanishes or turns dramatically costly because it was contracted in foreign exchange and a devaluation has magnified the cost of debt service.

The accompanying table shows the *fiscal* cost of banking crises in a number of countries. The basic point is that the numbers are extraordinarily large! They effectively amount to creating a large public debt which was implicit in an insured, badly regulated and poorly supervised financial system which is then made explicit in an outright crisis. The bottom line is always the same: the deposits are insured, de facto because anything else is politically impossible, the loans are bad and the government holds the bag. The capital of stockholders is never enough to make up fore the trouble and, incredibly, often the bankers even get to benefit from the crisis, thus adding to the cost. The table is by no means exhaustive; few countries have not suffered a banking crisis in the past two years (including OECD countries) and in several it is still under way. That is the case in Asia (Korea, Thailand,

Table 1

Fiscal cost of systemic bank restructuring

As a percentage of GDP

Spain	15.0	Ghana	6.0
Sweden	4.3	Kuwait	45.0
Côte d'Ivoire	13.0	Mauritania	15.0
Chile	33.0	Tanzania	14.0
Finland	9.9	Mexico	12.0–15.0
Hungary	12.2	Venezuela	17.0
Poland	5.7		

Source: Dziobek and Pazarbasioglu.

Indonesia and Japan), the transition economies and of course Latin America.

The fiscal cost of a banking crisis is certainly not all. When a banking system goes under, established loan customers lose their credit access; typically there is no smooth transition to another source of credit and absolute credit rationing is the rule. That means profitable projects have to be called off, distress forces disruption in production and employment, aggregate growth suffers. Asset prices are forced to low levels, making bankruptcy pervasive. Large companies may mitigate the effects by offshore credit, if they have foreign collateral, but small firms will simply be cut off and die in masses. A credit crunch is a formidable shock to the small business sector that is typically bank-financed. The fall in growth, or the outright recession and even depression, feeds back to the budget with a steep extra cost that may easily be of the order of 10% of GDP. Once it is in the open, a banking crisis lasts years in its after-effects, even if the authorities bring a relatively speedy solution.

The Chinese banking problem

"Banking distress is … quiet distress" is the apt expression van Wijnbergen (1998) uses to characterise severe banking problems in the making. China is surely a case in point. The saving rate is high, there are few banking institutions and there are no significant alternative saving vehicles. Deposit liabilities of banks in 1997 amount to 140% of GDP, growing on average at 30% per year over the past four years. For the

Table 2

The Chinese banking institutions

In billions of RMB

Reserves	1,646	Demand deposits	2,381
Foreign assets	532	Saving deposits	4,364
Claims on central government	152	Time and other deposits	989
Claims on other sectors	7,689	Bonds	354
		Foreign liabilities	489
		Credit from monetary authorities	1,404
		Capital account	429
	10,019	Other net	–390

Note: Data are for 1997. GDP in 1997 was RMB 7,600 billion.

Source: IMF.

banking system, net cash flow is strongly positive even if non-performing loans (NPLs) are substantial and growing. True, there is a hole in the balance sheet and it is growing, but as long as nobody asks a question and the public deposits in net terms, the problem merely grows and does not explode.

There is great uncertainty as to just how bad the loan situation is. Two questions are obvious in this context:

- What fraction of loans is non-performing?

Speculation on this question has as an anchor a remark of the PBC authorities to the effect that 20% of state bank loans are unrecoverable. See Cho (1998), who also quotes a Standard & Poor's estimate of 24%. Wilder guesses go as high as 40%.

- Of the NPLs, what fraction is recoverable?

This is entirely unknown. Pessimism about the quality of state-owned enterprises (SOEs), the borrowers, leads to numbers that might be as high as 50% or even 70%. A look at the very poor credit culture and in particular a willingness and need-to-pay criteria would place recoverability in a far more favourable light.

Combining these two considerations, we can place a broad range of estimates on the likely macroeconomic cost of a bank restructuring. The answer is between 10 and 20% of GDP with the upper end of the range the more likely number, since the credit deterioration is picking up speed with the deterioration of the macroeconomic environment.

Table 3

Bad news: guesstimate of the bank restructuring cost

In billions of RMB

		Unrecoverable loans (%)	
		50%	70%
Non-performing loans (%)	20%	800	1,120
	30%	1,200	1,680

Even this upper-end estimate needs to be raised for two reasons. First, the banking numbers above may not include all non-bank financial institutions. Second, the existing bank capital, not even considering bad loans, is not up to the Basel standard. A working assumption, therefore, is a total clean-up cost of 25% of GDP.

The good news is that China has only negligible public debt and no domestic debt to speak of. Thus the bank clean-up essentially represents a one-time creation of public debt in that amount. If depositors are to be protected, the government needs to put net worth certificates equal to the bad loans in the banks' balance sheet. The next question is how the bad debts are worked out – say, a Resolution Trust Procedure – on one side and a structure by which the banks can liquefy the net worth certificates over time to have resources for new credit expansion. Of course, bank restructuring is an art and we discuss below issues and incentives, including regulation and supervision, that will make it more effective. We also discuss the connection between bank restructuring and SOE reform.

We note here that bank restructuring should go hand in hand with the creation of a national capital market for both debt and equity. The clean-up in itself needs a capital market in which banks can see the government's rescue bonds over time. The government itself may want a bond market so that budget deficits, if and when they arise, can be funded by debt rather than money. And banks need competition if only to determine a sound benchmark for the cost of credit and spreads between deposit and loan rates. When credit is repressed and all rates are administrative, mispricing of credit is endemic and can build up to very large problems in balance sheets.

We also note here that the opening of the capital account surely must not happen until the banking problem has been resolved. The worst possible situation is one where banks that have balance sheet problems already attempt to resolve them by borrowing at low rates offshore to lend at high rates in the national market, oblivious of currency and credit risks. Asia's financial crisis is a monument to just this kind of problem.

How to restructure the banking system

Principles for successful bank restructuring

Severe banking crises are not unusual situations. In the last two decades at least two out of three IMF member countries have experienced significant banking sector problems, usually involving government assistance for their solution.[2] Insolvent banks are typically kept alive: a survey of 120 banks in 24 developed countries in the 1980s and 1990s finds[3] that two-thirds of failed banks were bailed out, directly or indirectly, by the government. The use of public money, however, is not enough to guarantee a successful restructuring – that is a programme which restores the financial viability of banks and puts them back at the centre of the country's intermediation system.

From the studies of a broad group of countries reflecting different regions of the world and levels of development,[4] one can detect common patterns in the policies that turned out to be successful at addressing *systemic* banking problems – that is, situations in which banks in trouble held a large fraction of total deposits. These common patterns can be summarised in eight basic principles:

1. *A clear diagnosis:* identifying the underlying causes of the banking problem and designing a strategy aimed at addressing each of them, and not just their symptoms in the banks' balance sheets. Because bank losses are often rooted in the real economy – loss-making enterprises and fiscal deficits – failure to address these issues typically prevents a long-run solution to the banking problem;

[2] See Daniel (1997).
[3] See Goodhart (1995).
[4] See Sheng (1996) and Dziobek and Pazarbasoglu (1997).

2. *Prompt action:* success is more likely when action is taken within a year of the problem emerging. Prompt action requires transparent accounting, as insolvent banks tend to hide bad loans with bad accounting;
3. *A comprehensive approach:* addressing not only the immediate stock and flow problems of weak or insolvent banks, but also the shortcomings in banks' accounting practices and in the legal and regulatory environment in which they operate, and improving bank supervision and compliance;
4. *Addressing banks' operations, not just their balance sheets:* inadequate management is a typical cause of banking problems. Success in bank restructuring is highly correlated with whether or not the management problem is addressed early on;
5. *Limiting the involvement of the central bank:* the countries that achieved the best results understood at an early stage that the problem was bank insolvency, not a lack of liquidity. In contrast, in all the cases where progress was slow the programmes made heavy use of protracted liquidity support from the central bank. Although few countries refrained from using short-term liquidity support, those that were most successful took a conscious decision to minimise the use of central bank financing and avoid central bank lending to insolvent banks. A parallel finding is that progress is slower when the central bank is the sole agency responsible for bank restructuring, because it is then drawn into financial commitments that exceed its resources, and conflict with the ability to run a sound monetary policy. At the root of a successful programme lies the recognition that systemic banking crises are a fiscal, not a monetary problem;
6. *Addressing openly the problem of who will pay for the programme*. Failure to do so can result in the politically easiest allocation of the cost: inflation.
7. *Removing bad loans from banks' balance sheets*. Carving out bad loans helps banks concentrate on their business and resume financing worthy projects: progress in management practices can only come after the balance sheet has been cleaned, otherwise bank managers will always have good excuses to justify poor results. "Loan workout" units typically played an important role in all countries that made substantial progress. In some countries the responsibility for workouts was centralised and assigned to a special government agency;

in others, such as Poland, the responsibility for dealing with bad loans remained with the banks but was separated from current operations and placed in special departments. In general, the use of distinct loan workout units appears to be an important element of best practice.

8. *Privatisation.* Although privatisation is crucial for the long-run viability of the banking systems, rapid and ill-designed privatisation programmes can lead to future banking problems. This happens (as the early experiences in Chile and Mexico have shown) when banks are overpriced, supervision is weak and legislation allows a few industrial conglomerates to buy a large portion of the banking system.

The benefits of transparent accounting and sound finance: SOEs should not be an excuse.

The first principle – recognising that bank losses are rooted in the real economy, often in loss-making SOEs – is typical of the experience of transition economies. Banks are unlikely to remain "clean" when their normal dealings are with loss-making firms. This observation, however, should not be used as an excuse to postpone bank restructuring. On the contrary, cleaning up the banks can do a lot to start improving the allocation of resources in the economy and to ensure that the enterprise losses are eventually stopped.

According to some observers,[5] restructuring Chinese banks before the underlying causes of the accumulation of bad loans are removed would be close to useless. Restructuring SOEs – that is, reforming these firms and imposing upon them a hard budget constraint[6] – should be the first step. This in turn would require discharging SOEs from the responsibility for providing a broad range of social services, shifting such costs directly to the budget: the accompanying increase in public expenditure should then be matched by a corresponding increase in tax revenues.

[5] See e.g. Lardy (1998).

[6] According to estimates quoted by Lardy (1998, p. 38), to reduce their leverage to a sustainable level, in 1994 SOEs should have written off an amount of bad loans corresponding to 25% of GDP.

While obviously correct, this approach runs the risk of justifying doing nothing, until an unlikely Big Bang turns the Chinese economy around. The losses of SOEs cannot be stopped overnight: still, transparent accounting and a clear assignment of responsibilities can be a powerful instrument to make sure that SOEs are eventually restructured.

The presence of bad loans in the balance sheet of banks distorts the incentives of both creditors and debtors. Banks which are technically insolvent lose the incentive to price new loans accurately – since they are already insolvent, they can hardly be worse off. Additional lending to allow bankrupt firms to service the old loans becomes rational, as it enables banks to report the loans as formally performing, thus delaying the day of reckoning. Firms' managers, on the other hand, are under no pressure to scrutinise their projects: they know that banks have no alternative but to keep lending. Those who lose are the potentially good borrowers, whose projects are crowded out. Households are among the first to be crowded out, and this prevents the housing market from taking off. Lending to new private businesses is crowded out through two distinct channels.[7] The first is simply an insufficient amount of credit, as this is used to roll over bad loans; the second is unduly expensive credit – banks in trouble tend to widen the gap between lending and deposit rates in an attempt to gradually rebuild their capital. High intermediation margins drive a wedge between the incentive to save and the cost of investment: the lesson from developing countries suggests that such financial repression can be extremely costly.

The first step thus requires identifying the non-performing loans and removing them from the balance sheet of banks. This is a precondition for reintroducing into the banks the culture of risk evaluation.

The credibility of this approach obviously relies on the ability of the banks to terminate any lending that is not based on sound commercial grounds. For such a commitment to be credible, in the presence of SOEs that are either obviously bankrupt but regarded as too sensitive or important to be abruptly closed down, or in need of costly restructuring, the government should introduce a special financing window to cushion liquidation and to pay for restructuring. As the German

[7] See Begg and Portes (1993). On the crowding-out of private firms in transition economies, see Webster (1992).

experience with the Treuhandanstalt indicates, this is best done through a special government agency with a set time horizon.[8] The financing needs of this agency should be provided for in a line item of the budget.

Banks with clean balance sheets and that are shielded from the need to finance SOEs have no excuse for diverting lending away from good projects, and for not monitoring such projects after the loan has been disbursed. Over time these banks can be privatised; meanwhile the government can monitor their managers. Setting in place sound regulation and supervision is obviously essential.

The bottom line is that there is no free lunch, but there are important benefits from transparency and a clear allocation of responsibilities. In the end, the cost of cleaning up the banks and the SOEs will be high, and will show up in an increase in public debt (needed to recapitalise the banks) and in higher government spending (needed to pay for restructuring and delayed closures). But this will only be the recognition of government obligations that were previously hidden by the lack of transparency. Meanwhile clean banks stop distorting the allocation of credit, and a government agency that deals with SOEs with a set time horizon, drawing its resources directly from the budget, is the best guarantee that the losses of such enterprises are gradually reduced.

Disposing of the bad loans

Removing the bad loans from the balance sheet of commercial banks poses two problems: where to put them, and how to replace them.

[8] The main tasks of the Treuhandanstalt (see Fries and Lane (1994) for a description of this agency) were to evaluate the balance sheets of the former East German SOEs, write off their old debts, reorganise and close enterprises by dismantling the Kombinate, and sell off whatever could be sold. To judge the potential viability of SOEs, the Treuhandanstalt used a team of West German managers. Their evaluation was based on whether the company had marketable products and capable management. These conditions were evaluated after an amount of old debt had been written down so as to bring the company to a degree of leverage similar to that of a corresponding West German firm. The agency had the power to circumvent management opposition to restructuring by dismissal. Selling prices were adjusted according to the investments that the buyers committed to undertake and to the jobs they would preserve. The agency was created in 1990 with a set deadline: the legal base for its existence vanished on 31 December 1994. Setting a time limit is essential: IRI, an agency created by the Italian government in 1936 to deal with bad loans, is still in existence. By 1994 the Treuhandanstalt had privatised some 14,000 companies, 3,000 of which were sold to their managers. The total cost for the budget amounted to approximately US$ 150 billion. On 1 January 1995, 60 companies remained unsold and were transferred to a special government agency.

Before discussing the possible solutions, we note that there is at least one experience where bad loans have not been removed from the banks. The Polish government chose, in 1990, to leave the bad loans inside the banks.

The motivations behind that decision illustrate the basic choices facing the authorities:

"We did not believe in our ability to create, within a reasonable time, a strong central institution in terms of the high quality of its staff and internal organisation. Nor did we believe in the possibility of devising an adequate incentive system that would ensure the institution's active approach toward restructuring SOEs. We did not believe that such an institution could resist political pressure. We also felt that the centralised solution did not address the causes of the problem, which we believed lay primarily in the banks' lack of experience in handling credit. By painlessly removing the burden of bad debt from the banks, the centralised approach creates a danger that a bad debt loan portfolio will re-emerge in the near future. It does not contribute to enhancing the banks' experience in conducting credit operations and facing bad debt situations. Instead we recapitalised the banks to such an extent that they were able to create adequate provisions for the bad loans. The amount of ex ante recapitalisation was a function of an estimate of the bad debts that could be recovered, so as to introduce an incentive to recover as much debt as possible."[9]

The risk with this approach is that the banks do not sever their ties with bad debtors: old debt may thus be financed with new loans. To avoid this risk, the Polish law on "Financial Restructuring of Enterprises and Banks" prevented banks from extending new credit to enterprises whose debt had been placed in the bad loans portfolio, unless such credit was given in connection with a conciliation procedure (similar to the United States Chapter 11 bankruptcy procedures). Banks were also subject to a two-year deadline to either recover the bad loans or obtain a court bankruptcy decision.

The Polish approach would seem to work in situations where the number of debtors that can return to creditworthiness is not negligible. But when banks have little leverage to impose the reorganisation of

[9] Kawalec, Sikora and Rymaszewski (1994).

troubled firms, and when bankruptcy procedure functions poorly, removing the loans from the banks and placing them in a specialised asset management company (as with the Treuhandanstalt or the US Resolution Trust Corporation) appears to be a safer solution.[10]

Running the asset management company: incentives not bureaucracy

The risks with asset management companies were clearly identified by the Polish authorities: low quality of the staff, no experience with loan workouts, a bureaucratic organisation, weak incentives, all leading to a lengthy process. The problems are not specific to transition economies: the recent case of an Italian asset management agency, created to recover the bad loans of a failed public bank, shows the dangers of a bureaucratic approach. The company is run by lawyers who fail to see the difference between a loan worth a few thousand dollars and one worth a million: both are subject to the same scrutiny – but there are 15,000 small loans in the company and a dozen million dollar positions. The result is that no positions are closed and the process drags on. As in the Polish example, a clear deadline should be set, compensation of the administrators should not be open-ended but linked to their performance in recovering loans and closing bankrupt positions. When the deadline expires, remaining loans should be auctioned.

Replacing the bad loans

Whether the debt of SOEs is simply cancelled, or transferred at face value to a new agency, the banks need new capital to be able to operate. The typical solution is to replace bad loans, valued at face value, with government paper. This operation should be transparent and final.

Transparency requires that the assets used be straight government bonds. The option, which is sometimes used, of employing bonds that are sitting in the books of the central bank conceals the fiscal impact of the operation in the transactions between the government budget and the central bank. Failure to bring the fiscal cost out into the open reduces the pressure to restructure the SOEs and thus increases the chances that a new bailout will be needed (this may be the reason why successful restructuring tends to be transparent – our fifth principle).

[10] On the choice between the centralised and decentralised solution, see also Sheng (1996, p. 41).

The resources needed to recapitalise the banks will eventually have to be provided by the public, in the form either of taxes or of an increase in public debt. This requires that the bonds issued to recapitalise the banks are eventually sold to the public. If the problem is big and a liquid secondary market for government bonds does not exist, the solution can come in two steps. The bonds are initially placed in the banks, and the banks then gradually sell them to the public. If the yield on the bonds is moderate, the banks have an incentive to sell them, because new loans are more profitable; gradualism will help a secondary market to develop.

The injection of public debt should be a once-and-for-all occurrence, not a government pledge to underwrite banks in perpetuity. This has two implications. First, there should be no doubt as to the quality of the assets with which banks are recapitalised: it should be "good capital".[11] Second, as our third and fourth principles indicate, recapitalisation should be accompanied by measures that address not only the immediate stock and flow problems of the banks, but also the shortcomings in management, in accounting practices and in the legal and regulatory environment in which banks operate. This requires, in particular, improving bank supervision and compliance.

Managers and directors

The first line of defence against unsound banking is competent management. Regulation and supervision, no matter how carefully designed, cannot guarantee that a bank is well run. Bank managers need to possess a high degree of integrity, adequate training, experience, and control over credit approval and risk control procedures.[12] But all this will not be enough if managers do not have the right incentives and boards of directors do not exercise effective control over management.

Managers can be motivated in roughly three ways.[13] Formal incentives, such as bonuses, stock options and evaluation based on verifiable measures of performance; career concerns inside and outside the firm, which encourage forward-looking individuals to work hard, thinking about their future; and monitoring by the board of directors.

[11] Begg and Portes (1993) suggest that it would be unwise to recapitalise the banks with nominal government bonds vulnerable to expropriation through future inflation. They advise using index bonds.

[12] On the need for competent and honest managers, see IMF (1998).

[13] For an illuminating analysis of how to design proper incentives, see Tirole (1993).

These simple principles have powerful implications. First, the reward of bank managers should be based on performance. When bank shares are publicly traded, stock options should constitute the largest fraction of a manager's compensation; alternatively, compensation should be based on bonuses, determined as a function of the bank's performance. Managers of state-owned enterprises, on the contrary, are often compensated in exactly the wrong way: salaries are relatively low, and unrelated to performance, while a significant fraction of the compensation comes in kind, through perks and fringe benefits. What is worse, public administrations often know of only one way to get rid of a bad manager: promotion to another job in the public sector. This guarantees lifetime perks and destroys incentives.

Incentives are not enough, however, as managers can always cook the numbers, for instance concealing bad loans. Boards of directors have a crucial role in controlling managers. To make sure that they do this effectively, boards should be organised in special committees with identifiable responsibilities (internal auditing, credit approval procedures, etc.). Board members' compensation should also depend on performance. The choice of good board members is particularly delicate when the company belongs to the government. Two simple rules can help, however. First, it should be clear that any civil servants sitting on a board do so under their personal responsibility: the legal and pecuniary implications of a bankruptcy should rest with the individual board member, not with the public administration they represent – in most countries this is written in the company law. Second, board members should be selected from the administrations which would bear the financial implications of possible losses, typically the finance ministry.[14]

Where to look for good supervisors

The architecture of bank supervision can be almost perfect, and still the ability of the supervisory authority to spot trouble depends almost entirely on the quality and the incentives of individual supervisors. Attractive remuneration, political independence and independence from bankers, immunity against possible legal actions (which does not rule out the right of appeals) are all necessary conditions for creating a successful

[14] In Italy, following 1992, the introduction of these simple principles went a long way towards improving the effectiveness of boards in monitoring SOEs.

team of supervisors, as is experience, particularly that needed to run on-site inspections. Still, recruiting supervisors that are both experienced and independent is often virtually impossible.

Of all the risks, however, the most serious one is capture: the Asian financial collapse is there to demonstrate the cost of corrupt supervision. One option is to offer the job to the new generation. This guarantees the separation from the bankers, admittedly at the cost of some lack of experience. Training, however, is not impossible: a good graduate education and a couple of years with an international bank (much better than spending the time in the supervisory training centre of an international organisation) can go quite far in teaching a bright young lady the right questions to ask.

Concluding remarks

China's banking system needs deep and early reform. The numbers at stake are staggering, the risk of leaving the task too late and hence doing it under conditions where there is no control or much less control of events is serious. The banking system today is largely dysfunctional and operates outside a credit culture. Loans are made without asking questions of profitability and recoverability, while borrowers do not necessarily believe that loans need to be repaid. It is true that China's financial system is not about to succumb to a vast bank run; it is even true that the authorities could face a vast bank run as long as they are focused on getting yuan cash rather than dollars. But that is too little of a test of the quality of the banking system. The basic fact is that the people's saving is being wasted by a dysfunctional banking system and that doing this for a long time means a huge public finance liability. This is dangerous because China's growth is already slowing to half speed and the ageing of the society poses major debt burdens in years ahead. Finally, a banking system that operates by directed lending focusing on what is politically important or just big necessarily risks missing out on financing projects that have a great rate of return. It is those projects that ultimately add up to a high rate of economic growth.

Chinese banking reform is important even if it is not dramatically urgent. It needs to be part of a systematic effort to create a capital market, preferably with long maturities to foster a long horizon in

business and stability in macroeconomics. Such a capital market is essential to shift the operation of the banking system to an allocation perspective that looks at the cost of capital and at credit risk. It is also essential to get away from the view that banks are public sector gas stations where companies go to get their juice without any questions asked. The mechanics of clean-up and the creation of a capital market are important. Lessons, good and bad, from abroad are plentiful and must be used. China is different, but that must not blind the authorities to neglecting important lessons learned elsewhere.

In concluding, we address a few issues of central concern:

The Chinese financial structure at this time fails to draw clear lines between banks, state enterprises, money, credit, debt and the budget – everything is one big glob. There is an urgent need to disentangle credit and intermediation from the rest. The creation of a capital market and a regulated, supervised and cleaned-up banking system goes in that direction.

Next, banking reform must not be too gradual. In a transition state where responsibility of managers for performance comes into play, they will only make political loans because those are the ones they won't be blamed for and anything else is "too risky". Of course, it is precisely these political loans which are the worst.

Chinese banking reform, along with the creation of regulation and supervision, must precede any notion of opening up the capital market. The present stability is entirely due to the absence of alternatives. That is good for stability but it is very bad for the quality of credit allocation. Opening to a domestic capital market and to cross-border capital movements must come, but getting things right must come first and soon.

Any idea of devaluation becomes a very bad idea when placed in the context of the existing unsound financial system. A major devaluation will teach the public the difference between dollars and yuan. Any resulting shift from deposits to black market dollars will quickly erode the present relatively controllable outlook for financial reform.

The most important issue in China today is to create a credit culture, from accounting to enforcement. China's people work hard and save an enormous share of their incomes. They are entitled to expect that their saving will ultimately be there and earn a return. The present system makes almost certain that this good outcome is *not* the case.

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The macroeconomy and reform of the banking sector in China

Lawrence J Lau*

Introduction

First of all, it is useful to put the Chinese economy into the proper context. Chinese GDP and GDP per capita in 1998 were, at market exchange rates, US$960 billion and US$770 respectively. In comparison, the GDP and GDP per capita of the US economy were approximately US$8.5 trillion and US$31,000 respectively. The Chinese economy, despite 20 years of phenomenal economic growth at approximately 10% per year, is still relatively small in both aggregate and per capita terms.

The effects of the East Asian currency crisis

The Chinese economy has managed to remain relatively unscathed from the East Asian currency crisis, which has been ravaging most of the other East Asian economies since mid-1997. China and Hong Kong are the only two economies whose currencies have not devalued. The real rate of growth of the Chinese economy has remained the highest in East Asia and even the world (8.8% in 1997 and 7.8% in 1998), while almost all of the other East Asian economies, including Japan, had a negative real rate of growth in 1998, except Singapore and Taiwan. The growth of Chinese exports, at US$183.8 billion in 1998, has, however, slowed down significantly to 0.5%, compared to 26.2% in 1997, mostly due to the decline in exports to the affected East Asian economies, including Japan. Otherwise, exports to European and North American markets have continued to grow at double-digit rates. In real terms, exports probably increased by 4.5% in 1998. Chinese imports declined for the

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first time in almost a decade, by 1.5%, to US$140.2 billion, compared to an increase of 2.5% for 1997. In real terms, imports probably increased 2.5%. There continued to be a healthy trade surplus of US$43.6 billion in 1998.

Foreign direct investment (FDI) arrivals in China totalled US$45.6 billion in 1998, an increase of 0.7% over 1997, with the reduction in investment from the East Asian economies offset by the increase in investment from Europe and the United States. FDI commitments totalled US$52.1 billion, 2.1% higher than in 1997.

The Chinese domestic price level has been falling for 15 consecutive months. For 1998, the retail price index (RPI) fell by 2.6% and the consumer price index (CPI) by 0.8%. However, much of the fall in the price level could be attributed to the worldwide decline in the prices of commodities, especially that of oil, resulting from the East Asian crisis, and the decline in the domestic price of food, due in part to good harvests.

However, the East Asian currency crisis and the resulting turmoil in the financial sectors of the East Asian countries does focus attention on the banking and financial sectors of China and the need for their improved regulation.

The macroeconomy

As mentioned above, the Chinese economy has remained relatively healthy – growing by 8.8% in 1997 and 7.8% in 1998. The rate of inflation has actually turned negative – prices have been falling for 15 consecutive months. The urban unemployment rates for 1997 and 1998 were 3.1 and 3.5% respectively. For 1999, the official government target rate of growth of real GDP is 7%. My own forecast is that it will be somewhere between 7 and 8%.

Two points are worth making here. First of all, for all practical purposes, the 8% target rate of growth for 1998, which was the focus of much discussion last year, was effectively achieved. For the entire year, the rate of growth of real GDP was 7.8%. However, the floods in the summer of 1998 reduced the rate of growth of real GDP by at least 0.5%. Thus, if it were not for the floods, 8% growth would have been comfortably achieved. My own estimate of the "core" rate of growth of

the Chinese economy, based on its long-term fundamentals, is around 8%. Second, it is almost "dogma" among most financial journalists that the Chinese economy "requires" a real rate of growth of at least 8%, otherwise the social order will crumble and the economy will collapse. However, no theoretical argument nor empirical evidence have ever been produced to support this often-expressed opinion. (There is also no other economy that is supposed to "require" an 8% or even 6% growth.) A simple calculation shows how fallacious this belief is. Chinese GDP and GDP per capita in 1998 were US$960 billion and US$770 respectively. The net new entrants into the Chinese labour force may be estimated to be approximately 10 million a year. If we assume that each new entrant into the labour force commands a wage rate of US$1,800 a year, which is on the generous side, the total cost of absorbing the net additions to the labour force comes to US$18 billion a year, which is less than 2% of GDP. Thus, in principle, a 2%, rather than an 8%, growth of the economy should suffice. I happen to think the Chinese economy has the potential of growing at approximately 8% per annum over the next two decades. However, the sky will not fall in if the Chinese economy occasionally slows to a 4% or even 2% annual growth.

Are the reported rates of growth of real GDP reliable?

One significant argument is, however, whether the official rates of growth of Chinese real GDP are reliable. There are many reasons why the real rates of growth may have been overstated at different times and for different reasons. For example, in the early to mid-1980s, it was quite possible that the rate of growth of real GDP might have simply reflected, in part, the effects of magnetisation (or marketisation) of the economy. The eggs produced by a farmer for an in-kind exchange with another farmer for pork would not be included in the GDP figure. However, if both farmers sold their own outputs and purchased each other's output on the market, GDP would register an increase even though total output has not changed at all. In the late 1980s and early 1990s, the effects of land transactions on profits of enterprises and hence value added might have also caused GDP to be overstated. This is because land used to be carried on the books of Chinese enterprises at zero cost. When land was transferred from one enterprise to another, or to a foreign-invested firm (usually in the form of a long-term lease) at market, all the proceeds

would be recorded as profit in the income statements and hence treated as value added in the national income accounts. In truth, many of the transfers were of raw, unimproved land, with little real "value added".[1] This was thus also a source of overstatement of GDP. However, over time, the importance of this source of overstatement would diminish as more and more land, especially the more valuable parcels, was marked to market on the books through the transfers. A possible source of understatement of real GDP comes from the upward bias in the measurement of the GDP deflator and generally the price indexes. The price indexes are likely to be overestimated because of the fixed weighting (changed only periodically), the lack of adjustments for quality improvements and for the introduction of new products, among other things. The effects of the upward bias in the deflators should be higher in high inflation periods and lower in low inflation periods.

There is, however, no evidence of any deliberate falsification or change in the statistical methods on the part of the National Bureau of Statistics (NBS) of the People's Republic of China – although there may be discrepancies between the NBS data and reports made by provincial, regional, municipal and local governments. Moreover, the incentives for falsification work in both directions at the provincial and local levels. On the one hand, the provincial and local leaders may wish to appear to have done a good job, both to the central government and to their local constituencies. Thus, they may be tempted to inflate the statistics. (That is one reason why the central government statistics are likely to be more reliable.) On the other hand, they may also wish to minimise their liabilities for taxes and profit remittances to the central government.

By far the most convincing arguments that the official rates of growth figures are reasonably reliable are based on cross-validation using other methodological approaches for the measurement of GDP. In addition to the production approach, that is, the measurement of GDP by summing up the value added of the productive sectors, e.g. agriculture, industry and services, there is at least the expenditure approach and the factor incomes approach. These alternative approaches yield estimates for 1998 that are consistent with a rate of growth in the order of 7–8%, as we shall show below.

[1] The transfer and sale of raw, unimproved land from one entity to another does not create value added per se even though it may create profit in the accounting sense.

The expenditure approach consists of looking at the rates of growth of the components constituting aggregate gross domestic expenditure (which in principle must be equal to gross domestic product). We begin with the gross domestic expenditure (*GDE*) equation, which is by definition equal to the sum of personal or household consumption expenditures (*C*), government consumption expenditures (*G*), gross domestic investment (*I*), and net exports of goods and services (*X*–*M*). Gross domestic investment or, equivalently, gross domestic capital formation, is in turn equal to the sum of gross domestic fixed investment (*GDFI*) and change in stocks or, equivalently, inventories (ΔS). Thus,

$$\begin{aligned} GDE &= C + I + G + (X - M) \\ &= C + GDFI + \Delta S + G + (X - M). \end{aligned}$$

The rate of growth of real GDP can therefore be estimated from the expenditure side as the weighted sum of the real rates of growth of the components of gross domestic expenditure.

In 1998, the rate of growth of real retail sales was 9.7%. While the rate of growth of real retail sales alone does not translate directly into the rate of growth of real household consumption expenditures, the latter may be conservatively estimated to be 5%, or approximately half the rate of growth of real retail sales. On a per capita basis, this amounts to a 4% growth, which was quite consistent with the rates of growth of real per capita disposable income in 1998 of 5.8% in the urban areas and 4.3% in the rural areas. Since real household consumption has approximately a share of 40% in GDE, it contributes approximately 2.0% (= 0.4 times 5%) to the real rate of growth of GDE. The rate of growth of real government consumption was 6.5%. With a share in GDE of approximately 10%, real government consumption contributes 0.65% (= 0.1 times 6.5%) to the real rate of growth of GDE. The rate of growth of real gross domestic fixed investment was 14.1%. With a share of GDE of between 35 and 40%, real gross domestic fixed investment contributes at least 4.9% (= 0.35 times 14.1%) to the real rate of growth of GDE. The real rates of growth of change in stocks and net exports were negligible in 1998. Thus, an approximate estimate of the rate of growth of real GDP may be obtained as the weighted sum of the real rates of growth of the components of GDE as 7.55% (2.0 + 0.65 + 4.9), which turns out to be very close to the official estimate of 7.8%.

The quantity theory of money provides another way of cross-validating the estimate of the rate of growth of real GDP. The quantity theory says that:

$$MV = PT,$$

where M is the nominal quantity of the money supply, V is the velocity of circulation of money, P is the price level, and T is the real quantity of transactions in the economy. Under the assumption that the velocity of money is constant, the rate of growth of the money supply is equal to the sum of the rate of growth of the price level (inflation) and the rate of growth of real GDP (identified with the real rate of growth of transactions). Thus, the rate of growth of real GDP may be estimated as the rate of growth of the money supply less the rate of inflation. In 1998, the rates of growth of the different measures of money supply were, respectively: M0, 10.1%; M1, 11.9%; and M2, 15.3%. Given a negative rate of inflation (–2.6% for the retail price index and –0.8% for the consumer price index), the implied rate of growth of real GDP would be in excess of 10%, no matter which concept of money supply is used. In reality, V must have been declining. Thus, the rate of growth of the money supply in China was not inconsistent with a rate of growth of real GDP of between 7 and 8%.

Why are the rates of growth of electricity, energy and freight traffic so low?

One final question that needs to be addressed is the following: was it possible for real GDP to grow at 7.8% per annum while the rate of growth of electricity production was 2.8% and that of freight traffic was –1.3%? The answer is yes, mostly because the Chinese economy has been undergoing very rapid structural change. If China were a mature economy in steady state like the US economy, such large "discrepancies" in the rates of growth of real GDP compared to those of the production of energy, especially electricity, and freight traffic would have been impossible.

First, the rate of growth of electricity consumption has been lagging behind the changes in the real price of electricity, which has risen threefold since 1990. Thus, the ratio of electricity consumption to GDP was expected to decline over time – the rate of growth of electricity consumption should, based on consideration of the price effect alone, be

lower than the rate of growth of GDP. The same argument applies more generally to the energy consumption to GDP ratio. In addition, there were also other forces at work to reduce the electricity consumption to GDP ratio. Second, the composition of the output of the Chinese economy has also undergone rapid change in recent years: the rate of growth of the manufacturing sector, which uses more electricity per unit value added, has slowed relative to the construction sector and the services sector, which uses much less electricity per unit value added. This results again in a decline in the electricity consumption to GDP ratio. The differential rate of growth between heavy and light industry also has an impact. Third, the effects of intra-industry changes in the composition of outputs can be very significant for a rapidly transforming economy. As the steel industry upgrades the quality of its products from ordinary steel to, say, stainless steel, the value added per metric ton doubles or triples, but the electricity consumption per ton increases much less. The same argument applies as the garment industry moves from making plain cotton shirts to silk shirts, with a significant increase in value added but almost negligible increase in electricity consumption. Thus, intra-industry changes in the composition of output by quality can result in a significant reduction in the electricity consumption to GDP ratio. Of course, in a mature economy, changes in the intra-industry composition of output are likely to be much smaller.

Fourth, there were genuine gains in efficiency, quite aside from the direct price effect, resulting from the replacement of old equipment with new equipment and from economies of scale of operation. Fifth, many of the arguments advanced above apply with equal force to the freight traffic to GDP ratio. A metric ton of steel is a metric ton of steel in terms of freight traffic even though the value added per metric ton can be vastly different. However, in the case of China, concern about pollution and environmental regulation had the additional effect of reducing the use of coal. But coal was responsible for 60% of Chinese freight traffic. Thus, a substitution of coal with oil, gas, hydro or nuclear electricity would result in a significant decline in freight traffic with no necessary corresponding effects on either total energy consumption or real GDP. This is the best and most plausible explanation for the observed contraction in freight traffic. Sixth, more generally, changes in the loci of production and consumption would have the effects of reducing both electricity consumption and freight traffic. Suppose one

power plant used to supply two cities 400 miles apart. Now suppose a new power plant closer to the second city becomes operational and takes over as the electricity provider for the second city. The overall electricity demand will come down because of the reduction in transmission losses; however, such contraction does not indicate a reduction in the economic activities in either city. The same argument works for freight traffic as well. A new plant opens in Chongqing, supplies the local area and replaces the "exports" from the old plant in Shanghai. Total GDP probably rises as the freight traffic declines. Of course, these effects would not have been important in a mature economy.

Seventh, technical improvements – new plants, better cables, higher voltages – over time could also have reduced transmission losses and hence overall electricity consumption in general.[2] Finally, as co-generation becomes more widespread in China, many industrial users have become marginal users. Thus, as their output level declines, they will not buy from the electric utilities. The output of the electric utilities is therefore especially sensitive to a slowdown in the rates of growth of industrial output. This will lead to a downward bias in the electricity consumption to GDP ratio if co-generated electricity is not fully included in the data on electricity production and consumption.

Is there sufficient aggregate demand?

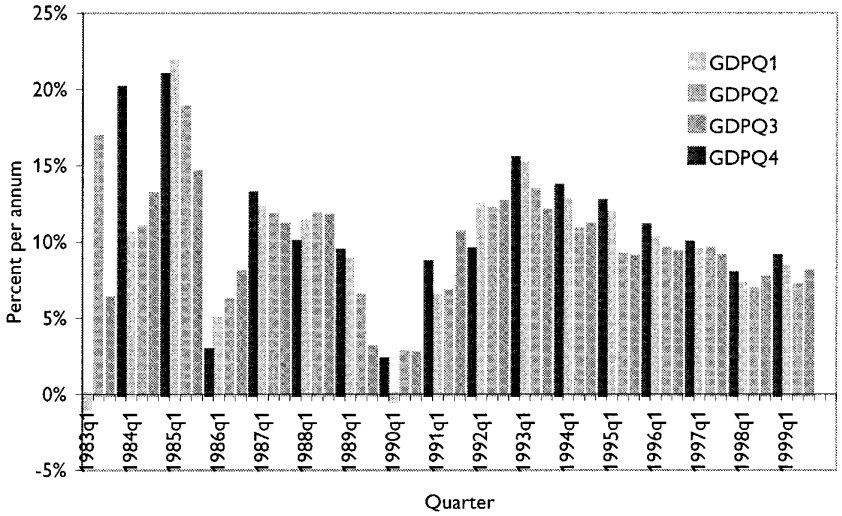
In order to answer this question, we should first examine what has happened to real GDP. Figure 1 presents the year-on-year quarterly rates of growth of Chinese real GDP. (There are no seasonally adjusted data available as yet; the measurement of quarterly rates of growth on a year-on-year basis is an attempt to control for the seasonal factors.) It shows that the rate of growth began to decline in the third quarter of 1992 until it reached bottom in the second quarter of 1998 (at 6.8%). It has been rising since. There is, however, a pronounced and readily apparent seasonality even in these year-on-year rates of growth. Thus, while the rate of growth appeared to have begun declining again from the fourth quarter of 1998, one should focus instead on the comparison of the rate of growth by the specific quarter, that is, for example, the fourth quarter

[2] Measures to reduce theft of electricity also result in a reduction in the "measured" rate of transmission loss.

Figure 1

Real GDP

Year-on-year quarterly rates of growth



with the previous fourth quarter (shown as similarly shaded columns). The resulting picture is actually one of a slow but steady rise in the rates of growth since the fourth quarter of 1998. Real GDP grew 7.6% in the third quarter of 1998 despite the floods which probably caused a reduction of 0.5% in real GDP and 9.0% in the fourth quarter of 1998, representing a strong turnaround from a string of declining quarterly growth rates. We conclude that the declining trend in the growth rates so evident in the figure has finally been reversed. It is also useful to note that the year-on-year rates of growth tend to lag behind. Thus, when rates are rising on a year-on-year basis, the economy is actually doing better than the rates indicate (unfortunately, the reverse is also true, so that when the year-on-year rates are falling, things are worse than they appear).[3]

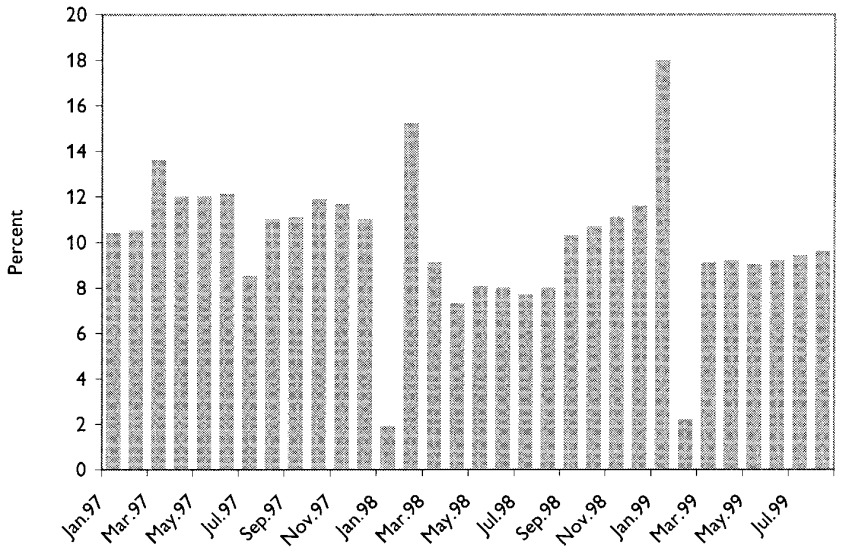
The rates of growth of industrial output, measured in terms of value added, are presented in Figure 2, and they tell a similar story. Ignoring the

[3] Developments subsequent to this conference have proven that our analysis is basically correct.

Figure 2

Value added in industry

Year-on-year monthly rates of growth



anomaly caused by the shifting of the Chinese (lunar) New Year between January and February, there was a readily discernible recovery in the rates of growth beginning in September 1998 and continuing through early 1999.[4] For 1998 as a whole, value added in industry grew 8.9%.

Beginning in the summer of 1998, the central government undertook a massive infrastructural investment programme. As a result, real gross domestic fixed investment grew by 14.1% in 1998. In the first two months of 1999, real gross domestic fixed investment of state-owned and other enterprises (excluding the collective and private enterprises) grew by 28.3% on a year-on-year basis, reflecting the continuing effects of the infrastructural investment initiative.

Prices have been falling for 15 consecutive months. However, much of the decline in the prices was caused by falls in the prices of energy, especially oil, and in the prices of food. The core rate of inflation, that

[4] The recovery would probably have occurred in August had there not been the floods.

is, the rate of inflation net of the changes in the prices of energy and food, may be estimated at between 1 and 2%, comparable to that of the United States. Thus, there is no empirical evidence of either a resurgence of inflation or of deflation. The rate of interest has been reduced four times since mid-1997. The yield on 10-year yuan-denominated bonds has fallen below 6%. Three-year yuan-denominated bonds issued in March/April 1999 carried an interest rate of 4.72%, whereas five-year bonds carried an interest rate of 5.13%. These long-term rates of interest are similar to the rates of US Treasury securities of comparable maturity. They provide evidence of an absence of expectations of either long-term inflation or a devaluation of the renminbi.

The growth of household consumption has remained sluggish and lagged behind the growth of disposable income. This is because household consumption has been adversely affected by actual and expected furloughing of workers by the state-owned enterprises (SOEs), the reduction in the staff of the central government by almost 50%,[5] and the prospective reform of housing, health care, education, pension and other social services. It has also been affected by the East Asian currency crisis through its negative effects on consumer confidence, even though the direct effects of the crisis on the Chinese economy as a whole have remained relatively small. As a result, the national saving rate has remained high at approximately 40% and household savings deposits as a percentage of GDP have continued to rise, reaching over 70% in 1998 (see Figure 3). The enterprises, both state-owned and non-state-owned, faced with a weak consumer market and excess capacity, have also reduced or even stopped their new investment altogether. Moreover, because of the East Asian crisis, exports to as well as the foreign direct investment inflow from certain East Asian countries have also slowed dramatically. This, coupled with the clampdown on smuggling since mid-1998, has resulted in pockets of economic recession, especially in the southern Chinese provinces of Guangdong and Fujian.

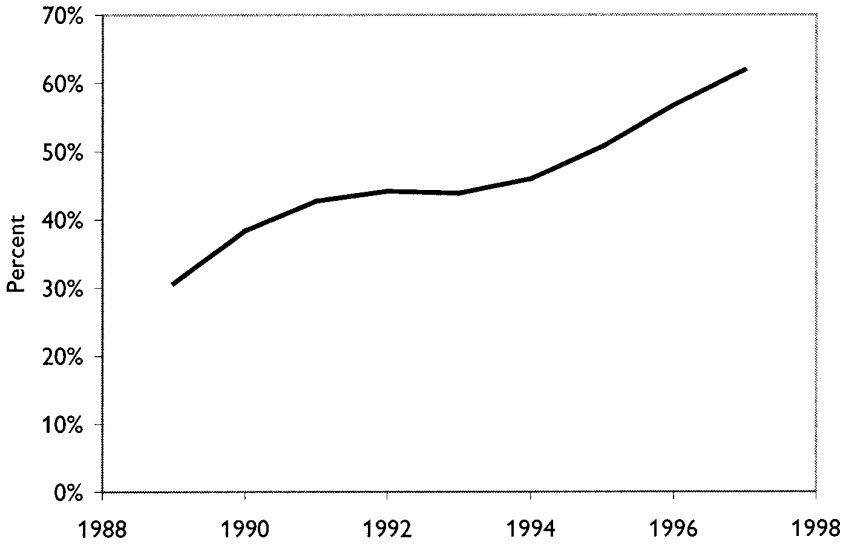
Overall, business and consumer confidence has remained weak. In order to continue to sustain a rate of growth that is close to the potential of the Chinese economy, additional economic stimulus by the central government is necessary.

[5] The central government employees have been reduced by approximately 48% across the board (approximately four million in total).

Figure 3

Household savings deposits

Year-end stock, as a percentage of GDP



The roles of the banking sector in a developing market economy

In this section, we consider the different possible roles of the banking sector in a developing market economy. First of all, a banking system is a payment and settlement system – it facilitates transactions and hence economic activities. Without a reliable banking system, all transactions will have to be conducted in the forms of barter, cash or buyer- and seller-specific credits. The volume of economic activities that can be supported will be much smaller in the absence of a functioning banking system. Second, banks provide a safe depository for the money balances of households and enterprises, as a convenient and reliable alternative to mattresses and private vaults. Third, banks provide low-risk[6] investment

[6] In economies with either explicit or implicit deposit insurance, such investment vehicles are virtually risk-free.

vehicles for the savings of households and enterprises in the form of different types of savings deposits. Finally, by extending credit to enterprises and households, the banking system also performs financial intermediation, allocating savings to their highest and best use and pooling and hence diversifying the risks across investment projects on behalf of its depositors.

In terms of loans (and investments), the banking sector has many options. The safest loans for the banks are of course those to the central government, and the safest investments are debt securities issued by the central government.[7] Next in the order of higher riskiness are short-term loans for international trade financing backed by letters of credit, followed by construction loans and short-term working capital loans. The biggest risk in construction loan and working capital financing is the diversion of the loan proceeds for unauthorised purposes. Construction loan financing, properly disbursed in accordance with verified progress, is relatively low-risk, but there may be some repayment risk to the extent that the structures constructed cannot be readily sold at completion. Short-term working capital is also relatively low-risk, provided that it is adequately monitored and collateralised (e.g. with warehouse receipts).[8] Banks can also provide loans for investment by government and enterprises. However, these loans are typically long-term in nature. While loans to the government are generally quite secure,[9] long-term loans to enterprises should properly be the province of specialised development, industrial and long-term credit banks. Ordinary commercial banks do not normally have the long-term funding base to make these long-term loan commitments because the bulk of their deposits are short-term in nature. Moreover, loans for financing long-term investment by enterprises are also inherently riskier because of both the long gestation period and consequently the long exposure period – the loans become much more like equity investment in terms of their risk characteristics. Finally, banks can also finance personal or household investment (e.g. residential mortgage loans) and consumption; however, non-collateralised

[7] This also provides the central government with an alternative to the practice of printing money to finance budget deficits.

[8] Working capital financing based on cash flows is riskier. In the East Asian developing economies, cash flow-based lending is extremely rare among the local East Asian banks. Collateral is almost always required and most often takes the form of real estate.

[9] Even then there may be a risk of maturity mismatch.

consumption loans are probably quite risky in developing economies, and even collateralised loans such as mortgages may face the problem of potential maturity mismatch with respect to the liabilities (deposits).

It is, of course, not necessary that all financial institutions perform all of the roles discussed above. Division of labour is quite possible. For example, the postal savings system in many countries essentially fulfils only the safe depository role. It does not typically support transactions other than those between the postal savings system and its depositors. It also does not typically make loans, except possibly to the central government, and purchases only central government securities. For another example, it is also possible to conceive of a system of narrow banking institutions that is specialised as a payments and transaction settlement system and does not otherwise make loans, except possibly to the central government, either directly or through the purchase of central government securities.[10]

How has the Chinese banking sector fulfilled these roles? As Figure 3 reveals, the savings deposits in Chinese banks have been growing much faster than Chinese GDP in recent years. The ratio of savings deposits to GDP has been rising rapidly, which demonstrates that the Chinese banking sector has done a great job in mobilising and collecting savings. The rising savings deposits also attest to the confidence of the average Chinese citizen in the ultimate ability of the Chinese banking system to pay its depositors upon demand. However, the Chinese banking sector does not seem to have done as good a job in terms of allocating the savings. The stock of non-performing loans in the Chinese banking sector is large and increasing. We shall discuss these problems in the next section.

The conditions of the banking sector

In this section, we examine the conditions of the Chinese banking sector in some detail. We assess the capital adequacy of the state-owned commercial banks as well as the potential gravity of their non-performing loans problems.

[10] Money market funds, common in western countries, come closest to this type of narrow banking institutions.

Capital adequacy of the state-owned banks

The "Big Four" state-owned commercial banks – Bank of China, Industrial and Commercial Bank of China, Construction Bank of China and Agricultural Bank of China – account for 90% of all bank assets. Recently, the People's Bank of China lowered the reserve requirement for the commercial banks. A special government bond issue in the amount of Yuan 270 billion (US$ 32.5 billion), with an annual coupon rate of 7.2%, was then purchased by the commercial banks with funds freed up by the lowering of the reserve requirement. Using these proceeds, the government, in turn, purchased subordinated debt of the commercial banks, which counts as "capital", to enable them to satisfy the standard capital requirement of 8% of assets laid down by the Basel Committee on Banking Supervision. Further recapitalisation along these lines is possible. One possibility is the exchange of government bonds by either the Ministry of Finance or the People's Bank of China for the (non-performing) loan assets of the state-owned commercial banks. Such an asset swap would strengthen the balance sheets of the commercial banks by improving the average quality of the bank assets. Another possibility is the purchase of government bonds by the state-owned commercial banks from the Ministry of Finance or the People's Bank of China, which in turn would purchase preferred shares or subordinated debt of the commercial banks with the proceeds. The net result would be an increase in capital as well as an increase in good assets (government bonds) on the bank balance sheets. Thus, it should be clear that capital adequacy for balance sheet purposes per se is not an issue. There is no question that the state-owned commercial banks are capable of satisfying the capital requirements. The more important issue has to do with the non-performing loans of the state-owned commercial banks.

The non-performing "loans" of the state-owned banks

The majority of the non-performing loans of the state-owned commercial banks in China are fundamentally different in nature from the non-performing loans of privately owned commercial banks in market economies. First of all, they are almost exclusively owed by state-owned enterprises to the state-owned banks. Until very recently, only SOEs had access to credit from the formal banking sector in China. Second, the fact that the loans have become "non-performing" is not in general a

surprise to either the lenders or the borrowers – most of the lenders do not expect the loans to be collectible even at the time they are first made and most of the borrowers know full well at the time that they will not be able to repay these loans. The truth of the matter is that most of these loans are actually government subsidies for loss-making SOEs disbursed in the form of bank loans.[11] These are, in fact, policy loans.

The non-performing loans to the SOEs at the state-owned banks can be approximately classified into three categories: loans to traditional old-line industrial enterprises; loans to enterprises established during the mid-1980s in lieu of a founding equity; and loans contracted during the overheated period in the early 1990s. On top of these three categories of loans, there were also the rollovers (appropriately disguised) of these non-performing loans since 1994. In terms of annual flows, the non-performing loans amount to between 2 and 3% of GDP, comparable to the government budget deficits in many countries. In terms of cumulative stocks, they amount to approximately US$200 billion. With a GDP of approximately US$960 billion in 1998, this implies a non-performing loan to GDP ratio of slightly over 20%, which is quite consistent with estimates of 20% by the People's Bank of China and 25% by international credit rating agencies. Ultimately unrecoverable non-performing loans have been estimated to be in the order of between one-third (by Chinese bank officials) and one-half (by rating agencies) of all outstanding non-performing loans. As mentioned above, these loans should be regarded as indirect loans by the state-owned banks to the state itself and thus should properly be included as part of the Chinese public debt. Official Chinese public debt outstanding was approximately 10% of GDP as of 1996. Adding in the estimated net new debts issued in 1997 and 1998 as well as the entire stock of outstanding non-performing loans, the public debt to GDP ratio will be somewhere between 35 and 40%, still considerably lower than those of many other countries (see the following section). Moreover, it is also clear that the Chinese banks will never be allowed to fail in a way that hurts the depositors – in other words, there is, in fact, universal implicit insurance for bank deposits.

[11] If the fiscal condition of the Chinese central government were better, these subsidies could have come directly from the budget rather than indirectly through the state-owned commercial banks as loans.

Why do state-owned enterprises lose money?

Since the majority of the non-performing loans are essentially government subsidies for making up the losses of SOEs, it is useful to try to understand why SOEs lose money. Presumably if and when these losses can be stopped, the subsidies will no longer be necessary, and the flow of new loans can be discontinued. The SOEs' losses can be attributed to many factors, most of which are unrelated to the profitability of the business operations of the enterprises. First, there is the burden of unfunded or under-funded pension and other social welfare liabilities such as housing, education and medical care. Second, there is the burden of the interest costs on loans incurred on the establishment of the enterprises in lieu of a founding equity. This applies to most SOEs established in the early 1980s. An enterprise otherwise breaking even on an operating basis may thus wind up in the red because of the payment of interest on the initial capital loan. Third, there are genuine operating losses due to antiquated equipment and technology and/or overemployment. Fourth, there may be losses due to diversion or relending of loan funds for other unauthorised purposes (e.g. from working capital to fixed asset investment; relending to third parties; speculation in the real estate or stock markets) with or without the connivance of the loan officers, due to insufficient monitoring. These losses occurred mostly in the overheated period in the early 1990s. Fifth, there may be losses due to improper transfer pricing (e.g. selling low and buying high from related parties) and other irregular practices on the part of the SOEs – as long as the state or state-owned banks, are ready to absorb them. Most of these losses are in the nature of accounting losses and imply only that the shareholders (the state), as opposed to the enterprises or the management, are losing money.[12] Finally, there may be losses due to the lack of incentives for efficient management or efficient allocation of new investment.

How can some of these losses be stopped? First, the burden of unfunded or under-funded pension and other social welfare liabilities such as housing, education, and medical care for the former and current

[12] A government official was reported to have remarked that, if there were a regulation that any state-owned enterprise that loses money three years in a row would be shut down permanently, then many of the loss-making enterprises would report a small profit in the third year so as to avoid becoming closed.

SOEs must be assumed by the state in one way or another. Otherwise the haemorrhage will simply continue. Second, for an enterprise that did not have a founding equity, there should be a debt-equity swap, converting the initial capital loan into the equity of the enterprise, thus greatly reducing the burden of the continuing interest costs and hence the potential losses. Third, for an enterprise with antiquated equipment and technology and/or overstaffing, measures should be taken to close down the enterprise and/or reduce employment. To a certain extent, "xiagang" (literally, "stepping down from one's post"), the furloughing of the workers of the Chinese SOEs, which by the end of 1998 had already shrunk the workforce of the SOEs by some 20 million, is a major step in this direction. However, the speed with which the furloughing of workers can continue to be carried out may have to depend on the robustness of the rest of the economy, so that the majority of the redundant labour force thus released can be absorbed. Fourth, for loan losses due to diversion or unauthorised relending of loan funds, the obvious solution is increased monitoring. By adopting relatively simple controls on the disbursement of loan proceeds – e.g. the implementation of the "real bills" doctrine (collateralising the loans for financing inventories of materials, intermediate inputs and finished goods), using the construction loan method of disbursement (direct payment to vendors and contractors in accordance with verified progress), and more generally insisting on the direct transfer of funds to the authorised payees (including suppliers and workers). Fifth, improper transfer pricing and other irregular practices can be reduced with increased monitoring and better auditing. However, a more thorough solution will require a general hardening of the "budget constraint" and selective divestiture of some of the SOEs to the management so as to reduce the incentives for artificial loss creation. Finally, in order to reduce losses due to the lack of incentives for efficient management or efficient allocation of new investment, the system of governance of the SOEs has to be reformed both to solve the principal-agent problem and to reduce moral hazard through the hardening of the budget constraint.

However, it is clear from the discussion above that the SOEs losses do not necessarily reflect social inefficiency as they may have been caused by fixed factors independent of the efficiency of the business operations of the enterprises and by unauthorised redistributions, both of which are basically infra-marginal in nature.

In principle, the solution of the non-performing loans problem is very simple. The liabilities can be simply assumed by the central government or the central bank, either directly or indirectly through another government-sponsored entity (like the Resolution Trust Corporation of the United States). In fact, China Construction Bank was the first of the four major Chinese commercial banks to undertake a restructuring of its non-performing loans by forming an asset management company. However, the real challenge of the non-performing loans problem is how to prevent its recurrence. A permanent solution of the problem of non-performing loans of the state-owned banks is only possible if the SOEs can be made viable so that new policy loans are no longer necessary. Thus, reform of the SOEs is essential for the long-term success of the reform of the banking sector. It is helpful that over time the state-owned sector has been shrinking. The percentage of GDP it accounts for has declined from almost 100% in 1979 to approximately 30% today. A growing GDP and a robust non-state-owned sector facilitates the reform of the SOEs and consequently the non-performing loans problem of the state-owned banks.

Other issues facing the banking sector

In addition to the non-performing loans problem, there are several other issues as well. First, in the current environment, the central government or the central bank must be prepared to guarantee the security of deposits of all individuals (perhaps up to a ceiling amount). In other words, the government must provide universal implicit deposit insurance to all commercial banks, and the central bank must act as the lender of last resort when necessary. The four major Chinese state-owned commercial banks are certainly "too big to fail". Implicit deposit insurance may, however, lead to moral hazard on the part of the depositors and the banks, and that is why a ceiling amount on the insurance may be desirable and financial regulation and supervision are necessary. For financial supervision and regulation to be effective, the management of the commercial banks must be made responsible for their banks' performance. Thus, there must be hierarchical and unitary control within the commercial banks. To enforce financial discipline, weak banks and non-bank financial institutions must be allowed to close or become bankrupt, or forced to consolidate and merge if

necessary. To a certain extent, the government has already implemented this policy by the closure of non-bank financial institutions such as China Venturetech and Guangdong International Trust and Investment Corporation (GITIC).

The closure and bankruptcy of GITIC has significance for the banking sector well beyond the GITIC episode itself. It sets a precedent and sends a very strong signal that non-sovereign guaranteed debt is just that – non-sovereign guaranteed debt, and the lenders, both domestic and foreign, should beware. Thus, in one fell swoop, by not bailing out the institutional creditors of GITIC, both domestic and foreign, and otherwise not interfering in the workout process, moral hazard on the part of both potential lenders and borrowers is reduced. The GITIC bankruptcy provides for equal treatment for all creditors in accordance with the priority established by law. It leads directly to the downgrading of the credit ratings of the Chinese state-owned banks and investment companies – Standard and Poor's assigned a "junk" rating to China International Trust and Investment Company (CITIC), the Bank of China, China Construction Bank and the Industrial and Commercial Bank of China, but there was a strengthening in the sovereign credit rating of China. Indirectly the GITIC episode also strengthened central government control over the financial and banking sector.

Moral hazard can also be reduced through a reduction of "excess leverage". Asset price bubbles are frequently caused by over-leveraging. In any case, the damage from the bursting of the bubble can be minimised if the degree of leverage is controlled. Rules and regulations that reduce or limit leverage (e.g. by classification of assets) on the part of bank borrowers (enterprises and individuals) should be enacted – and they should cover loans collateralised by stocks and residential and non-residential properties as well. The swap of debt for equity by enterprises should also help to reduce leverage. Higher capital requirements on the banks also help to reduce the leverage of the lenders and hence their moral hazard. The overall credit quality of bank loans can be expected to improve with a reduction of moral hazard on the part of both lenders and borrowers.

Information asymmetry can also adversely affect both the quality and quantity of credit. Improvement of the accuracy and availability of credit-relevant information will lead to higher-quality and more loans. The information flow may be improved by imposing uniform accounting

and auditing standards, encouraging the emergence of larger and more professional accounting and auditing firms with capital and reputation to protect, and promoting credit information collection, exchange and assessment organisations such as credit bureaus and rating agencies.

Mismatch of the maturities of assets and liabilities is a common problem for financial and banking sectors. The problem of the savings and loan associations in the United States in the early 1980s is a well-known example of such a mismatch – the savings and loan associations make long-term (30-year) fixed rate mortgage loans funded mostly by short-term deposits. The result, as the rate of interest rose in the early 1980s, was an unmitigated financial disaster that cost the US taxpayers approximately US$600 billion. China will do well to try to avoid repeating the same mistake. As the demand for long-term fixed rate loans increases in the Chinese economy, for example for financing residential mortgages, the banks must make efforts to expand their long-term fixed rate deposits, or to issue long-term fixed rate bonds themselves, or to either directly or indirectly (by selling the loans to another organisation) securitise the loans, minimising the exposure to interest rate risk. The development of a long-term capital market, including secondary markets for debt securities, is absolutely essential to increasing the supply of long-term funds.

Political interference with banking and monetary policy decisions is potentially a problem. The recent institution of a US Federal Reserve System-like system of district central banks in China is a first step to insulate the banking system from political influence at the provincial and local levels. Nine district branches of the People's Bank of China, each overseeing two or more provinces/municipalities/autonomous regions, have been established (Tianjin, Shenyang, Shanghai, Nanjing, Jinan, Wuhan, Guangzhou, Chengdu and Xian). In addition, the original provincial-level branches have all been abolished. Eventually, perhaps even the central bank itself can become more independent of the executive branch of the government.

Finally, there needs to be more investment in human capital in the banking sector. More education, training and institution building are required. Efforts should be made to develop and nurture a modern bank "culture" with emphasis on credit analysis, risk control and efficient provision of banking services to customers.

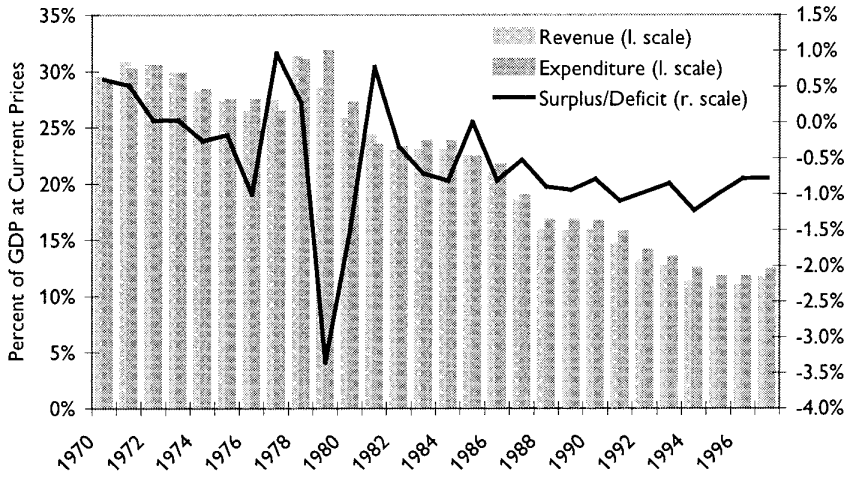
The fiscal situation

We now turn to examine the Chinese fiscal situation to assess both the short-term viability and the long-term sustainability of the Chinese financial system. If the Chinese financial system were in imminent danger of collapse, it would place severe constraints on the set of feasible government policies, and in particular would limit the ability of the Chinese government to stimulate the economy through deficit spending. The viability and sustainability of the Chinese financial system depend on a number of factors, including: the size of the annual government total and current (or operating) deficit; the public demand for public debt; the fiscal capacity for servicing the public debt; the lending and bond-buying capacity of the banking system; and public confidence in the banking system and the currency.[13]

Figure 4

Central government budget revenue, expenditure and surplus/deficit

As a percentage of GDP



[13] Since the renminbi is a non-convertible currency, only the confidence of the domestic citizens is relevant.

The government budget deficit

In Figure 4, we present the central government budget revenue, expenditure and surplus as a percentage of GDP. It shows that the official Chinese government deficit has been quite low in recent years, less than 1.5% of GDP. However, it is also worth noting that total government revenue (expenditure) as a percentage of GDP has been falling continuously, from slightly over 30% in 1979 to below 15% in 1997. This ratio is actually among the lowest in the world.

In Figure 5, we present the distribution between current (recurrent) and capital (non-recurrent) government expenditures. It is apparent that on a current (or recurrent) expenditure basis, the government budget has been in surplus in recent years. With the recent reduction in the size of the government, 48% of the central government employees have been laid off. This should result in a significant reduction in personnel and related costs in current expenditure in a couple of years. Thus, the surplus should become even larger in the future.

Figure 5

The distribution between current and capital expenditure

As a percentage of GDP

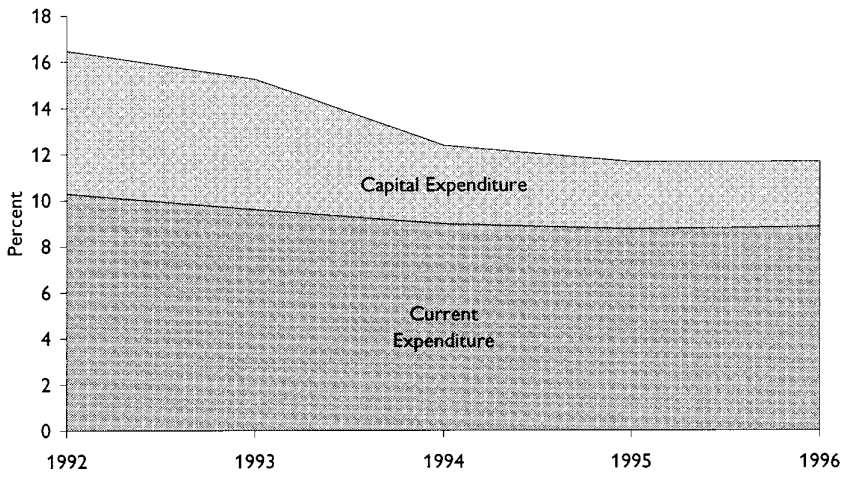
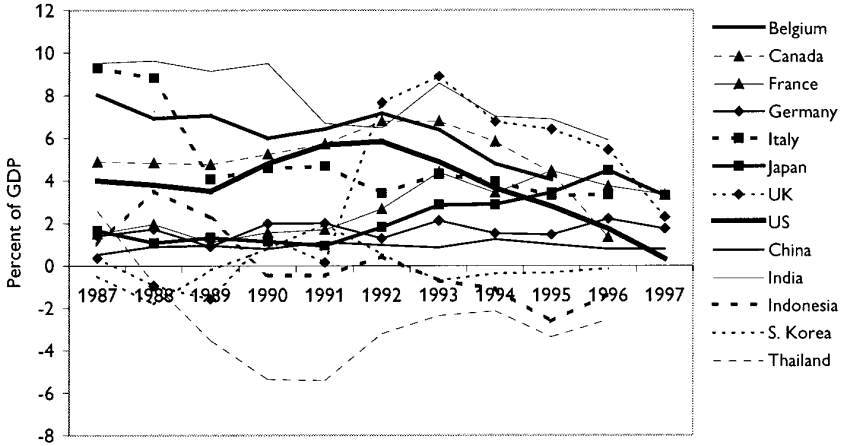


Figure 6

Government deficit, selected countries

As a percentage of GDP



In Figure 6, as a comparison, we present the total government deficit as a percentage of GDP for selected countries. The Chinese government budget deficit has been rather modest compared to other countries, including India, Japan, the United Kingdom and the United States. The current level of official government budget deficit is completely sustainable in the long run.

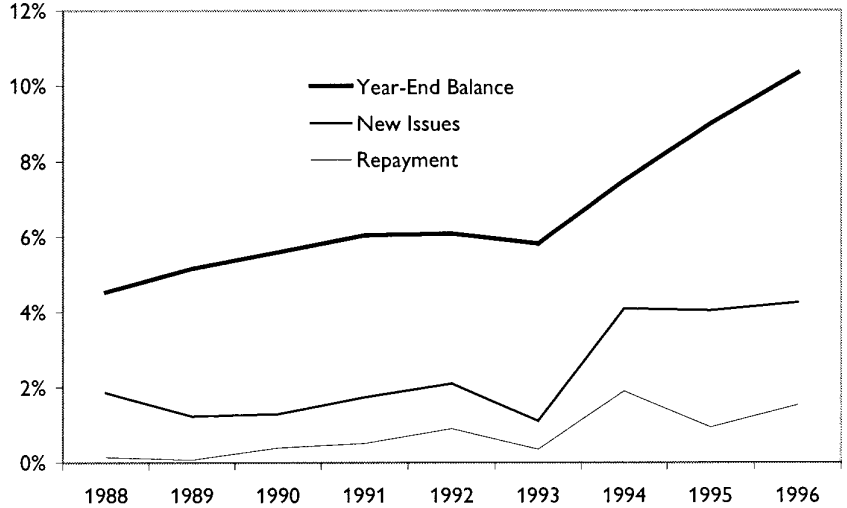
The stock of public debt

In Figure 7, we present data on the official Chinese stock of public debt as a percentage of Chinese GDP. In Figure 8, we present data on the stock of public debt as a percentage of GDP for selected countries. This shows that the public debt to GDP ratio of China is among the lowest. All the major industrialised countries, including Japan, have much higher public debt to GDP ratios. If we add the entire stock of the Chinese non-performing loans to the Chinese public debt (that is, assuming that nothing is recoverable), the public debt to GDP ratio of China will be approximately 40% in 1998, still below those of Belgium and Italy, which were above 100%, and the United States (70%), Japan (almost 100%), the United Kingdom, India and France. If we assume that approximately

Figure 7

The stock of public debt

At year-end, as a percentage of GDP



half of the non-performing loans can be recovered, then the public debt to GDP ratio of China will be somewhere between 25 and 30%, which is quite manageable. At 30% of GDP and at a rate of interest of, say, 5% (the current Chinese rate of interest is actually considerably lower), the amount of GDP required to service the public debt each year is approximately 1.5%. As a proportion of total government revenue, the debt service would amount to 10%.

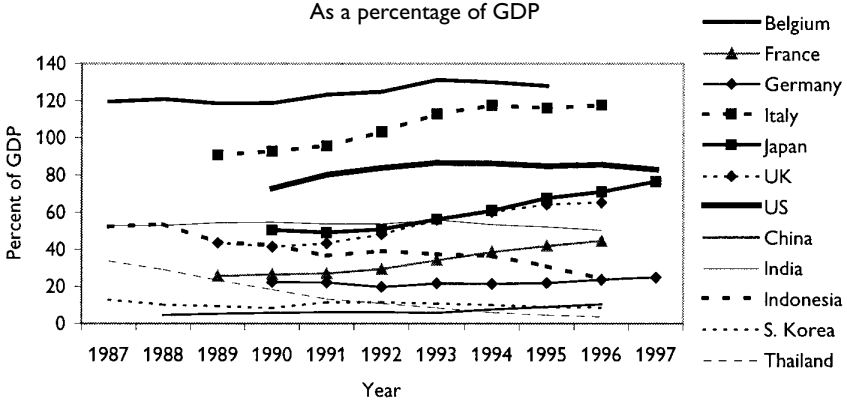
If we assume that new non-performing loans add to this public debt to GDP ratio at the rate of 2.5% per year, and assume again that approximately half of these non-performing loans cannot be recovered, then, in 10 years time, we shall have added another 12.5% to the public debt to GDP ratio, bringing it to approximately 40%, still a manageable figure and nowhere near the danger zone.

We conclude that the Chinese economy is not in imminent danger of financial collapse, despite the existence of a significant stock of non-performing loans. Moreover, while the existence of the non-performing loans and their continual increase over time are not desirable, they do

Figure 8

Public debt, selected countries

As a percentage of GDP



not yet pose a serious threat to the solvency of either the banking system or the central government. The system is sustainable for at least another decade or longer. It has already been pointed out that for a reform of the banking sector to be genuinely, as opposed to cosmetically, successful, it must await a successful reform of the SOEs. The present time, when the growth of the Chinese economy has slowed and public confidence in the economy, for a variety of reasons, is low, is definitely not the right time for hastening real reform of the SOEs, and hence there should be no rush to undertake a radical reform of the Chinese financial sector. Furthermore, the fiscal situation can certainly support a couple of years of deficit financing without significant adverse effects, especially given the low rate of growth of non-government aggregate demand and the low, indeed negative, rate of inflation currently prevailing in the economy.

While it is true that China's current capacity to expand tax collection is weak, it has been steadily improving. The reduction in the size of government should also result in real savings in a few years. For now, household deposits have been rising rapidly as a percentage of GDP and provide the wherewithal for the banks to continue financing the deficits of the SOEs either directly through bank loans or indirectly through the purchase of government bonds. Moreover, savings rates are expected to

remain high and longer-term debt instruments can be used. Furthermore, the state-owned sector is relatively stagnant. It has already shrunk to 30% of GDP, and in another 10 years it will probably shrink to 15%. Its losses as a percentage of a growing GDP must also decline over time. Thus, while the annual flow of losses that need to be subsidised is unlikely to decrease without more genuine reform, its ratio to GDP should not be rising. The rate of interest has also remained low. Public confidence in the banking sector and in the renminbi has remained high, as shown by the continuing inflow of household savings deposits into the banking sector. All these considerations suggest that while the problem is serious, it is neither critical nor fatal, and that the current situation can be sustained for a decade or even two without causing a collapse of the Chinese economy.

The macroeconomic policy options

In the previous section we show that the problem of non-performing loans in the state-owned banks does not impose a significant constraint on the ability of the central government to engage in the necessary fiscal and monetary policies to stimulate the economy. The near-term challenges that face the government include: maintaining aggregate demand (and hence economic growth and employment), stability of the Chinese yuan and the Hong Kong dollar; reform of the state-owned enterprises; reform of the banking system; and reform of the housing system.

First, we consider the external environment. The US economy cannot be any better than it is now, with record low rates of interest, inflation and unemployment and a booming stock market. All of the risks are therefore downside risks. The Japanese economy will take a long time to turn around. The South-East Asian countries (except Indonesia) and Korea will begin to recover in mid-1999 but the rates of growth for the entire year will be relatively low. Hong Kong is already in recession and the rate of growth of the economy of Taiwan has also begun to slow. Thus, China cannot rely on continued growth of its exports and must take the initiative on its own to maintain aggregate demand and to stimulate its domestic economy.

Second, domestically, neither household consumption nor enterprise investment (including foreign direct investment), state-owned or not, can

be the engine of economic growth in the near term. In order to induce households to consume and enterprises to invest again, one must first try to turn around expectations.

Third, among the objectives of the Chinese policy-makers is the preservation of social stability – a policy of "no losers" – at least "no immediate losers". Thus, it is a high priority for the Chinese government to limit unemployment and create new jobs – approximately 10 million new workers enter the labour force each year.

Finally, economic growth and economic reform are actually complementary – neither one can run ahead of the other. On the one hand, if economic reform runs too fast, it will cause economic growth to slow (because of the furloughing of workers and the adverse expectations that it generates). On the other hand, if economic growth runs too fast without reform, it will run into bottlenecks. However, economic growth actually provides the environment in which genuine economic reform can be implemented. Economic growth and economic reform must therefore go hand-in-hand.

The macroeconomic policy options

In the short run, increasing gross fixed investment through new and accelerated infrastructural investment projects is the only realistic macroeconomic policy option capable of providing immediate stimulus to the economy. This policy has already been implemented by the Chinese government. However, increasing infrastructural investment is only a transitional measure intended to maintain the rate of growth of GDP in the near term and to induce a change in expectations on the part of households and enterprises. Infrastructural investment alone cannot sustain the rate of economic growth for more than a couple of years. The promotion of affordable owner-occupied residential housing investment for and by the domestic population is therefore one of the few alternative promising sources of growth of aggregate demand. This also fits into the plan to marketise residential housing for employees of state-owned enterprises and the government by end-1998. The provision of long-term, preferably fixed rate, mortgages by the banking sector to households is critical to the success of this effort.

In the longer run, continued economic growth requires new investment by enterprises, which in turn requires new and increased lending

to new enterprise (both state-owned and non-state-owned) investment projects. However, in recent months, the growth of loans has been very slow – both the demand for and the supply of loans have been low.

What are the reasons for the low demand for loans? First of all, the expectations of households and enterprises have to be turned around and their confidence in the economy restored. However, this will take both time and sustained economic stimulus on the part of the government. Second, the real rate of interest, at 8%, is still too high for borrowers. Third, the lack of clearly secure property rights (rights of transfer of property in addition to use rights) discourages investment by both non-state enterprises and households.

What are the reasons for the low supply of loans? First of all, there is a general "reluctance to lend" on the part of loan officers at the banks, in part because of the introduction of "lifetime" responsibility of the authorising loan officer for the repayment of the loan. As a result, many loan officers simply go into a defensive mode by simply not making any loans. Those loan officers with loan quotas to meet will make only "overnight loans", that is, he or she will "pretend" to lend to a customer who by pre-arrangement will borrow on one day and repay immediately on the next day, thus helping the loan officer fulfil the loan quotas but without the risk of any loss (this type of activities gives a new meaning to the term "overnight loans"). Second, the lack of clearly secure collateral, especially in the case of non-state borrowers, discourages lending. Third, information is both inadequate and unreliable for serious credit analysis. Finally, capital inadequacy and existing non-performing loans may limit a bank's ability to lend.

What can the government do to increase the volume of loans (safely)?

First, the government will try to turn around the expectations of households and enterprises and restore their confidence in the economy by maintaining the growth in aggregate demand through undertaking infrastructural investment projects on a sustained basis. Recapitalisation of some of the enterprises through either a debt-equity swap, injection of new equity or forgiveness of old debt will help enhance the borrowing capacity of enterprises. Second, the central bank can lower the nominal and hence the real rate of interest, which it has already done quite a few times. Third, laws should be enacted that guarantee the

property rights of owners of residential housing units, including, in particular, the right of transfer to third parties (such rights can be completely analogous to the rights of the owners of rural housing units), thus solving the lack of collateral problem. In addition, the introduction of alternative modes of bankruptcy (e.g. reorganisation) in addition to liquidation will also help alleviate the lack of collateral problem.

Fourth, lending can be facilitated by drawing up "safe harbour" rules for loan officers so that they do not have to assume lifetime responsibility for loans they make indefinitely if they follow all the rules.

Fifth, the incentive for commercial banks to lend can be increased by reducing or eliminating the payment of interest on excess reserves held by commercial banks at the People's Bank of China. Lending to non-state owned enterprises can be expanded by implementing a prime rate system – allowing the commercial banks to charge higher interest rates to less established borrowers (this has the advantage of also protecting the net spread of the commercial banks as they lend to small and medium-sized enterprises). Third, the information for credit analysis can be improved by promoting the establishment of credit rating and reporting agencies and by setting up a system of accreditation and regulation of accountants and auditors. Finally, the recapitalisation of the banks and the transfer or sale of the non-performing loans to the government, or another entity set up by the government, should improve the ability of banks to lend.

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A review of recent banking reforms in China

YK Mo

Introduction

Banking reforms have played an important role in China's overall effort to transform a centrally planned economy into a market-based economy since 1978. Although the banking sector has undergone remarkable changes over the period, deep-seated structural problems of asset quality, capital adequacy and profitability continue to pose a challenge to the sector. During the last year, China has ostensibly accelerated reform of the banking sector. Focus has been given to addressing the cumulated non-performing loans (NPLs) – both bad loans inherited from the past and new loans that will deteriorate to become classified loans.

The purpose of this paper is to review the adequacy of recent measures and continued challenges to banking sector reform. The first section of this paper discusses the size and formation of NPLs. Section 2 describes recent reform measures. Section 3 outlines the challenges facing China's banking system. Section 4 argues that despite the weakness of the banking system, there are mitigating factors which prevent the system from generating a full-blown crisis similar to that seen elsewhere in Asia.

This paper focuses mainly on the four state-owned banks – Agricultural Bank of China, Industrial and Commercial Bank of China, Bank of China and Construction Bank of China – which account for 71% of loans and 62% of deposits in China's commercial banking system.

Size and origin of non-performing loans

The credit rating of Chinese banks is amongst the lowest in Asia (Table 1). The People's Bank of China (PBC) estimates that at end-1997, around 20–25% of *total* bank loans, or about RMB 1,500 billion (US$ 180 billion), were non-performing, equivalent to just under 20%

Table 1

Credit rating of the four state-owned banks

	Bank deposits		Long-term debt (senior)	Financial strength
	Long-term	Short-term		
Agricultural Bank of China	Baa2	P-3	Baa2	E
Construction Bank of China	Baa2	P-3	Baa2	E
Industrial and Commercial Bank of China	Baa2	P-3	Baa2	E
Bank of China	Baa2	P-3	Baa1	E+
China (foreign currency)	Baa2	P-3	A3	–

Source: Moody's Investors Service.

of GDP. Of the total NPLs, about 6–7%,[1] or RMB 400 billion (US$ 50 billion), were deemed irrecoverable. Bank analysts believe that the level would be significantly higher if international accounting norms were applied.

The exact amount of NPLs in the books of the *state-owned banks* is far from transparent. Based on 20% non-performing loans as disclosed by the PBC, NPLs in the books of the state-owned banks amounted to RMB 1,186 billion (US$ 143 billion) at end-1997. This was equivalent to 15.6% of GDP, matching the 15% official estimate of NPLs in Japan's banking sector.

The NPL problem has a stock and a flow dimension. The stock problem arises from the bad loans undertaken in the past and the flow problem refers to future loans to enterprises that will not be able to service them and which will thus become classified loans. The sheer size of NPLs is partly due to structural factors. Under a centrally planned economy, banks acted on behalf of the government to finance investment and working capital needs of state-owned enterprises (SOEs). SOEs, in turn, were responsible for the livelihood of their workers from cradle to grave. The IMF estimated that 37% of industrial SOEs were suffering losses as of end-1997,[2] so a large proportion of the loans extended to them might have become doubtful. Pulling the plug on SOEs would push

[1] This represents a deterioration of asset quality. The previously released figure was 4–5%.
[2] IMF Article IV Consultation, 1998.

them to bankruptcy, resulting in massive layoffs – a potentially serious social problem in a country that has only begun to build a social safety net. As a result, banks are still carrying the NPLs on their balance sheets but resolution of this issue is constrained by structural problems of the SOEs, fiscal structure and social welfare reform in China. However, as a consequence of several new measures (discussed in the next section), there will be far fewer new bad loans than previously thought.

Chinese banks shared the same symptoms of reckless credit expansion, which was common amongst banks in Asia in the 1990s. The domestic credit to GDP ratio rose from 87% in December 1995 to 105% in September 1998.[3] Moreover, as provincial governments maintained authority over bank personnel within their localities, the decision pertaining to credit allocation was influenced by local governments. Banks were made to lend generously to support ambitious projects of local governments in a race to outgrow neighbouring cities and provinces. As credits were allocated to the construction of huge commercial centres, office skyscrapers and luxury apartments for which there was no genuine demand, a significant portion of the loans turned bad and became irrecoverable.

Recent banking reform measures

Arguably, the major problem in the Chinese banking sector is the high level of NPLs and continued lending to loss-making SOEs. Until recently, banking reforms were mainly focused on introducing competition,[4] broadening the channels of financial intermediation and providing a legal framework for bank supervision. In 1995, notable developments in this respect were introduced: the promulgation of the Central Bank Law that firmly established the PBC as the sole government agent to supervise and regulate the banking sector, and the enactment of the Commercial

[3] Comparable figures were 201% for Japan, 165% for Hong Kong, 149% for Thailand, 147% for Korea, 145% for Malaysia, 111% for Singapore, 73% for the Philippines, 63% for Indonesia and 25% for India.

[4] The banking sector now comprises four large state-owned commercial banks, 13 other commercial banks, several hundred urban cooperative banks, and trust and investment companies plus 5,000 urban cooperatives and around 48,500 rural cooperatives. In addition, there are a handful of small foreign-funded and joint venture banks, hundreds of branches and representative offices of foreign banks, six finance companies and one joint venture investment bank.

Banking Law that clearly defined the scope of business for commercial banks (Annex 1).

In 1998, the government put forward a number of reform measures to deal with the issue of NPLs and to guard against financial risks in the banking sector. These included: (i) injecting equity to recapitalise the state-owned banks; (ii) compelling banks to adopt international standards of classifying NPLs; (iii) requiring banks to make loans on a commercial basis;[5] and (iv) banning local governments from influencing the lending decision of banks. Each of the measures is analysed below.

(i) Strengthening the capital base of state-owned banks

A notable measure to boost bank capital was the issuance in August 1998 of RMB 270 billion (US$ 32.5 billion) of special government bonds to recapitalise the state-owned banks. The plan was implemented in conjunction with the reduction in the deposit reserve requirement. The three steps in recapitalisation were:

- The PBC lowered the legal reserve requirement from 13% to 8%, freeing up about RMB 377 billion of bank liquidity.[6] (The PBC recalled part of its loans to the state-owned banks to offset the inflationary impact of this reduction in the reserve requirements.[7]);
- The state-owned banks used the additional liquidity to purchase bonds issued by the Ministry of Finance (MoF); and
- The MoF injected the entire proceeds into the state-owned banks to strengthen their equity capital.

In essence, the process is equivalent to two swap transactions resulting in the doubling of the capital of the state-owned banks: (i) an

[5] Three policy banks – State Development Bank of China, Agricultural Development Bank of China and Export-Import Bank of China – have been created to lessen the need for politically related lending by the state-owned banks.

[6] Roughly RMB 270 billion from the state-owned banks and RMB 107 billion from other financial institutions.

[7] The recapitalisation would have a mild inflationary impact on the economy because the reduction in the reserve requirement ratio applies not only to the state-owned banks but also other commercial banks and depository institutions such as rural and urban cooperatives. The central bank cannot offset this part of the increase in liquidity by recalling loans to these institutions. As of June 1998, total credits extended by The PBC to these institutions were RMB 14 billion compared with extra liquidity of RMB 107 billion that could be freed up. This extra liquidity was equivalent to 11.6% of new credits granted by the banking sector in 1997. Given the current deflationary environment in China, a modest inflationary impact could well be consistent with the present monetary policy stance in China.

asset swap of bonds for reserve deposits between the state-owned banks and the MoF; and (ii) a liability swap of equity for central bank borrowing between the state-owned banks and the PBC.

The recapitalisation plan raised the capital of the state-owned banks to RMB 478 billion from RMB 208 billion. After the capital injection, the size of the aggregate balance sheet of the state-owned banks remained unchanged. The balance sheet of the central bank contracted but this was offset by a similar expansion in the balance sheet of the MoF. Annex 2 gives details of the recapitalisation plan, including balance sheet adjustments of the PBC and the state-owned banks. The PBC has indicated that the recapitalisation plan would bring the average capital adequacy ratio of the state-owned banks to 8%, although published information does not provide enough details to assess the improvement in the capital adequacy ratio of the state-owned banks based on BIS standards. The consolidated balance sheets of the state-owned banks before and after recapitalisation are shown in Tables 2a and 2b.

The recapitalisation plan not only strengthened the capital of the state-owned banks but also has positive implications for their future income streams. *First*, the state-owned banks will benefit from the yields arising from investment in the bonds. This amounts to RMB 19.4 billion a year before additional dividend payments to the MoF because of the government's increase in equity holdings. *Second*, in paying off some central bank credits, the state-owned banks will also reduce their interest costs. Assuming the central bank credits withdrawn equal the amount of extra liquidity released, the interest costs saved roughly equal the difference between the interest received on reserves and the interest paid on central bank credits.[8] Such interest differential, which averages about 2% p.a., could translate into RMB 4–5 billion a year. The two together would amount to RMB 23–24 billion a year, almost as much as the estimated RMB 27 billion aggregate profits of the state-owned banks in 1997.

In addition to measures to replenish banks' capital, the government is in the process of establishing asset management companies to repackage and sell on the problem loans of the state-owned banks. In April, China

[8] Interest earned on reserves deposited at The PBC is 3.51%. Depending on maturity, interest paid for central bank credits is around 5.22% to 5.67%.

Table 2a

Aggregate balance sheet of the state-owned banks as of June 1998

Before recapitalisation

Assets (RMB billion)		Liabilities (RMB billion)	
Foreign assets	481	Foreign liabilities	377
Reserve assets	**1,189**	Liabilities vis-à-vis non-financial sectors	5,447
Central bank claims	69	Liabilities vis-à-vis central bank	**1,308**
Domestic claims on other sectors	5,800	Paid-in capital	**208**
		Other	199
Total assets	7,539	Total liabilities	7,539

Source: PBC Quarterly Statistical Bulletin.

Table 2b

Illustrated balance sheet of the state-owned banks as of June 1998

After recapitalisation

Assets (RMB billion)		Liabilities (RMB billion)	
Foreign assets	481	Foreign liabilities	377
Reserve assets (1,189–270)	**919**	Liabilities vis-à-vis non-financial sectors	5,447
Central bank claims	69	Liabilities vis-à-vis central bank (1,308–270)	**1,038**
New government bonds	**270**	Paid-in capital (208+270)	**478**
Domestic claims on other sectors	5,800	Other	199
Total assets	7,539	Total liabilities	7,539

Construction Bank's Shinda took over RMB 200 billion of the bank's bad loans. It is thought that separate companies would help keep track of the history of the bad loans and increase the recovery rate. For the bad assets of closed or merged small and medium-sized banks and credit

Table 3

Treatment of bad assets

		Separate management	
		No	Yes
Central ownership	No	Normal treatment of NPLs	Chinese SOBs Swedish banks State Bank of South Australia Mellon Bank (US)
	Yes	Mexico	Chinese small and medium-sized depository institutions Danaharta (Malaysia) KAMCO (Korea) RTC (US)

cooperatives, a centralised asset management company modelled on the US Resolution Trust Corporation is to be established.

In some ways, this resembles the Swedish model of separating the management of bad debts from originating banks while decentralising the ownership of bad assets. Table 3 shows the treatment of bad assets by selected countries. This separation of good assets from bad ones will help banks clean up their balance sheets, leaving a viable and healthy banking sector able to undertake new business.

(ii) Recognition of non-performing loans and loan loss provisions

China has taken an important step towards the recognition of NPLs by introducing a "new", risk-based, loan classification system. The system follows the international standard of dividing NPLs into four categories: special mention, substandard, doubtful and loss.[9] A trial run began in the Guangdong province in 1998 before the system's nationwide launch this year.

[9] According to international practice, loans overdue for three months are considered as non-performing.

Table 4

Summary of provisioning policy in Asia

Loan category	Singapore	Thailand	Korea	Indonesia	Philippines
General provision	Up to 3% of total gross loans and investment portfolio	0.25% of total loans	0.5% on normal loans	0.5% on current loans	Up to 2% of total gross loans
Special mention	–	–	1%	–	–
Special provisions					
Substandard loans	10% at MAS's special request	15%	20%	10%	25%
Doubtful loans	50%	100%	75%	50%	50%
Loss loans	100%	100%	100%	100%	100%

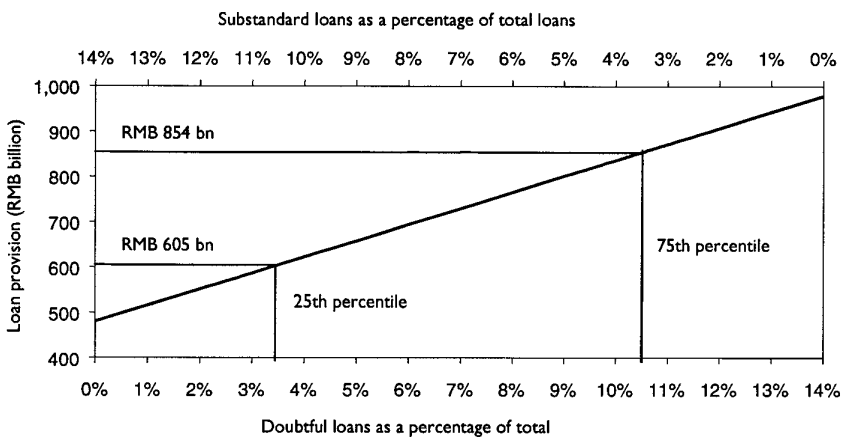
The "old" system loosely classified loans as overdue (loans overdue up to three months), doubtful (loans overdue for more than three months but less than 24 months) and bad (loans overdue for more than 24 months). Under the system, undue loans could still be classified as "performing" even when an enterprise ceased operation due to financial difficulties. No provisions were required to be made against the undue loans. This lack of provisioning explained the bulk of China's persistent NPL problem.

Implementing a risk-based loan classification system to replace the one based on the overdue period is an advance in capital risk management. Banks will need to make provision against a loan according to the category it is in. The regulators are better placed to monitor the asset quality of banks.

In the past, Chinese banks had only limited discretion when it came to loan provisioning. It was only recently that the MoF allowed the state-owned banks to carry out more aggressive provisioning against

Chart 1

Amount of provision for classified loans



NPLs.[10] In recent years, the state-owned banks have been allowed to make special provisions to write off loans arising from bankruptcy and enterprise mergers.

The amount of bad debt charge allowed was small – RMB 24 billion in 1996, RMB 30 billion in 1997 and RMB 50 billion in 1998. It is projected to rise to RMB 60–70 billion in 1999–2000. So far, no announcement has been made by the central authorities on any new provisioning requirements that go with the new classification system. Table 4 shows the provisioning policy in Asia.

To gauge the level of provisions for the state-owned banks against their classified loans, a sensitivity test was conducted based on the median provisions obtained from Asian economies (see Chart 1 and Annex 3 for assumptions used in the test).

The results showed that the required amount of provision was RMB 480–979 billion as of end-1997. Taking the 25th and 75th percentiles, a reasonable amount would be RMB 600–850 billion, roughly 1.3–1.8 times the entire amount of the post-injection aggregate paid-in equity

[10] Starting from 1993, commercial banks were required to make bad loan provisions of 0.6% of outstanding loans at the beginning of the corresponding year. Thereafter, the ratio was allowed to rise by 0.1% every year until it reached 1%.

capital of the state-owned banks. The state-owned banks would probably need such amounts of additional fund injection to recapitalise in order to maintain an 8% capital adequacy ratio. This analysis shows that additional financial resources are necessary. As the owner of the state-owned banks, the government is likely to be the provider of the additional capital.

(iii) Abolition of the credit plan

Another major reform measure to resolve the flow problem was the abolition of the credit plan. Until end-1997, credit allocation in China was based on a mandatory quota system under which the PBC set the *lower* limit on new loans to be made annually and their allocation to specific sectors. Under the system, banks were often asked to allocate credits to support the operations of loss-making SOEs. Effective from 1 January 1998, the PBC replaced the credit plan system (for both working capital loans and fixed investment loans) with an indicative, non-binding, target. The authorities have emphasised time and again that the indicative target only serves as a reference for commercial banks to plan their business. In 1998, the loan target for the state-owned banks was RMB 1,000 billion, up 25% from the 1997 credit plan.

Since the abolition, banks have been free to lend according to commercial considerations, provided that their total lending is in line with asset/liability ratios and monetary policy targets of the PBC. As loans are now granted based on the repayment ability of borrowers, loss-making SOEs will find it more difficult to obtain bank credits. By contrast, non-state firms and foreign-invested enterprises with high creditworthiness engaging in productive investment will find it easier to borrow from banks. With more efficient allocation of credits, the risk of loans turning bad will be reduced.

Some bank analysts are concerned that the amount of discretionary loanable funds might not increase by much even after the removal of the credit quota.[11] They have argued that even though policy lending is taken up by the three policy banks, the state-owned banks are still required to buy bonds issued by the State Development Bank, the largest policy

[11] See *The Chinese Financial System Update*, an unpublished World Bank discussion paper by Edgardo Barandiaran, May 1998.

bank. Moreover, a significant portion of funds may still be required to refinance outstanding SOE loans.

A crucial aspect is how effectively the new measure could facilitate the operations of the state-owned banks on a commercial basis. When the Commercial Banking Law was enacted in 1995, commercial banks, including the state-owned banks, were required to manage their loan portfolios by asset/liability ratios. The state-owned banks had already shifted to a more prudent lending attitude before the abolition of the credit quota.[12] In 1997, only 80% of the credit quota was fulfilled as banks were cautious and unwilling to lend to loss-making SOEs, indicating that they have made prudent lending decisions. Banks are competing to lend to good companies, and toll road and other profitable infrastructure projects, as well as investing in government bonds to improve their asset portfolios.

(iv) Independence of the PBC

The reorganisation of the PBC will strengthen and depoliticise the banking supervision and examination process. Under the plan, the 31 provincial offices of the PBC were combined into nine regional headquarters overseeing several provinces. The objective is to create a more streamlined structure similar to the US Federal Reserve. After the restructuring, senior bank managers will be appointed by the PBC, instead of the local governments. The change will deter/prevent local governments from encouraging banks to finance their favoured projects, many of which are over-ambitious and not profitable.

Challenges to banking reforms

There are five challenges to banking reforms in China. *First, the adequacy of capital injection*. The RMB 270 billion capital injection in 1998 is not likely to be sufficient to recapitalise the banks and, moreover, an even greater shortfall will open up if China does not contain the flow problem

[12] Following a revaluation of state-owned assets undertaken by the State Asset Management Agency in 1995, the state-owned banks were required to lower the proportion of NPLs in their loan portfolios. The amount of additional bad loans made by credit officers and bank managers became an indicator of their performance.

of NPLs properly. The experience of transition economies in eastern and central Europe has shown that prematurely injecting capital without solving the flow problem of non-performing loans could easily lead to a moral hazard problem and additional capital injections could be required. For example, the Hungarian government had to recapitalise the country's state banks four times between 1991 and 1994 as little had been done to tackle the flow problem before mid-1994.[13] Recent literature on bank restructuring agrees almost unanimously that the stock problem could be dealt with more effectively if it were among the last steps in enterprise and financial reforms.[14] In this connection, it should be noted that China has in parallel begun to tackle the flow problem of NPLs.

Second, slower economic growth. Bank restructuring is deflationary. As seen in Asia, Japan and elsewhere, high levels of NPLs invariably hold back economic growth as and when bank restructuring proceeds, lending behaviour turns cautious and losses get recognised and absorbed. Bank restructuring at a time when growth is slowing down is even more deflationary.[15] Thus, while the PBC instructed the state-owned banks to extend loans based on repayment ability, it also urged them to meet the 1998 loan target of RMB 1,000 billion to boost growth. There is therefore the concern that, should Chinese banks ease the lending criteria to finance investment projects in order to sustain growth, banking reform would suffer a setback.

Third, the SOE reform. Whether dealing with the stock or the flow problem of NPLs, the ultimate obstacle is posed by the SOEs. While banks have more discretion in making loan decisions, they can only limit their exposures to unprofitable SOEs in a gradual manner. However, the authorities have indicated their clear intention to resolve the SOE problem in three years. Banking reform could, hopefully, be accomplished within this timetable.

Fourth, the banking culture. Once recapitalisation has commenced, the operational performance of banks must be improved to minimise NPLs.

[13] See *Debt as a Control Device in Transition Economies: Examples from Hungary and Poland*, World Bank Research Paper 1480, June 1995.

[14] See *Restructuring Distressed Banks in Transitional Economies*, Paper for the Federal Reserve Bank of Chicago, July 1997, by Michael Borish and Fernando Montes-Negret, and *Lessons from Systemic Bank Restructuring*, Economic Issues No. 14, by Claudia Dziobek and Ceyla Pararbasioglu, IMF, April 1998.

[15] Reports of pullbacks by foreign banks, in particular Japanese banks, would exacerbate the credit crunch caused by more cautious lending by domestic banks.

In this respect, the project evaluation skills of bank staff need to be beefed up to cope with the change in lending policies.

Fifth, the regulatory and legal framework. Shortcomings in supervisory, regulatory, legal and accounting frameworks should be addressed and those frameworks brought up to international standards. But the educational process required to develop a proper credit culture and to implement the best practices will take considerable time.

Crisis vulnerability not high

Despite the many weaknesses in China's banking system, the chance of an imminent crisis similar to those seen in Thailand or Indonesia is not great. According to data from the BIS, claims on Chinese residents of BIS reporting bank countries shrank by US$ 3.3 billion in the second quarter 1998 and US$ 6.3 billion in the third quarter 1998, for a total of US$ 9.1 billion in January-September.[16] Of this, US$ 7.4 billion was against banks in China, suggesting that Chinese banks might have been losing access to the international banking market. However, there are mitigating factors and strengths in China's banking system. China's foreign exchange reserves, at US$ 145 billion at end-1998, were more than twice the liabilities of banks in China of US$ 64.6 billion at end-September 1998. Moreover, externally, China is not a fully open economy, with renminbi convertibility on the capital account not yet possible. This will minimise contagion risks caused by external shocks. Also, there are a number of positive factors that help cushion against any banking crisis generated domestically.

First, China's NPL problem is essentially a domestic problem rather than an external one, the latter being generally more pressing. *Second*, the public has strong confidence in the banking system. The state-owned banks, which account for 70% of total deposits, are regarded as too big to fail.[17] In addition, PBC funding support is significant and deemed to be stable (Table 5). *Third*, China has a high saving rate of over 40% of GDP but limited investment vehicles. Households and enterprises place

[16] *BIS Quarterly Review*, March 1999.

[17] The public will find it hard to imagine the government not guaranteeing deposits of the state-owned banks when it did so even for smaller commercial banks such as the now defunct Hainan Development Bank.

Table 5

Central bank liquidity support to the banking sector

In billions of RMB

	December 1996	December 1997
(1) Borrowings from central bank	1,421	1,400
(2) Total customer deposits	6,172	7,531
(1)/(2) (%)	23	19

Source: China Economic Information Centre.

most of their funds as deposits in the banking sector. *Fourth*, banks are generally fairly liquid, with steady growth in deposits and a loan-to-deposit ratio of slightly over 80%. All these factors reduce the risk of deposit runs and illiquidity-induced bank failures.

Conclusion

Important progress was made in 1998 in reforming China's state-owned banks. However, the recapitalisation plan may not be sufficient to restore the financial health of the state-owned banks, and additional resources – of two to three times the RMB 270 billion capital injection – are required to clear the cumulated bad and doubtful loans. The introduction of the new loan classification system is a good start to solving the flow aspect of NPLs, although the loan-provisioning policy is not yet widely implemented. Banks have begun to reduce lending to inefficient enterprises or financially unsound projects and the removal of the credit quota system is a step in the right direction. However, success will depend on the capability of bankers to make loan decisions without concern about possible political influence. The solution to the flow problem may also be constrained by a need to generate growth to ensure social stability.

China quickened the pace of reform in 1998 and seems to be aware of two lessons that can be drawn from the Asian financial crisis. The first lesson is that a sound banking system is crucial for an economy to withstand external shocks. The second lesson from the Japanese banking saga is that delay only allows NPLs to grow and erode bank capital. Chinese leaders have shown their commitment to reform, nonetheless a long and painful period of banking and SOE reform is inevitable.

Annex 1
Establishment of a prudential framework

Several measures have been taken in recent years to establish a strong prudential framework that encompasses all types of banking and non-bank financial institutions. They are:

- *Legal framework*. The promulgation of the Central Bank Law in 1995 firmly establishes the PBC as the sole government agent to supervise and regulate the banking sector. This is an important step for the PBC to shift its role from compliance with economic directives to the setting of prudential norms for compliance by banking institutions. The Commercial Banking Law passed in the same year also clearly defines the scope of business for commercial banks.
- *Restructuring of the PBC*. The regulatory powers of the PBC would be further strengthened with the proposed restructuring of the PBC's branch network. The new structure is modelled on the Federal Reserve System of the US, establishing nine cross-province regional offices to replace the existing provincial branch network. The main responsibility of these regional offices is to supervise and regulate the operations of banks and non-bank financial institutions. The new structure helps minimise local interference as these regional offices report directly to PBC headquarters. Local interference has been a main reason for the extension of policy loans for the so-called "mayor's project".
- *Consolidation*. The closure of Guangdong International Trust and Investment Corporation on 6 October 1998 was the boldest in a series of moves on insolvent financial institutions. Thus far, the authorities have been cracking down on illegal financing, futures trading and foreign exchange transactions; shutting down the weakest financial institutions, especially the problematic international trust and investment corporations (ITICs) and securities companies; and consolidating credit cooperatives and smaller ITICs so as to better regulate them.

The authorities announced that some 5,000 urban cooperatives would be consolidated into a smaller number of credit cooperative banks under city or municipal government. So far, more than 100 urban cooperative bank licences have been granted. The move is aimed at strengthening the regulatory regime for these institutions. There is also a plan to consolidate the nearly 50,000 rural credit cooperatives along the same lines.

Annex 2
State-owned commercial bank recapitalisation plan

This technical annex gives a detailed explanation of the balance sheet adjustments of the PBC and the state-owned banks under the RMB 270 billion recapitalisation plan.

Starting positions. The initial balance sheet positions are simplified as follows:

- The PBC has international reserves and credits to banks and government on its asset side, and currency, excess reserves, required reserves and capital on its liability side; and
- The state-owned banks have required reserves, excess reserves and customer credits on the asset side, and customer deposits, central bank credits and capital on the liability side.

All the figures used in this annex follow as far as possible those published in the PBC Quarterly Statistical Bulletin, but are rounded to the nearest hundreds of billions for computational convenience.

Central bank (RMB billion)				Four state-owned banks (RMB billion)			
Assets		**Liabilities**		**Assets**		**Liabilities**	
International reserves	1,300	Currency in circulation	1,000	**Required reserves**	**550**	Customer deposits	5,450
Credits to banks	1,350	**Excess reserves**	**800**	**Excess reserves**	**650**	Central bank credits	1,300
Credits to government	150	**Required reserves**	**800**	Customer credits	5,650	Capital	200
Other	250	Government deposits	150	Other	700	Other	600
		Other & capital	300				
Total	3,050	Total	3,050	Total	7,550	Total	7,550

Step 1. The PBC lowered the statutory reserve requirement, freeing up about RMB 270 billion of liquidity from the state-owned banks. Therefore, banks maintained only a reserve account with the PBC. The state-owned banks put their excess reserves into their reserve accounts with the PBC.

Central bank (RMB billion)				Four state-owned banks (RMB billion)			
Assets		**Liabilities**		**Assets**		**Liabilities**	
International reserves	1,300	Currency in circulation	1,000	**Reserves (650+550)**	**1,200**	Customer deposits	5,450
Credits to banks	1,350	**Reserves (800+800)**	**1,600**	Customer credits	5,650	Central bank credits	1,300
Credits to government	150	Government deposits	150	Other	700	Capital	200
Other	250	Other & capital	300			Other	600
Total	3,050	Total	3,050	Total	7,550	Total	7,550

Step 2. The MoF issued RMB 270 billion of bonds and deposited the proceeds in its account with the PBC. The state-owned banks purchased the bonds with liquidity freed up from the lowering of the reserve requirement. As a result, the state-owned banks had RMB 270 billion in bond investments but a corresponding reduction in reserves on the asset side. The PBC's liabilities vis-à-vis the state-owned banks dropped by RMB 270 billion but its liabilities vis-à-vis the MoF increased by the same amount.

Central bank (RMB billion)				Four state-owned banks (RMB billion)			
Assets		**Liabilities**		**Assets**		**Liabilities**	
International reserves	1,300	Currency in circulation	1,000	**Reserves (1200–270)**	**930**	Customer deposits	5,450
Credits to banks	1,350	**Reserves (1600–270)**	**1,330**	**Bonds**	**270**	Central bank credits	1,300
Credits to government	150	**Government deposits (150+270)**	**420**	Customer credits	5,650	Capital	200
Other	250	Other & capital	300	Other	700	Other	600
Total	3,050	Total	3,050	Total	7,550	Total	7,550

Step 3. The MoF injected the bond proceeds into the state-owned banks in the form of equity capital, raising the capital of the state-owned banks to RMB 470 billion.

Central bank (RMB billion)				Four state-owned banks (RMB billion)			
Assets		**Liabilities**		**Assets**		**Liabilities**	
International reserves	1,300	Currency in circulation	1,000	**Reserves (930+270)**	**1,200**	Customer deposits	5,450
Credits to banks	1,350	**Reserves (1330+270)**	**1,600**	Bonds	270	Central bank credits	1,300
Credits to government	150	**Government deposits (420–270)**	**150**	Customer credits	5,650	**Capital (200+270)**	**470**
Other	250	Other & capital	300	Other	700	Other	600
Total	3,050	Total	3,050	Total	**7,820**	Total	**7,820**

Step 4. The PBC recalled RMB 270 billion in credits to the state-owned banks. In the end, the size of the PBC's balance sheet contracted by RMB 270 billion.

Central bank (RMB billion)				Four state-owned banks (RMB billion)			
Assets		**Liabilities**		**Assets**		**Liabilities**	
International reserves	1,300	Currency in circulation	1,000	**Reserves (1200–270)**	**930**	Customer deposits	5,450
Credits to banks (1350–270)	**1,080**	**Reserves (1600–270)**	**1,330**	Bonds	270	**Central bank credits (1300–270)**	**1,030**
Credits to government	150	Government deposits	150	Customer credits	5,650	Capital	470
Other	250	Other & capital	300	Other	700	Other	600
Total	**2,780**	Total	**2,780**	Total	**7,550**	Total	**7,550**

Annex 3
Sensitivity analysis on provisions for classified loans in the four state-owned banks

Key assumptions. The non-performing loans are estimated to be 20% of total loans extended by the state-owned banks, of which 6% are bad loans and the remaining 14% are doubtful and substandard loans.

The following provision requirements apply in the analysis: 100% for bad loans, 75% for doubtful loans and 15% for substandard loans. These are international standards and also represent the median provision requirements adopted by Singapore, Thailand, Korea, Indonesia and the Philippines after the financial crisis.

Bad loans		Doubtful loans		Substandard loans		Classified loans provision
% of total loans (A)	**Provision assumption as a % (B)**	**% of total loans (C)**	**Provision assumption as a % (D)**	**% of total loans (E)**	**Provision assumption as a % (F)**	**RMB billion 5,932*(A*B+C*D+E*F)**
6	100	0	75	14	15	480
6	100	1	75	13	15	516
6	100	2	75	12	15	552
6	100	3	75	11	15	587
6	100	4	75	10	15	623
6	100	5	75	9	15	658
6	100	6	75	8	15	694
6	100	7	75	7	15	730
6	100	8	75	6	15	765
6	100	9	75	5	15	801
6	100	10	75	4	15	836
6	100	11	75	3	15	872
6	100	12	75	2	15	908
6	100	13	75	1	15	943
6	100	14	75	0	15	979

Note: Total loans extended by state banks were RMB 5,932 billion as of end-1997.

Macro-adjustments in China: experience and lessons

Lu Baifu

Since the financial crisis broke out in some Asian countries in mid-1997, it has been widely recognised that strengthening financial supervision and preventing financial risks is crucial to maintaining healthy economic development. Especially under the trend of economic and information globalisation, how to implement effective financial supervision has become an urgent issue that needs to be addressed without delay. There have been a lot of successes as well as painful lessons in this regard at home and abroad. I believe this seminar will play a positive role in contributing to improving financial supervision and regulation and preventing financial risks in China.

Governor Dai's and the distinguished Chinese and foreign experts' speeches have provided very valuable and insightful comments about China's macroeconomic development. These opinions and thoughts will be very helpful in China's efforts to improve macroeconomic performance and promote economic development. In the following, I will share with you my thoughts on the major experience and lessons that we should learn from the macroeconomic adjustments over the past 20 years since China began to adopt the policy of reform and opening to the world.

China's policy of reform and opening to the world has led to rapid economic development, a considerable increase in the country's overall national strength and an enormous improvement in the living standards of its people. These achievements have impressed the world. Nevertheless, it is undeniable that due to a lack of direct experience and readily available foreign experience, we have been fumbling and experimenting in the transition from a planned economy to a socialist market economy. Although there have been some obstacles and setbacks as well as some notable lessons, timely macroeconomic measures adopted by the Chinese authorities have succeeded in avoiding ups and downs in the economy, thereby maintaining the overall stable trend of development.

It is necessary to make an overall review and assessment of the principal experience and lessons of the macroeconomic adjustment over the past 20 years in order to continue to maintain sustainable growth. The following are the ten points that I think worthy of our attention.

First, development is of overriding importance. It is very important that the enthusiasm of central and local governments and the masses be motivated and brought into full play. China has a huge population of 1.2 billion people. China's economy is less developed and will remain in the primary stage of socialist economy for a long time, and thus developing the economy and enhancing social productivity is a long-term challenge facing us. As Deng Xiaoping once pointed out: the key to solving all of China's problems is to depend on self-development. China's economic growth has to rely on our own efforts; our "primary accumulation" has to rely on our own hard work and the wisdom of the people. The only right approach to achieve the goal of economic growth is to mobilise the initiatives of the central and local governments and those of the people at grass-root level. We must work together in our reform and development effort. That is perhaps the most important lesson we have drawn in the past 20 years.

Second, we should facilitate development by reform and ensure that reform is smoothly implemented so that social stability is maintained. Our experience over the past 20 years has proved that the only possible way for China to promote economic development is to continue our reform that has provided great momentum for emancipating economic agents and expanding productivity. Reform is the only way by which China can develop into a rich and strong country so that the people's living standards can be improved. No matter what happens, we should not stop our reform effort. The more economic difficulties we face, the more we should pay attention to straightening out the economic orders and pushing forward with reform measures. Reform and development can doubtless only be achieved in a stable social and political environment, which requires putting the interest of the majority first, forming consensus among the people and making economic development the priority.

Third, macro-adjustment powers should be appropriately concentrated and the powers of economic management should be appropriately dispersed. As the economic system reform and economic development are undertaken simultaneously, the relationships between different

economic factors and social groups are undergoing dramatic changes which can easily cause disturbances in the economy and imbalances between economic factors. Under such circumstances, the powers of macro-adjustment should be appropriately concentrated in the central government so that it can make decisions concerning the big picture and be prepared for potential problems in order to ensure the stable development of the macroeconomy. However, economic management powers should be delegated to the appropriate levels of government according to various economic sectors and affiliations to enable the micro-system to operate independently so that they can adapt to the market changes and the new economic environment.

Fourth, with aggregate demand under control, efforts should be made to improve aggregate supply. China's economy has long been characterised by insufficient supply. The major imbalance in the economy is reflected in the fact that booming aggregate demand and excessive investment demand are running ahead of insufficient aggregate supply. Therefore, it is an important task to bring aggregate demand and aggregate supply into equilibrium. Under most circumstances, balance can be achieved by managing aggregate demand. However, the ultimate solution to the imbalance between aggregate demand and aggregate supply relies on increasing aggregate supply. Therefore, balancing the two aggregates should be tackled with macro-adjustment. For short-term policy such as annual policies, the management of aggregate demand is the focus; while for long-term policy, improving aggregate supply is the overall strategy. In increasing aggregate supply, "to grab anything within one's reach" should be avoided so as to prevent future problems caused by blind development and over-construction.

Fifth, while sticking to moderately tight fiscal policy and monetary policy, it is nevertheless desirable to maintain some flexibility and fine-tune the economy when needed. In the long process of reform, inflation usually becomes the major obstacle to stable economic growth. To control the excessive growth of aggregate demand, attention should be paid to the fiscal balance and the balance between credit demand and credit supply to avoid excessive fiscal deficits and excessive monetary expansion. A moderate balance-of-payments surplus should be maintained. Although, in a relatively long period, positive capital inflows are favourable to a developing country, this net inflow should be kept within reasonable limits and should be mainly in the form of foreign direct

investment. Short-term borrowing from abroad should be undertaken prudently. It is therefore important to follow a moderately tight macro-economic policy to restrain fiscal expenditure and credit extension in order to maintain the overall balance of economic aggregates. However, economic development does not always run smoothly: the same macro-adjustments do not always work. At some times, the policy mix works well. At other times, timely adjustment in fiscal policy and monetary policy is required to facilitate the overall development.

Sixth, it is important to take advantage of the domestic and foreign markets and resources in improving investment conditions and enhancing economic technological exchanges. Against the backdrop of globalisation of the world economy, it is impossible for China to achieve its reform and development strategy without opening to the world. So we should continue to promote foreign trade, attract foreign investments and establish special economic zones within a multi-layer, broad-based framework of reform. It is also important for China to improve economic management and to enhance international competitiveness in order to make full use of our comparative advantage in interactions with foreign countries. In the process of opening to the outside world, we must also pay attention to following international practice, mitigating the effects of external shocks and protecting national economic security. We should promote reform in a positive and cautious way by taking into consideration the economic development of our country.

Seventh, a major aim must be to improve people's living standards while promoting economic growth. The fundamental objective of reform, opening to the world and economic development is to improve the living standards of the people in terms of goods, services and cultural wellbeing. The incentive for reform and development is the improvement of living standards, which may in turn promote the reform and development. When the public can see with their own eyes the positive results of reform and economic growth, it is easy for us to enhance their initiatives and perseverance in the face of difficulties arising from the reform process. Therefore, the reform and economic growth must meet the requirements of increasing living standards. Our goal at the present stage is to raise living standards to a moderate level and to gradually move to higher levels. In addition to raising people's real income, we should also gradually build public facilities and the social welfare infrastructure, improving the quality of education and healthcare. We

should also implement policies to ensure the basic livelihood of people in poverty so that most people will support the reform, actively participate and make their own contribution.

Eighth, the invisible hand (the market) and the visible hand (government intervention) should both play their roles in economic adjustments. The socialist market economy of our country is the combination of the basic socialist system and the market mechanism. The basic requirement of such an economy is to enable the market to perform its basic function of facilitating resource allocation under government regulations. Such a function is irreplaceable and indispensable especially in the behaviour of microeconomic agents. The operation of an economy must take account of the role of prices. However, market self-adjustment is no panacea. The imperfect market mechanism and the asymmetrical information sometimes give out misleading signals and result in erroneous judgements and even a destructive imbalance between production and consumption. Therefore, the state intervenes in the market with flexibility, correcting market distortions and facilitating market functioning. Over the past 20 years, the working of only one mechanism usually resulted in increased turbulence. Only when the invisible hand and the visible hand functioned together would the economy develop smoothly. A number of arguments and practices have proved the necessity and correctness of this point.

Ninth, under no circumstances should developing countries employ inflation as a policy option. Even if inflation is unavoidable, its potential impact should be measured and controlled. Letting inflation go unchecked is equivalent to suicide. Since China's development has been accompanied by a shortage in supply, the idea of development in a coordinated manner might not have gained enough attention when the economy was growing rapidly. Inflation occurred as a result. A policy mistake arises when stabilisation policy is insufficiently applied and growth is accompanied by inflation. Inflation should not be regarded as a growth stimulus. Once inflation occurs, the government should take measures to contain the inflation within an appropriate limit, i.e. to keep it low. In a country like China, people's living standards are still low and are vulnerable to inflation. Inflation should be kept lower than the growth rate of income. It is possible that the public may tolerate short-term inflation, while any long-term high inflation, from several months to two years, will inflict serious damage on the economy and

probably cause social disturbances unless the government intervenes resolutely.

Finally, in addressing the problem of economic overheating we should take effective measures. As the problem of "excessive eagerness in pursuing economic development" is prevalent in China, economic overheating has not received much attention and the adjustment measures are toothless. The expansionary inflation in the mid-1980s could have been corrected without many adverse consequences. However, the problem was not fully recognised and thus the macro-corrective measures were not sufficient. The subsequent acceleration of economic development only exacerbated the situation. Repeated over and over again was the cycle of inflation-rectifying measures impeding economic development; the economy overheating after the revocation of those measures; and the re-adopting of rectifying measures slowed economic growth once more. A thorough rectification was launched in the autumn of 1988 when the mounting problem culminated in bank runs and rocketing prices, but the ideal moment had passed.

The above are the experience and lessons drawn on the basis of China's economic development over the past 20 years. Since the second half of 1997, insufficient demand has emerged in China as a result of the Asian financial crisis and the economy has become a buyers' market. Other warning signals have also emerged in the financial field. The Chinese government has made timely policy adjustments on the basis of the fundamental principles of macro-adjustment, such as expansionary fiscal policy and appropriate monetary policy, and increasing investments to spur domestic demand. These measures have achieved positive effects. What should to be pointed out is that China was able to withstand the Asian financial crisis and achieve stable growth because of the measures aimed at rectifying overheating and reducing economic bubbles, taken several years before the crisis broke out. This proves that macro-adjustment is not rigid, unchangeable, but that it should be carried out, subject to further fine-tuning, taking into account new developments. Constant research and innovation are required especially in financial supervision, the reform of the financial system and financial innovation. In this connection, I would like to express my wish again, namely that the domestic and foreign experts here today will share with us their valuable opinions without reservation, thus contributing to China's stable economic growth.

The macroeconomic trend in 1999 and policy options

Wu Jinglian

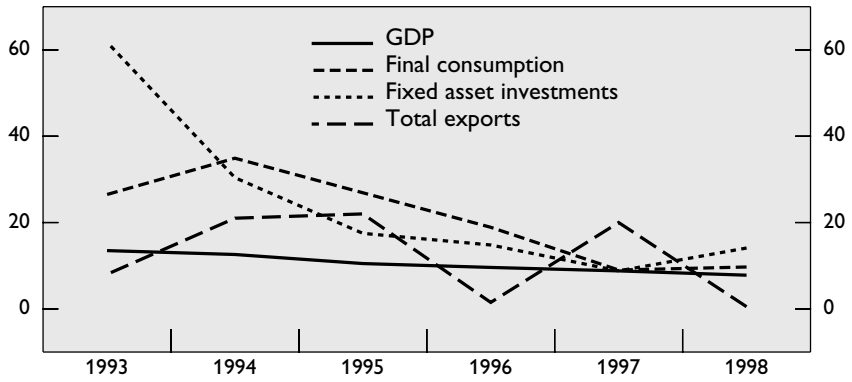
When the East Asian financial crisis ran rampant in the region and the world financial market suffered turbulence in 1998, China adopted appropriate policies to maintain the stable trend of economic development. It is estimated that the overall world economic environment is unlikely to make a big positive turn in 1999, in which case it will pose a grim challenge for China's economy. The issue of common concern is what policy to adopt to ensure that China's economy continues to grow at an appropriate rate.

The major problems facing China's economy are a slowing growth rate, insufficient demand and deflation. This situation began in mid-1997 and became apparent in the fourth quarter (Graphs 1 and 2). In October 1997, the price level began to fall continuously.

Graph 1

GDP growth and sources

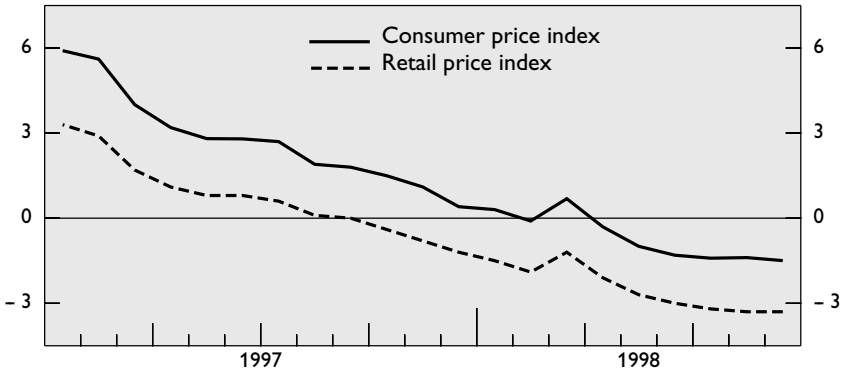
Annual percentage changes



Graph 2

Consumer and retail price indices

Annual percentage changes



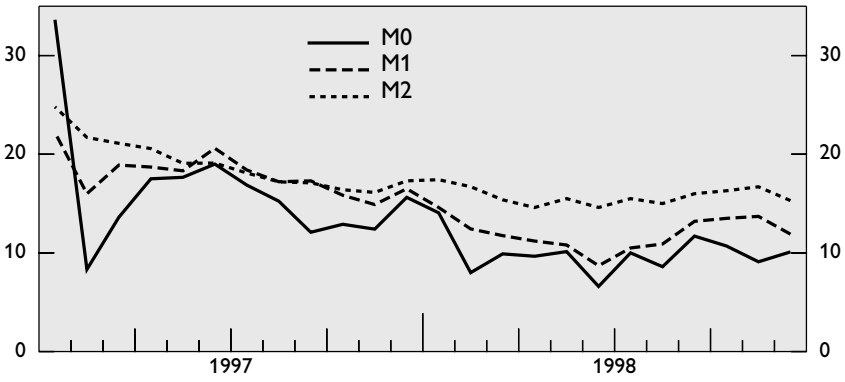
During the first half of 1998 the situation became worse. The underlying reasons were as follows:

1. The aftermath of the policies aimed at controlling the severe inflation during 1992–94 (Graphs 3 and 4).

Graph 3

Money supply

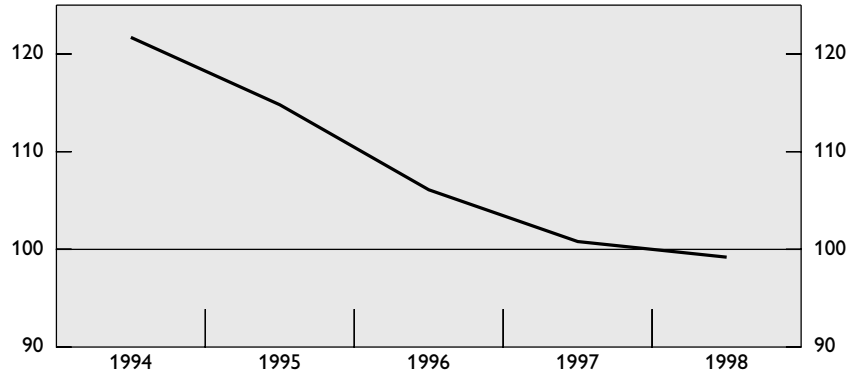
Annual percentage changes



Graph 4

Consumer price index

Previous year = 100

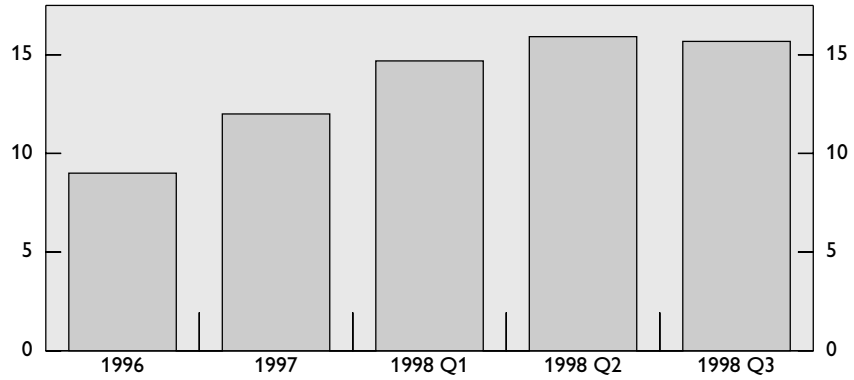


2. The reform of the state-owned enterprises has reached a critical moment, with millions of state-owned enterprise workers having to leave their jobs each year starting from 1997 (Graph 5).

Graph 5

Unemployed state-owned enterprises workers

In millions

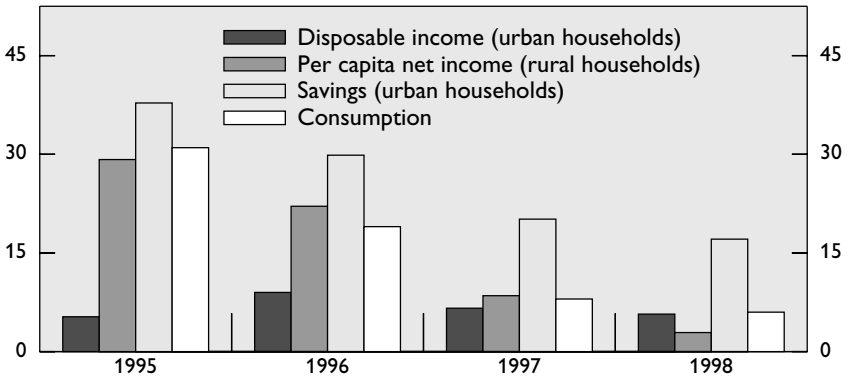


3. The breaking of the "Iron Bowl" and the housing and health care reform have brought increasing uncertainty to households. Thus the propensity to save has been rising (Graph 6).

Graph 6

Propensity to save and to spend

Annual percentage changes

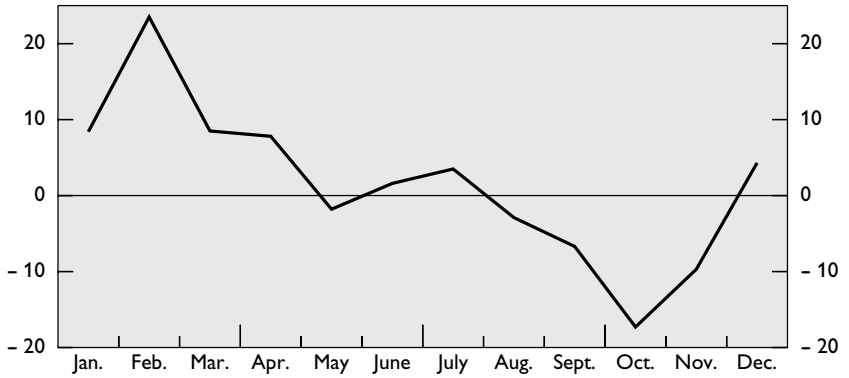


4. The lingering effects of the East Asian crisis resulted in lower exports (Graph 7).

Graph 7

Export growth in 1998

Year-on-year percentage changes



Facing such a situation, the Chinese Government, together with macro-economic authorities, adopted policies to increase domestic demand and stimulate economic growth in 1998.

The policies took effect on both the supply and demand sides.

With regard to demand, the macroeconomic authorities took a more aggressive fiscal and accommodative monetary policy stance. On the one hand, a RMB 100 billion Treasury bond was issued. The receipts were invested in infrastructure construction. On the other hand, the central bank lowered interest rates three times.

With regard to the supply side, starting from mid-1998 the Chinese Government began:

1. to implement the policy adopted by the 15th Communist Party Congress held in September 1997, which encourages development of various kinds of ownership of business and requires the Government to eliminate the prejudice against the development of private business;
2. to establish specific government institutions for small and medium businesses (establishing the Small and Medium Business Department in the State Economic and Trade Commission);
3. to require the banking system to take measures to increase loans to small and medium businesses; and
4. to lower the tax rates applied to small and medium businesses. In addition, some provincial governments have increased their support for these businesses.

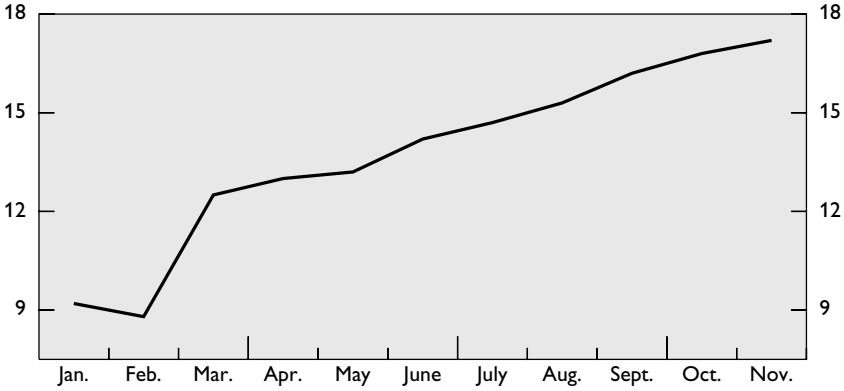
Therefore, the growth rate of small and medium businesses began to pick up in the second half of 1998. For the whole year, the industrial output of township enterprises increased by 17.5% (Graph 8). For enterprises with sales revenues higher than RMB 5 million, the growth rate of value added increased by an average of 8.8% annually, of which that for state enterprises was 4.9%, collective enterprises 8.7%, share-holding companies 11.9%, foreign funded enterprises 12.7% and private businesses 19.6%.

The effects of the above stimulatory policies became apparent after September 1998 with all the macroeconomic indicators ceasing to fall and the national economy showing a positive turn (Graph 9).

Graph 8

Output growth of township enterprises in 1998

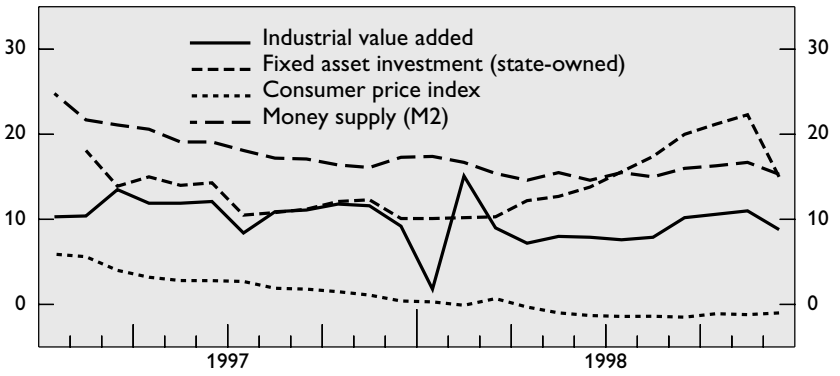
Year-on-year percentage changes



Graph 9

Macro-economic indicators

Annual percentage changes



Economic prospects in 1999

However, such a benign turn was unstable because, first, the growth of investment was mostly from state sources, with almost no increase from the private sector and a decrease of 3.5% in the collective ownership

sector. Investment from state sources rose by 19.6%, while the increase for society as a whole was only 14.1%, lower than the targeted minimum at the beginning of the year; second, consumption was not stimulated, with relatively higher growth in stocks.

Since the East Asian economies cannot recover very quickly, also considering the uncertainty in the economies of Europe and the United States, economic stability in China in 1999 relies mainly on increasing domestic demand. However, fiscal investment in infrastructure should not be used as a major policy measure to stimulate domestic demand. Therefore, we must find a new growth engine to realise the objective, and thus to ensure that the economy continues to improve and gradually enters a stage of stabilised growth.

Faced with such a situation, practitioners and academics have suggested the following (demand stimulating) policy options:

1. to continue to apply expansionary fiscal policy;
2. to apply expansionary monetary policy in a more manifest manner; and
3. to activate the consumption market, including the vast rural market.

The Government must adopt strong supply-side policies to reinforce the micro foundation of growth through reform. In the light of international experience and China's own national situation, it is very difficult for macroeconomic policy that aims to stimulate growth through increasing demand to be effective without vitality on the supply side and microeconomic reform. For example, to activate investments from the private sector relies not only on developing new financing channels and improving the financing mechanism, but also on fostering the growth of private businesses and their willingness to invest. A major obstacle to activating the rural market is the slow growth of rural income: this can only be increased through the development of small and medium enterprises, which may create more jobs to which the excessive rural labour force can transfer.

Providing the necessary stimulus requires three major steps.

The first is that the development of small and medium private businesses must be encouraged. Over the past 20 years of reform and opening to the world, these enterprises have had some development. Since 1998, the Chinese Government has made it a national policy to foster the development of small enterprises. But due to the predicament in ideology and the legacy of the planned economy, there were all kinds

of obstacles in the way of small business development. In 1997, the CPC Party Congress established that private businesses are an integral part of the socialist market economy. This notion will be added to the Constitution some time this year. At present, various levels of government are making efforts to eliminate the prejudice toward these businesses and to provide more services to them in accordance with the government policy of fostering the development of small enterprises. Now China has millions of non-state small businesses. We will improve their operational environment and tap their full potential.

Second, action is needed to address the lack of development and systemic weakness of the financial system. The financial system is as important a framework as the circulatory system of the human body in that its soundness is a matter of life and death. There are the number of serious weaknesses in the financial system, especially the large amount of non-performing assets left over after the financial bubbles burst. The accumulation of years of non-performing loans is eroding people's confidence in China's financial system and the prospect of economic development and is forming a hidden risk of a financial crisis. The work to solve these problems started in 1998, and should be further enhanced in 1999. In 1998 the Chinese Government issued a RMB 270 billion Treasury Bond for the recapitalisation of the four state-owned banks so that their capital adequacy reaches 8%, the ratio required by the Basel Accord. The authorities are strengthening supervision of the financial market and financial institutions. The authorities have ordered banks to make plans for restructuring their non-performing assets. The insolvent businesses and financial institutions will be restructured or liquidated.

The third necessary policy is the reform of the state-owned enterprises the and restructuring of the state-owned economy. The Chinese Government has decided to restructure the big state-owned enterprises into modern corporations. In 1997 the Government reordered the ownership structure, reducing the scope of the state-owned economy and promoting a multiple ownership structure in accordance with Deng Xiaoping's principle of forming an ownership structure conducive to increasing productivity, enhancing national strength and increasing people's living standards. In recent years, the Government has made some useful experiments and gained valuable experience. Now both the Government and people in the industries are discussing how to quicken the reform in restructuring the state-owned enterprises in the near

future, in order to revitalise the large industrial enterprises, commercial businesses, foreign trade companies and financial institutions.

The proper execution of the above measures will facilitate the stable growth of China's economy in 1999. If things go smoothly, China will enter a new era of growth in late 1999.

Warding off policy-oriented financial risks and promoting effective growth of the national economy

Chen Yuan

Today I am very delighted to give a brief account of the way the State Development Bank (SDB) wards off and mitigates policy-oriented financial risks.

Since last year, in the face of the economic circumstances affected by the Asian financial crisis, the Chinese Government has adopted the policy of stimulating domestic demand in order to sustain a rapid pace of economic growth. The key element of the policy is to expand the investments in infrastructure projects so as to shore up economic growth through the increased investments. Unlike in the past, the increased investments are not directed to industrial projects, neither are they unreasonably spread out on too large a scale. They are mainly channelled to the construction of infrastructure, which is still a bottle-neck in the economy. Since the direction of these investments is made clear and the measures are in place on time, substantial effects have been achieved so far. Meanwhile, expanding investment in infrastructure projects constitutes a new challenge to the strengthening of risk management; in particular, we have little experience in how to ward off and mitigate policy-oriented financial risks. Therefore, we are drawing from practical experience and working on how to take effective measures. The focus is on how to subject government behaviour to market rules and help local governments at different levels play positive roles in warding off financial risks while abandoning the usual practice of direct intervention in the specific projects.

Since its establishment in 1994, the SDB has made remarkable progress in funding the construction of key projects in the areas of state basic infrastructures, basic industries and pillar industries. By the end of 1998, the SDB had total assets of more than RMB 500 billion (around US$ 60 billion), greatly contributing to China's economic reform and

long-term development. In order to ward off and mitigate policy-oriented financial risks, we are taking the following measures:

First, make efforts to establish a market-oriented and independent operating mechanism. The SDB has been working on how to form fund-raising channels with high benefits and low costs, and has adopted a fund-raising method which combines a mandatory subscription mechanism and auctions. Efforts have also been made to improve fund position management and increase the efficiency of funds use, so as to increase the capability to ward off risks at source. Meanwhile, the accounting system reform is being deepened and the branch networking system is being strengthened with a view to gradually exercising credit management on our own.

Second, pay attention to strengthening the analysis of market conditions and boosting the level of decision-making on loan extensions. We have decided to set up the project screening mechanism, under which good projects are chosen and bad ones are rejected, in accordance with the principle of "broad entry, speedy passageway, grabbing good clients and keeping off bad projects". This mechanism is primarily aimed at increasing our independence in the selection of projects. It is in line with the need to focus project appraisals on the analysis of market conditions and risks that we have instituted the Department of Market and Industry Analysis, which is in charge of the analysis of market conditions and industry developments with the aim of providing appraisal evidence for the loan evaluation departments. In the process of conducting project appraisals, we adhere to the principle of independent appraisal, and combine the role of professionals at the bank with that of the outside experts. As a result, the quality of project appraisals is gradually being boosted. One of the indicators demonstrating the effectiveness of the SDB's project appraisals is that the ratio of rejected projects to total projects recommended by the government agencies had increased significantly to 46% in 1998, from 13% in 1997.

Third, strengthen credit management and improve the quality of assets. As China Investment Bank was merged into the SDB last December, the strengths of the two banks are now combined, which will strengthen the SDB's branch networking system and professional expertise to improve credit management. In the process of credit management, great efforts are being made to combine the efficient allocation of new loans with the structural adjustment of outstanding loans, to combine the appraisal of

new projects with the evaluation of the projects under construction, and to combine the loan recovery mechanism with the transfer of non-performing loans. In particular, by making full use of the advantage that the SDB has provided enormous support to infrastructure projects in various regions, we demand that local governments shift the focus of economic coordination to warding off and mitigating risks, and have achieved distinct effects.

Fourth, strive to establish risk management mechanisms throughout the whole process of credit operations. We have set up the Management Committee of Credit Asset Risks, which is in charge of the bank's credit risk management and monitoring. We have also established the responsibility system for credit risk control, under which the responsibility for risk control has been delegated to each working link and post. Through the establishment of the rules and regulations on the cross-supervision of each post, on the cross-checking of each working link, on the internal control inspection and on the punishment of illegal behaviour, we are striving to improve the internal control system and gradually put in place an effective risk monitoring and control mechanism.

Fifth, actively ward off credit risks. We regard improving the quality of outstanding assets as the key element in warding off credit risks, and have thoroughly checked the loans extended to the coal-related projects. Given that the ratio of non-performing loans in the coal sector to total loans is relatively high, we have put forward a series of counter-measures which are supported and approved by the central government. Special importance is attached to measures aimed at controlling the prices and manufacturing of some coals with high pollution and sulphur and at closing some large state-owned coal mines with exhausted resources in compliance with current adjustments of the state policy on the energy industry. We also have checked the outstanding loans extended to other sectors, and subsequently put forward suggestions and measures on risk control. These suggestions and measures have helped accelerate the structural adjustment and boost the benefits of improved management for the national economy.

Finally, help industrial sectors and local governments to develop a mechanism of investment discipline. In order to effectively ward off financial risks, efforts must be made to subject government behaviour to market rules, and help local governments at different levels actively play their

roles under market conditions. The SDB has signed investment/finance service cooperation agreements with a number of provincial governments, which have helped improve the investment environment and discipline the investment behaviour of relevant industrial sectors and local governments by establishing a unified framework governing who borrows money, who is entitled to use the money and who is also responsible for repaying the money. Meanwhile, we have put in place a system of reporting credit asset quality conditions to relevant industrial sectors and local governments, and impel them to join us in conducting the management and supervision of loan projects through such measures as combining loan recovery with loan extension and linking up loan recovery with project appraisal, so as to invigorate the adjustment of the outstanding loans with the incremental loans of high quality.

While the unusual year 1998 is now behind us, 1999 is going to be another challenging year. As the biggest developing country in the world, China has a vast market and huge potential. This year, the Chinese Government will continue to implement the policy of expanding domestic demand and increasing investment in infrastructure projects in order to promote economic growth, while the steady increases of domestic demand and the stability of the renminbi exchange rate will create favourable conditions for capital inflows. As the biggest policy-oriented bank in China, the SDB is willing to continuously bridge capital inflows, and enhance the communication and cooperation with foreign as well as domestic financial institutions. The SDB will also make great efforts to provide high-quality financial services and play an active role in financial markets both at home and abroad, so as to make a further contribution to China's reform and modernisation of the financial system.

Strengthening the financial system in less developed countries: the Latin American experience

Roberto Zahler

Financial system fragility in many developing countries is greater than in the industrial world. This fragility can affect the overall performance of the economy. It introduces microeconomic inefficiencies in the intermediation of savings into investment, and consequently limits economic growth. It may affect the proper functioning of the payments system, thereby increasing transaction costs and reducing overall productivity of capital, and it may be an important factor generating or, more likely, deepening a macroeconomic crisis. On the other hand, inappropriate macroeconomic policies can weaken significantly the functioning and the efficiency of the financial system, contributing to its fragility, which in turn may affect macroeconomic equilibrium, creating uncertainty, lowering output and reducing welfare.

The first section highlights the main lessons of the impact of macroeconomic policy on the strength of the financial system, particularly on the banking systems in Latin America. The second section refers to some of the major concerns and challenges for bank regulation and supervision in countries of the region.

Macroeconomic issues

Latin American countries' economic structure, their output and export diversification (by-products and by-markets) and their dependency on foreign saving imply that they tend to be *more prone to macroeconomic fluctuations and volatility*. These originate, on the one hand, from terms-of-trade shocks. Also, from changes to international interest rates, especially in highly indebted countries. Third, from international liquidity constraints and/or "excessive" capital inflows, based on how the major creditors assess a country's creditworthiness. Fourth, from "stop and go"

domestic macroeconomic policies, which tend to exacerbate the booms and busts in economic cycles. And, finally, from high variability of key macroeconomic prices, such as the exchange rate, domestic interest rates and asset prices.

Regarding these issues, experience in Latin America suggests the need for policy to focus on:

1. Minimising the probability that domestic spending growth will deviate significantly, and over a long period of time, from a reasonable measure of potential output growth, i.e. by recognising the importance of achieving internal equilibrium.

The main reason for this is, on the one hand, that inflation in general, *but high and erratic inflation in particular* (unless there is widespread financial indexation), *is inimical to financial development*. This occurs since the real return on deposits becomes highly volatile, reducing the degree of monetisation and of financial deepening in the economy.

On the other hand, *macroeconomic instability correlates positively with higher vulnerability of bank debtors and with inappropriate and erroneous risk evaluation by the financial sector and, consequently, with banking system fragility*. Furthermore, the impact of an excessively expansive and/or contractive phase of a cycle (especially if it is not anticipated) is not symmetric regarding the vulnerability of the financial sector. What occurs in practice is that banks tend to get stuck with bad loans in the downward part of the cycle, while the credit standards of individual banks decline in the presence of "excessive credit growth", which tends to occur during the expansive phase of the cycle.

Macroeconomic policy should focus on the achievement of internal equilibrium in a stable, sustainable and credible way, by using pre-emptive action and adequate coordination of fiscal, monetary, exchange rate and wage policies.

2. Special care should be taken when considering the *adequacy of demand management policies*. Although official fiscal accounts may present a balance or even a small surplus, fiscal policy – in a relevant sense – may in fact be expansive and accommodate rapid and unsustainable total (including private) domestic spending.

Some countries present significant *central bank cash losses*, which tend to have their origin in exchange rate and foreign exchange sterilisation

policies but also in the bailout of domestic financial entities. These losses, or quasi-fiscal deficits, are equivalent to other types of public spending, having a detrimental effect on national savings, and should be taken into account when designing and implementing fiscal policy.

On the other hand, it could be argued that in many instances of financial reform in Latin America, the private sector has relied on *contingent fiscal transfers* in its evaluation of its income and wealth budgetary constraints. These "contingent" transfers, although excluded from the usual and accounting definition of fiscal spending, as well as from parliamentary discussion and approval, de facto, increase the private sector's expected wealth and affect its spending decisions. The region's foreign (and domestic) debt crisis of the early 1980s is a good example of the above. A more recent example is Mexico's "tequila crisis" of December 1994.

These contingent fiscal transfers should include an appropriate percentage of implicit, and certainly explicit, deposit insurance schemes, as well as of exchange insurance and other contingent support typically given by governments to banking system depositors, creditors and/or borrowers when facing a banking sector crisis. If these contingent transfers were taken into account, public sector liabilities would grow at a much faster rate than official statistics show. Such a situation would have beneficial effects on the economic authorities' evaluation of the soundness and sustainability of macroeconomic policy and the consequent need for the adoption of proper and timely corrective measures.

3. Together with overall appropriate aggregate demand policies, caution and wise judgement are required, especially, although not exclusively, in the *transition period* in economies undergoing significant reforms, i.e. from "repressed" to "liberalised" economies. *Speed, timing, intensity and sequencing* of price liberalisation, tax, trade, financial and social security reforms, as well as the opening of the capital account of the balance of payments, may make a huge difference to the evolution of key macro prices.

In fact, particular care should be taken when prices such as interest rates, exchange rates and asset prices tend to behave as *outliers*, in the sense of being divorced from their fundamentals or trend long-term equilibrium value over a prolonged period of time. This is due, on the one hand, to its macroeconomic implications. But also because debtors'

capacity to service their debt is jeopardised and many reforms end up in a banking sector crisis. There is even a high probability of a less open and more repressed financial sector than when the liberalisation reform process started.

An important lesson that can be drawn from recent Latin American experiences is that aggregate demand policy should be directed at obtaining *stable and sustainable overall macroeconomic conditions*. Among these, the value and stability of key relative macro prices is a necessary condition. Wide fluctuations of relative prices transform dynamic and profitable sectors into problem sectors in short periods of time, and vice versa. Since banks share the losses but not the windfalls of their clients, defaults increase on average with the presence of unsustainable values of key macro prices in the economy.

4. Macroeconomic policy, and especially *monetary policy, may be extremely ineffective when some of these key prices are out of the norm*. In particular, although real interest rates should be positive, special care should be taken when they reach absurdly high levels over a significant period of time. There are a number of cases where no action was taken by the authorities, usually because it was argued that the interest rates, high as they may have been, were "market-determined". However, *since such interest rates might be much higher than any reasonable rate of return in the non-financial sectors of the economy, and because these sectors are the main debtors of the banks, such a situation may easily develop into a financial sector crisis*.

In addition, *monetary policy which is designed to be contractionary is not, in fact*. This is because such high rates of interest tend to be ineffective in moderating excessive spending. In fact, such rates are not binding on bank debtors' behaviour, given that borrowers expect to defer indefinitely the effective payment of those interest rates (rollover of loans) and/or to have their debt bailed out in one form or another. Under such conditions, extremely high interest rates do not contribute to rationing credit effectively and banks do not play their proper role in the transmission of monetary policy. What happens is that budget constraint is not operative and therefore excessive spending takes place, in spite of (and even because of) the presence of extremely high real interest rates, thus causing a simultaneous deterioration in both macroeconomic conditions and the quality of banks' loan portfolios.

5. An *adequate degree of flexibility* in macroeconomic policies has been shown to be an essential ingredient in the design and implementation of the more successful macroeconomic policies in Latin America. Under such circumstances, countries have been able to face the effects of foreign and/or domestic (supply-side) shocks in a timely and efficient manner. Furthermore, experience shows that *flexibility allows the effects of (positive and negative) shocks to be distributed throughout various markets*, which, in turn, contributes to a more balanced adjustment of the economy to these shocks. In the process, key macro prices do not tend to deviate significantly, or for a long period of time, from their fundamentals.

6. Latin American experience also suggests that policy-makers should be aware that *the current account of the balance of payments does matter*, i.e. that they are aware of the importance of achieving external equilibrium.

This understanding is especially relevant if a country has large gross foreign financing requirements due to a high stock of short-term foreign debt. Such an understanding is also important if it faces significant short-term "voluntary" capital inflows, since in that case the authorities may be "tempted" to rationalise the existence and persistence of large current account deficits on the grounds that such deficits do not originate from excessive domestic spending.

Emerging markets' high level of domestic interest rates, especially if foreign creditors do not have an adequate evaluation of country risk and/or exchange rate risk, tend to attract massive inflows of external capital, much of which is usually intermediated by the domestic banking system. Under such conditions *excessive domestic spending is not eliminated*, putting pressure on the (temporary) appreciation of the domestic currency and increasing the size of the current account deficit, while at the same time *domestic bankers tend to relax their credit standards, thus deteriorating the quality of their loan portfolio*.

Therefore, when facing such conditions, if monetary, exchange rate and sterilisation policies are well implemented, and if fiscal policy has made its contribution by generating a surplus, by limiting the rate of growth of spending and by having some degree of anticyclical effect, countries should consider a gradual and selective approach to financial opening-up. This can be achieved by reducing the speed at which domestic agents can get indebted abroad

and/or by increasing the cost of short-term foreign financing. In this way the economy can slow the pace of overall foreign indebtedness, while at the same time reducing its vulnerability to foreign financial shocks. The latter is brought about *by changing the composition of the capital account of the balance of payments*, with incentives being given to risk capital (foreign direct investment) as compared to foreign debt, and to long-term foreign financing as compared to short-term external debt.

Furthermore, *scope appears to exist for increasing the risk awareness of foreign creditors regarding the domestic economies of developing countries. Responsibility in this area lies with creditor countries and with international financial institutions*. The improvement and homogenisation of information standards, better data on countries' aggregate exposure, and more in-depth analysis of country risk and exchange rate risk – by rating agencies and international financial institutions – may contribute to a more adequate and realistic approach to the supply of private international finance to developing economies.

7. A more structural aspect relates to the role of high domestic saving in developing economies: it allows for sustainable financing of investment, strengthens the domestic financial sector and makes the economy less vulnerable to foreign shocks. Recent experience suggests that high and sustained economic growth, a stable macroeconomic environment, deep, competitive and well-regulated domestic financial markets, pension fund schemes based on individual capitalisation accounts, tax structures that encourage (corporate) saving and penalise consumption spending, and high public (including central bank) saving explain the most successful cases of high saving rates in some Latin American countries.

Public saving plays a major role, especially in the process of financial liberalisation, where typically private saving tends to fall. And, although private pension fund systems tend to deepen domestic capital markets, they also tend to generate a fiscal deficit and may imply some banking disintermediation.

Financial reforms, regulation and supervision

1. A typical problem faced by many economies that engage in financial reform is that *traditional bank management is not aware of the implications of reform for its behaviour*, i.e. that in a liberalised and competitive

scenario, there is a crucial need for banks to engage in serious, responsible and *professional risk evaluation*. At the same time, especially during the bank privatisation process, many newcomers to the banking industry do not comply with the appropriate requirements for being bankers. A major challenge in Latin America is to ensure bank owners and managers have the skills, prudence and ethics required for sound and safe banking. If this is not the case, problems will tend to worsen, given the usually weak supervisory and regulatory capacity of the authorities, while at the same time the general public behaves as if there were an explicit and/or implicit public deposit insurance scheme.

2. The experience of Latin America suggests that *domestic financial liberalisation as well as the opening of the capital account of the balance of payments should proceed in a gradual and, if possible, in a selective way*. If reforms are poorly designed in terms of pacing or sequencing, they may generate huge distortions during the transition from a repressed to a liberalised situation. The right speed at which to liberalise the domestic financial sector relative to the foreign financial sector or the right sequence in which to open trade and to liberalise the financial sector are not the same in every country under different initial conditions. Additionally, the sequencing of financial reform should be a function of how profound the adjustment and stabilisation policies have been, i.e. the degree of macroeconomic equilibrium that has been achieved, as well as of the effective capacity of the supervisory and regulatory authorities of the financial system.

3. Opening-up and domestic financial liberalisation stimulate credit growth and foreign indebtedness, increasing a country's vulnerability, due to a higher dependency on external savings. If these reforms coincide with the expansive phase of a cycle, problems related to excessive credit growth, quality of bank loans and overindebtedness tend to amplify.

These problems are exacerbated when financial reforms go hand in hand with very high domestic real interest rates and appreciated domestic currencies. In this case, which is quite common, perverse incentive predominates in the working of the financial system. On the one hand, the loan portfolio tends to concentrate in the non-tradable sector and adverse selection tends to be the norm. On the other,

rollover of the non-performing loans of overindebted agents increases, so as not to recognise losses. Furthermore, a bubble of (mainly non-tradable) asset prices is generated, which not only simulates further credit growth and spending, the latter due to a wealth effect, but also distorts the appropriate valuation of collateral in the bank lending process, thus increasing financial fragility.

In addition, given the need for liquidity, banks' competition for deposits tends to increase interest rates even further. That process increases the risk of their portfolio, with little or no risk return considerations being made by depositors when, as is usually the case, explicit or implicit deposit insurance and/or guarantees exist. This risky behaviour tends to be aggravated when there is a low level of bank capitalisation, generating the well-known "agency problem", where the bank no longer defends the interests of its depositors, becoming an agent of some borrowers (usually related to the bank shareholders).

4. Special consideration should be given *to the way in which regulators consider the match between banks' assets and liabilities*. For example, a common mistake is not to analyse the characteristics of the economic agents indebted to the banking system in foreign currency, i.e. regulators may feel comfortable with the fact that there tends to be a reasonable balance between banks' assets and liabilities denominated in foreign currency, but they may be missing a crucial point: the exposure of banks' debtors to a change in the exchange rate.

In other words, if bank loans in foreign currency are concentrated, for example, in debtors of the non-tradable sector, and a big exchange rate change takes place, the value of those loans should be downgraded. The reason is that the debt service capacity of those debtors is reduced when the domestic currency depreciates. So even though banks' assets are matched with banks' liabilities in terms of foreign currency, debtors may be unable to absorb exchange rate fluctuations. In summary, an exchange rate change may increase the debt burden and the risk of financial instability, in spite of the fact that there may be a match between bank assets and liabilities in foreign currency. Thus regulators must be extremely cautious, exercising judgement in evaluating risk and not limiting themselves to one kind of accounting analysis.

5. The Latin American experience with capital market deregulation, and particularly with financial liberalisation, shows that *establishing adequate*

regulatory and supervisory frameworks remains at the top of the agenda. Some of the issues on which the region's banking regulation and supervision should concentrate are:

a) Institutional development of banking supervision itself: political support, i.e. a high degree of political independence, adequate staff, resources and training programmes.
b) Preventive and prudential approach aimed at anticipating problems, evaluating them and taking appropriate corrective measures, before they appear.
c) Adequate incentives so that market signals will increasingly contribute to monitoring banks.
d) Transparency in the functioning of the financial system, through appropriate financial accounting and disclosure.
e) Strengthening the working and scope of private agents, such as external auditors and rating agencies, while at the same time making them more accountable to bank supervisors.
f) On site inspections and bank management consultations.
g) Adapting, in a more strict and demanding way, agreed minimum capital standards (such as those of the Basel Committee on Banking Supervision), to compensate for higher macroeconomic vulnerability, higher risks and poorer supervision in many Latin American countries. Furthermore, individual asset risk criteria should be complemented with exchange, interest rate and loan diversification risks, when defining the appropriate capital requirements for banks in these countries.
h) Balancing carefully the benefits of internationalisation of domestic banking, which tends to diversify portfolio risk, with proper and adequate regulation and supervision. Although it is true that the risks of banking are greater in small economies than in economies where there are more opportunities to diversify, many small and not-so-small economies lack the capacity required to oversee bank lending or investment abroad. And those markets may have a higher country risk, contagion risk and arbitrage risk, in addition to a different sort of regulation and supervision.

   The fact that obtaining information is usually more costly in other countries, the differences in national accounting practices and the possible inconsistencies among countries' banking laws, supervision and regulations, suggest that the increase in the scope of

international banking activities should proceed in a gradual and prudential way. Information sharing and coordination among national supervisory agencies should be a necessary condition in the initial stage of domestic banking internationalisation. If this is not the case, banking activities outside the home country may end up increasing rather than reducing banks' overall portfolio risk.

i) The need for consolidated supervision is another major challenge for countries where conglomerates exist or are being created "de facto", and where banking and financial operations are just one of their economic activities. This is particularly relevant when these conglomerates look for opportunities abroad, in terms of acquiring real and financial assets and/or, in the case of banks, lending abroad.

j) Avoidance of contagion effects and intermediation of low-risk emerging market countries as a vehicle to increased exposure by third parties in higher-risk less developed countries. This situation may offer attractive arbitrage opportunities, but at the eventual cost of triggering in the first countries explicit or implicit government or central bank guarantees, and should therefore be avoided.

k) Countries where financial reforms and banking legislation are relatively advanced and where non-bank financial intermediaries, typically pension funds, have acquired an important dynamism and play a key role in the capital market, face an important challenge: to achieve consistency regarding the norms, regulation and supervision that relate to different financial intermediaries. In other words, the process of disintermediation requires a gradual adaptation of financial legislation and supervision. This adaptation should be oriented towards strengthening the institutional set-up of regulatory and supervisory agencies, as well as their "intercoordination". This is necessary so as to incorporate changes as they appear and deepen the modernisation and efficiency of the overall financial system (not only banks) and its contribution to the ongoing process of saving and investment.

l) Another major challenge for regulatory and supervisory agencies in emerging countries relates to the risk involved in the rapid development of new financial techniques and instruments.

The framework for financial supervision: macro and micro issues

Jeffrey Carmichael

Introduction

It is a great pleasure to have been invited to participate in this conference. As some of you may already know, the Australian Government commissioned a review of its framework for financial regulation just over two years ago. I was a member of the review team and had the honour of being appointed the inaugural Chairman of the restructured prudential regulation agency that emerged from the Government's review.[1]

Against that background, I believe that the most useful contribution I can make to this conference is to share with you the key issues that arose in the review of our framework. I will also share with you some of our experience following implementation of the new framework, just over six months ago.

My paper is structured around what I regard as the key ingredients of an effective framework for supervision:

- a coherent regulatory philosophy;
- the government's commitment to the regulator;
- the commitment and competence of the regulator's staff; and
- education of the public as to the role and limitations of regulation.

Philosophy

Background to the Financial System Inquiry

Let me begin with philosophy. Since those involved in our Australian review spent much of their energy discussing regulatory philosophy, I should start with a brief background to the review and why we focused so heavily on philosophy.

[1] Throughout this paper I will use the terms regulation and supervision interchangeably.

The Financial System Inquiry, or Wallis Inquiry, as it came to be known, was the first full-scale review of the Australian financial system since the Campbell Inquiry in the late 1970s.

Unlike the situation facing the Campbell Inquiry, we were not faced with an overwhelming mandate for change at the time of our deliberations. Nor were we faced with a financial crisis, as has been the case preceding many financial reforms elsewhere in the world. Our banking system was functioning well; it was profitable and well capitalised. Our insurance industry was healthy and our financial markets in general were considered among the best in the world for disclosure and market conduct. Not only was our financial system functioning well, large sections of both the finance industry and the regulatory community were quite vocal in expressing their resistance to any form of change.

So why did we have an inquiry? Primarily because the Government wanted to be forward looking. The Government was aware of pressures that were arising from technology and globalisation and that these pressures might lead to changes in the industry over time, which could in turn put pressure on the regulatory structure. It was their intention that we should review these long-range issues without the distraction of a crisis. The particular focus of our Inquiry was underscored by the Treasurer's terms of reference, which emphasised the need to analyse the forces shaping the future and to design a regulatory framework to best ensure an efficient, flexible and competitive financial system.

In this way we had the luxury of being able to give adequate consideration to the underlying issues of reform – that is, to the philosophy of regulation.

The rationale for regulation

In constructing a framework for supervision, the Wallis Committee began with the fundamental question of why we regulate.

The Committee agreed that the primary rationale for regulation is market failure.

Western economies are built on the principle that free markets produce efficient outcomes. It is widely recognised, however, that even the best of markets can fail to produce efficient outcomes in certain circumstances and that they can fail in this way for a variety of reasons. Private enterprise only works efficiently where regulation corrects market failure.

The main sources of market failure identified by the Committee were:

- anti-competitive behaviour;
- market misconduct;
- systemic instability; and
- information asymmetry.

All markets face potential problems associated with the conduct of market participants.

Anti-competitive behaviour in the form of collusion or exercise of monopoly power has long been recognised as a source of inefficiency in free market outcomes. Competition regulation establishes laws to prevent these forms of anti-competitive behaviour from generating overpricing of products and underprovision of services essential to economic growth and welfare.

Similarly, market integrity regulation typically seeks to minimise market misconduct in the form of market manipulation and consumer exploitation. Market integrity regulation aims to promote confidence in the efficiency and fairness of markets by ensuring that markets are sound, orderly and transparent. For these reasons, regulators around the world impose and enforce disclosure requirements (such as prospectus rules) and conduct rules (such as prohibitions on insider trading and market manipulation).

These two forms of market failure are common to all markets, financial and non-financial. They are as relevant in retailing and agriculture as they are in banking. In many markets, these are the only forms of market failure and economy-wide regulation aimed at resolving the associated problems is considered adequate.

The third form of market failure, systemic instability, is almost unique to the financial markets. It is a fundamental characteristic of parts of the financial system that they operate efficiently only to the extent that market participants have confidence in their ability to perform the roles for which they were designed. Third party, or systemic, risks occur where failure of one institution to honour its commitments leads to a general panic as individuals fear that commitments made by similar institutions may also be dishonoured. Bank runs are the most common example of this type of contagion. However, equally disruptive consequences can also flow from other types of market disturbances such as stock price collapses and even the failure of a single large institution – where that

institution is involved in a complex network of transactions including forward commitments.

The fourth form of market failure identified by the Wallis Committee – information asymmetry – arises where products or services are sufficiently complex that disclosure, by itself, is insufficient to enable consumers to make informed choices. This form of market failure is not unique to financial services and occurs in non-financial areas such as air safety, drugs, and medical services.

Financial contracts contain promises to make payments at specified times, in specified amounts and in specified circumstances. However, not all financial promises are equally onerous. Financial promises can be distinguished according to the following characteristics:

- the inherent difficulty of honouring the promise;
- the difficulty faced by the consumer in assessing the creditworthiness of the promisor; and
- the adversity caused by promissory breach.

Some financial promises, such as common equity claims, are relatively easy to honour in that they contain very general and flexible obligations. Other financial promises, such as demand deposits (a promise to pay a fixed nominal amount at the total discretion of the promisee), are very onerous.

Similarly, the creditworthiness of some financial promises, such as unit trusts, is relatively transparent to consumers, while that of others, such as insurance contracts and bank deposits, can be extremely difficult to assess.

The consequences of promissory breach can also vary widely. The consequences of a failure of the payments system, for example, would be much more dramatic than the failure of a company to meet its equity obligations.

Drawing the institutional boundaries

The question of where to draw the boundary for regulating this particular form of market failure was not easy. The Wallis Committee was conscious of the reality that regulation imposes certain obligations on government, both implicit and explicit. For financial markets to operate efficiently, it is critical that the government's regulatory imprimatur (or worse, its implicit guarantee) is not extended any further than is needed.

The Wallis Committee took as its guiding principle that institutions making financial promises warrant regulation only where their promises are judged to have a high intensity in all three of the characteristics outlined above. This is the same principle applied to regulation in other areas where asymmetric information is involved. Thus we regulate the sale of complex drugs but not of complex electronic equipment.

As with these other areas of the economy, there is still judgement required about when a promise reaches sufficient promissory intensity to justify regulation. The form of regulation in these cases involves interposing the regulator's judgement between the purchaser and the provider to ensure a high degree of promissory confidence. In financial markets, this form of regulation is usually referred to as "prudential regulation".

The Wallis Committee noted that the regulatory structure existing in Australia at the time was based along institutional lines (institutions were allocated among the then existing regulators largely according to their institutional groupings). The philosophical framework outlined above suggested that a better structure would be based on functional lines, with one regulator for each of the types of market failure. Indeed, that is what we recommended and that is what the Government implemented during the course of 1998.

We now have four regulatory bodies, each charged with managing one of the four areas of market failure:

- the Australian Competition and Consumer Commission (ACCC) – with responsibility for administering laws to prevent anti-competitive behaviour;
- the Australian Securities and Investment Commission (ASIC) – with responsibility for regulating disclosure, market integrity and consumer protection, with the objective of promoting confidence in the efficiency and fairness of markets by ensuring that markets are sound, orderly and transparent;
- the Reserve Bank of Australia (RBA) – with responsibility for overseeing systemic stability through its influence over monetary conditions and through its oversight of the payments system; and
- the Australian Prudential Regulation Authority (APRA) – with responsibility for regulating asymmetric information problems in the finance industry, by setting and enforcing standards of prudential behaviour for all institutions making promises in the areas of deposit-taking, insurance and superannuation.

I should emphasise that the recommendation to move to this new structure was not an indictment of the regulatory structure as it existed at the time. On the contrary, the current strength of our economy and financial system is ample evidence that the old system was meeting the demands made on it. Rather, the new system was born out of the need to be forward looking and to design a system that would be capable of withstanding change.

Limitations on structural reform

In making its recommendations to the Australian Government, the Wallis Committee acknowledged that there was no unique best regulatory structure for all situations. The Committee believed that the recommended structure was the best for Australia, given its stage of financial development and size. A different decision may have been made ten years ago. A different decision may be made in ten years' time – indeed, the Committee recommended that reviews be undertaken at regular intervals and that the effectiveness of the regulatory bodies be monitored very closely.

Despite the emphasis in the Committee's Report on regulatory structure, it is my view, and I believe that it would be shared by the Committee, that while structure is important, it is only a necessary, rather than a sufficient, condition for sound regulation. Overall regulatory success depends at least as heavily on three other factors:

- the government's commitment to the regulator;
- the commitment and competence of the regulator's staff; and
- education of the public as to the role and limitations of regulation.

The government's commitment to the regulator

Legislative backing

The most fundamental support that the government can give to a regulator is to ensure that the regulator has the legal powers needed to carry out its functions effectively. Not only does this give the regulator the power to function, it gives the regulator the ability to protect the government's own exposure.

One means of limiting the government's exposure is to ensure that the regulator has the necessary powers to minimise the probability that public funds will be required to cope with a financial disaster. This does

not mean that it is the responsibility of regulators to prevent financial institutions from taking risks, or from exiting the industry if their risk management decisions turn out to be poor. On the contrary, it is the business of financial institutions to trade in risk, and some turnover in the industry is healthy. The role of the regulator is to manage these exits in a way that minimises potential loss to depositors (or policyholders in the case of insurance regulation) and avoids any loss of confidence in the industry as a whole.

The necessary powers to avoid financial crises include the power to respond quickly and flexibly to changing circumstances. They also include the power to act quickly to merge distressed institutions before their capital has been completely eroded (while governments typically agonise over possible losses to deposit-holders, few have qualms about losses to shareholders).

In my view, effective powers of enforcement include the following as a minimum:

- the power to inspect;
- the power to request information;
- the power to direct (for example, to cease certain activities);
- the power to remove directors and auditors;
- the power to suspend operations;
- the power to appoint an administrator; and
- the power to transfer engagements.

Ensuring that the regulator has the appropriate powers is no simple task. It requires establishing clear lines of responsibility and accountability between the regulator and the government. It also involves defining as unambiguously as possible the extent and nature of the powers available to the regulator.

In terms of responsibility and accountability, our Australian model has much to recommend it.

APRA has been established as a Statutory Authority with its own Board. Under Clause 8(1) of the APRA Act, 1998, "*APRA is established for the purpose of regulating bodies in the financial sector in accordance with other laws of the Commonwealth that provide for prudential regulation or for retirement income standards, and for developing the policy to be applied in performing that regulatory role*".

Thus, APRA is charged with the development and implementation of regulatory policy. APRA does so independently of the government. The

funding for APRA is provided by a levy on industry, so that there is no immediate conflict with the Government over resourcing.[2] In terms of accountability, APRA is required to keep the Government informed about any institutions that it considers to be in financial difficulty and, more generally, about its regulatory policies. In Clause 12, the Act provides that "*where the Government and the APRA Board are unable to agree that a particular policy is directed to the best performance of its functions*", the Government may resolve the issue, subject to tabling the decision and the background to its decision in the House of Parliament. In practice, this gives APRA a high level of autonomy but also a high level of accountability.

This degree of autonomy is consistent with the Basel Committee's Core Principles for Effective Bank Supervision.[3]

In terms of powers, our Australian model has some limitations. APRA currently operates under a number of different Acts of Parliament covering the various institutional groups that it regulates. At this early stage, there are some notable differences in the powers that we have in respect of regulating different financial activities, as well as the ways in which we can exercise those powers.

At the broadest level, APRA appears to have very extensive powers. Under Clause 11 of the Act, "*APRA has the power to do anything that is necessary or convenient to be done for or in connection with the performance of its functions*". While this is a very wide-ranging Clause, it is constrained by the operation of the individual Acts covering the separate industries. While there are many subtleties in the legislation, in broad terms APRA operates under two different models.

In the case of banks, APRA has the power to set and enforce prudential standards. It carries this role out by issuing Prudential Guidelines. These are policy statements that do not have the formal force of law. However, under the powers conferred on APRA by the Banking Act, APRA can direct a deposit-taking institution to comply with

[2] The actual levy is nonetheless determined by the Government each year, after consultation with APRA and industry. Thus the Government remains involved in the process and is conscious of its commitment to cost efficient regulation.

[3] The Core Principles state that supervisory agencies "should possess operational independence and adequate resources (including staffing, funding and technology) to meet the objectives set, provided on terms that do not undermine the autonomy, integrity and independence of the supervisory authority".

a Guideline. In this way, the Guidelines have the informal effect of law. This model, which is sometimes referred to as an "*informal Guidelines*" approach, is very effective and flexible.

In the case of insurance companies and superannuation funds, APRA is required to issue its standards as Regulations within the relevant Acts. The need for this "*Black Letter Law*" approach arises because the relevant Acts only provide APRA with the power to direct a regulated institution to comply with Regulations.

From a regulatory standpoint, the most attractive feature of the Guidelines approach over the Black Letter Law approach is the flexibility that it affords APRA. First, APRA can issue Guidelines quickly, without the need to pass legislation through the Parliament. In practice, after a new Guideline, or amendment to an existing Guideline, is agreed by the APRA Board, it is exposed to industry and other interested parties for discussion before it is implemented; this process usually takes a matter of months, whereas legislative amendments can take years.

Second, there can be no dispute over the interpretation of a Guideline. If there is any ambiguity in the wording of a Guideline, APRA can either issue an Interpretative Note to clarify the matter, or it can amend the Guideline. Importantly, the ultimate jurisdiction for the interpretation lies with APRA. In contrast, where the interpretation of a Regulation comes into dispute, jurisdiction for the interpretation ultimately lies with the courts. Some of Australia's historical regulatory failures can be traced to the inability of the legal draftsmen to draft legislation tightly enough for effective enforcement.[4]

Philosophical support

While legislative backing in the form of autonomy and enforcement powers is critical to the regulator's ability to function effectively, it is equally important that the government and the regulator share the same philosophical stance on regulation. This means sharing a common view about the role and objectives of regulation. It also means keeping open the channels of communication so that the government is aware of issues facing the regulator as well as evolution in the regulator's approach and in the regulated industries.

[4] The collapse of Pyramid Building Society in the late 1980s, for example, was hastened by that institution's ability to find ways around the prudential rules contained in legislation.

At a broader level, a supportive government will also ensure that the regulator has functional links with other regulators and bodies whose policies and decisions influence the effectiveness of the regulator. The most obvious of these is the disclosure regulator. Without adequate disclosure, the prudential regulator's task is almost unmanageable. In the event that the disclosure regulator is unwilling or unable to enforce adequately high standards of disclosure on the regulated industry, the prudential regulator must have the legal power to require information in whatever form and in compliance with whatever disclosure standards it requires.[5]

The commitment and competence of the regulator

Even with a sound regulatory structure, strong government support and extensive powers of enforcement, the regulator will be ineffective unless it has staff with the commitment and skills to carry out the tasks involved.

Staff commitment

An appropriate staff culture is a concept that is easy to discuss but very difficult to achieve. The ideal culture for a regulator is one in which staff are fully aware of and committed to the regulatory philosophy, and to achieving the regulatory objectives. Importantly, the ideal regulatory culture is driven by a commitment to outputs rather than inputs. The reality is that most regulators around the world are staffed by public servants or ex-public servants – people who come from a culture which does not fit readily into what I have just described.

The conversion of culture is one of the biggest tasks currently facing APRA. At its establishment in July 1998, APRA was required to absorb the staff of the then existing regulators of banks, insurance and superannuation. In July of this year, we are expecting to absorb further responsibilities and staff from the state-based regulators of building societies, credit unions and friendly societies. Melding these disparate cultures into one effective unit is a major challenge.

[5] In Australia in 1992, the prudential regulator of building societies and credit unions went so far as to promulgate a specific prudential standard setting out accounting standards for the industry.

As a first step, we will be introducing a new staff structure around the middle of this year. That new structure will better align divisional responsibilities with the integrated nature of our regulatory responsibilities. Thus, for example, we will introduce a new division to deal with complex financial conglomerates and another to deal with specialised institutions. These will replace existing divisions structured along industry lines.

At the same time, we will introduce a new set of terms and conditions for staff employment. This will be structured so as to reward excellence and commitment and to refocus attention away from inputs (such as time spent on the job) and towards outputs (such as objectives achieved).

Staff skills

One of the great difficulties facing every regulator is that salary differentials between the industry and the regulator are such that the most highly skilled staff usually work for the industry rather than the regulator. This makes it extremely difficult for the regulator to keep abreast of frontier developments in products and techniques in the industry.

Given that a fundamental tenet of prudential regulation is that responsibility for risk management lies first and foremost with the boards and management of the regulated institutions, it is not critical that the regulator have the staff skills needed to remain ahead of the industry in terms of identifying and understanding innovations. At the same time, it is important that the regulator does not fall too far behind the industry in terms of technical skills, or it risks being incapable of identifying problems before they become critical.

On balance, these considerations lean towards a model in which staff skills are developed largely on the job. In-house training can play an important role, as can staff exchanges with industry and with other regulators. It is unfortunate that few academic programmes around the world cater for the specific training needs of regulators. We are conscious of this in Australia and are currently working with an Australian university to develop a "tailor-made" graduate programme designed to cater specifically for regulators. While this programme is still in the early stages of development, the features that I expect it to contain are roughly as follows.

The programme will run over five to six years, with staff taking two or three subjects per year. About half the subjects will be conventional MBA subjects (Management, Accounting and so on) while the remainder will be specific to regulation (these will all have a financial orientation and should help build up specific skills in areas such as credit analysis and derivative products).

The subjects will be offered in "intensive" live-in form, with each taking two weeks. APRA will release its more promising staff for up to four weeks per annum on training leave to participate in the programme. We expect that other regulators in the region will also participate, so that the programme should help build up networking among the regulators. Such a programme is not only designed to build up the necessary technical skills among our staff but also, by rewarding our better staff with a marketable qualification, we hope it will attract better quality staff to APRA and that APRA can retain them for a longer period.

Public education as to the role and limitations of regulation

My final ingredient to a sound supervisory framework is possibly the most elusive. As I mentioned earlier, it is important that consumers of financial services are properly educated about the nature of prudential regulation and the limit of any government guarantees of regulated institutions, implicit or otherwise. This involves walking a tightrope between the inherent desire of regulators to minimise the risk to consumers and the need for management and boards of financial institutions to take full responsibility for the risks that their institutions incur. The literature on moral hazard is replete with examples where the regulatory imprimatur has been abused to create an illusion of safety.

In some countries, the government's guarantee is explicitly limited by deposit insurance. In the case of Australia, the extent of the guarantee with respect to deposit-taking institutions is made explicit in the legislation. In the event of a bank liquidation, for example, the legislation limits APRA's responsibilities to ensuring that depositors have priority over other creditors.[6] Despite this explicit limitation of the Australian

[6] Banks are also required to maintain an excess of domestic assets over deposit liabilities to give substance to the priority provisions.

government's liability, there is little doubt that the public still perceives an implicit government guarantee in respect of banks.

The issue of public education is important but difficult. Without an informed public it is difficult for any government to stand back from distressed institutions. The danger in such an environment is that there is a tendency to over-regulate to minimise the government's exposure. Over-regulation not only inhibits competition and innovation, but can also cause the very instability that it seeks to avoid.[7] But even with a well informed public, and mechanisms in place to explicitly limit the government's exposure, the reality is that any government is faced with a dilemma in the event that a significant financial institution faces financial distress.

Conclusion

A unique, ideal framework for prudential regulation does not exist. There are many workable configurations of regulatory agencies and divisional structures. What is most important is that the structure chosen be appropriate to the nature and stage of economic development. It is also important that there be consistency across a range of issues that make up parts of the overall framework.

In this paper I have suggested the following issues as key ingredients to a successful supervisory framework:

- a coherent regulatory philosophy;
- a strong government commitment to the regulator;
- a strong commitment and high level of competence among the regulator's staff; and
- education of the public as to the role and limitations of regulation.

[7] Some of the more spectacular institutional crises, including the current Japanese banking crisis and the 1980s Savings and Loan crisis in the US, can be attributed largely to over-regulation (or at least to inappropriate regulation).

The framework for financial supervision: macro and micro issues

Andrew Sheng

Introduction

Nearly 20 months after the beginning of the Asian crisis, we are still struggling with the painful exercise of restructuring banks across Asia. The financial crisis in Asia is most commonly associated with banking crisis and contagion. This paper looks at the macro and micro issues in the framework for financial stability.

Financial supervision is all about risk management. Indeed, financial supervision is about the activities of the regulator to ensure that the management of financial institutions is managing their risks in a safe or prudent manner. This is the micro aspect of governance. But governance of financial institutions in an economy depends on the stability of the macroeconomy itself. Hence, the risk management of financial institutions is also related to the management of not only micro-risk factors (such as credit risk to a single borrower), but also macro-risk factors such as market risks – interest rate and exchange rate risks that are beyond the control of a single market participant. Such variables used to be under the control of central banks, but in an open economy global forces now determine these variables. Globalisation has brought about contagion and systemic risks, as we all found out to our cost during the Asian crisis.

Box 1 sets out the financial market risks that both the bank manager and the bank supervisor must assess at the micro and macro levels. Before we do this, it may be useful to rethink what recent market developments imply for proper risk management.

Finance as a derivative of the real economy

Bank problems do not happen overnight, they have very complex roots. Many of the factors are country-specific and originate in the real

Box 1

Financial market risks

Credit risk – the risk that the counterparty will fail to fulfil the (credit) contract. The size of the loss is the replacement cost of the contract in the market.

Liquidity (maturity) risk – risk of *losses resulting from forced sales when there is insufficient liquidity to meet contractual obligations.*

Interest rate risk – *risk of interest rate changes on value of assets or liabilities.*

Foreign exchange risk – *risk of exchange rate changes on value of foreign currency assets or obligations.*

Settlement risk – *the risk that one party (or agent bank) will not settle or deliver final value when settling a contractual obligation.*

Operational risk – risk of *losses due to failure of adequate internal controls, procedures and operating equipment, software and systems.*

Legal risk – risk of *losses caused by inadequate laws or court processes, including uncertainties in the legal definition of obligation or court reversals of commonly understood obligations, such as the legal obligations of multilateral netting.*

Reputational risk – risk of *loss of reputation of a market participant that leads to the market cutting off credit and transactions with that party.*

Political risk – risk of *losses due to political changes that affect public confidence.*

Systemic risk – *failure of one party triggers failure elsewhere in system (for example, contagion).*

Source: Sheng, 1996.

economy. Some of these problems are structural, others cyclical. For example, excessive sovereign debt was a problem of the 1970s, but the 1990s problem involved excessive private sector debt. Bank problems involve political, sectoral, legal, social, institutional and incentive dimensions. A combination of policy and institutional weaknesses could lead to losses in the real sector, which sooner or later manifest themselves in the banking system.

At the last count, 150 of the 180 IMF members had suffered varying degrees of bank distress or fragility in the last 15 years. What has gone wrong, what can we do to prevent it, what should we do to cure it? My book on the lessons of the 1980s concluded that the reasons for bank failure were so complex and so country-specific that it was impossible to generalise a solution (Sheng, 1996).

Given the complexity, bank restructuring is a process that encompasses the following:

- *diagnosis* – the need to understand the sources of bank losses and the dynamics between bank losses and real sector losses;

- *damage control* – the need to stop the bleeding. Having identified the "stock" of non-performing loans, it is important to prevent the "flow" of losses from escalating;
- *loss allocation* – the political economy of determining "who bears the losses", with the need to ensure that the method does not engender moral hazard; and finally
- *rebuilding the incentive structure* – the need to ensure that the incentive structure will avoid the repetition of past mistakes, so that the banking system will develop the right credit culture for a healthy, stable and competitive financial sector.

The US banking supervisors, who helped advise the banking reforms in Russia and Eastern Europe, found it useful to present these policy and institutional issues as set out in Box 2.

Box 2

Assessing the risk of bank failure

The diagnostic process begins with a review of the policy and institutional environment in which banks operate:

Policy environment

Is there significant financial repression?
Does the state own a large stake in the financial sector?
Is there liberal entry into the financial sector?
Is there a non-bank financial sector that is growing rapidly without supervision?
Are credit allocation and forced lending policies hurting banks' autonomy in credit decisions?
Are banks being taxed considerably higher than non-banks?
Do large enterprise groups substantially own banks?

Institutional environment

Are the legal framework and judicial processes conducive to enforcement of debt recovery?
Do domestic accounting and auditing standards meet internationally accepted accounting standards?
Is information on credit and borrower performance available and transparent?
Is there good bank supervisory capacity?
Do supervisory authorities fully understand the problems facing the banking system?
Are sufficiently trained bank management staff in place, for example, in foreign branches?
Do bankers have a good understanding of the costs of intermediation and the sources of their profits and losses?

Sources: Federal Reserve Board, Federal Deposit Insurance Corporation and US Comptroller of the Currency 1992.

But the Asian financial crisis has demonstrated that global contagion and capital flight have severe systemic implications for bank supervisors, so that we cannot look simply at the domestic sector, but must also examine carefully the external environment. We therefore need a much wider framework to examine financial stability. A national risk management framework needs to be fitted into the global context, with important implications for international regulatory cooperation, policy coordination and information exchange.

The key questions, therefore, that financial supervisors need to ask are:

- Do banks have the necessary information and incentives to manage their risks at the micro and macro level?
- Are they managing these risks, and if not, why not?

To answer these questions, we need to rethink the structure of financial markets. Globalisation was the result of three key factors: technology, deregulation and emergence of large savings in search of higher returns. First, technological advances in computerisation and telecommunications created the power and ability of markets to transact large values on a 24-hour basis globally.

Secondly, financial liberalisation, especially the opening-up of the capital account and the deregulation of the financial sector, has greatly opened up competition and forced not just the financial sector, but, more important, also the real sector to adjust (Crockett, 1997).

Thirdly, as the population aged in the developed markets, there emerged the growth of large asset funds, especially insurance, retirement and mutual funds and, more recently, hedge funds that began to diversify globally in search of higher returns. These funds are now larger than the banking system in terms of assets.

The reason why banking systems play such an important role is that they form the heart of the global financial markets by being:

- custodians of the liquid savings of the public;
- lenders of these resources to their borrowers to facilitate economic activity, such as investment, consumption or risk management;
- operators of the payment system, across which property rights are traded, cleared and settled; and
- highly leveraged institutions with roughly 12 times leverage (8% capital base).

Financial markets are best seen as networks across which information and financial transactions are transmitted and contracted between

different network participants. As we all know, networks have positive externalities, since participants benefit from wider networks. Unfortunately, these networks are also the channels of transmission of contagion when participants fail to settle their contractual obligations. In other words, financial markets help allocate resources and manage risks. But at the same time, they are the channels through which losses (real or financial) are allocated in the economy.

Market participants obey the right incentives when they observe one basic rule in the financial markets: they must be solvent institutions with positive capital, i.e. gross assets exceed their liabilities. However, the incentive structure could be distorted by three key problems:

- the information which market participants use to make their financial decisions is not reliable, timely or accessible;
- the incentives for market participants are distorted by tax, regulations or implicit or explicit guarantees that engender moral hazard; and
- some market participants are insolvent.

If information is unreliable, with bad accounting standards, and the incentives to use available information is distorted, then markets will behave with higher volatility and uncertainty, with possible herding or panic characteristics.

As we have learnt at great cost, if market participants are insolvent, their behaviour changes from risk aversion to risk taking, since they gain at social cost. Under certain conditions, private losses are socialised. Bank failure is another way of redistributing private losses.

In other words, markets behave "normally" as long as private participants are solvent and the incentive structure is not distorted by moral hazard or other factors. Since private agents maximise returns by using leverage, at certain levels of high leverage the market participant crosses the risk/return frontier, and its losses are socialised.

It is no coincidence that bank distress is closely associated with both speculative behaviour and asset bubbles. Asset bubbles occur because the public believes, through incomplete information and distorted incentives (e.g. crony capitalism, supply constraints, etc.), that asset prices[1]

[1] The price of an asset P (equity or real property) is equal to the discounted present value of the asset's expected earnings (E). The discount factor most commonly used is the yield on a risk-free asset (r), adjusted for the expected growth in earnings (g), taxes (t) and a risk premium factor (σ). As presented by Kahkonen (1995):

$P = E/(r-g+t+\sigma)$.

Box 3

The fiscal impact of bank losses

Since bank losses are quasi-fiscal deficits, the cumulative losses in the banking system are equivalent to an internal debt of the state. The long-term consequences of running such internal debt can be projected using the following equation: the change in the government debt/GNP ratio (d) is equal to the primary (or non-interest) deficit of the public sector, less what is financed by seigniorage, plus the current debt ratio (d) times the average real interest rate on the debt minus the growth rate of GNP:

Change in d = (primary deficit/GNP) – (seigniorage/GNP) + d (real interest rate – growth rate)

The quasi-fiscal deficit due to bank losses tends to increase the primary deficit. To the extent that the central bank is already financing bank losses through liquidity creation, the revenue that can be obtained from seigniorage is correspondingly reduced. The change in the overall debt ratio d will increase with the primary deficit or if the real interest rate exceeds the domestic growth rate. On the other hand, d will decline with inflation or high GNP growth.

The equation above helps explain the varying success of bank restructuring programmes. In countries with high growth or low real interest rates, d may be declining over time.

On the other hand, countries with large primary deficits and excessive real interest rates allow their debt ratios to become unsustainably large, so much so that the debt can only be reduced through higher and higher inflation. This category includes Argentina, Chile in the early 1980s, and Yugoslavia. The growth of the domestic debt also rose sharply because of excessive real interest rates, reaching as high as 40% a year.

How d will perform depends on whether bank losses continue to flow or converge towards zero, provided the bank restructuring exercise has stemmed all future losses. If the bank restructuring fails to stem losses, then even the fiscal deficit becomes unsustainable.

Source: Fischer and Easterly, 1990.

will continually rise above the cost of funds. They may not have priced in interest rate or exchange rate shocks or credit withdrawals in their expectations.

Once actual returns fall short of expectations on new information, then the vicious circle of asset sales, higher real interest rates, capital flight and credit withdrawal deflates the asset bubble, causing huge wealth losses. Overleveraged borrowers become insolvent and pass their losses on to the banks through rising non-performing loans.

If bank shareholders are unable to raise new capital to recapitalise the bank, then through the implicit bank deposit guarantee or explicit bank deposit schemes, *bank losses become quasi-fiscal losses*. In effect, the political economy of bank losses means that wealth losses in the economy become partly vested in the banking system. And since the

government is usually unwilling for policy reasons to pass the bank losses on to the depositors, *ultimately the government bears the losses through either public bank recapitalisation or monetary creation*. The fiscal implications of bank losses are considered in Box 3.

Towards national and sectoral risk management

The financial sector is supposed to help the real economy allocate resources and manage risks. Unfortunately, as we have discovered, the financial sector itself can be a major source of new risks. Thus, a review of the risks of the economy as a whole requires an understanding of the way growth has been financed in each sector, and the inter-relationships between the sectors. If domestic financial systems are inefficient, the private sector or even the public sector may resort to external financing, thus exposing the economy to the volatility of capital flows. Such flows are not in themselves the causes of economic or financial problems, but are the effects of distortive incentives in the market, possibly a combination of policy mistakes and weaknesses in economic fundamentals.

Given the larger risks in open financial markets that can feed back into shocks on the real sector and vice versa, central banks must focus on national risk management. To withstand greater shocks, an economy requires a combination of credible policies, sound fundamentals, good supervision, robust infrastructure and a non-distortive incentive structure.[2]

The following pre-conditions appear to be necessary for a stable financial system:

- *Credible policies* demand monetary and fiscal policies that are consistent with each other, and are applied consistently.
- *Sound fundamentals* include a high domestic savings rate, sustainable balance-of-payments position, high foreign exchange reserves and prudent debt management.
- *Good supervision* involves the maintenance of solid capital adequacy and liquidity requirements for the financial sector, as well as regular examination and monitoring of financial institutions. The banking system must have the capacity to avoid excessive credit concentrations and risks, and to manage market risks well.
- *A robust financial infrastructure* would encompass an efficient payment and settlements system for domestic and international transactions.
- *A non-distortive incentive structure*, such as taxation or regulatory restrictions that would not encourage risk concentrations or excessive leverage in any economic sectors. Examples of distortive structures are property development tax incentives that led to excessive commercial real estate lending in the US in the 1980s, or land restrictions that fuelled the Japanese property bubble. Moral hazard distorts risk management.

The Fund had a mantra on the above (Lindgren, 1996): *private governance, market discipline and official oversight*, with the notable omission of a robust infrastructure.

Asian crisis post-mortem

The lessons from the last 20 months in Asia have demonstrated to me that the above mantra is incomplete. Before the crisis, most Asian economies, at least at the superficial level, appeared to have very sound fundamentals and reasonably good supervision by emerging market standards. What was not apparent was the degree of contagion and panic that the crisis brought about. What macro and micro issues are therefore missing from the above list of pre-conditions for national risk management?

I would list essentially five inter-related areas that need to be addressed:

- incomplete information;
- unequal leverage;
- incomplete contracts or rules of the game;
- lack of sound corporate governance; and
- adjustment asymmetry.

The *incomplete information* question has been extensively studied, notably by the Group of 22 Working Party on Transparency and Accountability, whose report was published in October 1998. I would

[2] See Joseph Yam, "International Capital Flows: Opportunity or Threat? View from Hong Kong", Bank for International Settlements, June 1995.

summarise the information question as "Bad accounting = bad information = poor decision making = bad risk management = financial crisis".

But the problem was due to more than simply gaps in information or gaps in incentives to use information. In my view, the under-explored issue in the Asian crisis was the gap in the *capacity to use information*. Recent debate over the record of the Fund in managing the Asian crisis accused it of not understanding the implications of globalisation and banking crisis. To be fair to the Fund, the difficulties of managing asset bubbles in an open economy with large capital flows are now not unique to emerging markets.

Two simple examples demonstrate what I mean. First, never in its wildest prudent corporate risk management dreams could an Indonesian corporation foresee that the rupiah would fall from 2,500 to 17,000 to the US dollar. Thus, any prudent corporation that borrowed 10% of its capital in foreign currency would have become insolvent. Secondly, financial systems are not normally designed to absorb volatilities in the two key currencies in the region (dollar and yen) that are as large as those in the equity markets. The 8% capital adequacy requirement, with inadequate loan classification standards, meant that many Asian banks simply did not have a large enough capital cushion to withstand these credit and market shocks to their borrowers and themselves.[3]

The second asymmetry is *leverage asymmetry*, which I consider to be the real Achilles heel of financial systems. The greater the degree of leverage, the greater volatility in asset prices and the greater the *volatility in duration*. In a society with high savings and strong credit discipline, leverage would tend to be low. Present supervisory systems simply do not have sufficient information on the different degrees of leverage in the economy. Some sectors of the economy could be becoming too highly leveraged, resulting in concentration risks and potential systemic risks.

There is also a highly distortive element in different leverage in different markets. For example, the average margin in stock markets is 50%, while that for index futures is 8–12%. Leverage in the OTC

[3] The average Asian debt/GDP ratio was 130%, of which foreign currency liability was 30%. Thus, an average 30% devaluation would cause foreign currency losses alone of 9% of GDP. Since bank assets/GDP in East Asia was roughly 100% of GDP, the foreign exchange losses alone overwhelmed bank capital, leaving aside credit and other market risks.

markets, such as those for foreign exchange, options and warrants, could be significantly higher. Such leverage in OTC markets (especially in below-the-line derivative obligations) is simply opaque to many market participants and the regulators. The result is that these derivatives may be totally wrongly priced in terms of risk. That was what happened when LTCM appeared to be "too big to fail".

Thirdly, *incomplete contracts* or rules of the game are now better understood after the Asian crisis. Most economies realise that they must have better market competition and operation rules, such as clear rules of entry and exit. These would include bankruptcy rules and a fair and transparent legal framework that can enforce contracts equitably and efficiently.

Related to the question of incomplete contracts is the problem of *corporate governance* or the incentive structure. Corporate (including bank) management must be rewarded or punished according to a balanced incentive structure. There must be not only internal controls and checks and balances, but also the absence of distortive incentives such as tax incentives and implicit state guarantees that encourage moral hazard.

Indisputably, the most vexing question in most Asian economies currently is how to ensure that corporate governance is soundly based. Even if the government is determined to recapitalise the banking system and make the necessary reforms, if corporate governance is weak the mistakes of the past will be repeated.

Finally, we have to recognise the reality of *size asymmetry* and the different pace of adjustment between economies and between the real sector and the financial sector. Because we live in an interdependent world, and an increasingly integrated world, domestic economic problems are compounded by the policy mistakes of others, especially the larger economies. Small open economies that thought they were adequately prepared for reasonable-sized external shocks today discover that international prices, such as exchange rates of G10 economies, can fluctuate by 10–20% in a few days. Through flexible exchange rates, internal losses can be passed externally to others through both the trade and capital accounts.

We also need to recognise that financial markets adjust faster than the real sector. The incentive structure, information gaps, and the institutional and legal framework all take time to change. The Asian

Box 4

Lessons of the 1980s for bank restructuring in the 1990s

Financial stability rests on the government's ability to maintain a stable currency.

Banks fail because of losses in the real sector, compounded by poor risk management and fraud.

Liberalisation programmes often fail to take into account the wealth effects of relative price changes, and inadequate supervision creates further losses.

Bank losses ultimately become quasi-fiscal deficits.

Failure recognition is important because a banking crisis is a solvency problem, not a liquidity issue.

Stopping the flow of future losses is critical.

The method of loss allocation determines the success of the restructuring programme.

Success depends on generating sufficient real sector resources to pay off losses, adequate financial sector reforms to intermediate resources efficiently and safely, and the budget's ability to tax "winners" and wind down "losers" without disturbing monetary stability.

Rebuilding a safe and profitable banking system requires good policies, reliable management and a strong institutional framework.

crisis demonstrated that the market is quick to punish even the slightest policy mistakes. It is easily said that we should all have sound fundamentals, and that prevention is better than cure. However, it is also a fact of life that we all make mistakes.

Thus, the only consistent lesson that we can draw is that financial supervision or national risk management is a continuing process of vigilance. Given relentless competition and change, financial supervisors cannot assume that they can prevent the market from making mistakes, nor can they minimise the costs of learning without moral hazard. These are a natural part of the learning process.

In other words, increasing market transparency, creating a level playing field and removing incentive distortions through sound policies and a flexible institutional framework, including robust infrastructure, would help make the market work better.

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Financial supervision in China: framework, methods and current issues

Cai E-sheng

Current supervision framework and methods in China

Financial supervision in China is conducted according to the laws and regulations in force. With the enactment of the Law on Securities at the end of 1998, the three major supervision authorities, namely, the People's Bank of China (the PBC), the Insurance Regulatory Commission of China and the Securities Regulatory Commission of China, now supervise the three types of financial institutions and their business activities based on the Law of The People's Bank of China, the Law of Commercial Banks, the Law of Insurance and the Law on Securities respectively. The financial institutions adhere strictly to the principle of segregation of financial business. Banks in China cannot engage in trust, insurance or securities business, nor can they invest in trust or investment companies; while the securities and insurance institutions cannot be involved in banking and trust business. As to the supervision of commercial banks in China, both the supervision system and the framework are designed strictly in line with the requirements of the Basle Accord.

In the past, the financial system in China was established in line with the administrative structure, as was the PBC system. Therefore, there was segregation in the supervision of financial institutions, which meant that supervisory bodies supervised the commercial financial institutions at the same administrative level while being ignorant of the overall situation of a commercial bank confronted with risk. In consideration of the existing financial risk in China, especially the changes in the international financial environment and the lessons from the South-East Asian financial crises, the method of financial supervision in China is now changing towards risk evaluation of the legal person of a commercial bank and the resupervision of the management structure inside every financial institution. Based on the Basel Core Principles, the supervisory

measures have been enhanced in some aspects, such as the design of some indicator systems and the monitoring of the risk situation of financial institutions, especially non-performing assets and the risk faced by medium- and small-sized financial institutions. In addition, procedures for the exit of problem financial institutions were introduced in China in 1998. Viewed from the market angle, this is an issue which requires further research. Since the financial system in China is undergoing transition from a planned one towards a market one, we could not deal with everything perfectly overnight. However, attention has been paid to the market issue. In 1998, the PBC closed down the Guangdong International Trust and Investment Corporation, more than 20 urban credit cooperatives and one shareholding commercial bank, Hainan Development Bank. Dealing with these problem institutions is unavoidable in the process of development.

As to the supervision methods, one of the main problems confronting us is the examination of the qualification of staff in financial institutions and dealing with unqualified staff. The low quality of some staff is really a problem. The PBC is therefore gradually improving its supervision and examination of the management of financial institutions, and has removed some unqualified bank managers from their positions. Many problems in financial institutions are caused not solely by economic factors, but mainly by the behaviour of senior managers. If all the senior management of financial institutions fulfilled their duties according to the rules and regulations previously enacted by the PBC, the situation of many institutions would not have been as bad as it is today. The problems caused by factors outside the financial system, such as staff and management, can only be solved by correcting the behaviour of staff, which is essential to ensure the soundness and development of the institution.

Risks confronting China's financial institutions and the problems in financial supervision

As Governor Dai pointed out before, a stable supervision system should be based on a sound economic and financial environment. Apart from external factors such as the intervention of government agencies and the imperfection of the legal framework, there are currently four major problem areas in financial supervision:

1. The supervised entities (i.e. financial institutions) are undergoing the transition from a planned economy to a market economy, and with the reform and opening-up, therefore, their behaviour needs to be improved accordingly. In this context, the financial institutions themselves have to gradually come to understand the market and risks. The fundamentals of the financial institutions operating on the market now are not very solid. Once I asked some supervisors who had just returned from a study trip abroad what was the most difficult part in China's financial supervision. They said that the most difficult part of supervision was the behaviour of the supervised entities and the unsound internal governance mechanism. Let me take the health of a child as an example to illustrate this: if a child is born disabled or unhealthy, how should one bring him up to be a healthy man through supervision? This is a very difficult issue, and finding a solution is time-consuming.
2. There are various problems in the PBC's current supervision of financial institutions. One example is that supervision is relatively weak. The PBC began to perform the sole function of a central bank in 1984. Before that time, the PBC also took deposits and extended loans. Its current function was developed in the process of reform. Therefore, the behaviour and system of the central bank itself needs to be improved gradually according to the market principle and international practice, so as to make it more in line with the requirements of a socialist market economy. This is a long and concrete process. We are now aware of the problem and speeding up our steps to change this situation. For example, in 1998, the PBC underwent organisational restructuring, setting up nine regional branches to replace the original provincial level branches. This appears to be a simple transition, but as a matter of fact it is really a big change and differs very much from the existing structure of the political system in China. This illustrates that a systematic change is taking place and a great effort is being made towards creating a genuine central bank.
3. Information disclosure is also an issue to be solved in supervision, which means to provide the public and investors with necessary information to let them judge the risk of a financial institution. It is not enough just to make information public. For example, listed companies began to disclose their financial statements on the capital market several years ago, but investors did not realise the importance of this practice. Therefore, it is true that information disclosure is an issue to be solved

in China, but what is more important is to enable investors and business people to realise the significance of doing this. This means, through information disclosure, making investors aware of the risk situation of the institution they intend to invest in, and showing them where the risk of their investment lies, and therefore enhancing their awareness of financial risks. What I mean here is that information disclosure is not only a technical issue but also an issue of one's mentality.

4. The market exit of financial institutions is an acute issue. Market exit is not a simple and easy thing to do even in market economies, since it is connected with the interest of investors and the stability of a country and of society. We also see that, after the Asian financial crises, no country is able to deal with problem financial institutions in an easy way. This is also a hard problem for China, especially in the course of its economic development. However, we have begun to incorporate the international experiences into our research on how to deal with problem institutions in consideration of the concrete situation in China.

Solutions to the issues existing in financial supervision in China

It is sometimes said that the problems we are exposed to today have been accumulated during the past 20 years of reform and development in China. In my view, we should look back 50 years, not only 20 years, when thinking of the issues in China. During the 50 years since the foundation of the new China, economic operation and people's way of thinking were much affected by the planned economy. Therefore, the issue we are confronted with today will not be solved simply by principles of market economies. For example, we could make a good judgement about the risks taken by the financial institutions, including the seriousness and types of the risks. We know that the reasons causing those risks are complicated, unable to be handled only on the technical level. When we deal with the issue of financial risk, we will not only solve the problem on the surface but also solve the fundamental problems by improving the mechanism. In the process of improving the supervisory system and resolving the existing problems, we have to make reform the top priority. The meaning of the word "reform" here is different (or more profound) from the same word mentioned before. Here it means that we have to determine clearly how to develop an institution or a

system, and what is its future status. Since we did not have a clear idea about the status and development of some institutions such as the trust and investment companies in the past, they could not achieve soundness and healthy development. For these institutions, we should not only solve their existing problems, but also make their whole system work well and develop. Enhancing competition is not targeted at individual institutions, but to make analysis and judgement based on the linkages among institutions as well as their roles in the market. Currently the issue of establishing the financial supervision system is arduous, but we have found out the way to fundamentally solve the problems after years of experiment, exploration and research.

To be able to better supervise the commercial financial institutions according to market principles, the PBC will need to encourage the financial institutions to improve their internal control systems, to regulate their behaviour and to raise their consciousness of risk prevention.

Raising the quality of the staff engaged in financial business is also part of the task to improve the supervision system. The overall improvement of supervision will be compromised if the problem remains unsolved. In practice, some staff members work very hard, but they have not mastered modern techniques and methods, and they have not realised that banks' exposure to risk is an unavoidable reality facing us with the development of the market. Many of them still try to solve these problems using out-of-date administrative methods which cannot meet the requirements of the modernised market economy.

The study of China's issues should be based on China's concrete situation

China is still in the process of transition from a planned economy to a market economy. Therefore, the public, the management of financial institutions and government agencies should strengthen their awareness of credit and risks. If they hold the view that all deposits are protected by the authorities and the interests of the depositors will not be impaired, investors will never learn to judge the risk of an institution but will rely on the authorities and supervisors. We should therefore make the public fully aware of the importance of financial risk prevention.

The supervision of banks: the United Kingdom's experience and challenges in China

Carol Sergeant

Introduction

Every country faces its own unique challenges, heavily influenced by history and its own particular set of economic and social circumstances. Nonetheless, it should be possible to learn from others' experiences and in this spirit I propose to set out briefly some of the developments in UK financial regulation which may be of interest to you in China. I will cover the background to the creation of the UK Financial Services Authority, some observations from our own experience of what typically goes wrong in banks, the UK approach to supervision of banks (including risk based supervision) and finally some remarks on the relevance of all this for developments in your own banking system.

Creation of the UK Financial Services Authority

The concept of a single financial regulator is of course not unique to the UK – we also have the Japanese FSA and the Korean FSS and many others are considering this approach. In the United Kingdom's financial sector we had ten different regulatory bodies working under eight different pieces of legislation with around 15 different rule books. The regulatory bodies included government departments, the central bank and self regulatory organisations. The style of supervision ranged from relatively informal to highly rule-based and the objectives for each body were in many cases not set out clearly in legislation, or at best incomplete or vague. None of this is surprising since the regulatory framework had grown up over a long period of time in a piecemeal fashion often in response to a particular crisis or market development. Although there were no significant barriers between different types of

financial institutions they remained distinct, and it is only in recent years that we have seen moves to put together institutions dealing with all aspects of financial activity. Moreover, because the United Kingdom has such an open financial system we have benefited from virtually every financial innovation imaginable. Changes in our society's needs and expectations have also had a significant influence, particularly on the protection provided for retail consumers.

All of us involved in financial regulation were well aware of the potential risks and inefficiencies of these fragmented arrangements (which are not unique to the UK), and we had put in place cooperative arrangements designed to mitigate them. We had regular information exchanges between the different regulatory bodies both about particular institutions and on general policy matters; we worked together at all levels on common issues and problems, and we were making good progress. But there would always have been limitations on just how far we could go because of our differing (and sometimes unclear) objectives, our different legal and institutional arrangements and the resulting differences in styles and techniques of regulation. At the same time the increasing integration in our financial industry with conglomerates combining banking, insurance, securities business and investment management, and the repackaging of conventional products across several parts of the financial industry, was putting severe pressure on this regulatory structure.

The new Labour government decided to dismantle the current arrangements and replace them with a single regulator and a single piece of legislation with clear objectives and accountabilities designed to deliver greater effectiveness, efficiency and consistency within a more flexible overall framework. We are now in an interim phase where all the regulatory staff are employed by the Financial Services Authority but we are still operating under the old legislation. We hope that our new legislation, which will replace most of the existing laws, will be in place by mid-2000. In July 1998, the government published the new draft law (the Financial Services and Markets Bill) for consultation and it will shortly begin its passage through our parliamentary process.

So the complex arrangements I described earlier are largely still in place and we in the Financial Services Authority are now supplying services under contract to eight of the regulatory bodies mentioned earlier and are still operating under eight separate Acts of Parliament.

Banking Supervision has benefited from an early legislative change and is now fully the responsibility of the FSA, although our powers continue to derive from the Banking Act and the Board of Banking Supervision remains in place.

What our experience has demonstrated is the need for: legal and institutional arrangements which are flexible, adaptable and as simple as possible; clear objectives and accountabilities; a mechanism to ensure there are no gaps in the regulatory system, minimal overlaps and a consistency in approach; a set of rules or guidelines which minimises duplication of effort and thereby reduces inefficiencies and the opportunity for regulatory arbitrage; and institutional arrangements that facilitate the exchange of skills and knowledge at all levels, both among regulators and between regulators and the regulated institutions. The precise way of delivering this set of objectives will vary between countries, but the more integrated the financial system, and companies within it, the more difficult it will be to deliver effective and efficient regulation with numerous different regulators.

The new proposed legislation is a flexible framework which leaves the FSA to set the more detailed rules and guidelines. It sets out four clear objectives for the FSA:

- market confidence: maintaining market confidence in the financial system;
- public awareness: promoting public understanding of the financial system;
- consumer protection; securing the appropriate degree of protection for consumers;
- reduction of financial crime: reducing the extent to which it is possible for a business carried on by a regulated person to be used for a purpose connected with financial crime.

These are supported by a set of general duties which set out principles of good regulation to which we should have regard in achieving these objectives:

- using resources in the most economic and efficient manner;
- the responsibilities of those who manage the affairs of authorised persons;
- being proportionate in imposing burdens or restrictions on the industry;
- facilitating innovation;

- taking into account the international character of financial services and the UK's competitive position;
- not impeding or distorting competition unnecessarily.

The UK FSA is committed to an open and consultative approach and has issued numerous consultation papers and explanatory documents. They are all available on the FSA's website and we would be very happy to answer any questions you may have on them. The task of merging ten very different organisations and approaches is not easy and we have a long way to go yet, but we are on target with our plans so far and already beginning to see the benefits of all the staff belonging to just one organisation, now housed in a single building in London's Docklands financial district.

What goes wrong in banks

Continuing with my theme of learning from the experiences of others I will try to summarise what seem to be the most common causes of bank problems and failures. This brief outline is the result of some work carried out nearly six years ago when I returned to bank supervision after a lengthy spell on other central bank duties. It is based on a range of case studies covering both large and small banks that encountered problems. I have not had to change these key factors in the last six years and you may be tempted to conclude that the main message is that bankers are very slow indeed to learn from their own or others' mistakes.

We identified five main generic causes of bank problems and failures:

- misconceived *strategies*;
- failure to analyse and *understand the business* (e.g. the risks, costs, source of profit);
- inappropriate *organisational structure*;
- weak or irrelevant *controls*;
- lack of timely, reliable and relevant *information*.

Strategy

A common feature of any well-run organisation is a clear and properly resourced strategy which is understood at all levels in the organisation. The most frequent weaknesses in strategy that we found are:

- a fundamental misunderstanding of the economic, financial and – particularly – competitive environment;
- inadequate resources to support the strategy, for example insufficient capital, inadequate skills or experience, poor information technology, weak management;
- inability to recognise that a previously sound strategy is no longer viable due to changes in the economic, social or financial environment, and failure to adjust accordingly;
- failure to implement change effectively (this is a particularly high risk in large organisations where chief executives sometimes do not understand that it takes a huge amount of planning, effort and determination to achieve effective implementation throughout the organisation);
- poor communication. No matter how good a strategy, it will not work unless everyone in the organisation understands it and the role they have to play in delivering it.

But perhaps the biggest and most frequent cause of problems under this heading is the complete absence of any agreed or coherent strategy.

Understanding the business

In every case of failure or significant loss that I have observed, senior management has quite simply not understood the nature of the business they are in. For example, they have not understood:

- exactly how and where the profits have been made (there is a tendency to investigate thoroughly the source and cause of obvious losses – but not of profits);
- the risks taken to generate those profits (are boards able to review an analysis of risks alongside the profit figures on a regular basis?);
- the cost structure;
- potential changes/threats to the business (how often do banks conduct regular and effective scenario analysis to evaluate the future viability of their business under different sets of assumptions?).

Organisational structure

Clear responsibilities and accountabilities are essential. A common cause of bank failures and problems has been confusion over responsibilities. Overlapping responsibilities, where no one takes ownership of issues, are just as dangerous as outright gaps.

- The organisational structure needs to reflect business and control objectives.
- Responsibilities should be clear and written down with no overlaps or gaps.
- Care is needed in deciding how much decision-making should be delegated or centralised.

Controls

Controls are often much too narrowly interpreted. A key control is the whole culture and leadership of the organisation. This sets the tone for what is acceptable behaviour. Appointments, rewards and compensation and motivation systems as well as the quality of training are all key parts of a sound control system.

We should of course not overlook the more conventional control mechanisms:

- segregation of duties and dual control;
- independent risk management (which should cover operational risk as well as credit risk and market risk);
- high quality independent internal audit and compliance;
- high quality external audit;
- independent non-executive directors.

These types of controls are essential but they will not work properly unless the overall culture of the organisation promotes, respects and rewards strong controls and the organisation appoints people to senior positions who believe in these values.

And finally of course controls need to be relevant. In some of the banks that have experienced problems there were plenty of controls in place, but the nature of the business had changed and the controls had not been adjusted to meet that change.

Management information

In order to manage and control any organisation and measure its progress, management needs timely, reliable and relevant information. As with controls, many banks implement significant changes in their business without paying regard to the change in their information needs. Banks need management information that is:

- of a reliable quality and accuracy;

- up-to-date and timely, so that it can be used as a tool to steer and manage the business – not as a historical record;
- appropriately detailed (too much irrelevant detail is as bad as insufficient information).

The information should enable management to assess:

- the bank's progress against its plan (with particular emphasis on areas of significant change);
- the bank's risk profile; and
- its profitability (with appropriate breakdowns of costs and profit sources).

It is also very important that information gets to the right level of management at the right time and is fully aligned with each person's responsibilities.

Supervisory approach

If these are some of the hazards to which banks are exposed, what is the proper role for bank supervisors? We have a very wide range of banks in the United Kingdom, from multi-billion dollar capitalised international banks to very small local banks offering a few simple products. All of these banks operate in a volatile and rapidly changing financial environment. We have also always been keen to ensure that we have a sound financial system in which innovation and competition can flourish. The key features of our supervisory approach are that it is *risk-based* and *flexible*. I will explain our risk-based approach to supervision (known as "RATE")[1] briefly below. The key outputs for each bank are a tailor-made and unique supervisory programme and a capital requirement, both of which reflect the supervisors' judgement of the risks of that bank. We set individual capital ratios for each of our banks, typically above – and for some banks significantly above – the Basel minimum.

Supervisory techniques

We use a range of techniques in our supervision:

Off-site analysis of formal FSA statistical returns, the bank's own management information, risk limits, risk manuals, general industry data and much more.

[1] Risk assessment, tools of supervision evaluation.

On-site analysis of systems and controls, focusing particularly on credit risk, market risk, operational risk, IT systems and internal audit. We also review the effectiveness of senior management, high level controls, strategy and so on. This work is conducted by supervisory staff and teams of technical experts.

Reports by accountants where the FSA determines the scope of the enquiry but the work is carried out by external accountants (usually, but not always, the bank's own external accountants).

Liaison with overseas regulators is also very important to discuss the operations of foreign banks in the United Kingdom and of UK banks operating in other countries.

Risk-based supervision[2]

The FSA undertakes a formal risk assessment of each bank, reviewing the bank's *business risk* and *control risk* separately, so that we may find that a bank has high inherent business risk (because for example its business is concentrated in volatile markets) but because the business is very well controlled the control risk may be low. Conversely, we may find a bank which has low business risk to have very weak controls and therefore represents a high control risk.

Under the *business risk* heading we evaluate capital, asset quality, market risk, earnings, liabilities and general business risk (which includes for example strategy and competitive position). Under *control risk* we evaluate internal controls, organisation and management.

I hope you will recognise here the issues I covered in our small study on things that go wrong in banks! The work involves an on-site risk assessment including interviews with senior management, analysis of key numerical data and consultations with other parties, particularly overseas supervisors (where relevant).

The output from this process is:

- a formal risk assessment with detailed numerical scores;
- a remedial action plan for the bank with deadlines;
- a supervisory programme for the supervisors and bank which will include:
  - "discovery": where the supervisors need more information;

[2] Described in more detail in "Risk-based approach to supervision of banks", FSA, June 1998.

– "correction": where the supervisor seeks to ensure that required corrective or remedial actions by the bank are implemented; and
– "monitoring": where the supervisor needs to receive regular information.

The work is reviewed by a committee of senior FSA staff to provide a check on quality and consistency.

The risk assessment, remedial action plan and supervisory programme are sent to the bank's board of directors along with a letter highlighting the key points. It is also sent to overseas supervisors and head offices in the cases of foreign banks. The risk assessment sent to banks does not include detailed scores (these are used internally) but the bank is told whether it has high, medium or low business and control risk and the reasons for the FSA's views are given very clearly. Most banks appreciate this frank and open approach. The FSA will also determine and communicate a "supervisory period", which is the length of time until the next formal risk assessment. This can be anything from six months for a high-risk bank to three years for a low-risk bank operating in a stable market.

We have found this to be a very effective process. It communicates clearly to banks our assessment and expectations of the bank within a consistent and transparent framework. It also provides a sound basis for us to allocate our own scarce resources to the areas of highest risk, leading we hope to a more efficient and cost-effective supervisory system. This has been a very brief summary of our risk-based approach and if you are interested in more information I urge you to read our explanatory paper on the process published in June 1998. As well as being a supervisory tool it is also a useful framework for banks to conduct self-analysis.

Sanctions against banks

We are frequently asked what sanctions we have if banks do not meet our requirements. The first thing I should say is that we have a very strong preference to agree voluntary remedial actions with banks. We believe this is the most effective way of securing our objectives but if that is not possible we have a range of powers and sanctions at our disposal.

- We may *increase the bank's capital requirement*. This is not a "punishment" – it simply recognises that the bank's risk has increased and many higher-risk banks have permanently high capital requirements; similarly we may *increase liquidity requirements*.
- We can place *informal agreed restrictions* on a bank's business, for example on credit exposures, types of business, management, shareholder controls, etc.
- We can invoke our *formal powers under the Banking Act*; this can range from formal restrictions to revocation of a bank's authorisation. The use of Banking Act powers is subject to formal procedures, and is subject to appeal.

Relevance to China

You in China are facing your own challenges, which in many ways are quite distinct, but I believe that there may be useful lessons from our experience in the UK that can be adapted to your particular needs. There are, of course, significant differences between our two countries: they are at different stages of economic development; their financial sectors differ in structure and composition; and there is a different balance in public and private sector involvement. Nevertheless, China is moving towards a market-based economy, with some of the most far-reaching reforms being in the financial sector. I believe, therefore, that some elements of our approach may be relevant to China in spite of the differences between us.

Single regulator

I have mentioned earlier the reasons why the UK has opted to have a single financial regulator, but we have never claimed it is a universal model. You in China have gone the other way – creating separate regulators for the banking, securities and insurance sectors. The decision to go with either model must be determined in large part by local circumstances. In China you have opted for a separation of banking, securities business and insurance, so there is logic in having separate regulators. The task of adapting regulation to the needs of a new and rapidly developing financial services industry is a difficult one and

specialised regulators may be better able to focus on the unique problems that this brings up.

You may find that, further down the road, you will come under pressure from regulated firms to remove the restrictions that prevent them engaging in a full range of financial activities. Even at this stage, however, you may want to consider setting in place arrangements to ensure that there are no gaps or overlaps between the regulatory bodies and that there is sufficient consistency in approach between them to prevent any regulatory arbitrage or possible distortions to the financial system. If at a later time you do ever come to consider the merits of a single regulator, you will be in the happy position of being able to learn from our mistakes.

Reform in Chinese banking sector

But that is looking quite far into the future. For now, we are watching the reform of the Chinese banking sector with great interest. As we see it, the key elements of this reform are:

- the removal of policy lending from state-owned commercial banks;
- measures to deal with non-performing loans;
- strengthening the capital of the major state-owned banks;
- strengthening internal controls; and
- increased competition.

If I may, I would like to make a few remarks about each of these, from the perspective of a UK regulator.

Removal of policy lending from state-owned commercial banks

The removal of "policy lending" from the state banks is a key reform if these banks are to operate on a commercial basis. It marks a major change in the whole culture of Chinese banking: amongst management, employees and customers. The crucial ingredient is independence. If the process is to work, government – at both local and national levels – must allow management to make its own commercial decisions. Managers, in turn, will have to get used to being held accountable for the decisions they take and the performance of their staff. It is a significant strategic shift and will require a restructuring of incentive systems, controls and management information systems.

For this to work, it is important that a bank's organisational structure is clear and its levels of decision-making and responsibility well set out and understood. This is something which we look at under our RATE framework. As part of our risk assessment, we evaluate the effectiveness of a bank's organisational structure and whether the Board of Directors and management have the necessary skills, experience and integrity to manage the business. A bank which fails these "Corporate Governance" tests will have much greater difficulty controlling its business and will be more susceptible to fraud.

Non-performing loans

Dealing with the legacy of past policy lending is a major challenge. The quantity of non-performing loans in the major state-owned banks is unknown, at least outside China, but estimates range from 20% to 40% of the total. Whatever the exact figure, it will be difficult for the banks to make a genuine shift to a more commercial, risk-based approach so long as they retain relationships with such a large number of borrowers who cannot service their debts.

I therefore welcome the announcement that the legacy of non-performing loans will be tackled by the creation of Asset Management Corporations. This method has been used with success elsewhere, and I look forward to hearing details of the Chinese model. If you are to convince the outside world that you are serious in your resolve, it will be important to make the process as transparent as possible. Which bad loans are to be transferred? What discount will apply? Will the banks have to recognise losses at the point of transfer? How will the Asset Management Corporations be funded? There is a lot of interest outside China in what you are doing and, I am sure, a lot of support. But the benefits that you stand to gain from dealing effectively with the legacy of past policy lending could be compromised if the process is not seen to be clear and rigorous.

Dealing with the past is difficult enough. But it is equally important to avoid making the same mistakes again. A priority for the banks should be to develop sound credit assessment procedures to minimise the risk that new lending will turn bad. And of equal importance, they need to introduce prudent provisioning policies consistent with the new loan grading system that I understand is being gradually introduced throughout the banking sector. This will help to ensure that any deterioration in credit

quality is picked up quickly, acted upon by lending officers and also accurately reflected in the balance sheet. I should emphasise, too, the importance of a clear bankruptcy code, which banks can invoke to recover some part at least of otherwise unrecoverable debts.

Strengthening the capital of the "Big Four" banks

Clearing non-performing loans from the banks' balance sheets will not by itself be a panacea for China's banking sector. There is a need for additional capital to support their business, particularly in view of their rapid expansion in recent years. Raising and maintaining adequate capital, and earning a decent return on it, are important disciplines for a bank. Under Chinese accounting standards, it has not been possible for outsiders to judge the quality of Chinese banks' assets, their profitability or the adequacy of their capital and provisions. The authorities have said that all the state-owned banks will meet the Basel minimum capital ratio of 8% within two years. No one would argue with the objective of strengthening the banks' capital, but it will not be enough merely to assert that the standard has been met. Much further disclosure will be required if you are to convince an often sceptical world that the published figures are true.

This is a fundamental point which applies more widely. A market-based economy relies on the availability of timely, accurate and comprehensive information on the financial status of companies operating within it. This is, of course, particularly important for banks, if they are to make a proper, objective assessment of a borrower's creditworthiness before extending a loan and then monitor credit quality during its life. Banks, indeed, should be at the forefront of those calling for greater disclosure. But they will not be the only beneficiaries. The economy as a whole will benefit from an improvement in accounting standards because it will, over time, lead to an increase in productivity by enabling savings and investment to be channelled to where it can earn the best return. Better disclosure could also help China in its objective of eliminating moral hazard. I completely agree that lenders and investors should rely on their own analysis and commercial judgement when dealing with Chinese counterparties, and not on an implicit state guarantee. Nevertheless, if they are to do that, they need more information than is available at present. It was clear from the closure of GITIC that there was a large gulf in understanding between foreign creditors and the

Chinese authorities about the degree of official support the investment and trust companies enjoyed. I do not want to comment on that particular case, save to say that it demonstrates how important it is that all players know and understand the rules of the game.

Strengthening internal controls

I know that the strengthening of banks' internal controls is one of the priorities of the People's Bank of China. We too set great store by this. As a starting point, a bank's internal control framework should be commensurate with the nature of its business and the amount of risk it is prepared to run. In the FSA, we assess this framework in each bank, together with its internal limits and guidelines, the adequacy of its IT systems, the quality of its financial and management reporting, the effectiveness of its audit and compliance functions and its money laundering controls.

As a minimum we expect to see: accurate accounting and other records so that management has the information it needs to make informed judgements about its business; adequate systems to identify, measure, monitor and control different types of risk; and staff and remuneration policies that ensure staff are properly qualified for the jobs they do, and adequately rewarded on the basis of their performance. As I mentioned earlier, in the UK we make extensive use of external accountants to report on the adequacy of the banks' systems and controls. We have also built up specialist teams to help our line supervisors assess the quality of controls in the banks. These include IT specialists who have been particularly busy of late analysing the adequacy of banks' Y2K preparations. A useful by-product of the work of our specialist teams has been their contribution to spreading best practice throughout the banking sector.

Increased competition

Judging by our own experience, increased competition will be a spur to the process of reform that is under way in China. Although the "Big Four" state-owned banks remain the dominant force in Chinese banking, a number of new commercial banks have been established in the past decade, bringing a new level of participation to the banking sector. Competition from foreign banks, however, has been slower to develop.

I understand the reasons behind this, and appreciate the need for gradual, controlled development. At the same time, I believe that China will reap great benefits from opening up its banking sector to outsiders, who will bring in new capital, technology and expertise. More generally, increased foreign competition, not just in banking but in fund management and insurance too, will over time help bring greater stability to China's financial markets.

Conclusion

Although the UK and China are at different stages of economic and financial development, we share at least one thing in common – the pace of change in our financial service industries is accelerating and, as regulators, we must do our best to keep up. I have spoken today about developments in the UK and tried to draw some lessons from our experience for China. I hope they are of some help. A lot, I know, is already under way in China, and the initiatives the People's Bank has already taken show that it is well aware of the key issues it faces and is taking steps to address them. We in the FSA should be delighted to help in any way we can. We have, I am pleased to say, a very good relationship with the People's Bank, with frequent visits in both directions. We were delighted to host, in conjunction with the Bank of England, a week-long programme for Deputy Governor Liu and his delegation last November. It was during that visit that a Memorandum of Understanding covering the exchange of information between the FSA and the People's Bank was signed.

The framework for financial supervision: offsite supervision and credit information

Michael Pomerleano

Creating an effective framework of prudential regulation

Strengthening the regulatory framework

Recently much has been written about the broad attributes of sound financial regulation and supervision, particularly in light of the challenges presented by increasingly integrated global financial markets. For instance, a past chairman of the Basel Committee on Banking Supervision has identified the following prerequisites for effective banking supervision:[1]

- sound and sustainable macroeconomic policies;
- a well-developed public infrastructure;
- effective market discipline;
- procedures for efficient resolution of problems in the banking sector; and
- strong prudential mechanisms for promoting systemic risk management and protection.

The importance of stable macroeconomic conditions and effective supervisory structures for the well-being of the financial system is well documented. Spiralling inflation and recession wreak havoc with fundamental credit quality. Equally, an efficient financial infrastructure, e.g. a well-defined accountable legal system, and consistent, transparent accounting standards are in many ways a prerequisite to promoting effective supervisory structures.

Effective market discipline and improved practical measures provide both internal and external incentives to promote enhanced risk management and, thus, safeguard markets. For instance, with established and

[1] See de Swaan (1998). See also De Juan (1991), Goldstein and Turner (1996) and Polizatto (1990).

transparent procedures in place for resolving failing financial institutions, managers have adequate incentives to conduct prudent banking.

Finally, given that financial systems are characterised by systemic risk, removing or neutralising such risk will naturally introduce stability and balance into the financial system. For example, systemic risk protection in the form of safeguards of the payment system in the financial system can mitigate damaging behaviour in the marketplace. To briefly elaborate on some of the elements of effective market discipline:

Laws and prudential regulation

A broad, robust banking statute is essential to ensure that bank supervisors can fulfil and carry out their responsibilities. The legal framework applicable to banks must be both innovative and capable of being responsive to often rapidly evolving economic and business conditions. Banking law and associated statues should encompass prudential norms, disclosure, capital requirements, prudential standards, bankruptcy and foreclosure processes and taxation rules.

Banking supervision

An effective legal regulatory framework must be complemented by strong enforcement designed to prevent fraud, manipulation, and other market abuses. When laws and regulations are quite adequate, but effective enforcement is discouraged, supervisors lack adequate incentives to take required corrective actions to ensure regulatory compliance, such as implementing incremental improvements in operating procedures, seeking to raise new capital, providing costly but necessary disclosure, replacing inefficient or corrupt managers and forcing the exit or restructuring of failing banks.

First, of course, there has to be a political will to deal with such problems. Strong enforcement serves as a deterrent to future problems, often bigger problems. Thus, supervisory staff need to be presented with rational public policy goals which are an outgrowth of an effective statutory regulatory system. Furthermore, to promote such goals, supervisory organisations must have sufficiently trained personnel as well as be well staffed overall. Part and parcel of maintaining such a well-rounded organisation will be adequate compensation, strong, but

fair, leadership and a clear understanding of the role of supervision, both in the industry and society at large.

Accounting, disclosure and transparency

Transparency is another important component of the infrastructure that permits market mechanisms to function fairly and efficiently. Customers can make informed decisions, utilising publicly disseminated information. Improved transparency in market operations will, furthermore, help attract international investor interest. One element of transparency is good (internationally accepted) accounting standards and disclosure rules. Basic market integrity and efficiency depend on acceptable standards, as does promoting the best interests of both the bank's customers and investors. Promoting world-class accounting practices and business conduct rules will, at the same time, encourage the growth of an effective national accounting profession which is needed to ensure the establishment of uniform accounting standards that reflect the condition of financial institutions.

With that overview, in preparing this paper I will go further beyond these basic regulatory principles and this supervisory framework and explore in greater detail the nature of marketplace transparency. The financial sector is unique in that it takes "as many eyes as possible" to introduce transparency, and by inference resiliency, into the financial sector. However, in many developing economies, transparency is limited or hampered due to the lack of effective measures to ensure transparency.

The common themes of improving oversight and market transparency are extremely pertinent, but they are often overlooked and neglected in the supervisory practices adopted in developing countries. They are based on my experience in Asia – primarily in Indonesia, the Philippines, and briefly China – complemented by a survey of the Banking Regulatory Framework in Asia.[2] The suggested measures are relevant to China's effort to strengthen supervisory capacity, even taking into account differences in history, culture, customs and business practices. The recommendations that follow are based on the view that the experiences of other countries, both the good and the misdirected, can be

[2] See Pomerleano (1997).

used constructively by policymakers in China. Having said that, it would be naïve to characterise one country's regulatory system as better than another's; therefore, I am not suggesting the wholesale importation of regulatory practices, but rather taking a global perspective, hoping this experience is applicable to the effectiveness of China's regulatory and supervisory initiatives.

The second section of this paper draws on the recent regulatory experience with offsite supervision in various countries. The third examines the role of private sector organisations in leveraging supervisory capacity. The fourth discusses the role of credit rating agencies. The fifth draws on the implications of the Asian crisis in outlining prospective challenges for supervisors in China.

Importance of offsite supervision

The advent of the "information age" has brought a new bank supervision technique: offsite bank surveillance systems[3] for the collection and interpretation of regular reporting returns and other statistical data. Several countries in Asia have implemented offsite systems, including Indonesia and Malaysia.

A critical component of this supervisory process is effective offsite supervisory capacity. Offsite monitoring systems have a number of advantages:

- they are less costly than onsite capacity;
- they can be updated frequently when new information is received through quarterly reports;
- they can provide the basis for a financial evaluation of the bank between examinations; and
- they are potentially able to isolate risk factors that may lead to future problems.

Therefore, offsite monitoring systems complement examinations' focus on the bank's current condition, e.g. credit, income, and capital, and are designed to accomplish a number of objectives. Foremost, they serve as an "early warning device" to detect emerging bank financial problems. In some cases, this early offsite detection of banking problems can mean

[3] For a discussion of offsite systems, see Baltrop and Sheng (1992).

the difference between taking timely action to save a bank from failure and inaction. At a more aggregate level, offsite surveillance systems employed by regulatory authorities can monitor the financial condition and performance of the entire banking system (or banks in a region or narrow geographic area). The aggregate data offer evidence on the condition of the banking system – and show changes or shifts that might require prompt adjustments in overall bank monetary or supervisory policy.

Offsite detection methods mandate periodic bank reports, in addition to the financial reports collected by the examiners. Examples of periodic reports that are useful to bank supervision are reports of condition and income; legal lending limit exposure reports; and reports of indebtedness of executive officers and principal shareholders and their related interests to banks.[4] The data are supplemented by generating critical ratios related to bank performance, and analysis of key bank financial ratios and other financial data.

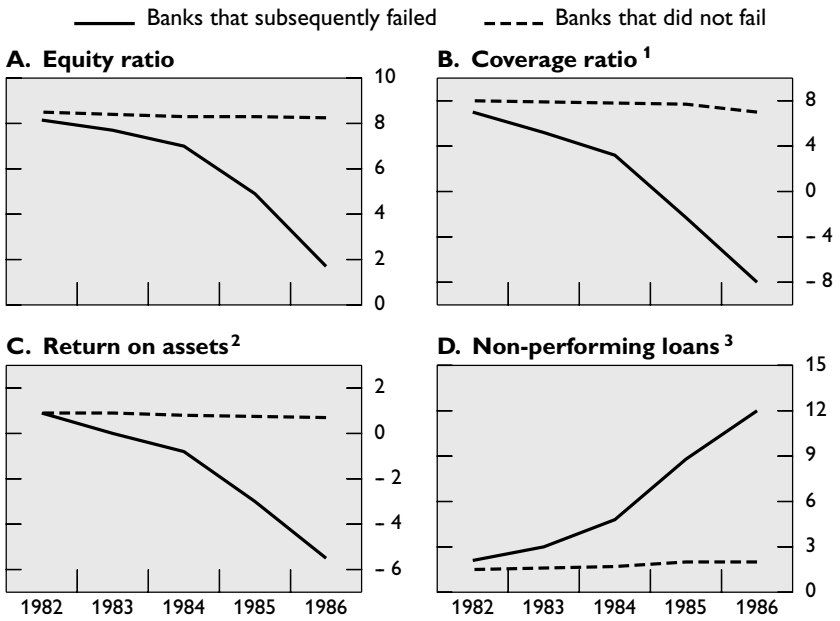
The offsite surveillance in the US and analysis can serve as illustration of the process. Offsite analysis precedes onsite examinations and inspections. This offsite system is used as well in evaluating applications filed for mergers and acquisitions. The regulatory agencies prepare a Uniform Bank Performance Report (UBPR), which is an analytical tool created for offsite surveillance and monitoring. UBPR data are presented in ratios, percentages and dollar amounts. The report is computed mainly from reports of condition and income submitted by banks. The database used to generate the reports contains several years' worth of trend-capturing data. In a concise format, the reports' data are used to evaluate earnings adequacy, liquidity, capital and asset and liability management. Examiners can use this report to further their understanding of a bank's financial condition and go on to identify risk areas. Each UBPR also contains corresponding average data for the bank's peer group and percentile rankings for most ratios. Therefore, the analysis permits evaluation of the firm's financial performance and facilitates comparisons with the performance of peers. The possibilities of isolating condition and risk factors by analysing banks' financial data are illustrated in Figure 1.

[4] A 1988 OCC study of 162 national bank failures between 1979 and 1987 concluded that insider abuse was a significant contributing factor in 35% of the failures, and fraud in 11%. See Office of the Comptroller of the Currency (1988).

Figure 1

Bank condition ratios for failed and non-failed banks

In percentages



[1] (Equity + reserves – non-performing loans)/assets. [2] Net income assets. [3] As a percentage of assets.

Source: FDIC Banking Review (1998), Vol. 11, No. 1, April.

Figure 1 demonstrates the predictive power of ratios measuring the current condition of banks – e.g. equity, non-performing loans – to detect vulnerable banks through offsite analysis. The US has even developed algorithms to assess fragility from the offsite reports: the FIMS[5] monitoring system developed in the Federal Reserve study predicts failure based on 11 key variables collected from the report of condition submitted to US bank regulators. Five of the 11 variables are related to the riskiness of commercial lending. Similarly, the FDIC has

[5] Cole, Cornyn and Gunther (1995).

developed the Growth Monitoring System (GMS). The system's premise is that rapid growth in total assets or loans represents a potentially risky activity. The system is based on the levels and quarterly trends of five summary measures: asset growth rate; growth rate of loans and leases; ratios to assets of equity capital; volatile liabilities; loans and leases plus securities with five-year maturities or more. Banks flagged by the GMS as rapid-growth institutions are identified for offsite review and may receive increased supervisory attention.

The success of an offsite system hinges on several elements. First, the accuracy and timeliness of the data submitted by banks. Second, the technology used to capture the data and compile the comparative ratios, trend analyses and percentile ranks relative to peers. Finally, the analyst makes a judgement based on a variety of financial ratios and trends, and combines the findings to offer compelling evidence of a specific bank's financial condition.

Therefore, a critical part of the offsite process is the analytical skills of the individual financial analysts requested to make judgements regarding the bank's financial condition. It follows that credible systems have to be complemented by skilled and trained financial analysts. In addition, it is important to note that every country has its own unique starting point for building up financial sector and supervisory standards, and China's unique economic and social factors will invariably help shape its offsite surveillance practices.

The first step

Development of an offsite system carries the promise that the periodical financial reports currently generated by the banks could be used even more efficiently to generate an early warning system, using, for example, peer group analysis to detect broad trends affecting the financial sector. Implementing an effective offsite system in China requires overcoming some obvious, though surmountable, impediments. Just the vastness of the nation presents a major obstacle. Also, in China, the headquarters of the state-owned banks have traditionally delegated control to the local branches. This strong tradition of local autonomy has impeded comprehensive consolidated risk management systems, preparing timely consolidated financial statements and generating comprehensive supervisory reports. I am also aware of the challenges posed by conversion to International Accounting Standards. Therefore, Chinese banks are

hindered by the information collection and dissemination systems for timely internal risk control analysis.

Given these hurdles, it should be pointed out that Chinese banks are aware of the need to modernise their banking technology, including setting up a modern information system with real-time risk monitoring. Although the impetus for developing internal risk management can come from prescribed regulatory reporting requirements, the end result can be a banking system with more sophisticated risk management tools.

Role of industry associations and self-regulatory organisations (SROs) in an institutional supervisory capacity – appraisers, banking associations, auditors

Comprehensive laws, regulation, and supervisory standards need to be complemented by private sector support in the form of sound legal, banking, accounting and appraisal professions. This section explores the supporting "eyes" of accountants, lawyers and appraisers in strengthening the banking sector's professional capacity and integrity.

Effective industry organisations and quasi-governmental self-regulatory organisations (SROs) for bankers, accountants, lawyers and appraisers fulfil several vital second- or third-tier regulatory functions. First, these organisations have the potential to establish and help maintain high standards via uniform certification, registration, or licensing standards, including education, evaluation and compilation of disciplinary history databases. Industry associations (and SROs) have a vested interest in establishing professional standards and assisting members to improve their conduct, ethics, performance and overall expertise. The licensing process promotes these objectives, and protects the professional designation. For instance, SROs can implement a wide-ranging educational curriculum supporting the development and maintenance of professional skills. In addition, industry associations/SROs monitor performance and enforce – through sanctioning powers – current standards and requirements. Further, the SROs' membership can serve as a forum for articulating and communicating practitioners' views.

China would benefit substantially from nurturing the institutional capacity for independent industry associations (and eventual SROs) supportive of the regulatory and supervisory apparatus and climate in

such areas as appraisers, bankers, lawyers, accountants and securities and futures market participants.

The challenges of establishing credible industry associations and for self-regulation

I am aware that, in the short run, these organisations do not have the institutional capacity to achieve these objectives.[6] Considerable effort is needed in the institutional and human capital development of private sector organisations in China. With proper development over the long term, private sector organisations can bear the major responsibility for monitoring their members, ensuring compliance with rules and laws and training. Notwithstanding the challenges, nurturing the development of industry organisations alongside self-regulation is a worthwhile endeavour for the Chinese authorities.

Commercial real estate markets and the importance of real estate appraisers

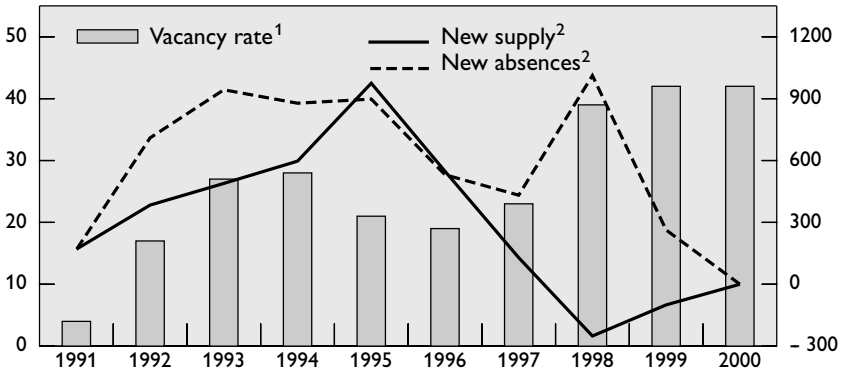
Commercial real estate development is inherently risky, in part because of the long gestation period of commercial construction projects. When completed projects finally come to market, absorption conditions may have changed considerably from what they were at the time of conception. For example, the gap between supply and demand in the Bangkok Metropolitan Region shown in Figure 2 illustrates the risks: vacancies reached 40% in Bangkok by the time the supply and absorption of new space stopped. Another risk element is the highly leveraged nature of real estate projects and risks of cost overruns. The Asian financial crisis has documented the heightened credit risks of real estate lending.[7] Loans to the real estate sector in Asia are estimated in the range of 15–20% of the total loan portfolio (see Figure 3). Regulators in Asia have come around to recognising that real estate is a sector prone to risks and dramatic price and supply/demand swings. In part, the solution is to contain real estate financing risks through more stringent supervision of real estate financing by banks and other regulated lenders. The following

[6] In the absence of strong professional associations, and as an interim measure ensure professional competence in China, the PBC licenses accounting professionals to work in the banking areas.

[7] World Bank (1998b).

Figure 2

Supply and demand in office space in the Bangkok Metropolitan Region



[1] In percentages (left-hand scale). [2] In thousands of square metres (right-hand scale).
Source: Jones Lang Wootton.

section examines the issues surrounding the real estate sector and recommends measures designed to establish a credible real estate appraisal profession.

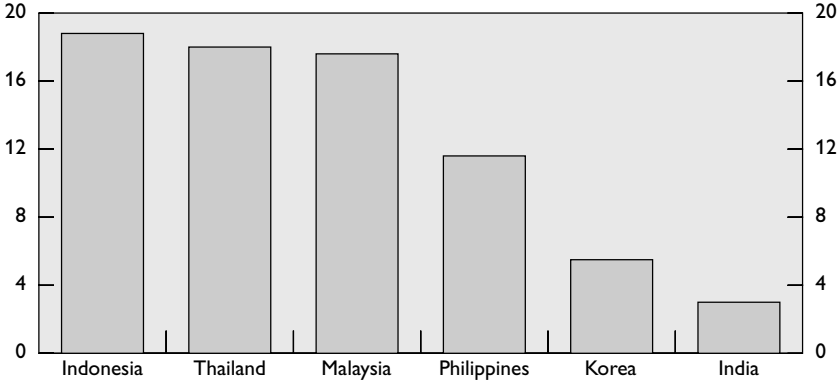
Similarly, after the S&L crisis, it became clear that irresponsible appraisals contributed, in part, to the real estate bubble of the late 1980s and the regulators and legislators explored for solutions. Figure 4 demonstrates that, in the US, banks with a high real estate exposure had a considerably higher likelihood of failing. The challenge from the Asian and US experiences is to improve the operation of real estate markets. The US upgraded the professionalism of the appraisal profession through legislation, licensing and supervision. In measures designed to instil enhanced discipline in the appraisal profession, the Financial Institutions Reform, Recovery and Enforcement Act of 1989 ("FIREA") required all federally regulated financial institutions to use *state-licensed or certified real estate* appraisers to perform appraisals in federally related transactions. FIREA further authorised the States to certify, license and supervise real estate appraisers within their jurisdiction.

Concomitantly, the Appraisal Subcommittee of the Federal Financial Institutions Examination Council ensures that real estate appraisers, who

Figure 3

Exposure of the banking sector in the property sector

Loans to the real estate sector as a percentage of total loans



Source: World Bank (1998), *East Asia: the Road to Recovery.*

perform appraisals in real estate transactions, are sufficiently trained to assure competency and independent judgement according to uniform high professional standards. An Appraisal Foundation is responsible for establishing and promoting minimum *uniform* appraisal standards and appraiser qualifications criteria. Two affiliated boards – the Appraisal Standards Board, which promulgates and maintains Uniform Standards of Professional Appraisal Practice ("USPAP"), and the Appraiser Qualifications Board, which establishes Appraiser Qualifications Criteria – carry these tasks.

Similarly, as China's commercial construction boom is fuelled in great part by increased bank lending, the regulatory authorities are well advised to develop more fully the nation's appraisal profession. China's real estate markets would benefit from the enhanced capacity of the appraisal profession.

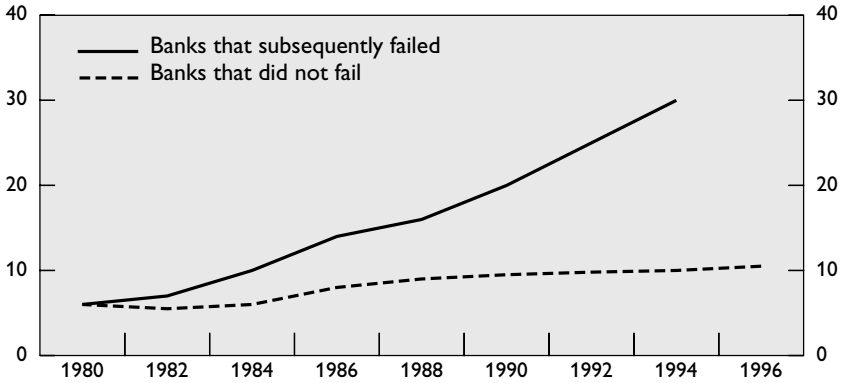
Banking Associations

A local Bankers' Association brings together the banking community with local industry leaders to promote economic development and direct investment. Banking groups provide professional continuing education

Figure 4

Ratio of commercial real estate loans to total assets in the US, failed and non-failed banks, 1980–94

In percentages



Source: FDIC Banking Review (1998), Vol. 11, No. 1, April.

and training for bankers, promote effective leadership in forging industry consensus and disseminate innovative practices, products and services. As an example of training, the American Institute of Banking (AIB), a national organisation dedicated to training, has an active curriculum offering over 50 banking programmes, ranging from compliance, corporate banking, management, marketing, sales and retail banking to core in-depth courses in accounting, communications and banking fundamentals. More than 150,000 participants enrol annually in AIB programmes. SROs established for the accounting and legal professions can reach similar training objectives. Therefore, initiatives designed to foster the capacity of the Bankers Association, accountants and lawyers in China are warranted.

Auditors

Another area worth exploring is fostering a greater role for and increased coordination between the work of external auditors, internal auditors and bank supervisors. A working relationship can leverage the use of the respective resources and expertise. The Basel Committee on

Banking Supervision in collaboration with the International Auditing Practices Committee of the International Federation of Accountants has provided guidance on the respective roles of bank supervisors and auditors and on how their mutual relationships can be strengthened.[8]

There are many areas where the work of supervisors and that of the auditors are complementary. For instance, management letters and reports submitted by external auditors can provide supervisors with insight into weak aspects of banks' operations. Many countries have adopted practices for such reports to be made available to the supervisors.[9] Similarly, the internal compliance and audit department can provide helpful, if not crucial, insights for supervisors. In this mutually beneficial relationship, the supervisory findings during an inspection, or before a management interview takes place, are customarily communicated to banks. These communications benefit the work of internal and external auditors and provide an independent assessment of risks and focus attention on specific areas of supervisory concern.

Credit information system

Regulation and supervision are one element of the institutional infrastructure for sound banking. Equally important elements are the professional organisations discussed in the previous section. In many developing countries, the capacity to evaluate credit risk is hampered by the absence of audited Financial Statements that meet International Accounting Standards. Further, credit markets in developing countries suffer from lack of credit discipline. Poor credit performance is attributable not only to adverse economic conditions, but also to the lack of credit discipline in the system. Ill-willed borrowers *do not have incentives* to perform on their credit obligations due to impediments in enforcing credit contracts and insufficient transparency regarding their creditworthiness. Loan workouts in the crisis countries in Asia have

[8] International Auditing Practices Committee of the International Federation of Accountants, *The relationship between bank supervisors and external auditors*, July 1989.

[9] The Group of Thirty has prepared "A Study Group Report Defining the Roles of Accountants, Bankers and Regulators in the United States" designed to achieve better financial reporting at US banks with less duplication and expense.

demonstrated that the number of lenders and amount of total debt involved were far more than expected. For instance, reports from Thailand indicate that moral hazard has been injected in the system during banking and corporate restructuring: borrowers with repayment capacity have stopped servicing debt in anticipation of moratoriums and massive "haircuts". Further, many banks, foreign and domestic, involved as creditors had limited knowledge of borrowers' total loans or total number of creditors. The benefits of transparency are evident and the role of Credit Information Systems essential.

What is a Credit Information Bureau?

A Credit Information Bureau (CIB) is an entity that collects loan and contingent liabilities profiles and payment performance. A credit report is a short report that helps evaluate new banking customers, pre-screen prospects, or perform a quick credit check.[10] The information is consolidated in a computerised database on a periodic basis, and a comprehensive profile of borrowers, including a performance record, is generated.

The Bureau distributes the information to interested parties on request: potential lenders or lessors obtain the credit history of someone to whom they were considering lending money or leasing equipment. Thus, any bank that is considering making a loan or lease or entering into a credit transaction with a commercial entity can buy information about the company's payment records. Argentina's central bank has established one of the most impressive credit information sharing schemes. It releases (on CD-ROM as well as on the Internet) on a regular basis detailed information on borrowers, including bank lines, credit rating by various lenders and status of repayments. Bureaus have been established in other developing countries, such as Malaysia, the Philippines and Indonesia, as well as developed countries, e.g. Denmark and France, for corporate borrowers.

[10] The typical credit check contains the following information: customer background (name, address, telephone number, parent company name and location, line of business, chief executive officer, year started, number of employees, sales and net worth); payment activity summary and payment history summary; and special events, such as updates on bankruptcy proceedings, changes in ownership, relocations, acquisitions or other newsworthy items.

What are the benefits of a Credit Information Bureau?

The benefits are threefold.

First, transparency about performance deters ill-willed borrowers: realisation on the part of the borrowers that their performance is monitored will eliminate moral hazard, and therefore lead to better performance on the part of existing borrowers to whom credit was extended; the knowledge that potential lenders know of the poor performance gives borrowers an automatic incentive to establish a good payment record.

Second, the CIB offers early detection of non-performing loans, and so prevents additional lending to poorly performing borrowers.[11] Therefore, macroeconomic benefits accrue to the economy by redirecting new credit from poorly performing credits to viable ones, thus promoting economic growth. Finally, the aggregate information from a Credit Information Bureau can be used for analysis, such as lending trends, and industrial allocation of credit.

In order to be successful, a Credit Information Bureau should adhere to several principles. First, clear and transparent rules governing the management of the Bureau, collection of information and the procedures for sharing it with the banking community. Second, the Bureau should cooperate with the banking industry and address explicitly up-front the banking industry's concerns. Enhancing the transparency of credit exposure (including contingent liabilities), collateral and delinquencies of borrowers through a Bureau is highly desirable in China.

Lessons from the Asian crisis … regulation as a "catch-up" game, and need for proactive regulation and supervision

The experience of other countries, mature and developing economies alike, suggests that the market is ahead of the regulators in terms of innovations, and many times regulation is a "catch-up" game. Regrettably,

[11] In this context, it is desirable to note that experience suggests total borrowings of defaulting borrowers in the system increase rapidly and disproportionately as their financial condition deteriorates.

in many instances, great financial distress acts as a catalyst to the regulatory and supervisory response. The financial crisis in Asia, the collapse of institutions such as Barings and Peregrine, and abuses such as the S&L crisis in the US underline the need for vigilance and proactive and anticipatory regulatory initiatives. In this context, what are the prospective challenges for regulation and supervision in China? I submit three topics for your consideration drawn from the Asian financial crisis.

Internationalisation of activities of Chinese banks, and the need for a global orientation of supervisors

Globalisation posed challenges for the capacity of the region's supervisory apparatus to oversee the international affiliates of domestic financial institutions. The Basel Committee made initial progress in the area of home/host reciprocal supervision of banking entities in several earlier documents, starting in 1975 and most recently in 1996. The gradual liberalisation of the financial system in China is leading banks to establish an international presence. Already, several Chinese banks have established international branches. In this context, it is important to note that the future happens sooner than we expect, and the regulatory authorities in China might be advised to consider the Basel Committee's approach and guidance on the subject, including harmonisation of capital standards and initiatives to improve cross-sector supervision. Similarly, China might benefit from international efforts to harmonise national rules that are under way, such as Core Principles developed under the auspices of the Basel Committee.[12]

Brave new world of financial services: implications for regulation and supervision of non-bank financial activities

Throughout Asia, there were non-bank financial institutions (NBFIs), such as the finance companies in Malaysia and Thailand, and merchant banks in Korea (see Table 1) in financial distress. In recent years, these NBFIs

[12] It should be noted, however, that while the Basel approach is accepted by banking supervisors, implementation of cross-border banking supervision is moving slowly: information-sharing arrangements, and examination of global risk taking are lagging. See International Monetary Fund (1998) and Basel Committee on Banking Supervision (1997).

Table 1

Structure of the banking system – number of financial institutions

	Private domestic commercial banks	State banks	Merchant banks	Financial institutions for the primary sector	Finance or security companies	Foreign financial institutions	Total
Malaysia	23	0	12	0	40	14	89
Indonesia	203	7	0	0	0	10	220
Korea	26	8	30	0	53	52	169
Thailand	15	2	0	0	104	11	132

Source: World Bank, *East Asia: the Road to Recovery*, 1998.

have become an important segment of the financial system in Asia. Part of the growth of the industry was attributable to efforts to circumvent prudential norms in the banking sector. However, the unregulated growth exacerbated the financial system's fragility. These developments were occurring within a legal framework that has not fully recognised the weaknesses in the regulatory framework and potential to exploit the loopholes.

NBFIs lacked adequate internal controls and credit discipline, and therefore their lending for real estate, margin loans for equity, consumer finance and car purchases were an important source of risk moving into the economies. Finance companies in Thailand and merchant banks in Korea were owned by banks, and therefore credit risks were directly transmitted to the parent banks. Furthermore, the erosion of the distinction between banks and NBFIs led to compromise in credit-underwriting criteria, with the finance company affiliates of banks extending credit that the banks were precluded from extending, due to prudential norms, such as legal lending limits.

As a result, the process created inequities, as well as unintended systemic risks. For instance, finance companies had different capital adequacy requirements. The challenge for regulation and supervision throughout Asia is to permit expansion of financial service activities in a framework that maintains the safety, soundness, and integrity of the overall financial system, and the banking system in particular, without imposing unnecessary regulatory burden or intrusion.

Also in mature markets, where the transformation in financial services is rapid and the distinction between financial products is blurring, brokerage houses are offering money market accounts, which in essence are checking accounts, and banking institutions have broadened their activities to marketing mutual funds and insurance products. The transformation poses challenges to regulatory authorities' efforts to regulate financial institutions. Regulatory responses around the world offer a range of potential solutions: Japan, Korea and the UK have adopted a model of an umbrella supervisor, while the US focuses on the holding company framework for permitting new banking organisation activities, while containing the risks to the system.

The US authorities have adopted the holding company framework[13] as a solution to NBFI activities. The governing principle is that non-bank activities and affiliations should not take place through subsidiaries of banks. The US regulatory framework requires that organisations that conduct financial businesses should organise in a holding company form where the bank and the other activities are subsidiaries of the holding company. The holding company is subject to capital adequacy and other prudential norms.[14] Profits and losses of the business lines accrue to the holding company and thus do not directly endanger the bank, nor the deposit insurance system. One major advantage is that any losses in an affiliate do not flow to the bank, as in the case of direct subsidiaries of banks, where the risk is not isolated and can be transmitted to the parent.

An economic argument supporting isolating non-bank activities outside the bank resides with offering a level playing field for competition. Banks, in the presence of explicit deposit insurance such as in the US, or implicit deposit insurance such as in China, have an economic advantage in the form of lower funding costs. This advantage is not directly available to the non-depository affiliates. Such a situation undermines the competitive playing field between bank subsidiaries and independent firms engaging in the same business, defying the purpose of competition in financial services. Therefore, a policy objective of creating a level

[13] Other countries subscribe to the universal bank approach.

[14] Provisions of Section 23A prevent the misuse of a member bank's resources through "non-arm's length" transactions with its affiliates. Section 23A places quantitative (i.e. percentage of capital) limits, and in some cases collateral requirements, on transactions between a member bank and an affiliate.

playing field, while at the same time preserving the integrity of the deposit insurance system, leads to segregation, regulation and supervision of non-bank activity. No matter what model China elects to isolate banks from non-bank activity risks, the challenge for China's policy-makers will be to anticipate the inevitable and fast-paced transformation now under way in financial services and to update the regulatory and supervisory framework to respond to innovative markets.

Banking resolutions

A visible limitation of the regulatory framework in Asia was the lack of an explicit exit policy for failing financial institutions. Bankers in many cases resisted timely exit or recapitalisation of failing institutions, with a resulting increase in the ultimate costs to the financial and economic system.[15] Further, the lack of expertise with financial restructuring techniques led to gridlock and delays in resolving, or working out, failing financial institutions. Banking resolutions will be addressed in a separate session; however, briefly, I would like to share some pertinent observations on the resolution process.

First, the restructuring should focus on the objective of the exercise: fundamentally changing banking practices in order to prevent a recurrence. Recapitalisation must be accompanied by thorough financial, operational and managerial restructuring and transparency. Authorities granting regulatory forbearance and accounting relief to banks only help banks avoid the actual recognition of realised losses. In reality, forbearance does not change the underlying economic losses in banks, and ends up costing more later on. Therefore, the key to the effectiveness of the restructuring programme is not whether the recapitalisation achieves an improvement in capital ratios. Rather, the ultimate success resides with the programme's effort to address the underlying weaknesses of the system.

Second, banking resolutions are challenging, and the resolution process poses a set of complex choices to the authorities. What resolution technique is needed to adopt whole bank purchase and assumption transactions, deposit transfer, payoff and liquidation, or conservatorship? In most instances, the preferred course of action is the

[15] See Pomerleano (1997).

privatisation of selected items in the balance sheet of the intervened bank, so that the original institution preserves the franchise value, and continues to operate in private hands with a cleaner set of financial assets.

Third, the experience from banking crises has been that failing banks' losses are substantial and their capital base is insufficient to cover them. Most of the time a loss for the government is unavoidable, and in a large number of cases the transactions require financial assistance from regulators, i.e. the taxpayers. Thirdly, in all cases, worldwide experience shows that designated government agencies end up with a portfolio of bank assets of substandard quality. This is because the assets that cannot be included in the privatisation deals stay behind in the hands of the regulator or a state agency created *ad hoc* to deal with these problem assets and associated liabilities, such as emergency funding provided at the onset of the crisis. It is worth noting that the treatment of depositors and creditors in failing institutions indicates that there are compelling arguments to provide *de facto* deposit insurance, even in the absence of formal deposit insurance. In numerous resolution cases in Asia during the crisis, uninsured depositors were protected due to fear of serious repercussions and loss of national confidence in the banking system. On the other hand, the innate moral hazard in such an approach is evident. This discussion illustrates the complex choices facing supervisors and leads to the following recommendations.

Fourth, resolution strategies can benefit from *financial engineering*. Experience has shown that it is desirable to make the private sector investment banks and accounting firms a partner in *asset dispositions*. The private sector has the specialised skills – such as securitisation and flexibility – to solve problems and preserve value. Otherwise, the danger is that poorly managed residual assets (managed by the government) will end up costing the state – and, again, ultimately the taxpayer – much more than anticipated. Provided that the right incentives are introduced in resolutions, and structure and contract provisions are clearly spelled out, the private sector can dispose of troubled assets in a more cost-efficient manner than the government.

Finally, *incentives should be a paramount consideration in designing market-based resolutions* by introducing appropriate incentives for acquirers of assets, while preserving risk. For instance, incentive structures are evident in the recapitalisation process in Thailand. Drawing again on

the US experience, "asset pool" arrangements illustrate the need for adequate incentives in resolutions. In "asset pool" arrangements the regulator pays someone to work out assets, in addition to a flat fee. The easiest compensation formula is to agree to reimbursement of *all* the costs connected with managing assets. Unfortunately, such open-ended arrangements discourage prompt disposition of assets and give rise to disputes about proper allocation of costs. Acquirers will expend resources up to the point where their own profit, not the government's, is maximised. For instance, they will dispose of the "easy assets" and neglect the tough ones, knowing that the government bears the economic risk of loss. The United States, over time, learned to avoid open-ended cost reimbursement provisions in assistance agreements, and told potential acquirers to build the cost into their bid. Compensation schemes with the right incentives will pay increasing percentages of successive "tranches" of collections, e.g. 3% of the first 40% of book value collected, 6% of the next 10% collected, 9% of the next 10%, etc.

The previous discussion highlights the complexity of banking sector restructuring and reinforces the need for a *systematic approach* by regulators to the resolution of bank failures. Adoption of the systematic approach in China to resolutions is desirable. Such an approach consists of legislation enabling the regulatory authorities to address promptly failing banks, subject to bankruptcy and foreclosure law. This approach also requires establishing a skilled, experienced and *dedicated* unit to focus on troubled banks, with the power to intervene with a coherent rehabilitation programme and alternative resolution game plan.

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Strengthening the banking system: issues and exposures

Danièle Nouy

It is a privilege to be able to present in Beijing the Basel Committee's recent work, and especially the Basel Core Principles for Effective Banking Supervision. In front of such an audience, which has taken a strong stance on financial stability, there is no need for me to stress their importance. Let me start with a few general considerations concerning the Basel Committee and its recent work.

The Basel Committee was created in 1974 by the Committee of G10 central bank Governors and it meets four times a year. It comprises banking supervisory authorities of the G10 countries, and cooperates with regional groups of supervisors (for example SEANZA and EMEAP, of which China is a member). The Committee has an international Secretariat at the BIS (with a representative from the People's Bank of China), and is supported by several working groups. It is also a forum for international cooperation among the G10 countries and between G10 and non-G10 supervisors.

The Committee has produced binding minimum standards, best supervisory practices papers and, more recently, the "Core Principles for Effective Banking Supervision". It maintains contacts and cooperates with fellow supervisory groups such as IOSCO and the IAIS and it played a significant role in the creation of the Joint Forum (1996) addressing the supervision of financial conglomerates.

What are the Core Principles for effective banking supervision? In what way can they be helpful to China?

The Core Principles are a set of supervisory guidelines aimed at providing a general framework for effective banking supervision in all countries. They are a reference document to be used by national supervisors and international institutions to strengthen supervisory standards in emerging and developing countries.

The Principles represent for the Basel Committee a very radical change in its relationship with non-G10 countries. But they are at the same time only one step in a continuous process that the Committee has been engaged in for over twenty years to strengthen banking supervisory standards around the world.

This has been from the outset a product developed at the global level. The Basel Committee has driven and supported the process, but it could not have moved forward at the speed it has without the positive and active cooperation of supervisory authorities around the world. We can all be satisfied with the outcome and the speed with which a worldwide consensus was reached.

The Core Principles are in at least three ways a "first" for the supervisory community. As I have mentioned, a mixed drafting group in which non-G10 countries were in the majority developed them. The extent of consultation with supervisors in all countries was such that the document can truly be regarded as a consensus document of the world supervisory community, the first of its kind but by no means the last.

The second innovation is that the Core Principles are comprehensive in their coverage. They are sometimes called the supervisors' "bible". The Principles are not developed in any great detail but instead represent a checklist of the principal features of a well-designed supervisory system. The much longer Compendium, of course, supports them. While the documents in the Compendium were not designed for the purpose of providing comprehensive supervisory guidance, we now have a framework to build upon.

What is the Compendium?

The Compendium is a collection of most of the Basel Committee's "live" policy papers. It consists of three volumes dealing with basic supervisory methods, advanced supervisory methods and International supervisory issues. The most recent version was recently published in February 1999.

In a more subtle way, however, and this is the third "first", the Principles represent a significant initiative by the supervisory community to make a political statement, albeit clothed in technical language: financial stability is a public good that must be achieved everywhere because we now live in a "global village". Sound banking systems and efficient banking supervision are key points in this process. Similarly, in

the "Preconditions for effective banking supervision" we lay it on the line by stating that it will not be possible to ensure the effectiveness of a country's supervisory arrangements unless certain conditions are in place. This, too, I will come back to later.

Let me mention two other preliminary points. First, the IMF and World Bank were closely associated with the development of the Core Principles. Both institutions saw and commented on the Principles during the drafting process and have expressed their intention of using the Principles as a basis for developing technical assistance in their missions and surveillance work. The current preparation of a methodology for assessing compliance with the Core Principles will be very helpful in this respect. Second, the Core Principles are deliberately designed to apply equally to industrialised countries, emerging markets, economies in transition and even countries that do not yet aspire to any of these categories.

An important aspect of the Core Principles is the philosophy that underpins them. Conceptual approaches to banking supervision have developed radically over the past 20 years or so, both as a result of the work of the Basel Committee and in response to the rapid evolution of the financial markets. In the major markets, at least, the old technique of ticking boxes, analysing ratios and monitoring compliance with numerical standards has become totally inadequate as a means of monitoring the performance of a bank. Supervision has become far more qualitative than quantitative – more an art than a science. In today's fast-moving environment, the focus of supervision at the sharp end is on the quality of corporate governance, risk management and internal controls. The key point to grasp is that bank management must manage – supervisors can be advisers, unpaid consultants if you like, but not those who take the decisions. That is the responsibility of bankers and ultimately the reason why they earn more money than we do.

As far as the content of the Core Principles document is concerned, I mentioned that it is general but comprehensive and addresses a wide range of supervisory issues.

There are four main aspects to which I would like to draw your attention.

1. The first of these concerns a section I have already mentioned, "Preconditions for effective banking supervision". This section makes some fairly obvious, but nonetheless important, statements about the

circumstances in which banking supervision can operate. The conditions include:

- First, sound macroeconomic policies – in their absence, supervisors are faced with an almost impossible task.
- Second, a well-developed public infrastructure in order to protect financial system stability. The infrastructure one would look for includes such basic features as; business laws sufficient to establish solid contract and property rights; well-defined accounting standards; a system of independent audits to validate financial statements; adequate supervision of non-bank financial markets and their participants; and a secure clearing system for settling financial transactions. If these are not in place the ability to supervise effectively is severely constrained. None of these features of the financial system fall within the competence of bank supervisors and, if they are lacking, it is essential that they be addressed expeditiously.
- Third, a system of effective market discipline based on good standards of corporate governance and adequate transparency in respect of financial activities. That, too, is something that goes beyond bank supervisors' responsibility and that cannot be achieved overnight.
- Fourth, sufficient flexibility to enable problems arising in banks to be resolved in an efficient manner, including, where necessary, the orderly exit of problem institutions. This is important, because forbearance and continued feather-bedding of inefficient market participants damages the ability of strong competitors to expand their business and improve efficiency in the sector.
- Fifth, an appropriate level of systemic protection, or some kind of safety net, in order to guard against crises of confidence. I personally believe that a soundly structured deposit insurance scheme is of considerable help to supervisors in addressing problem banks.

2. The second, which is also the longest of the Core Principles, deals with the characteristics of an effective supervisory body. I am sure that this Principle is one you can all readily support. Five main components are established:

- First, a consistent framework of responsibilities, with operational independence to pursue them. Such operational independence means that supervisors should not be subject to political pressure concerning operational judgements they may be called upon to make. But it can also mean independence in setting supervisory rules. Whereas bank supervisors would be wise to consult the industry and other supervisory bodies, etc. about regulatory changes, the final decision must remain with the supervisor.
- Second, adequate resources to train, pay and provide adequate technology for the agency's staff. Too often, either the supervisory body is not able to recruit the kind and number of staff it needs or it suffers a steady "brain drain" over the years. No supervisory agency can be expected to perform to the highest international standards if it does not have adequate, properly trained human resources.
- Third, a framework of banking law that enables supervisors to set prudential rules in a flexible manner, gather information and apply penalties for non-compliance.
- Fourth, protection from personal and institutional liability for supervisory actions taken in good faith.
- Fifth, the ability to share information with other regulators and to protect the confidentiality of information received. This is a difficult issue, particularly in a cross-border context, because of the need to preserve customer confidentiality without giving criminals undue protection. But without adequate information channels, supervision will be handicapped.

3. The third section of the document, on which I would like to put particular emphasis, deals with credit risk management. This is critical because, whatever you hear about trading and operational risks, the problems that have led to the vast majority of bank failures have had their origins in credit risk. Credits should be granted only when the money will generate an additional return that can be used to service and repay the debt, and not because the national plan determines that certain industries or projects need financing. Otherwise, bad loans will pile up in the balance sheet of the banks and sooner rather than later the banking system will have to be restructured and supported/bailed out by public money. Sound credit practices involve standards for banks' policies in the following five areas:

- First, policies for making credit assessments as a basis for granting loans.
- Second, policies for evaluating the quality of assets, which also means establishing provisions against impaired assets.
- Third, management of concentrations (this includes consideration of supervisory limits on concentrations).

- Fourth, guarding against connected lending abuses.
- Fifth, management of country risks.

More fundamentally, however, the establishment of a prudent approach to credit risk management at the national level involves the development of skills in a number of different professions:

- Bank credit officers need the skills to evaluate a loan application.
- Bank supervisors need the skills to assess whether the bank has an adequate method of evaluating loan applications and, later on, monitoring the performance of the borrower.
- Bank auditors need to be properly trained and qualified to pass a judgement on whether the accounts present a "true and fair" view.
- The borrowers themselves need the skill to assess a project, arrange the financing and carry out the expenditure in an efficient manner.

This may involve in some countries a significant change in attitudes to the role of banks in financing economic development, and such cultural and educational advances/changes are not likely to take place rapidly.

4. The fourth and final section I would like to spend a few moments on is Principle 22, which deals with supervisors' powers. What is most important here is that supervisors have the authority to bring about what is called "prompt corrective action", i.e. to enforce changes when they detect incipient problems in a bank. This can include additional reporting requirements, special audits or examinations, constraints on a bank's ability to operate or, if necessary, the suspension of dividends or other financial constraints. It is essential that the supervisor have the power to address management weaknesses, including the ability to replace poor-performing managers, or, in extremis, impose conservatorship. Most bank supervisors have the "nuclear option" of withdrawing a licence, but in a deteriorating situation it should be possible to take remedial action before the patient becomes terminally ill.

Among the other tools: capital adequacy. The Basel Committee believes that capital is an important defence and discipline and the Principles state that supervisors should establish appropriate minimum capital requirements. The big question concerning capital, however, is what to do when losses overwhelm the available capital. Very often, this occurs at a time when the markets are not receptive to new equity issues. The resolution of such problems is one of the main skills of the supervisor; often mergers or takeovers by stronger partners are the most practical solution.

So what happens next? The challenge for supervisors now is "Quality implementation of the Core Principles".

The Core Principles for banking supervision provide the foundation necessary to achieve a sound supervisory system. Local characteristics need to be taken into account in the specific way in which these standards are implemented, as they are necessary but may not be sufficient, on their own, in all situations. Each country should therefore consider to what extent it needs to supplement these Core Principles with additional requirements to address particular risks and general conditions prevailing in its own market.

No two countries are starting from the same point – some have nearly all the Principles in place in their supervisory arrangements, while others have a way to go. In many countries, significant changes in the legislative framework are required. Some, for example, are lacking in basic infrastructure, such as the framework for effective contract law, property rights, or insolvency procedures. There is no "quick fix" in such a country. Years will be needed to establish the skills to develop the necessary legal framework and credit culture. We need to be careful not to create unrealistic expectations as to how fast improvements can be made.

Quality implementation of the Core Principles will be a long process to build, as it requires a competent and motivated body of professional supervisors, a banking regulatory framework that supports sound banking practices, a credit culture that supports sound lending practices, and adequate accounting, reporting and disclosure requirements that support financial transparency. The first step is always an assessment exercise: identify the areas where changes are necessary and establish a timetable.

The first step is to make an honest assessment of the situation: identify where changes are needed and determine what the impediments may be.

The survey prepared for the Sydney ICBS, to which we received over 120 responses, identified four common difficulties.

1. The most acute problem is the shortage of skilled human resources. We are all aware of the need to strengthen banking supervisory skills, but several survey results also pointed out the need for improvements in the banks themselves, where the Core Principles require skills in several areas such as credit assessment, risk management, internal audit

and back-office controls. The Core Principles also have human resource implications for some non-banking professions such as lawyers and accountants.

2. A related issue raised in the document is the financial strength of the supervisor and his ability to retain his skilled staff. Although most agencies have control over their budgets, these are rarely sufficient to protect themselves against a "brain drain" to the private sector.

3. The autonomy of supervisory agencies is clearly not adequate in many countries. A very practical test of the autonomy of the supervisor is the licensing process. As the Core Principles make clear, this goes far beyond the issue of initial licences and needs to protect against structures and cross-ownerships that may impede effective supervision.

4. A fourth theme that is common to many responses is the need for greater understanding and use of modern risk management techniques, both in banks and in supervisory agencies.

One issue that is being discussed is the extent to which we need to impose some form of time limit for the implementation of the Principles.

Part of the problem is that the timing of implementation of the Core Principles is not something that supervisors can necessarily control. They can advise and "lobby for action", but where legislative changes are required they are at the mercy of the national political process. So I believe that we should readily welcome the outside pressure that is coming from a number of quarters, notably the G7, the G10 and the Willard Group (the G7 plus 16 emerging markets). In addition, the IMF and IBRD are playing an important role in advising on and encouraging implementation. Already in their surveillance work, the two Washington institutions are placing great emphasis on stronger supervisory standards and the Basel Committee's Chairman and Secretariat are in regular contact with IMF and World Bank staff. In addition, we expect the rating agencies and other private sector agencies to play a role in demanding that countries adhere to the Principles.

To help assess compliance with the Core Principles in an efficient and consistent manner, the Basel Committee, with the support of the Core Principles Liaison Group (of which China is an active member), is preparing a methodology. For each principle (or sub-principle) this methodology distinguishes what constitutes minimum standards and best practices.

All these pressures are very likely to make life difficult for those countries that do not apply due diligence to implementation, although monitoring compliance is not going to be a simple procedure.

Also, sooner or later, there will be a demand for transparency and accountability, which will be difficult to resist.

Of course, the Basel Committee has taken a number of initiatives to support the implementation process. The Core Principles Liaison Group already referred to consists of about 18 countries (including China) and meets three or four times a year. The World Bank and the Fund are members of the Liaison Group.

Meanwhile, the Basel Committee has revised its 500-page Compendium of detailed documents that back up the Core Principles and issued a second edition. Even more important, though, the Basel Committee is working to elaborate on certain features of the Core Principles, namely credit risk management, corporate governance and loan valuation and provisioning issues.

As supervisors, we are well aware of the practical realities. High-quality banking supervision can, over time:

- strengthen national banking systems;
- contribute to greater stability in the financial sector; and
- reduce vulnerability to external shocks.

But, at the same time, it cannot solve all the financial problems countries are faced with:

- it cannot, on its own, create macro-economic stability;
- it cannot immunise a country to external shocks;
- and, importantly, it cannot guarantee that no bank will ever fail. If that is to be the prime objective of bank supervisors, it is likely that they will impose conditions that obstruct dynamic growth in their banking sector.

So, we need to take care that expectations of what the Core Principles can achieve are set at a realistic level. First, implementation of the Principles in spirit and not only in letter is critical. Second, this is going to be a long process. For those starting from scratch, the first challenge is to build a competent and motivated body of professional supervisors. This takes time: sending someone on a couple of training courses, even to Basel, does not make a supervisor. Years of on-the-job experience are necessary.

Even with the right people in place, supervisors need the appropriate tools to do the job. What are the main necessary arrangements for

ongoing banking supervision? Sixteen of the 25 principles cover the essence of ongoing supervision under three main chapters: prudential regulation and requirements (Principles 6 to 15); methods of ongoing banking supervision (Principles 16 to 20); and information requirements (Principle 21).

Let us focus on methods of ongoing banking supervision. Main prudential regulations should address at least: capital adequacy (regulatory capital should cover credit risk, market risk and operational risk); risk management; internal controls; and accounting, reporting and disclosure requirements.

Methods of ongoing banking supervision comprise: on-site and off-site supervision; regular contact with bank management; procedures for collecting, reviewing and analysing prudential reports and statistical returns on a solo and consolidated basis; methods of independent validation; and the ability of supervisors to supervise consolidated entities.

Let me conclude with what I regard as the three critical elements of infrastructure:

- a legal framework that supports sound banking practices;
- a credit culture that supports sound lending practices; and
- an accounting framework that supports financial transparency.

For each of these elements, too, it is necessary to train the necessary people, including lawyers, judges, bank credit officers, auditors, accountants, etc, and develop the necessary body of experience and case law to enable the system to operate effectively. This, as I have said, will inevitably be a long process, but it is one which we need to support and work towards if we are to be able to exercise our functions to the best of our abilities.

Deposit insurance system design and considerations

Nicholas J Ketcha Jr

This paper will discuss deposit insurance and failed bank resolution systems: the role they play in a nation's financial safety net; the advantages and disadvantages such systems provide; the establishment, coverage and funding of such systems; the linkage with supervision and licensing; and failed bank receivership and resolution processes and considerations. While deposit insurance systems are in place in many countries throughout the world, this paper is based heavily on the principal features of the deposit insurance system in the United States and some of the lessons we have learned from it.

Introduction

Financial safety net

Before addressing the role of deposit insurance in a nation's financial safety net, it would first be beneficial to briefly discuss what is meant by a financial safety net and why such nets have been established for the banking systems of many nations.

A sound, competitive banking system is critical to a nation's economic vitality. Banks have traditionally performed the important function of intermediating between lenders and borrowers by using liquid, short-term liabilities to fund relatively long-term, illiquid assets. By providing a liquid savings vehicle for small and large investors alike and by developing specialised skills to evaluate and diversify the risks of their borrowers, banks have played an important role in funding economic growth.

Banks also generally play a central role in a country's payment and settlement systems, and can be an important element in the conduct of monetary policy, which works through financial institutions and markets to affect the economy.

Given these special roles played by banks, safety net arrangements are often provided by governments with the public policy purpose of promoting economic growth and financial stability. While the nature of these arrangements can take different forms, they typically include some combination of the following: (1) bank access to a lender of last resort; (2) final, riskless settlement of payment system transactions; (3) prudential supervision of banks; and (4) deposit insurance. The remainder of this paper will focus primarily on the role and effects a deposit insurance system such as the one in place in the United States has in such an arrangement as well as the necessary interrelationship it should have with a nation's supervision and regulation of its banks.

Bank runs

Earlier in this paper I discussed how the combination of holding illiquid assets with the holding of liquid liabilities by banks provides real economic services that in most cases could not otherwise be obtained by much of the nation's population. However, it is precisely this liquidity transformation which enables banks to provide these services that also serves as the source of banks' susceptibility to bank runs.

Bank runs are caused by a combination of two factors. As previously discussed, loans, the primary asset of banks, are illiquid in that they cannot be sold quickly without a loss in value. The second factor that causes bank runs is the ability of most depositors to withdraw their deposits either on demand or at short notice. These two factors virtually guarantee that a bank will be unable at any time to fulfil its potential obligation to convert all or most of its liabilities to cash. Of course under normal circumstances the bank would never be called upon to fulfil all of its obligations; this is what allows the bank to invest in illiquid assets.

If, however, a depositor believes that the bank will be called upon to fulfil more than the normal amount of withdrawals, that depositor would have the incentive to attempt to withdraw his or her funds. This is because once the bank has depleted its inventory of liquid assets, it must begin to sell illiquid assets to meet further withdrawal demands. In effect, each such sale means the bank is realising a liquidation loss on the asset. At some point the bank will have suffered enough losses to render it unable to fulfil its obligation to the remaining depositors.

It is this "first come, first served" nature of the process that provides depositors with the incentive to run. Those depositors at the beginning

of the withdrawal line lose nothing while those at the end of the line lose everything. A depositor who merely suspects that the other depositors are going to run will get in line whether he or she desires liquidity at the time or not. This can lead to "panic" runs.

Deposit insurance: its role in the safety net

Advantages and disadvantages of a deposit insurance system

By providing a guarantee that depositors are not subject to loss, deposit insurance has two somewhat contradictory effects. On the positive side it removes the incentive to participate in a bank run, while on the negative side it eliminates the need for depositors to police bank risk-taking.

Deposit insurance systems are designed to minimise or eliminate the risk that depositors placing funds with a bank will suffer a loss. Deposit insurance thus offers protection to the deposits of households and small business enterprises, which may represent life savings or vital transactions balances. With a deposit insurance system in place, these households and businesses can "go about their business" with some assurance that their funds are secure. This in turn supports the stability and smooth operations of the economy.

This sense of public assurance is important. Public concern about the safety of deposits – whether based on fact or only on rumour – can lead, and has led, to the aforementioned damaging bank runs that can cause banks that are otherwise sound to fail. Similarly, concerns about one bank have at times led to concerns about others, resulting in so-called "contagion runs". Public confidence in the safety of bank deposits, in contrast, promotes the stability of individual banking institutions. Public confidence reduces the likelihood that depositors at an individual bank will panic and withdraw funds suddenly if concerns arise about the condition of that institution. Thus, deposit insurance can enhance stability by preventing bank runs. No amount of prudential supervision can provide protection against runs that is equivalent to deposit insurance. In addition, as opposed to blanket guarantees provided in times of stress, the explicit coverage rules of a deposit insurance system provide clear incentives for risk-monitoring by certain creditors ex ante and, ex post, provide a basis for distinctions in the treatment of bank creditors. A

related effect of deposit insurance that may be important in some financial systems is that it levels the playing field to a degree for large and small institutions. Under a formalised deposit insurance program, all institutions have access to depositor protection in the amounts specified by the coverage rules. Finally, the explicit rules of the deposit insurance program provide added certainty regarding the resolution process for failed banks. This can be extremely important for maintaining stability when a banking crisis threatens. Deposit insurance thus works together with the other elements of the safety net to contain potential threats to individual institutions or groups of institutions. In this way, deposit insurance supports economic stability by helping to avert interruptions in bank liquidity and credit availability that could otherwise result from disruptive bank runs or bank failures.

While deposit insurance systems, as well as the other elements of a financial safety net arrangement, contribute to stability and thereby promote economic growth, they can also generate perverse effects. By providing protection to market participants, costs of pursuing riskier strategies are reduced and excessive risk-taking might be incentivised – the moral hazard problem. With their deposits protected against loss, insured depositors have little incentive to monitor bank risk-taking, and may simply seek the highest return possible on their deposits. Thus, deposits may tend to flow away from conservatively managed institutions towards those willing to pay higher returns by assuming more risk. Deposit insurance can thus exacerbate moral hazard by altering the normal risk-return trade-off for banks, reducing the costs associated with riskier investment strategies. These incentives are inherent to some degree in the nature of all insurance, and even the best structural designs for deposit insurance systems cannot be expected to eliminate moral hazard. As will be discussed later in this paper, supervision and regulation of insured institutions, as well as some degree of market oversight, are essential for controlling moral hazard in order to maintain safety and soundness.

Moral hazard can be expensive, as evidenced by the savings-and-loan crisis in the United States during the 1980s, the banking problems of the Scandinavian countries during the same period, and the current crises in Japan, Korea and other Asian countries. While moral hazard was not the only factor at work in these crises, most would agree that it contributed to the high cost of resolution in each case.

The distinction between maintaining stability and preventing failures should also be emphasised. A safety net that is structured to prevent all failures is likely to stifle innovation and reduce the responsiveness of the banking industry to changing customer needs and other developments in the marketplace. To avoid such rigidity, an exit mechanism needs to be formulated and incorporated into the system. A properly balanced deposit insurance program can provide order in winding up the affairs of a failing institution, and can thus facilitate the establishment of an effective exit mechanism.

It is easy to underestimate the value of deposit insurance when times are good. When times are bad, governments often re-evaluate the need for such arrangements. Typically, deposit insurance systems are adopted in the aftermath of severe banking crises or when industry conditions are deteriorating and unstable. A recent IMF survey of deposit insurance systems in 60 countries indicated that 40 of these systems were initiated during the 1980s and 1990s, largely in response to actual banking problems or the perceived threat of instability.

Organisation, coverage and funding of deposit insurance systems

As previously discussed, the creation of an explicit deposit insurance system is an expression of government support for a nation's banking system that in large part reflects a concern about the potential for costly bank runs. In the absence of deposit insurance, bank runs are an ever-present threat owing to the fact that banks typically fund illiquid assets with more liquid liabilities. Bank runs are costly because they interfere with the financial intermediation performed by banks. Credit availability and economic activity can be adversely affected if loans are liquidated prematurely in order to meet depositors' claims. Even if bank runs are not widespread, they can disrupt the communities in which they occur. Borrowers who may otherwise receive loans in a more favourable environment may not be funded as banks are forced to maintain high levels of liquid assets.

It must also be stressed that it is the financial capacity of the insuring entity that lends credibility to a deposit insurance guarantee, and thereby removes much of the incentive for bank runs. In many larger economies,

the taxing and borrowing authority of the national government provides the maximum financial capacity and government-provided deposit insurance.

Organisational structure

Another area that challenges policy-makers to maintain a proper balance involves the organisational structure of a deposit insurance system. To the extent that the structure facilitates the organisational and political separation of the deposit insurance system from other government operations, there may be less potential for incentive conflicts that compromise the effectiveness of the deposit insurance programme. For example, some argue that combining the insurance function with the chartering function in the United States thrift industry created incentive conflicts that proved to be a factor in the demise of the Federal Savings and Loan Insurance Corporation which was established to maintain the strongest possible protection against banking instability.

In general, experience suggests that times of crisis produce political pressures for decisions that may not be in the long-run interest of a sound and efficient banking system. An independent authority is in the best position to resist such pressures. However, it must be recognised that establishing a separate authority for deposit insurance requires careful attention to the balance of power among the various banking authorities, given the incentives towards conservatism on the part of the insurer. Different structures will be appropriate for different institutional settings but, in general, the United States experience suggests caution in creating structures with a high potential for incentive conflicts.

A related issue involving the appropriate responsibilities among bank regulators is whether the deposit insurer should also have direct supervisory authority. In cases where the insurer is not also a bank supervisor, the arrangement must provide the insurer with the necessary information on the current condition and practices of all insured institutions. When the deposit insurer also has supervisory responsibilities, the internal structure must provide for appropriate balance between these functions.

Another important issue in the establishment of a deposit insurance system is the extent to which the protection afforded is explicit or implicit. Explicit rules set clear boundaries on the protection that will be provided and thereby contribute to discipline during normal times.

However, during crisis periods, rigid adherence to explicit rules may contribute to instability.

Scope of deposit insurance

A related issue involves the scope of activities to be brought under an insurance protection scheme. It is important to avoid including activities unnecessarily, given the potential for government involvement to create distortions that may skew the decisions of market participants away from the most productive choices. Once the scope of the insurance system is determined, moreover, it is important to identify measures that can most effectively strike a balance among the considerations mentioned above. For example, basing deposit insurance pricing on market indicators or other timely triggers may restore some of the discipline that is forgone by placing bank activities under the government safety net.

The attempt to minimise unwarranted expansion of the deposit insurance safety net raises questions about where banking organisations should conduct non-banking activities, as well as what should constitute a banking activity for deposit insurance purposes. An important, related concern with government involvement in deposit insurance is the potential for market distortions that diminish productive capacity. When an activity is brought under the government safety net, the production process for that activity and the resulting set of choices available to consumers and businesses may be altered significantly. For example, certain investment and lending decisions of insured institutions may be based more upon regulatory considerations than market incentives, and such distortions may diminish social welfare or productive capacity, or both.

In some countries, these concerns have been addressed primarily by limiting the activities of insured institutions to traditional bank intermediation and closely related functions. In other words, banking and non-banking activities have been required to be carried out in separate organisations. A commonly cited reason for requiring such a separation is the fear that a non-banking operation could expose a bank to greater risk of failure. Although some non-bank activities may be less risky than traditional banking activities, certain risks may be difficult to detect or monitor without some degree of corporate separation. A related reason for requiring separation of non-banking activities is to prevent banks from using deposits insured by the government to fund these activities.

The concern here is that, to the extent that banks enjoy a funding advantage from access to government deposit insurance or other features of the financial safety net, this will be passed on in their non-banking activities and give banks an unfair advantage over non-bank competitors.

The potential concern regarding corporate separation, however, is that innovations in technology and information services have increasingly blurred the distinctions between banking and non-banking organisations. Financial institutions must be allowed to evolve in response to a dynamic marketplace in order to provide a level playing field for competition. The "universal bank" model is perhaps best suited to provide institutions with flexibility but may raise concerns about unwarranted expansion of the safety net. Moreover, this model must reconcile the different approaches to regulation that may be applied simultaneously to an institution with many business lines; for example, securities regulators may tend to focus on disclosure while banking regulators rely upon prudential supervision. Regardless of the structural model, however, the challenge is to provide a statutory and regulatory framework that allows financial evolution to occur while maintaining the safety and soundness of individual institutions and the stability of the financial system without causing significant market distortions.

Simply requiring all non-banking activities to be conducted in a separate entity will not, by itself, address all concerns. Without limitations on their exposure, banks could suffer significant losses if the non-banking activities conducted in a related entity are highly risky. If the non-banking entity were to suffer losses, the health of the insured entity could be threatened if, in the absence of adequate safeguards or clear disclosure, value was diverted from the bank to support the troubled organisation, or depositors withdrew their funds out of concern for the effect the losses might have on the bank. To the extent that a deposit insurance subsidy exists, it could be transferred to non-banking activities if insured deposits are used to fund a non-banking entity. In addition, if moral hazard affects the risk-taking decisions of a bank's managers, significant management overlap also could corrupt the decisions of the non-banking organisation.

Among the measures used to enforce separation and safeguard the resources of insured banks against misuse for the benefit of affiliated entities are: (1) explicit funding limitations on the amount of loans a bank

may make to, or investment it may make in, affiliates; (2) collateral standards on loans or extensions of credit, as well as other standards for the quality of assets purchased from affiliates; (3) requirements that certain transactions between a bank and its affiliates be carried out at arm's length, under terms and conditions comparable to those between unaffiliated entities; and (4) requirements that the bank and its affiliates be established and maintained as separate corporate entities under the law. Again, balance is important in designing the requirements for corporate separation, as there is a potential for rendering the banking organisation less flexible and less able to respond to evolving customer needs and market developments.

Deposit insurance coverage

Striking the right balance is also critical in establishing the coverage limit for insured instruments. Coverage must be sufficient to prevent destabilising bank runs, but not so extensive as to eliminate all effective market discipline on the bank's risk-taking.

Deposit insurance schemes around the world vary widely in the amounts and types of coverage provided. Some systems protect deposits of all types, several exclude interbank deposits, and some protect only household accounts, reflecting the different emphasis on stability versus protection for small, presumably less sophisticated, savers. Coverage is limited to less than $10,000 per account in some countries and is unlimited in others, with most systems falling between these extremes. Several countries provide only coinsurance, such as protection for 80% of the deposit account balance. Coinsurance provides an incentive for all depositors to monitor bank risk-taking by exposing them to small losses, but it thereby also provides an incentive for the depositors to run on banks. Institutional and cultural factors doubtless influence the tolerance for risk exposure among depositors, as well as depositor reactions to adverse financial news and economic shocks. Different schemes likely will be optimal for different countries, depending upon these factors.

The IMF uses one or two-times per capita GDP as the general rule in advising countries on appropriate limits for deposit insurance coverage. It is intuitive that deposit insurance coverage limits should bear some relationship to measures of income or wealth, so as to provide a relatively constant amount of protection to savers. However, coverage

limits have not been explicitly connected to income measures in several of the longer-standing deposit insurance systems, including the system in the United States. For example, the real value of United States deposit insurance coverage has declined significantly since its inception. In 1935, the $5,000 coverage limit was almost 10 times per capita income, while the $100,000 limit today amounts to less than four times per capita income.

Another significant issue in designing a coverage scheme involves the treatment of "foreign" deposits, which include deposits payable in foreign currency, deposits in domestic branches of foreign banks, and deposits in foreign branches of domestic banks. Again, there is great variety in the treatment of foreign deposits among deposit insurance systems. Most systems that cover foreign deposits protect themselves from foreign exchange risk in some fashion, usually by making payment only in domestic currency up to the coverage limit. Unlike the case envisioned for the European Union in its current deposit insurance directive, many depositors at branches outside a bank's home country cannot depend upon receiving the same protection as the bank's home-country depositors. Nor can depositors doing business with foreign banks depend upon receiving the same protection that is available in their own country for domestic deposits.

Too big to fail

No discussion of deposit insurance systems would be complete without a mention of the so-called "too big to fail" issue. When large banks become troubled and threaten the stability of a nation's financial system, governments often intervene by providing guarantees that extend beyond the limits established by the deposit insurance system. This practice, which has become known as "too big to fail", has been criticised for undermining market discipline and being unfair to small banks and their customers.

One approach to the too-big-to-fail problem is to create a class of creditors with clear incentives to monitor bank risk-taking and adjust their required yields accordingly. This would provide discipline directly, and pricing information could also be used to adjust deposit insurance premiums or trigger supervisory actions. This is the rationale behind proposals to require haircuts for large depositors and proposals to require large banks to issue some amount of subordinated debt. An

approach that could generate similar market information with potentially less interference in bank funding decisions might involve direct market pricing of the large-bank risks posed to the deposit insurance system. This could occur, for example, through reinsurance or through tradable risk-sharing contracts issued by the deposit insurer. The feasibility of this approach has yet to have been fully explored.

Another approach to the too-big-to-fail problem is to internalise some of the costs associated with extending special protections in the case of a large-bank failure. The largest banks as a group might be required to pay the extra costs associated with resolutions that are not least-cost, thereby creating stronger incentives for these banks to find market solutions to any large-bank problem while the institution is still viable. A similar approach is to implement prompt, increasingly severe supervisory sanctions as the bank's situation deteriorates, in an effort to encourage a market solution. These approaches are not mutually exclusive, and several may be suitable for some banking systems.

In the end, however, the issue of government intervention to prevent systemic problems transcends the deposit insurance system. If the failure of a private firm were to threaten the stability of a country's financial system – whether that firm was a bank, a financial services company, or a commercial entity – the decision to intervene would likely be made at the highest levels of the government. An important issue in designing a safety net is therefore whether the deposit insurance system is the appropriate vehicle for implementing too-big-to-fail determinations.

Funding the deposit insurance system

Another key issue to be considered is whether or not to establish a separate deposit insurance fund. In the absence of a stand-alone fund, there may be political obstacles to obtaining funds when they are needed for deposit insurance purposes. With a stand-alone fund, monies will be available when needed, provided that the premiums charged have reflected realistic assumptions regarding potential losses and other deposit insurance costs. A benefit of establishing a stand-alone deposit insurance fund financed solely through premiums paid by insured institutions is that these institutions may perceive a direct stake in the financial health of the insurance system, providing motivation for them to scrutinise deposit insurance operations and maintain industry self-policing.

If a separate deposit insurance fund is created, an important question is the appropriate target ratio of the fund balance to total insured deposits. The answer to this question is likely to vary over time, depending upon the strength of the banking industry and condition of the economy. Moreover, a potential function of a deposit insurance system is to spread risk over time as well as across insured parties. Fund "adequacy" ultimately depends upon the goals established for a deposit insurance system.

If maintaining solvency in the face of extreme outcomes were the only consideration, then the choice of a reserve ratio would, conceptually, be reduced to identifying the process that generates insurance losses and selecting the level of protection desired from an appropriate statistical loss distribution. In practice, this task is difficult, involving judgements on the basis of imperfect information about potential losses. The issue is complicated further by considering other relevant factors, such as economic costs associated with the premium volatility that may be required to maintain a given reserve ratio continuously. These considerations raise the possibility that flexibility in choosing a target reserve ratio, as well as determining the appropriate steps to achieve it, may provide better balance among the relevant objectives.

Deposit insurance premiums

A simple and relatively easy-to-implement system for assessing deposit insurance premiums is to assess all insured institutions at a given rate per unit of deposits or per unit of another assessment base that reflects the total coverage provided. Such a pricing system is aimed at maintaining adequate financial capacity for the insurer, and leaves the task of controlling moral hazard to the supervisory process and the market. A flat-rate system was employed in the United States for almost 60 years, during which institutions were charged a given rate per dollar of total domestic deposits.

Under a flat-rate system, participation of institutions in the deposit insurance programme generally needs to be compulsory in order to avoid attracting only the riskier entities – the "adverse selection" problem. A risk-related premium system can address adverse selection, but to the extent that risk-related premiums may not fully reflect all the risks posed by insured institutions, compulsory membership still may be warranted.

A risk-related premium system may also provide additional control over moral hazard. At a minimum, such a system can create stronger incentives for institutions to avoid actions that may result in a weakened condition. This is true of systems that charge higher premiums based primarily upon deteriorating financial performance. Although such systems can exacerbate banking problems if not designed with care, they function similarly to supervisory sanctions and may be regarded as an additional tool for traditional bank supervision.

Ideally, however, risk-based pricing of deposit insurance would influence bank decision-making well ahead of supervisory sanctions, providing incentives ex ante for institutions to avoid undue risk-taking. To be most effective, such a pricing system must be based upon the current practices of institutions, current market signals regarding changes in the risk profiles of institutions, or other forward-looking factors, as opposed to observed changes in financial conditions. To the extent that market information is incorporated, this may limit any divergence between market and regulatory incentives, thereby reducing the distortions associated with deposit insurance. Moreover, attention to market information may reveal inefficiencies or obsolescence in traditional approaches to risk assessment by regulators, and may suggest reforms that would reduce regulatory burden.

The liability structure of institutions should also be considered in establishing an effective risk-based premium system. An institution with a high percentage of liabilities that are secured may represent a high risk of loss to the insurer, given that such liabilities have priority in the order of receivership claims. In contrast, depositor preference may provide protection against insurance losses, given that all depositors (including the insurer, standing in the place of insured depositors) stand ahead of other unsecured creditors in the receivership. However, by shifting risk from the insurer to other creditors, depositor preference may create greater incentives for them to withdraw funds, secure claims, or convert claims to deposits.

Risk-based pricing has been adopted by at least 11 countries, and some systems – including Argentina, Canada and the United States – in an explicit attempt to incorporate forward-looking components. However, these systems have not yet been tested through an entire banking cycle and must be considered as still in the experimental stages.

The assessment base

A key consideration in designing a pricing scheme for a deposit insurance system involves the choice of an assessment base. While the risk of insolvency is probably most closely linked to the assets of insured institutions, deposit insurance premiums in most systems are tied in some fashion to the amount of coverage provided.

Many regard the amount of insured deposits as the most equitable assessment base, in that the insurer assesses only the amount that is explicitly insured. However, estimating the insured component of total deposits may be costly and impractical under some coverage schemes. Moreover, given the reality of "too big to fail" and other systemic risks, which suggest that protection likely would be extended beyond insured deposits under some circumstances, basing premiums on explicitly insured deposits could result in significant underpricing.

This dilemma may be addressed by using a broader assessment base, such as total assets or liabilities. In the United States, the law establishes a separate assessment base for recovering the additional costs associated with too-big-to-fail or other systemic risk determinations that extend protection beyond insured deposits. For such purposes, a flat assessment rate is applied to total liabilities, so that all large institutions pay more than smaller institutions, regardless of deposit amounts or explicit coverage provided.

Linkage between deposit insurance and supervision and regulation

To a large extent, prudential supervision and deposit insurance are complementary and their goals are closely aligned. Deposit insurance programs, to a certain degree, increase the need for governments to supervise and regulate banks. However, it is maintained that even in the absence of a deposit insurance programme, given the unique role played by banks in a nation's economy, there is a need for a process for the prudential supervision and regulation of banks.

While the specifics of bank supervision and regulation will vary from nation to nation given their institutional, cultural, historical and legal differences, the basic goals are generally quite similar, namely: maintaining public confidence in the banking system, protecting

depositors' funds, fostering an efficient and competitive banking system and insuring compliance with banking laws and regulations. In this regard, bank supervision, examinations and regulations provide effective mechanisms for limiting excessive risk-taking by banks.

Similarly, effective supervision is aimed at ensuring stability in the banking system, which, in turn, allows banks to perform their various roles effectively. Judicious supervision can also go a long way towards protecting savers without undue burden or market distortions. Both are also key goals of deposit insurance.

Bank examinations, which, at a minimum, entail an assessment of the financial condition of banks and their operating practices and controls, are essential to assessing the risk profile of banking institutions. Our experience in the United States has shown that simply monitoring financial statements is not sufficient to assess the condition of a bank.

Regulations have a purpose similar to the covenants that are found in virtually every debt contract, namely: to prevent bank management from undertaking activities that excessively increase risk to the detriment of existing depositors and creditors or the insurance fund. Regulations covering bank capital requirements similarly serve to limit a bank's appetite for excessive risk-taking. Capital requirements serve to reduce the incentives of owners to increase risk since, the greater the amount of capital, the larger is the owners' loss in the event of failure. As a critical element of assuring capital adequacy and to minimise market distortions, capital standards should approximate the level of capital that market discipline would require if there were no deposit insurance. In this way, standards for capital adequacy provide supervisory protection while achieving the benefits of a market-based system, that is, efficient allocation of resources, competitiveness, healthy innovation and stability.

Resolutions and receivership processes

As previously mentioned, a properly balanced deposit insurance system can provide an effective exit mechanism for winding down the affairs of a failed institution. When an insured institution fails, the deposit insurer must provide the public with ready access to insured funds so that stability and confidence in the banking system are maintained. The timely resolution of failed institutions reinforces systemic stability,

promotes public confidence in the system, and restores liquidity to the economy. To further minimise disruption associated with insured institution failures, every attempt should be made to dispose of failed bank assets quickly and cost-effectively so that funds can be disbursed to remaining creditors, including the deposit insurer, as soon as possible.

The legal framework will in part determine the type of resolution process that is most effective in achieving these goals. The priority of claims on the receivership, the rights of claimants, and the authority of the receiver to take control and dispose of assets are among the many statutory factors that play a critical role. A related issue is whether the legal framework for bank insolvencies should provide receivership powers that reach beyond those established in the normal bankruptcy code. Depending upon the specific characteristics of the deposit insurance programme and the legal environment, the deposit insurance authority may be well positioned to execute resolution and receivership functions efficiently. On the other hand, conflicts may arise between the roles of deposit insurer and receiver in the event of a bank failure, and this could complicate housing both responsibilities within one body.

Given the basic goals for the resolution process, some flexibility exists with respect to the choice between alternative resolution methods. Selecting the most suitable resolution method for a particular failure situation requires that several factors be considered. These include maintaining stability, minimising the volume of assets managed by the government, and ensuring that market discipline is not materially weakened.

In the United States, three basic techniques have been used to resolve failed institutions: the purchase and assumption transaction, the deposit payoff method, and the open bank assistance model. In a purchase and assumption transaction, a healthy insured institution purchases some or all of the assets of a failed bank and assumes, at a minimum, all insured deposits. Purchase and assumption transactions generally minimise disruption in the local community by avoiding interruptions of banking operations and allowing credit relationships to be maintained.

In the early 1990s, as the supply of failed bank assets in the United States expanded to unprecedented levels, getting these assets back into the private sector became increasingly important. In order to stimulate bidding during the resolution process, the FDIC modified the purchase and assumption transaction to include a loss-sharing feature whereby the

government agreed to cover a certain portion of potential losses on assets purchased by the acquirer. By shifting risk away from the acquirer, loss-sharing transactions were successful in increasing the demand for failed bank assets, facilitating more cost-effective resolutions, and keeping more failed bank assets in the banking sector.

One type of purchase and assumption transaction involves the use of bridge banks. A bridge bank is a temporary banking structure controlled by the government and designed to take over the operations of a failing bank and maintain banking services for the customers. As the name implies, the bridge bank structure is intended to "bridge" the gap between the failure of a bank and the time when the government can implement a satisfactory resolution of the failing institution. The bridge bank is particularly suitable for dealing with the failure of large banks with complex financial structures, because it affords the resolution authority sufficient time to evaluate and market the institution. A disadvantage of using a bridge bank is that it entails greater government involvement in banking operations than other resolution methods.

The second type of resolution method is the deposit payoff. In a deposit payoff, no liabilities are assumed and no assets are purchased. Depositors of the failed institution are paid the amount of their insured deposits as soon as the institution is closed; uninsured depositors are covered only if additional funds remain following liquidation of the assets. Deposit payoffs are used when an acquirer cannot be found, either because of a lack of interest in the banking franchise or in the event that the purchase and assumption bids received for the bank would be more costly to the insurance funds than a payoff. Deposit payoffs can be disruptive: customers are forced to find new banks and the local community may experience a decrease in the availability of credit due to the closure of the institution. In addition, deposit payoffs have proven more costly than other resolution methods used in the United States.

The third resolution method for failing financial institutions is open bank assistance, in which the resolution authority provides financial assistance in the form of cash contributions, loans, or asset purchases to a troubled institution to prevent its failure. Because open bank assistance transactions are negotiated, they can take many structural forms. Such flexibility may be attractive in systemic risk situations; in particular, where the failure of a large institution with a significant volume of deposits and correspondent bank relationships could threaten the stability of the

banking system. However, the use of open bank assistance creates concerns involving fairness, cost and moral hazard. Reflecting these concerns, recent legislation in the United States has restricted the FDIC's ability to provide open bank assistance to troubled institutions. Under current law, the FDIC must show that open bank assistance is the resolution alternative least costly to the insurance funds. In addition, insurance fund monies cannot be used to benefit shareholders of a failing institution. Given these requirements, it appears that open bank assistance will be used rarely, if at all, in the future.

It should be noted that a lack of funding for resolution initiatives can cause severe problems and impose significant additional costs. Without adequate funding, the resolution authority may select resolution techniques that provide needed liquidity, but ultimately do more harm to the banking system. In addition, if funding is inadequate, delays in resolution activity will likely occur. This creates two fundamental problems, both of which result in higher overall resolution costs. If a resolution authority must delay its resolution of an institution, asset quality is likely to continue to deteriorate, and the moral hazard problem becomes more pronounced.

Summary and issues for further consideration

Deposit insurance programmes can help to maintain financial stability, thereby enabling banks to intermediate effectively and support economic growth. As with other components of the safety net, however, deposit insurance can create perverse effects. The potential for moral hazard, misallocation of resources, and excessive regulatory burden point to the need for appropriate balance in designing deposit insurance systems. This paper has reviewed the major features of deposit insurance design to consider the types of trade-offs that must be confronted in striking a proper balance. The major considerations surrounding deposit insurance arrangements include the role they play in a nation's financial safety net, the advantages and disadvantages such systems provide, the organisation, coverage and funding of such systems, their linkage to supervision and regulation, and the processes for failed bank resolutions and receiverships.

It is important to note that there is not a "one size fits all" approach for any of the important elements in the deposit insurance system. Institutional, cultural, historical and legal differences among countries

will dictate certain differences in the design of the deposit insurance system as well as in the other elements of the nation's financial safety net.

Approaches to measuring, limiting and managing risks, especially those facing small and medium-sized institutions

Brian Peters

Introduction

I am greatly honoured to be here today to discuss the subject of risk management for small and medium-sized financial institutions. Unlike the other presenters, I am by no means an expert on the Chinese banking system – nor am I an expert on the establishment of a deposit protection scheme. Instead, I hope that I can share with you some insights that I have gained as a humble bank examiner. I have a short presentation, hopefully with ample time at the end to field questions. So far in this conference, we have heard excellent presentations on the external framework necessary for financial supervision and problems that supervisors have faced recently. Our focus now will turn to the internal framework that banks need to develop to control their risks.

Managing risk is a concern for banks of all sizes. Why? Well, we have heard that it is important for the proper implementation of financial intermediation. We have also heard that it is to ensure that banks are operated safely. I have a more basic view – it is important so that banks can be profitable. I want the banks I supervise to be as profitable as possible. I like greedy bankers. Greedy bankers want to make money for their institutions – and greedy bankers know that the losses from one bad loan can offset the profits and hard work on 20 others.* I would argue that the only way to measure if a bank is performing its financial intermediation role well is to observe sustained real profitability (no phoney accounting tricks) over the business cycle. This ensures that credit is being priced appropriately, and that too much credit is not being extended to unworthy borrowers.

*That is not to say I like unethical bankers, or those who put their personal interests ahead of their banks.

Contrary to popular perception, bank supervisors realise that banking organisations must take risks if they are to generate acceptable economic returns. As a fundamental principle, however, supervisors want banks to take risks that they can understand and measure and also earn enough income to adequately compensate for those risks. We at the Federal Reserve tend to break down risks into six key areas: credit risk, market risk, liquidity risk, operational risk, legal risk and reputational risk.

Of these, credit risk and operational risk are the most important at small and medium-sized institutions in the United States. By operational risk, I mean primarily the risk of loss from internal control breakdowns. As Danièle Nouy mentioned, the Basel Committee is actively engaged in the study of credit risk, operational risk and liquidity risk, and in the past year has published papers on interest rate risk and internal controls. I am glad Michael Pomerleano said that credit risk was the biggest risk facing the Chinese banking community, because today I will focus on credit and operational risk. I would note, however, that every institution, whether large or small, faces each of the six risks I listed above to some degree.

Credit risk

Let me begin with credit risk. Given banks' traditional focus on extending credit and loans to customers, credit risk has been – and remains – the most important risk for banks. In the US economy, small and medium-sized banks mainly take deposits and provide banking and credit-related services to local customers, and extend credit to small to medium-sized local and regional businesses and to consumers. One of the main risks for the bank in serving as an intermediary of credit between depositors and borrowers is that its borrowers will be unable to fully meet their loan obligations and default.

In our experience, a key to effective credit risk management is a well thought out business strategy. Who are the customers the bank wants to serve? What types of credit and other services do those customers need? How much risk do the customers present and, therefore, what interest rate does the bank need to charge to ensure that the bank earns an adequate rate of return on its capital? Once the credit strategy is developed, we think it is important to put the strategy in writing and ensure that all bankers with lending authority understand it.

While these questions seem basic, in our experience many banks run into trouble because they lack a carefully chosen credit strategy. We have seen that when banks set goals to be the fastest growing bank or have the largest market share in their area, they later find that they lent to customers they did not really know and took on credit risks they did not really understand to achieve those goals. More often than not, substantial credit losses were the first signal that the bank's strategy was flawed. This does not mean that growth and market share are not important considerations for banks – they are. But carefully selecting the potential customer base and understanding the risk characteristics of the bank's credit activities are even more important.

For any bank, the management of credit risk should begin when a potential customer asks for credit. In our experience, it is typically during this first step – making the decision whether to extend a loan – where many mistakes are made. The decision to lend should be based on the borrower's ability and willingness to repay the loan. These characteristics are indicators of risk, which should be reflected in the pricing of the loan. However, some banks have tried to rely only on the value of collateral or some other guarantee offered by the customer, which are secondary sources of repayment for loans but should never be the primary factor in deciding to extend a loan. The primary factor should be a company's ability to repay the loan from its internal operations. This calculation can only be based on forward-looking financial projections – something we call "spreading the numbers".

As Larry Lau alluded to, the ability to accurately project financial performance is highly dependant on accurate, rigorously applied accounting standards. The only way a counterparty can assess the creditworthiness of another is through transparent financial statements. Transparent, rigorously applied accounting standards strengthen the confidence parties have when dealing with each other.

Relying on collateral or guarantees alone rarely insulates banks from losses if the borrower defaults. Often, when a customer defaults on a loan, the bank may be left with collateral or a guarantee that does not fully cover its credit losses. While this problem has often been noted in the banking sectors of many emerging markets, the need to maintain strong underwriting standards is key to the success of any bank – large or small, sophisticated or basic – in extending credit profitably and safely.

Supervisors and bankers have learned that to control credit risk, it is critical to know your customer; that is, you should know your customer's business, financial condition and industry. To understand these factors, a banker should research the customer's past performance and reputation. This is particularly important for small and medium-sized institutions that are entering new product areas, markets, or geographic regions. Collateral and guarantees may not be enough to prevent financial losses when customers fail to repay their loans.

While the management of credit risk begins with the decision to underwrite a credit, management's responsibility to control risk continues throughout the life of the credit. When a bank has exposure to a local or regional business, for example, it must continue to monitor the creditworthiness of the borrower until the credit has been repaid in full. There should be an ongoing assessment of the financial health and stability of the obligor by loan officers, as well as periodic independent evaluations of the credit risk of the bank's loan portfolio.

Collecting and analysing the most current financial statements issued by the obligor, as well as understanding industry trends and macroeconomic developments, help loan officers and bank managers to understand the different levels of risk associated with each credit and use this information to assign a "risk rating" to each credit. Sophisticated banks in the developed world have up to 18 internal risk grades. Such an internal credit risk rating system can be a valuable tool for tracking and responding to changes in the creditworthiness of obligors. Additionally, in many developed countries, this forward-looking analysis forms the basis for establishing adequate credit reserves, instead of the practice of only reserving for loans once they are legally impaired. Picking up on Nick Lardy's presentation, a thorough risk rating process would have identified the decrease in profitability at many state-owned institutions – which would have led to lower ratings and higher credit risk reserves.

The bank should also monitor the size of its exposure to any one customer or industry. This helps to avoid concentrations of credit, which increase the bank's vulnerability to shifts in the financial health of any one company or industry. In addition, management must monitor the growth of its overall lending portfolio. Excessively rapid growth in lending may indicate either that underwriting standards are not strict enough or that credit risk is not being priced appropriately.

When extending credit, both supervisors and bankers should acknowledge that some borrowers experience problems. Banking, like any other business, has risks. When problems arise, the bank should recognise and disclose its losses in a timely manner. By international standards, loans typically are impaired when payments are 90 days past due. There are many banks throughout the world today that have been slow to recognise losses and begin the process of working out bad debts. This has left banks and, in some cases, entire banking systems saddled with a mountain of bad debts, which continue to restrict their growth. The bank, therefore, should have a system in place to not only recognise risks but also respond effectively if problems develop. While it is an important role of the banking sector to sometimes help borrowers work out of problems, banks must be exceedingly careful not to throw away "good money after bad". In the United States, the accrual of interest on impaired loans and the capitalisation of interest are practices that are frowned upon and usually avoided at all costs.

Operational risk

Operational risk, especially the potential for breakdowns in internal control, is among the most important risks at any bank, large or small. Some of the most spectacular losses at financial institutions have involved one or a few managers in a bank taking actions that involved errors of judgement or fraud that could have been prevented or detected by an effective framework of internal control. But the benefits of an internal control process are not just in preventing a spectacular problem, but more generally in increasing efficiency and effectiveness in meeting business objectives, while at the same time ensuring the reliability of financial and management information and compliance with laws and regulations.

Why do regulators care so much about operational risk? As I said earlier, we want banks to make money by taking risks that they can understand and measure. Unlike some other risks, operational risk is extremely difficult to measure, and as such should be avoided.

Any approach to risk management should be integrated with both the right tools to identify risk and also the organisational structure and processes to effectively deal with these factors. In September 1998, the

Basel Committee on Banking Supervision issued a paper, titled the "Framework for Internal Control Systems in Banking Organisations", which outlines fundamentals of internal controls for managing operational risk and how supervisors should evaluate them. It stresses the importance of having solid internal control mechanisms such as documentation of policies, procedures, and controls for risk management, and ways to test and validate the procedures and controls to ensure that they are being followed and understood throughout the institution. I would now like to talk more in-depth about what some of the characteristics of an effective internal control process are.

Supervisory experience as well as considerable work in many countries on internal controls have led to a few widely agreed key principles to use in evaluating a bank's internal control system. The Basel paper organises the basic principles of a bank's internal control system in five categories. They are:

1. Management and control culture.
2. Risk assessment and recognition.
3. Segregation of duties and control activities.
4. Monitoring activities and correcting deficiencies.
5. Information and communication.

All of these areas are important and an internal control framework needs to cover every area for the control environment to operate efficiently and effectively.

Management and control culture

The starting point for effective internal controls at a bank is the role of the executive management and the board of directors. Together, they are responsible for the bank's business strategy, the incentives within the bank that motivate the officers and employees, and for the risk management and internal control environment of the bank.

In the United States, the board of directors has a fiduciary responsibility to ensure the safe and sound operation of the banking organisation. The board has two important duties: choosing and compensating executive management and providing guidance and oversight to management's activities. While the day-to-day operations of the company are management's responsibility, the board of directors must review the overall business strategies and significant policies of the bank. This requires the directors to understand the risks the bank faces, to set

acceptable levels of risk, and to ensure that senior management takes the appropriate steps to establish, as well as continually monitor, internal control mechanisms. Many of these directors are independent – they are not members of the executive management of the bank, but often experienced executives from business or government. Their independence and business judgement, and above all their willingness to ask questions of management, can help management better understand the risks and the rewards of proposed strategies or policies. In short, the board of directors is ultimately responsible for the financial health of the organisation.

Senior management, in turn, is responsible for developing and executing the bank's strategies, while also limiting the associated risks and ensuring compliance with all rules and regulations. The executive management as well as the heads of the bank's various businesses, therefore, must have the necessary depth of expertise and knowledge to cover the business lines and their relevant risks, in order to carry out the day-to-day operations of the company in a satisfactory manner. Put simply, no management team should be wholly reliant on one person who commands all the banking expertise. Each member of senior management should have the ability to adequately supervise the activities of the bank's officers and employees, as well as respond to risks, in order to ensure the safe and sound operations of the financial institution.

For any internal control process to be effective, staff and managers at all levels must participate. This means that a bank should have a culture that emphasises and demonstrates the importance of internal control. Senior management and the board of directors, in particular, play a crucial role in establishing the importance of internal controls. Their attitudes and actions shape the bank's control culture and promote respect for the policies and procedures in place.

A major challenge for executive management is to ensure that business heads have the freedom to achieve the greatest possible success for their business line, while making sure that they do not take on excessive risk, incur costly errors or fraud, or violate regulations. The more profitable the business line, the harder it is for executive managers to say no to the business head's proposals to increase risk levels or defer addressing a problem. And part of the freedom business managers need is the choice of the most effective risk management techniques for their business line.

The incentive system within the bank – the system of rewards, such as compensation, promotion and business opportunities – is the means by which executive management persuades business managers to seek business success while carefully managing risks and promoting internal control. If business managers are rewarded for asset growth or attracting prestige clients, but not for business profitability, profits may fall short. If managers who advance rapidly generate profits, but ignore control problems and internal auditors, the internal control environment will likely suffer. Setting the appropriate incentives for officers and staff is one of the most difficult tasks of executive management.

Segregation of duties and control activities

Let me now turn to discussing the importance of segregating duties in maintaining a safe and sound operating environment. Under an effective internal control system, staff and managers should not be assigned to conflicting responsibilities. For example, the person or department that controls a bank's disbursement and payments should not also be responsible for reconciling payments to the bank's general ledger. Otherwise, mistakes – or outright fraud – could easily be concealed.

Control activities in general should be an integral part of a bank's day-to-day operations. The control system should define the measures available at each business level to contain risks, such as top-level reviews of transactions, independent checks on exposure limits, or a system of authorisation and verification.

Monitoring activities and correcting deficiencies

In addition to creating controls, it is important to verify that controls are followed. This is the essential principle under the third category of controls, monitoring activities and controls. While boards of directors and senior management are responsible for overseeing the entire bank's adherence to sound policies and procedures, it is important for someone from outside each business line to verify that every manager and every staff member in every business line adheres to the bank's internal controls. This critical task is carried out by the independent audit function, which ensures that everyone is playing by the rules. This is an important principle outlined in the Basel paper, which states that a comprehensive internal audit of the internal control system should be carried out by an independent and well trained staff.

Internal audit also has the broader responsibility of seeing that a bank is complying not only with its own internal policies but also national banking laws and regulations, as well as accounting standards. For internal audit to see that these rules are being followed, it must have the authority to ask questions and get answers from personnel at all levels of the bank. Moreover, for it to be truly independent, the audit function must be able to report its findings directly to the board of directors, free from the influence of the business line leaders or senior management. It is important to remember that all areas of the bank should be audited, whether profitable or not. Experience suggests that activities that are new or rapidly growing or unusually profitable often may pose the greatest risk to the financial stability and performance of the bank in the long run and deserve special attention from the auditors.

Information and communication

Information and communication form the nerve system of an internal control system. Managers make decisions based on the data they have available, and an effective internal control system ensures that accurate and comprehensive internal and external data are collected and disseminated. Those data include information on the risks, the performance, and the financial flows of the bank. Personnel at all levels, therefore, must be able to effectively monitor and measure risks, as well as quickly communicate changes in the overall risk profile to senior members of the bank. The information senior management receives must be reliable, timely, and accessible. The bank's ability to manage the flow of information between groups in the bank helps to promote a highly effective internal control environment.

To have this, managers also need reliable information systems within the bank to monitor the range of its activities. Today, information is increasingly transferred electronically. Although electronic information systems may provide more timely and accessible information, business can grind to a halt if the technology breaks down. Therefore, banks need to have a contingency or business resumption plan, in the event that computer systems fail or that natural disaster strikes.

Conclusion

Although many of the principles which I have discussed with you today are simple steps that can be taken to avoid losses, they should not be overlooked in developing a comprehensive risk management strategy for the bank. In this decade alone, many large and small banks have suffered significant losses because they did not have a sound credit risk management approach and solid internal control mechanisms to effectively manage and assess risks.

The principles of managing credit risk and promoting sound internal controls system, therefore, apply to banks of all sizes. And as banks continue to grow in size and in scope, credit risk management and internal controls become more critical to managing the bank's increasingly complex day-to-day operations. The challenge is to start today by developing and improving the internal controls and risk management processes and procedures that will help banks to maintain safe and profitable operations.

The Japanese banking crisis in the 1990s*

Kazuo Ueda

Introduction

This short note first provides a brief history of the Japanese bad loans problem. It then discusses the current state and the causes of the problem. It also describes the Japanese government's attempt to address the problem, explaining why the task has not been an easy one.

The crisis which hit the financial system in the 1990s is unprecedented in the postwar period. The ratio of publicly disclosed bad loans to total loans in the banking sector stood at 3.6% as of March 1998. Based on the self-assessment by banks, problem loans amount to 11.0% of total loans. It is now more than seven years since resolution was first officially discussed, but it has still not been possible to completely steer the economy out of the crisis.

In order to analyse the crisis, it may be useful to divide the last decade or two into several sub-periods. First, the period from the late 1970s to the mid 1980s can be characterised as the starting point of the process of financial deregulation in Japan. Second, the mid to late 1980s was a period of rising asset prices supported by massive bank lending. Third, the 1990s have seen falling asset prices, resulting in problems in the banking sector, and the government's slow attempts to address them.

The 1990s may be further divided into three sub-periods. First, the period until 1994 is one in which banks and the regulators started to recognise the seriousness of the bad loans problem. The first troubled banks to be closed, with the injection of deposit insurance funds into rescuing banks, were Toho-Sogo and Toyo-Shinkin in 1992. The Cooperative Credit Purchasing Company (CCPC) was created in 1993. Banks started to disclose bad loan numbers in 1993.

* The views expressed are those of the author and do not represent those of the Bank of Japan. The paper is an abridged and revised version of Ueda (1998).

Second, starting in late 1994, the regulators embarked on serious attempts at resolving banks' problems, which they thought were most serious among the credit cooperatives and housing finance companies (Jusen). Thus, they tried to mobilise public money, but faced serious objections from taxpayers. As a result, the sum of public money mobilised was very small, less than 1 trillion yen. In addition, the implementation of the prompt corrective action (PCA) was decided as a way to make the regulatory approach more transparent and rules-based. Unfortunately, even with these measures, the problems did not disappear.

The third period starts in 1997 when three large banks and securities companies went under, leading to a serious credit crunch. The government finally decided to mobilise a large sum of public money, 30 trillion yen initially, subsequently adjusted upwards to 60 trillion yen, to protect creditors of insolvent banks and to recapitalise some of the solvent ones. At the end of March, the government injected about 7.5 trillion yen in capital into 15 large top banks. The capital injection was considered to be enough to let the banks clear the BIS criterion after writing off the large sum of bad loans.

In the first section, I review the current state of the bad loans problem. In the next section, a brief discussion of the causes of the bad loans problem is presented. The third section takes a look at the role played by public policy towards banks in aggravating the bad loans problem. The section first discusses the relationship between financial deregulation in the 1970s and 1980s and increases in real estate loans during the period. It then goes on to cover the constraints the government had to face in its attempt to resolve the crisis in the 1990s. The final section contains some concluding remarks.

The bad loans problem as of 1998

Let us first briefly look at the current state of the bad loans problem. The definition of bad loans has changed over time and has been a source of confusion. Initially, banks were reporting only Non-accrual Loans and Past Due Loans with Restructured Loans successively added to the list. In addition, starting in fiscal 1997, the definition of Restructured Loans has been extended to make it comparable to the corresponding concept in the US. Separately, the results of the self-assessment of loans, a major

Table 1

The bad loans problem as of March 1998

	Top 20	Regional	Shinkin banks	Credit cooperatives
Number of banks	20	128	401	351
Total assets	747	265	111	23
Problem loans[1]	50.2	21.6	10.1	2.5
As a percentage of loans	11.1	11.0	13.6	16.6
Required loss provisions[2]	11.2	4.3	1.9	0.6
Hidden reserves	2.7	2.6	0.6	0
Capital	13.6	9.4	5.1	0.5
Operating profits[3]	3.6	1.9	0.8	0.2

[1] Category II+III loans by self-assessment. [2] 16.7% of Category II loans+75.3% of Category III loans. [3] In fiscal 1997.

component of PCA, have been made public since March 1998.[1] This approach classifies all loans into four categories: non-classified, i.e. healthy loans; and three types of problem loans depending on the financial health of borrowers. The bad loans based on the official definition stood at 19.5 trillion yen for the top 19 and regional banks as of March 1998, while the problem loans based on the self-assessment totalled 71.8 trillion yen. Apart from technical details, the major reason for the discrepancy is that the latter include a large sum of Category II loans, relatively the healthiest of the three types of problem loans. Category II loans amounted to 65.8 trillion yen in March 1998. Past experience suggests that only a small fraction of Category II loans become non-recoverable.[2] For a while, it seems that we will have to live with many concepts of bad loans.

Table 1 summarises bad loans and related information for major segments of the banking industry. In row 3, we show problem loans, the sum of the three categories, based on the self-assessment by banks.[3] The ratio of problem loans to total loans is highest for credit cooperatives.

[1] The official bad loan figures are disclosed for each bank, while the results of self-assessment are available only at industry aggregate levels.

[2] The bank inspections carried out by the MOF and the BOJ have used roughly the same classification of loans.

[3] Actually, PCA requires that all Category IV loans be written off by the end of a fiscal year. Hence, the figures in the table are the sum of Category II and III loans.

This accords with the fact that many of the resolution attempts so far have involved credit cooperatives.

Row 5 is an estimate of the necessary amounts of loss provisions. Based on data from its past inspections, the BOJ (1997) reports that the probabilities of problem loans becoming non-recoverable within three years are 16.7% for Category II and 75.3% for Category III. I apply the same probabilities to the classified problem loans, not shown in the table, to arrive at row 5.

Such loss provisions can be made out of hidden reserves on banks' securities portfolio (row 6), own capital (row 7), and operating profits (row 8). The sum of the three rows exceeds row 5 for all segments of the industry. Thus, banks have enough capital to make loss provisions. However, credit cooperatives would have almost no capital left once required provisions are made. After loss provisions, the capital ratios of some of the other banks seem to fall short of the BIS criterion. Hence, the current attempts at capital injection using public money.

Even more striking than the figures in the table is the amount of bad loans written off in the last few years.[4] As of March 1993, official bad loans outstanding totalled 12.8 trillion yen for the top 20 banks. Since then, the banks have written off 37.6 trillion yen of loans. As of March 1998, bad loans amounted to 14.5 trillion yen, higher than in 1993. Thus, during the five years, the banks were writing off, on average, 7.5 trillion yen of bad loans per year (42% of average bad loans outstanding during the period), but had to face an even larger increase in bad loans, 7.9 trillion yen, every year. Hence, the net increase in bad loans. This is basically due to two factors: underestimates of bad loans in the past and genuine increases resulting from the stagnant behaviour of the economy. We will come back to this point in the section on public policy.

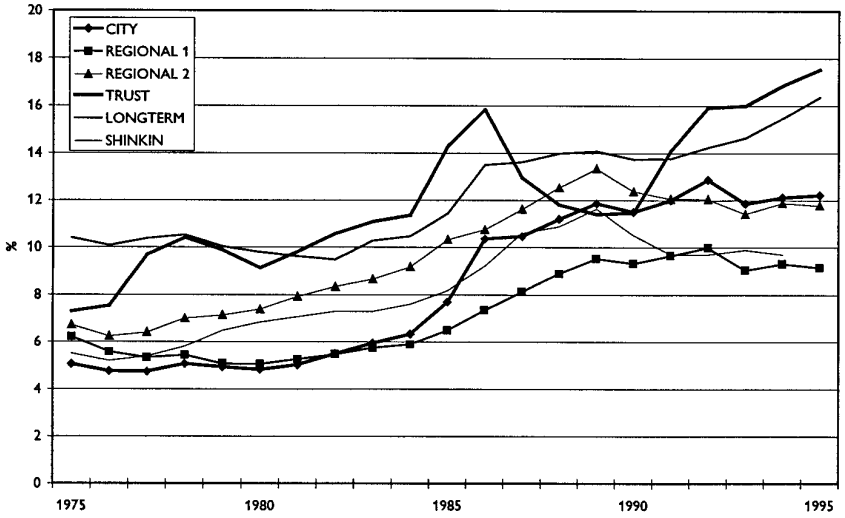
Causes of the bad loans problem

The role real-estate-related loans played in causing the bad loans problem has been widely discussed. At the aggregate level, Figure 1 shows the movements of the ratio of loans to the real estate industry

[4] Data on the problem loans as recognised by self-assessment or by regulators' inspections are only available for fiscal 1997.

Figure 1

Share of real estate loans



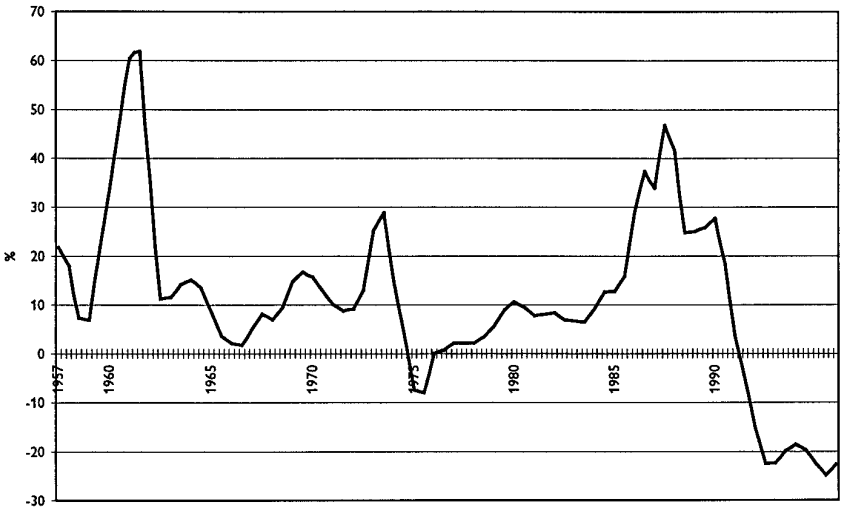
to total loans for six segments of the banking industry. Despite some differences between the sectors, the rough pattern is the same across the industry. The ratio started to go up in the early to mid 1980s, peaked around 1990 and has not declined sharply since then. The exposure to the real estate industry is higher for long-term and trust banks.

The role that real estate loans played in causing the bad loans problem can be easily inferred from Figure 2, which shows the movements of the price index for land for commercial use in six large cities. The increases in real estate loans in the mid to late 1980s, shown in Figure 1, correspond with sharp increases in land prices after the mid 1980s in Figure 2. The long period of large declines in land prices in the 1990s is consistent with the view that this has been the major cause of the bad loans problem. Incidentally, the chart shows that, with the exception of a brief period around 1975, the 1990s have been the only postwar period in which land prices have exhibited major downward tendencies. Thus, there is some truth to the argument that the large land price declines in the 1990s were an unexpected shock.

The next question is what led banks to increase real estate lending so sharply in the 1980s. Financial liberalisation, which has been steadily

Figure 2

The rate of change in Japanese land prices



taking place since the late 1970s, is sometimes claimed as one of the causes. Liberalisation hit the securities markets first. Large non-financial firms that were good customers of major banks started to turn away from banks and use the securities markets. The introduction of CDs in 1979 and the liberalisation in time deposit interest rates that began in 1985 increased the cost of funds for banks and forced them to look for lending opportunities with low screening costs. An easy place to go was real-estate-related loans, where credit analysis was just a matter of estimating the future path of real estate prices. The perceived risk of such loans must have been low, given the movements of real estate prices in the postwar period as discussed above. Large banks also went to look for customers among smaller firms. This meant a loss of customers for smaller banks. Some of them increased real estate loans as well.

Inefficient or lax bank management is sometimes regarded as a cause of bad loans. This is certainly a reasonable argument,[5] but is a bit

[5] Wheelock and Wilson (1995) find that the probability of bankruptcy was higher for inefficient banks in the banking crisis in Kansas during 1910–25.

stretched as a cause of an economy-wide bad loans problem. One must argue that many banks suddenly became inefficient.

Some safety nets have been blamed for contributing to banking instability by generating moral hazard. This view is especially strong in the literature on the US banking crisis in the 1980s. That is, troubled banks chose to get into high-risk investments only to find themselves in even worse situations.[6] The strategy was supported by regulators' forbearance approach. To my knowledge, similar analysis on Japanese banks has not been carried out yet.

Many studies have tried to test some of the above-mentioned hypotheses. In Ueda (1998), for example, I use cross-section data on the top 148 banks to analyse the relationship between real estate loans up to 1990 and the bad loans problem in the 1990s. I find that banks with higher exposure to the real estate industry suffered more from the bad loans problem in the 1990s. I also find that real estate loans in the late 1980s were larger for banks that did not have a good customer base among small firms or non-real estate sectors and for banks that experienced larger increases in their deposit rates than others. These results accord well with the hypothesis that financial deregulation forced some banks to expand real estate loans.

The above discussion inevitably leads to the question of what created the volatile movements in asset prices. Here, there seems to be general agreement that monetary policy played a crucial role. In Ueda (1997), for example, I provide a detailed analysis of the issue. I skip the discussion in this paper.

Public policy towards the financial industry and the bad loans problem

To what extent are the bank regulators to be blamed for the bad loans problem? Below I will proceed along two lines: one, the appropriate pace and scope of deregulation; and two, the appropriate design and the introduction of prudential regulation. To anticipate, public policy seems to have made mistakes on both fronts.

[6] See, for example, Brumbaugh and Carron (1987).

The first two periods: the gradual approach to deregulation

Financial deregulation started in Japan during the late 1970s for a variety of reasons, including large issues of government bonds and the pressure from the US to open Japanese financial markets. The salient feature of Japanese deregulation was gradualism and the maintenance of the segmentation approach to the financial industry. An example of the gradualism is the process of the deregulation of interest rate control on time deposits. The deregulation started in 1985, but was completed nine years later. The segmentation approach has implied that different types of financial services have been provided by different types of financial institutions with fairly strict barriers between segments of the financial industry. Thus, long-term banking and short-term banking have been separated. Trust banking services have been provided by trust banks with only a few exceptions. Smaller banks have been encouraged to lend to small businesses. Needless to say, banking and securities businesses have been strictly separated.

This policy of segmentation, when coupled with liberalisation in other fields such as development of the securities markets, has created serious difficulties for some banks. For example, long-term credit and trust banks were created as financial institutions specialising in loans to large firms. Under deregulation, these banks increasingly lost large borrowers to the bond and equity markets, and expanded real-estate-related loans. With segmentation, they were not able to move aggressively into investment banking. Similarly, smaller banks and Jusen increased commercial real estate loans because large city banks, which were also losing large borrowers, aggressively sought customers among smaller firms and individuals.

Unfortunately, the 1980s were a period when foreign financial institutions started to develop innovative financial techniques. Insufficient lifting of entry regulations prevented Japanese financial institutions from developing similar skills through competition.

With a lag of about a decade, Japan decided to carry out more full-fledged financial deregulation under its own Big Bang. With hindsight, however, it would have been much less painful in terms of the costs of deregulation and much more effective in terms of mitigating speculative real estate booms had it succeeded in carrying out the Big Bang in the 1980s.

Another problem with the prudential policy during this period concerns bank risk management. Tight controls of bank behaviour by regulators had long been a substitute for risk management by banks themselves and for monitoring by shareholders and depositors. But the controls were successively relaxed in the 1970s and 1980s. On the other hand, banks had not yet started using modern risk management techniques.[7] Depositors still had faith in regulators' ability to protect them. Thus, a vacuum emerged in bank risk management. This may have been a factor behind massive lending into real-estate-related activities, as discussed in the previous section.

The 1990s: a struggle with the BIS capital requirement

Without doubt the regulators underestimated the negative effects on the economy of the bad loans problem in the 1990s. As a result, their approach to the problem has been one of forbearance.[8] Below I will discuss some of the backgrounds for the adoption of the forbearance approach.

Since the early 1990s, both banks and regulators have been trying to achieve at least two ends, reducing bad loans and meeting the Basel capital standards,[9] with sometimes only few instruments at hand.

Large Japanese banks had capital ratios of barely above 8% at the start of the 1990s, with about half of the 8% accounted for by unrealised capital gains on their equity positions. Since then, banks have been writing off bad loans by basically using operating profits and realising latent gains on equity positions. This meant that every time equity prices plunged, banks faced the risk of not being able to meet the Basel standards or having to slow down the pace of bad loan write-offs. As of March 1998, latent gains stood at 2.7 trillion yen for the top 20 banks, only 15% of what they were in 1993, almost a negligible portion of their capital base. What has filled the gap is a sharp increase in other components of Tier II capital, mostly subordinate bonds and loans.

For domestic banks, the Basel standards were not a constraint. Aggressive bad loan write-offs, however, were sometimes not possible

[7] Even as of 1996, banks were reluctant to go ahead with self-assessment of their loan portfolio because, in their view, this would involve much preparation on their part.

[8] Early warning against forbearance was issued by a number of people, including Kane (1993).

[9] Of course, the Basel standards apply only to internationally operating banks. But with PCA, capital standards have become important for domestic banks as well. The PCA's strict application, however, was postponed in 1998 due to the prevailing financial instability.

because they may render banks insolvent, leaving regulators at a loss as to what to do for the reason pointed out below.

The difficulties banks and regulators faced along the above lines reflected a few constraints on their behaviour. First, public money for protecting depositors in the event of a bank failure was very difficult to obtain. It required the financial panic of November 1997 to persuade the public and politicians of the necessity of a large sum of public funds for the resolution of the bad loans problem. In the absence of the backing of funds, the regulators were not able to become very aggressive. Second, asset markets were not functioning properly. Despite large price declines, it has been very difficult to issue new shares in the equity market. Some suspect that the so-called Price Keeping Operations resulted in the malfunctioning of the market. Ironically, the PKOs themselves were a reflection of the recognition that large price declines in the stock market would add to the instability of the financial system.

Consequently, provisions for bad loans have been made only gradually. Intentionally, or unintentionally, insufficient loss provisions have been rationalised by insufficient disclosure of bank balance sheets. In a sense, regulators have been forced to adopt the policy of forbearance.

An important lesson one can draw from this experience is the difficulty of designing appropriate regulations and introducing them at the right time. Capital requirements such as the BIS regulation and PCA have had the unfortunate feature of intensifying the effects of negative exogenous shocks on the economy. Introduction of the regulations into the weak banking sector may have aggravated the financial instability.[10] Additionally, the inclusion of hidden reserves in the definition of the capital base has increased the destabilising nature of the regulations. To avoid misunderstandings, let me emphasise that the right remedy was not to get rid of the capital requirements, but to have addressed the bad loans problem seriously at a much earlier stage.

Concluding remarks

As stated in the introduction, the serious credit crunch that started in the fall of 1997 has finally persuaded the public and politicians that the use of taxpayers' money is necessary for the resolution of the bad loans problem. In early 1998, the government passed a law authorising it to spend up to 30 trillion yen on protecting creditors of troubled banks and on recapitalisation. Only a minor portion of the fund, however, had been spent by the summer of 1998. The government also lacked a scheme to continue the loans to healthy borrowers of insolvent banks and to carry out the restructuring of the banks in case no merger could be worked out. Meanwhile, the market attacked the Long-Term Credit Bank of Japan, among others.

In the fall of 1998, the Diet passed a set of laws enabling the government to spend a much larger sum of public money, 60 trillion yen, on the resolution of the bad loans problem and to use the bridge bank idea to handle insolvent banks. The Long-Term Credit Bank of Japan and the Nippon Credit Bank have been declared insolvent and are now controlled by management teams selected by the government under the bridge bank scheme.

The recapitalisation of the top 15 banks was carried out at the end of last March. As a result, the widespread panic psychology against the Japanese financial system seems to have subsided for the moment. The Japanese experience in the 1990s, however, leaves many difficult questions unanswered, some of which are pointed out below.

Finally, I might add that the tough problems regulators have faced in their attempts to address the bad loans problem in the 1990s have had a common element. That is, attempts to adopt a transparent supervisory framework became serious only after the economy stagnated. Thus, regulators had to face the trade-off between achieving a market-friendly regulatory framework and the maintenance of short-run stability in the financial system. A typical example is the appropriate degree of bank creditor protection. On the one hand, a market-friendly regulatory approach would call for imposing some penalty on depositors with insolvent banks. On the other, the requirement to maintain the stability of the financial system favours complete depositor protection. The regulators have respected the second consideration so far. It remains to be seen what they will be able to do in order to balance the two considerations when the current emergency regulatory framework ends in the year 2001.

[10] I fully realise that the international financial community would not have accepted a Japanese decision to introduce a radically different capital standard.

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The banking reform in Korea: issues and challenges

Yung Chul Park

Introduction

Four months into the financial crisis that broke out in late November of 1997, the Korean government embarked on a complete overhaul of the financial sector. By then two of the six largest commercial banks had already been nationalised, and the operations of 10 merchant banks were suspended. Many other banks and non-bank financial institutions had piled up huge amounts of non-performing loans (NPLs) in their balance sheets, and the losses resulting from the bad loan accumulation were driving these institutions into a state of near bankruptcy. The unsoundness and instability of financial institutions, in particular commercial banks, threatened the stability of the financial system, thereby posing systemic risks to the entire economy.

Beginning in March 1998, the Financial Supervisory Commission (FSC), newly created by consolidating separate institutions for supervision and regulation of different financial industries, went to work. At the outset, the FSC decided to revoke the licences or suspend the operations of non-viable financial institutions; clean up the balance sheets of relatively healthier institutions; create, through mergers, a relatively small number of large banks modelled on the best practice banks in the United States and Europe; and let the restructured banks take charge of corporate restructuring. To this end, Korean authorities were prepared to spend 64 trillion won of public resources.

Few countries have been able to manage such an extensive and comprehensive restructuring of the financial sector in a relatively short period of time. Because of this aggressive reform, commercial banks have become a lot more transparent and healthier than before, and the confidence of foreign investors and financial market participants in the Korean economy has largely been restored.

The reform process is, however, by no means over: it has been plagued by a series of relapses and still faces formidable challenges. This note discusses some of the unresolved issues and draws several lessons from Korea's experience with financial restructuring.

Progress in financial restructuring

According to the FSC's diagnostic review of financial institutions, 12 out of 24 banks in Korea were not viable as they failed to meet the minimum capital adequacy standard as of end-1997. These banks were then ordered to submit their own rehabilitation plans specifying the measures of cost cutting, recapitalisation and management changes before the end of April 1998.[1]

After due diligence, the FSC concluded that all of the plans submitted by the 12 banks were not feasible and rejected them at the end of June. Five banks had their licences suspended, and the remaining seven were given conditional approval. The five insolvent banks were then acquired by other healthier banks through purchase and assumption arrangements. Non-performing loans of these failed banks were purchased by the Korea Asset Management Corporation (KAMCO) at a considerable discount. The acquiring banks also received capital injections through public bonds issued by the Korea Deposit Insurance Corporation (KDIC) and guaranteed by the government, which bears interest costs. Any shortfall in the net value of transferred assets and liabilities was also covered by the government.

The remaining seven banks with conditional approval were in effect asked to merge with other banks or find strategic foreign partners which could replenish their equity capital and bring in expertise for bank management. More specifically, the FSC would purchase their non-performing loans and recapitalise them if they satisfied a set of conditions. To qualify for government support, the seven banks had to reduce manpower by 45–50%, streamline headquarters operations, consolidate the branch network, secure merger or strategic foreign partners and replace the existing management with a new breed of bankers recruited from both within and outside the banks.

[1] On Korea's financial restructuring see FSC (1998a) and Claessens, Ghosh and Scott (1998).

Other banks with a Basel ratio higher than the 8% minimum requirement were also subjected to diagnostic scrutiny. If their balance sheets needed improvement and managerial practices did not conform to international standards, they were asked to take corrective action.

Since implementation of the bank reform began in July 1998, two of the seven banks (Hanil and CBK Bank) with conditional approval, which are also among the six largest Korean banks, merged voluntarily. Another large bank (Chohung Bank) has gone through a series of management changes and internal restructuring and will merge with a regional bank. One regional bank (Chungbuk Bank) has been ordered to take steps to merge with Chohung Bank. The Korean Exchange Bank received a capital infusion conditional on management change, staff reduction, operational consolidation and an additional capital injection by its major foreign partner. There have also been two other mergers between four healthier banks. One of the two nationalised banks (Korea First Bank) has been acquired by a consortium of foreign investors, and another bank (Seoul Bank) will be sold to a foreign concern in the near future.

Most of the commercial banks subjected to restructuring have been successful in carrying out the corrective actions required by the FSC. On average, they have managed to reduce their manpower by 20% and streamline their organisations by closing down more than 700 branches so far. Some of the banks have secured foreign partners, and have made considerable progress in bringing about fundamental changes in their governance and operational structure.

The Korean government initially projected that the fiscal support required to clean up banks and other financial institutions would amount to 64 trillion won. At the end of 1998, the restructuring of commercial banks had absorbed 40 trillion won (FSC, 1999). Although the available estimates vary, the commercial bank restructuring will need a lot more financing than is projected by the government in 1999 if the economy does not recover from the ongoing crisis.

Non-performing loans and competitiveness of banking institutions

As of end-September 1998, total non-performing loans classified as either substandard, doubtful or estimated loss of 22 commercial banks

amounted to 7.1% of total bank loans (FSC, 1998b). Although the loan classification standards were strengthened as loans in arrears for more than three months are now defined as non-performing (instead of six months before), the ratio dropped because of the sale of non-performing loans to KAMCO.

In recapitalising commercial banks, the Korean authorities considered it prudent to maintain banks' capital adequacy ratios somewhere in the range of 10–13%, higher than the minimum standard, since there were considerable uncertainties regarding asset qualities, risk concentrations and other adverse financial conditions at most of the banks. This increase, it was thought, was vital to restoring the credibility of, and the confidence of foreign investors in, the Korean banks. Although the government has poured in 40 trillion won so far to meet the Basel target ratios for capital adequacy among the banks, it is not altogether clear whether Korean banks are any stronger and sounder than before in terms of their capacity to bear risks and absorb losses in the eyes of foreign investors and international financial market participants.

The credibility problem is related to the lack of agreement on the international loan classification standards. At present, any loans in arrears for more than three months are classified as substandard or below and non-performing. However, a new trend in banking eschews the mechanical loan classification in favour of a diagnostic standard, a classification based on the ability of borrowers to repay their bank loans. According to this standard, obtaining a precise figure for non-performing loans at a bank requires due diligence of its asset portfolios. Since the ability to repay depends in a large measure on the prospects of earning performance and cash flow generation of its borrowers, the amount of NPLs could vary substantially depending on how macroeconomic prospects of the economy, among other things, are perceived.

Since the Korean economy has not fully recovered from the financial crisis and, more importantly, corporate restructuring has just started, it is argued that a substantial portion of precautionary loans, those loans in arrears by one to less than three months, should be classified as non-performing. If the diagnostic standard is adopted, therefore, the official figure of NPLs may be grossly underestimated. Recognising this problem, the FSC has set aside 5 trillion won to purchase additional non-performing loans at the banks that are likely to appear in the future.

This precautionary measure has done little to improve the standing of the Korean banks.

The use of a diagnostic standard poses a number of difficult problems for the Korean authorities. In order to mitigate the confidence problem, they could provide more financial support to the banks. But this could be very costly. From the government point of view, there is also the question of deciding how much additional support would be adequate, since the earning prospects of corporate borrowers and hence their ability to repay depends on the speed of economic recovery.

Higher Basel ratios could help enhance banks' soundness and stability in the short run, but would cut into their earning capacities. If this happens, then it may take a long time for the banks to regain their competitiveness. This prospect may then undermine their soundness and hence weaken their competitiveness further. This competitive disadvantage could be more serious if financial markets are opened up while the financial sector restructuring is being carried out. This is because internationally active banks entering the Korean market could afford to maintain low Basel ratios as they are able to manage the quality and risk of their asset portfolios better than domestic banks.

High capital adequacy requirements may also produce perverse effects on macroeconomic policy management. Knowing that economic recovery is imminent and could improve the quality of assets held by commercial banks and hence lessen their burden of holding a large amount of capital, policy-makers may be more inclined to reflate the economy than recapitalise the banks.

New governing and operational structure of commercial banks

One of the conditions for the government's fiscal support for recapitalisation is that commercial banks reform their management structures using US and British banks as a model. According to the FSC's best practice model, major decisions concerning banks' business strategy, risk management and the appointment and performance evaluation of senior management would be made by an independent board of directors. The bank is also to be organised around several business units engaged in lending and investment, such as consumer and corporate banking and capital market transactions, and supporting units such as general

administration, information technology and risk management. Departing from the old structure, branches are to be reorganised basically as sales outlets instead of full service banking units as they were before.

Unfamiliar with the workings of the new management system, bank managers and staff find it difficult to adjust to a new environment and often rebel against the reform. In the light of the experience of banking reform in other countries, it may take several years to complete the structural reform at the operational level. The operational reform can be costly as well, because bank staff have to be retrained, and during the period of adjustment banks also suffer from confusion and lack of coordination among different business and support units and often lose deposit and loan customers as they move from an old centralised system to an untested decentralised structure.

The inertia problem is often compounded by the desire of senior management as well as the supervisory authorities to turn around a bank's performance as soon as possible. As far as top executives are concerned, an improvement in a bank's income statement, which is visible, would help enhance their reputation and also the chances of staff staying in their jobs, more than progress in operational restructuring, the benefits of which will only be realised in the long run and are not visible in the short run. For these reasons, senior management does not have any strong incentive to develop necessary internal policies and procedures and deploy adequate resources for implementation of the reform, all the more so in the face of staff opposition. Top executives are in fact inclined to sacrifice long-term gains for short-run profitability.

One of the side effects of the financial restructuring has been a relatively severe credit crunch. Korean commercial banks have been trying to improve and expand their risk management capacities by recruiting risk management experts, but the experienced people who could manage credit, market and other risks involved in bank investment and lending are in short supply. Having operated for so long under a tightly controlled regime, the Korean banks have had no need to strengthen their risk management, but with the speed of market liberalisation and opening accelerating, they realise a simple mistake or misjudgment in risk management could easily impair the quality of their balance sheets. Owing to a lack of experience in analysing credit risks associated with their lending, in particular to small and medium-sized firms, and together with the need to increase the BIS ratios, domestic

banks retrenched from lending much more than called for. In so doing, they contributed to prolonging the credit crunch that was initially caused by tight monetary policy at the early stage of the crisis.

Privatisation of commercial banks

In the process of restructuring the financial sector, the government had to assume the ownership of a number of major Korean banks. The government replaced their management and set in motion internal changes necessary to improve their efficiency and stability. The government plans to privatise these banks as soon as strategic investors with expertise to manage banks can be found. Domestically, they will not find many qualified buyers; chaebols and large corporations are effectively barred from owning banks. Even if they are allowed, they may not be able to mobilise enough capital to purchase banks.

Unable to find qualified domestic buyers, the government may have to turn to foreign financial institutions and investors for the sale of domestic banks at bargain prices. Since domestic banks' competitiveness has been so much weakened, the free entry into the Korean financial market may lead to the foreign domination of Korea's banking sector. If the Mexican experience is any guide, the domestic banking sector could easily be dominated by banks owned and controlled by foreign interests as weak domestic banks are driven out of the market. The foreign dominance could raise sensitive social and political issues.

In Korea's experience, the presence of foreign banking institutions either as branches or as joint ventures with Korean partners has not contributed to upgrading the quality of the financial sector or to bringing in foreign expertise. Instead, they have adjusted to the domestic banking environment so much that there are not many operational differences between foreign and domestic banks. At present, foreign banks could help facilitate the restructuring of the corporate sector as they have more experience and better skills than the Korean banks. However, if foreign investors buy Korean banks, they are certain to buy clean banks and then will not be involved in the workout. It is an open question how their expertise and experience could be transferred to other Korean banks wrestling with the disposition of corporate debts.

For more than a year, the government has been searching for suitable foreign buyers for the two nationalised banks. However, there have not

been many foreign investors interested in buying Korean banks. Korea First Bank, one of the two banks which were put on the market for sale to foreign investors, has been taken over recently by a consortium of foreign investors after a long period of negotiation. The sales negotiation dragged on because the interested buyer and the Korean government could not agree on the put-back option, that is, the disposition of new NPLs that surface during the first two years, which the buyer wanted the Korean government to assume. The negotiation for the sale of another government-owned bank, Seoul Bank, has met similar problems, although the bank is expected to be sold soon.

If these experiences are any guide, foreign investors with capital and expertise in managing banks may not be easily found. Indeed, it may take a long time to privatise government owned banks. Until suitable investors are found at home or abroad, the government will continue to assume the responsibilities of ownership. The government is not expected to intervene in day-to-day operations of these banks except to exercise its voting rights as a major stockholder.

But many people are openly questioning whether the Korean authorities could adhere to a hands-off policy, given the long tradition of government intervention in the management of financial institutions.

Commercial banks leading corporate restructuring

One of the major structural problems that precipitated the crisis in Korea was excessive corporate borrowing, much of which was short-term. The debt/equity ratios of some of Korea's major industrial conglomerates rose to 500% at the start of the financial crisis. With the increase in interest rates, the debt burden became so severe that most Korean firms, both small and large, could not remain solvent. With the onset of the crisis, the Korean authorities realised early on that the resolution of corporate debt problem was a prerequisite for the recovery of the economy from the financial crisis.[2]

Immediately after Korea agreed to the IMF programme that raised the market interest rate above 30% per annum, some of the relatively small chaebols went bankrupt and the number of business failures

[2] On Korea's corporate restructuring, see Lieberman and Mako (1998) and FSC (1998c).

jumped up sharply. Since the bulk of non-performing loans at the banks were overdue loans extended to major Korean chaebols, commercial banks could not extricate themselves from corporate debt problems.

In addressing both the banking and corporate financial problems, the Korean authorities chose to restructure commercial banks in advance of restructuring corporate debts.[3] The underlying argument for the bank-led approach was that once their soundness was restored, commercial banks would be in a position to lead corporate restructuring. This approach was consistent with market liberalisation policy and has a number of advantages, as Claessens and et al (1998) point out. In a market oriented economy, the government should not involve itself directly in restructuring corporate debts, as government intervention would, among other things, result in a repetition of the moral hazard of bailouts, in the end causing higher costs of restructuring. Since the government guarantees banks' liabilities, the banks are in fact responsible for corporate restructuring.

Despite some of the apparent advantages of the bank led approach, it has not worked as well as it was expected. The fundamental problem of this approach is that five of the largest banks – FKB, Seoul, Chohung, KEB and Hanvit, which account for the lion's share of total borrowings by Korea's 30 chaebols from commercial banks – have in effect been nationalised after the restructuring. Except for a few smaller national banks and regional banks, the government now owns practically all large commercial and specialised banks in Korea and hence should ultimately bear the responsibilities of restructuring corporations.

However, the Korean authorities have been reluctant to direct the corporate restructuring for ideological and political reasons, the banks do not believe that they have either financial clout or authority, and those workout candidates, for understandable reasons, have been uncooperative. The lack of clarity on sharing responsibilities and coordination among the major players has delayed the restructuring process.

Questions have been raised as to whether the major creditor banks have developed an institutional capacity adequate to dispose of the massive debts of a large number of corporations, especially those of chaebols. Korean chaebols are also too big and too powerful for the creditor banks to resolve their debts on their own. Even for smaller

[3] See Lieberman and Mako (1998) and FSC (1998c).

firms, banks have shown themselves reluctant to play an active role in the debt workout, for fear of being held responsible in case the workout does not succeed and also because of the social and political consequences of failure.

Currently, seven companies including 65 affiliates belonging to 24 chaebols are undertaking workout processes, but there are indications that in many cases creditor banks were unable to control those firms under the workout arrangements because they could not agree on how the debts should be restructured, and in some cases the workout process has served to keep alive insolvent firms instead of helping viable firms with short-term financial and management problems to improve their financial and competitive strength.

Recognising these constraints, the government took a major initiative in December in restructuring the nation's top five chaebols in cooperation with the creditor banks.[4] The leading role of the government in corporate restructuring raises a number of difficult questions. The debt restructuring may involve debt/equity swaps and hence result in commercial banks holding large amounts of corporate equities. Since the banks are, in fact, nationalised, the government will end up owning a large number of corporations in Korea.

The bank-led approach was chosen to mitigate the moral hazard of bailouts that occurs when the government is directly involved, but in the end the government is unable to avoid the problem. Therefore, the strategy to clean up banks before addressing corporate debt problems may require repeated recapitalisation because of the slow progress in the workout and the corporate equities held by commercial banks which cannot be disposed of quickly.

The bank-led approach poses a more fundamental problem related to macroeconomic management. Korea's major corporations including those belonging to the chaebols must not only restructure their massive debts, but also carry out the restructuring at the operational level. For example, they should: consolidate their business lines to concentrate on core ones where they have competitive advantage; institute corporate governance with an independent board of directors; adopt international accounting and disclosure standards; and develop a more profit oriented corporate culture.

[4] See FSC (1998d).

It is widely recognised that without both financial and operational restructuring, Korea will remain vulnerable to systemic crises. How does the government induce the corporations to undertake operational restructuring?

The Korean government's strategy has so far used the debt restructuring – debt write-off and extension and debt/equity swaps – as an incentive for the operational restructuring. The strategy, however, has conflicted with macroeconomic management. Beginning in the fourth quarter of 1998, there have been many signs suggesting that the economy is coming out of the recession. The economy is forecast to grow by 4–5% in 1999 as against a minus figure only a few months ago. The sovereign rating of Korea has moved up to investment grade. The stock market has also recovered, increasing the possibility of raising equity capital.

This sharp turnaround in growth prospects has also affected the behaviour of corporations in their debt workout negotiations with the banks. Korea's major chaebols are starting to believe that with some luck they might be able to ride out the debt crisis. Certainly, the bullish expectations on the future expansion of the economy suggest to both the corporations and the banks that the amounts of financial support needed for the corporations will decline. The greater availability of liquidity will then weaken the resolve of both the banks and the corporations to proceed with their workout plans. Since the creditor banks are also reluctant to get actively involved in the debt workout, they may tend to slow down or delay the workout process on the grounds that the economic recovery is likely to change the profile of corporate debts.

The rise in unemployment may indeed call for expansionary monetary and fiscal policy as corporates' earning prospects improve. There seems to be a trade-off between corporate restructuring, on the one hand, and macroeconomic policy supporting economic recovery on the other. The Korean policy-makers have yet to find an optimal strategy which will promote growth without jeopardising economic restructuring.

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Experiences of resolution of banking crises

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Executive summary

Experiences of other countries, including in Eastern Europe, Latin America and Scandinavia, suggest several important principles for successful systemic bank crisis resolution and bank restructuring. Systemic bank restructuring, a lengthy process, requires sufficient public resources, and deep changes in institutions, rules of the game and attitudes. An early and systematic evaluation of the size of the problem, an overall strategy, and prompt action can help limit economic costs. The approach needs to be comprehensive and credible and repair the immediate flow and stock problems of weak and insolvent banks and corporations. Segregation of non-performing loans from bank balance sheets to loan recovery agencies can be useful in easing the stock problem of banks. But it has risks. The government might have to provide capital to viable banks, but this should be done in such a way as not to undermine incentives for private-sector equity injections and end up rewarding poor management of banks. Also necessary can be extraordinary measures to accelerate the operational restructuring of corporations to return banks (and corporations) to profitability and sustained solvency. This in turn means effective loan workouts and properly structured loss absorption mechanisms that take into account the links between financial and corporate-sector restructuring.

As part of the changes in legal and regulatory frameworks, exit policies and procedures (for corporations, banks, and other financial institutions) typically need to be revamped and strictly administered. Capital adequacy targets should also be enforced – forbearance can be

* The paper draws on "Systemic Bank and Corporate Restructuring". The opinions expressed do not necessarily reflect those of the World Bank.

a risky and costly policy – but have to be meaningful. More broadly, regulatory changes need to balance the need for fundamental reforms with realism and political support. Experience also suggests that systemic restructuring is difficult to design and often leads to moral hazard problems. The appropriate design will depend on country circumstances, including the macroeconomic environment, the fiscal and external financing situation and quality of the institutional framework. Existing institutional weaknesses in many developing countries often rule out some options. In particular, in many countries a bank-led approach (where banks are recapitalised and take the lead in corporate restructuring) has not been enough to either resolve corporate-sector problems or lead to the desired medium-term changes in corporate financing and governance. It is also obvious that more centralised, government-led approaches have many risks.

Introduction

After briefly reviewing the origins and dimensions of many banking crises, this paper points to lessons and principles from cross-country experience with systemic bank restructuring (while the paper does analyse some of the principles which may be used in individual bank restructuring, its main focus is on systemic bank restructuring, i.e. the restructuring of the banking system which is in crisis). It then discusses how these lessons may be applied to developing countries. The paper makes clear that, while there are general principles, circumstances typically differ greatly – in the size of the problems, the institutional framework for systemic bank restructuring, and the degree of freedom government has in raising financing to defer some costs of restructuring. In the last section, some issues specific to China in systemic bank restructuring are discussed.

Origins of financial crises

This section briefly reviews the latest understanding on the proximate causes of banking crises, before turning to some of the fundamental causes. Understanding the proximate causes may help with predicting

crises, but an understanding of the fundamental factors is necessary to help with their prevention.

Financial crises have multiple causes. Causes for financial crises can be divided along two lines: more proximate causes and more distant or fundamental factors. The proximate causes of banking crises have included:

- poor macroeconomic policies and macro shocks, including large government deficits, slowdown in GDP growth, declines in terms of trade, increases in the real interest rates and inflation, and unexpected depreciations of the exchange rate;
- financial distress, including rapid capital outflows, declining foreign exchange reserves, and loss of confidence in the financial system, triggered by large vulnerabilities, such as high short-term debt to foreign exchange reserves, high credit growth, and high bank cash/bank assets; and
- institutional weaknesses, including the presence (or absence) of explicit deposit insurance, absence of resolution mechanisms, weak enforcement of contracts, poor regulation and supervision, and perverse links between corporations and banks.

These indicators predict banking crises relatively well. Slower output growth, increases in real interest rates, declining liquidity, faster credit growth, explicit deposit insurance, poor legal systems, and a generally less-developed institutional framework are found to be associated with a greater likelihood of banking crises. A number of specific institutional factors are often found to be associated with banking crises. Implicit guarantees that governments would stand behind financial intermediaries have often led to investment based, not on expected returns, but on those likely in the best of all possible worlds. Close links between the government and owner/managers of intermediaries often feature in banking crises. Overborrowing, that is, when the non-bank private sector becomes euphoric about the success of reform because of the overly optimistic implicit signals about macroeconomic developments contained in loose credit decisions, is often followed by a banking crisis.

Many of these causes featured in East Asia's financial crisis. In recent years, East Asian corporations were more highly leveraged than those in other countries. These high levels of debt went hand-in-hand with low profitability, suggesting that banks and other outside investors did a poor

job of monitoring corporate management. Typically, banks did not apply modern credit-risk analysis and management techniques, and credit tended to flow to borrowers on the basis of close relationships with bank owners and to favoured sectors, rather than on fundamentals, such as projected cash flows, or recoverable collateral values. Links between banks, corporations and government were widespread in East Asia and other countries which experienced a banking crisis. In Korea and other countries, the state historically played a big part in setting interest rates and determining the allocation of resources. In Indonesia and Thailand, many of the same families or groups that controlled banks also owned major corporations, introducing distortions into allocation of resources and dangerously concentrating risks.

Banks had poor governance and internal management, inadequate control of risks, and many financial institutions were undercapitalised. Faced with little information, and often having links with bank borrowers, bank owners exercised little control over management, and in some places, notably Korea, government interference was significant. Banks had inadequate disclosure and transparency, and most banks had very limited internal interest rate and exchange rate management systems. In the case of non-payment, banks had little means to force corporations to repay and debt restructurings often involved little more than extraordinarily long reschedulings, suggesting that asset quality was already a big problem, even before the crisis.

Non-bank financial institutions in some East Asian countries had many of the same weaknesses. In general, non-banks were feebly supervised and financed many risky investments, particularly in real estate. Moreover, non-banks were often controlled by corporations, such as the large chaebols in Korea, which added to the problem of financing on non-market terms. These weaknesses in the corporate and financial sectors were compounded by those in securities markets which lacked depth and breath, with few, good-quality institutional investors to be reliable sources of funds. With weak regulatory systems, capital markets neither sufficiently monitored corporate behaviour, nor diversified risks that were piling up in the banking system.

Financial liberalisation with inadequate supervision often plays into this unholy trinity. In Korea, for instance, offshore borrowing by merchant banks, often controlled by chaebols, was liberalised, while foreign direct investment and portfolio flows were restricted. Chaebols,

through the merchant banks they controlled, rapidly built up short-term foreign exchange borrowings, while maintaining a competitive advantage over foreign investment in domestic markets.

In most other crises, multiple factors also featured. Of 86 episodes of bank insolvency over the 1980–94 period, at least 20 of these featured "cronyism," meaning excessive political interference, connected lending, or similar labels, and at least 30 featured overborrowing. Panics by foreign investors played a role in Latin American crises of the 1980s, and premature liberalisation could be cited in virtually all cases. And of course, macroeconomic factors are common factors in bank insolvency, especially terms of trade declines or recessions.

But there are more fundamental factors behind most crises. Crises are typically manifestations of deeper characteristics of the financial sector, which make it prone to such events. The financial system often implicitly protects poorly performing firms by continuing to provide loans. Besides the failure of owners to discipline management of, particularly, state-owned, banks, incentives for prudential banking are typically weak. This includes inadequately designed and weakly enforced lending limits, asset classification systems and loan loss provisioning rules which fall short of international standards, and no clear exit policy for troubled financial institutions. Countries with systemic bank crises have often huge holes in their regulatory, supervisory, accounting, auditing and disclosure frameworks and practices. The quality and disclosure of information and financial statements is often unreliable or simply out of date. And enforcement of laws and regulations can be pitifully weak. These underlying institutional weaknesses prevailed also in many East Asian countries.

Principles for banking crises resolution

Experiences across many countries point to clear processes and principles for systemic restructuring of financial systems, during the short-term, containment phase while the crisis is unfolding, and during the rehabilitation and restructuring phase, including establishing an institutional framework for a sounder financial system. Box 1 describes the main elements of this restructuring process.

Box 1

What is restructuring?

The term restructuring, as used in this paper, refers to several related processes: recognising financial losses; restructuring financial claims; and operational restructuring of corporations and banks. In cases of systemic bank and corporate restructuring, in tandem with these restructuring processes, the institutional framework for the financial and corporate sector undergoes major changes.

Recognition involves the allocation of existing losses. Losses can be allocated to shareholders by dilution, to depositors and external creditors by reduction of (the present value of) their claims, and the government, that is, the public at large, through increased taxes, expenditures cuts or inflation tax. Restructuring of financial claims can take many forms: reschedulings (extensions of maturities), lower interest rates, debt-for-equity swaps, debt forgiveness, indexing interest payments to earnings, and so on. Operational restructuring, an ongoing process, includes improvements in efficiency and management, reductions in staff and wages, asset sales (for example, reduction in the number of bank branches), enhanced marketing efforts, and so on, with the expectation of increased profitability and cash flow.

Restructuring will have to vary by individual bank or corporation. One, conceptually useful classification of corporations can be those that are profitable in the medium term, those that cannot cover their financial costs, and those that cannot cover their financial, labour and material costs. The first probably do not need financial relief, the second are candidates for financial relief, while the third are candidates for liquidation. Of course, projected medium-term profitability will depend on the intensity of operational restructuring and on the overall economic conditions.

First things first

Contain the crisis with lots of don'ts. Financial-sector crises concentrate minds, but provide little opportunity to reflect. Nevertheless, especially in the early stages of any crisis, there are crucial choices to be made. In the containment phase, international experiences offer a clear guide to the steps to be taken even if they are mainly negative ones: don't provide liquidity on an ongoing basis to a financial institution until you are satisfied that the overview is more than adequate; don't close a financial institution in the middle of a systemic crisis until there is a credible system-wide policy on resolution; don't announce a blanket deposit guarantee, if depositors are merely running to quality within the system; and don't act aggressively, except in the context of a coherent and workable plan.

Stop the flow of bad financing and stop looting. For starters, it is important to stop the flow of new financing to bank borrowers in default and limit new lending to insolvent institutions. Managerial and shareholder incentives suddenly shift in a financial institution when it becomes insolvent: managers have no incentive to run the institution on a viable basis and their actions often speedily drain away resources – including liquidity support from the central bank. This was disastrously demonstrated in Venezuela in 1994 and in Thailand in 1997, with large-scale liquidity support – 10% of GDP – being extended to finance companies that turned out to be black holes of insolvency. Similarly, the central bank of Indonesia extended vast amounts of credits to weak banks, in some cases exceeding bank equity several times over. In the process, the monetary base was expanded and losses on these credits had to be shouldered by the government (that is, the taxpayer). And, in Korea, banks continued to extend emergency (or so-called bankruptcy avoidance) loans to financially crippled corporations as late as early 1998. All of the above illustrates that there is no reason to extend liquidity support to bankrupt banks, non-banks and corporations. When a crisis hits, it may seem that a few more months of forbearance can do little harm. Wrong. Experience shows that costs increase, as happened in East Asia when authorities were unable (or unwilling) to stop the transfer of resources out of financial institutions that had long turned insolvent. Intense regulatory oversight is needed to stop what amounts to looting by managers and owners of banks and corporations.

Do not necessarily suspend, but do impose limits. It is often not feasible or economically sensible to close or suspend a large segment of the financial sector. Abruptly closing banks in a climate of widespread uncertainty can prompt depositors to flee further and faster from banks. It also disrupts relationships between banks and borrowers, shutting off new lending or inducing borrowers to stop servicing old loans. Nor should authorities resort to the quick fix of giving guarantees to depositors and creditors to stem the loss of confidence. This limits their manoeuvrability in the future. And guarantees might not be credible anyway if the problems are big enough and the government lacks the resources and capacity to back them up, as happened in Indonesia, where a depositor run turned into a currency panic. So, if wide-scale suspension is not the right answer, what is? Preferably, a legal and institutional infrastructure – for prompt corrective action and for

intervention in insolvent institutions – is in place before a crisis to provide clarity on any intervention, including the priority of claims and procedures for transferring performing loans. Short of that, failed financial institutions cannot be allowed to return to "business as usual" without adequate capital, nor should shareholders be indemnified against losses. Countries should rather appoint a conservator or hammer out contractual arrangements, whereby the government holds some of the capital for a transitional period.

Systemic restructuring when public support is necessary

Without systemic and accelerated restructuring, often involving government financial support, problems in the financial and corporate sectors are unlikely to be resolved, and foreign investors enticed back in. In a systemic bank crisis, the problems are too large and run too deep. Insolvent banks will face incentives to gamble or will sharply reduce lending in an attempt to build up capital. Undercapitalised, the financial system will remain dysfunctional. Prompt action and large up-front investments by the public sector – through bank recapitalisation – may lead ultimately to lower costs as the moral hazard of repeated bailouts may be avoided and, more generally, as there are large benefits in getting credit flows and economies moving again. These interventions need to be preceded by some fundamental reforms, however, and be guided by principles.

Act promptly, be comprehensive and credible. Fast action is an essential ingredient for success. In many cases, piecemeal solutions were adopted. Japan, for example, has tried for almost a decade (and failed) to resolve its financial-sector difficulties through a policy of low interest rates, and hiding the real losses in its financial system. Prompt action on financial-sector restructuring is also necessary to maintain credit discipline for borrowers. In some countries, borrowers have adopted the attitude that their creditors are less likely than they to be around in the future, thus reducing their incentive to repay, even when they can.

Fixes, such as increasing lending margins or an inflation tax to restore profitability and recapitalise banks, don't work. Often in systemic bank crises, banks tried to raise spreads but only reduced the demand for financing and the number of sound firms able (or willing) to pay the

higher costs. Such cases most often led to severe costs to the economy and to financial development. In Korea, for example, limits on deposit rates in the past helped spawn a "curb" market, later formalised in non-bank financial institutions and trust-accounts of commercial banks, which have added to financial instability.

Forbearance on capital adequacy targets is most often a mistake. Most countries saw their problems multiply when banks and other financial institutions were allowed to ignore or violate prudential rules (see Box 2). Capital adequacy ratios are not something that should be

Box 2

Forbearance: Never? If ever, when? And how?

Forbearance can be structured – that is, adopted as a policy measure and applied to the whole financial sector. It can include regulatory forbearance (where existing supervisory regulations and standards are waived for an institution), accounting forbearance (where an institution is exempted from following standard accounting practice), and tax forbearances that exempt a class of institutions from paying their full taxes. It may result in lower capital adequacy requirements, more lenient tax treatments, tax breaks, loan loss reserves and provisioning requirements that are lower than expected losses, and lenient accounting standards and practices. Forbearance can also be implicit – that is, authorities turn a blind eye to violations of laws, standards and regulation by either individual banks or the entire banking system.

Forbearance may be appropriate when an otherwise healthy financial system is subjected to an exogenous shock that causes a rapid and unexpected deterioration in the financial condition of its borrowers. A natural disaster, for instance, may result in major dislocations that adversely affect the financial system. In such a case, forbearance is very appropriate while the institutions (and their borrowers) get back on their feet. But forbearance may be highly risky when it is applied to institutions that are poorly managed, lack a credit culture, and are engaged in high-risk lending practices.

Forbearance is not just an issue for developing countries. It has been applied in developed countries also. For example, in the debt crisis of the 1980s, some international banks were allowed to build up gradually their loan loss provisions against impaired sovereign claims to avoid a severe write-down of their capital. During the 1930s depression in the United States, banks were allowed to operate even though many were technically insolvent.

Throughout most of the 1980s, the federal regulators of the savings and loan industry adopted several forbearance techniques. These included lowering required capital levels, allowing extended amortisation of loan losses, allowing intangible assets (e.g. supervisory goodwill) to count as capital, and making deposits in failing S&Ls in return for net-worth certificates, which could then be treated by the S&L as regulatory capital. These policies allowed a number of insolvent and undercapitalised S&Ls to continue to operate and make new loans. The ultimate cost of this forbearance to the taxpayer, however, was enormous due to these institutions (which were known as zombie thrifts) generating huge losses.

up for discussion or compromise. Rather than lower ratios or allow violations, banks could instead be given tax and other relief on loan-loss provisioning to increase retained earnings and boost capital and, possibly, public support. Allowing entry by foreign banks and foreign investors can also be a quick way to raise bank capital. In any event, capital adequacy targets should be designed consistent with the projected profitability in the banking system and supply of new, outside capital. This in turn requires an analysis of the expected profitability and cash flow of the corporate sector.

Have a vision. A coherent realistic and sector-wide medium-term approach to the problem, steadfastly applied, is crucial. In a systemic crisis, addressing only the problems of a handful of the most severely affected institutions will not do. Unless credible action encompasses all (or most) financial institutions that are ailing or failing, market uncertainty may be heightened, rather than reduced. Asset prices will continue to languish or fall further. Systemic bank restructuring needs to be driven by a well-articulated, medium-term vision for the financial (and corporate) sector. This needs to be developed by the government, preferably in collaboration with the private sector. Private-sector involvement, both domestic and foreign, is essential, not only for design but to help restore confidence. This vision should cover, among other things, the role of various financial institutions in providing financial services, so as to allow greater and fairer competition and thereby create a more stable financial sector. It also needs to consider the concentration of the sector, for example, how many financial institutions and of what size are expected to (or should) emerge from restructuring. Too many financial institutions can reduce franchise value, and so undermine stability. Also, what part are foreign investors to play in ownership of domestic financial firms and financial assets? And, where is restructuring in the real sector expected to lead – in ownership and governance of firms, and the links between the financial and corporate sector? All of this will take several years to complete but markets will demand early on the development of a coherent, credible and articulated strategy.

Have a dedicated focus for the restructuring process. Developing a medium-term approach begins with diagnosing (the size of) the problem, which means rigorously monitoring and scrutinising all financial institutions, including detailed portfolio reviews by reputable outside (preferably international) auditors. Systemic bank restructuring must also be given

immediate focus and high-level attention. This means forming a dedicated, top-notch crisis team to coordinate the government's response to the crisis. The team should develop specific basic operating assumptions and principles to tackle the crisis and develop an immediate agenda and the general scope and direction of the next steps. Most pressing is empowerment of a single restructuring agency – whether in the central bank, ministry of finance or elsewhere – to avoid gaps and conflicts in approaches and actions.

Rehabilitation and restructuring plans of individual financial institutions can be given credibility and integrity with, for example, the participation of independent parties, including internationally recognised experts. More generally, there will often be a need for third-party inputs and technical assistance at various stages of restructuring. These include diagnostic audits of financial institutions, loan workout skills to create viable restructured assets, and investment banking skills to sell restructured assets. In many countries, adequate safeguards were not built in during the evaluation and decision making, and transparency was limited. This hardly restores the confidence of investors and depositors. For instance, when (stronger) Korean banks acquired five weaker banks in July 1998, the market reacted adversely as details on the government support for the acquiring banks were initially limited.

Use public resources as necessary, but don't bail out banks, and do change management. Government's instinctive reaction to a crisis is to allocate too few public resources. Unsure of the amount of help available, financial institutions tend to hide the true extent of their problems. Existing and potential shareholders will not put up new capital as they are uncertain about the capacity of the government to provide loss protection. More generally, it undermines confidence of depositors and investors. In short, countries need (or must be perceived) to have large enough public war chests to deal with the large costs. This will often require more-developed domestic government bond markets.

Public-sector capital injections cannot (or should not) be a bailout for existing shareholders. Rather, the aim is to allocate losses transparently and minimise costs to the taxpayers, while preserving incentives for infusion of new private capital. Corporate and bankruptcy laws establish seniority of claims and the order in which they can be written off, with equity top of the list. Thus, where a bank (or corporation) is still solvent but in dire need of debt relief from creditors or public support, existing

shareholders' equity (and so their voting power) should be diluted, but not completely eliminated. Correspondingly, where the bank (or corporation) is insolvent, claims of shareholders and subordinated debt-holders should be written down completely before public money is forthcoming (unless the government is responsible for the bank's or corporation's losses). In some of the most comprehensive bank restructurings (in 1995 in Argentina, for instance), shareholders, non-depositor creditors and sometimes depositors sustained losses, without much affecting overall confidence in the restructured system.

In the past, many countries, including some in East Asia (Thailand in 1983–87 and Indonesia in 1994), chose not to restructure – for which they eventually paid. They resolved their financial crises, in part, through partial or full public bailouts, which reinforced the perception of an implicit government guarantee, on deposits and other bank liabilities, to the detriment of market discipline. In some cases, bank management, at least partly responsible for the problems, was not even changed as part of the restructuring, which further undermined incentives for prudent behaviour. The lingering effects of such policies contributed to the following banking crises, including the present crisis in East Asia.

More generally, most bank recapitalisations in developing countries using public resources failed, with one recapitalisation following another. Efforts mainly fixed balance sheets, with little attempt to correct the underlying problems. Repeated recapitalisation led to moral hazard; with an implicit government guarantee, there was little incentive for prudential banking. Hungary, for example, had to recapitalise its banks several times before it got it right. Venezuela repeatedly restructured its banks. Even industrial countries have not been immune to recurrent recapitalisations – for example, France's Crédit Lyonnais in the 1990s. Mergers can help, but only where they make commercial sense to the acquirer. Merging two weak financial institutions will compound the problem, making the bigger bank a bigger problem down the line. Reprivatising banks hastily is a no-no, as is clear from the experience of Mexico in the early 1990s and Chile in the late 1970s.

Restructuring can strengthen financial discipline by allocating losses, not only to existing shareholders, but (at least some losses) also to creditors and depositors who should have been monitoring the bank. Allocating losses to creditors or depositors will not necessarily lead to a run on the banks or end in contraction of aggregate money and credit,

Box 3

Lessons from systemic restructuring and burden sharing

In some past crises – notably in Estonia (1992), Argentina (1980–82), Japan (1946), and the United States (1933) – governments adopted a more or less common approach. First, policy-makers undertook a comprehensive programme of financial restructuring. Next, regulators restored public and investor confidence by demonstrating that institutions still in business were solvent and well capitalised; measures to signal this included injections of (private) capital into marginally solvent banks and relicensing procedures in cases where bank solvency crises affected much of the financial systems' assets and deposits (in the United States, for example). Old, partly distressed assets were separated from new assets, and existing depositors absorbed losses. In some cases, new deposits were ranked senior to pre-crises obligations. This allowed viable financial institutions to maintain existing deposits to fund existing assets, while attracting new deposits to fund profitable new investments, thus facilitating restructuring. To limit the public's desire to shift from deposits to currency, the relative return on deposits was correctly priced. Finally, the time during which deposits of insolvent banks were frozen was kept to a minimum; a complete deposit freeze or a lengthy workout would have increased flight of depositors to currency, or other substitute assets.

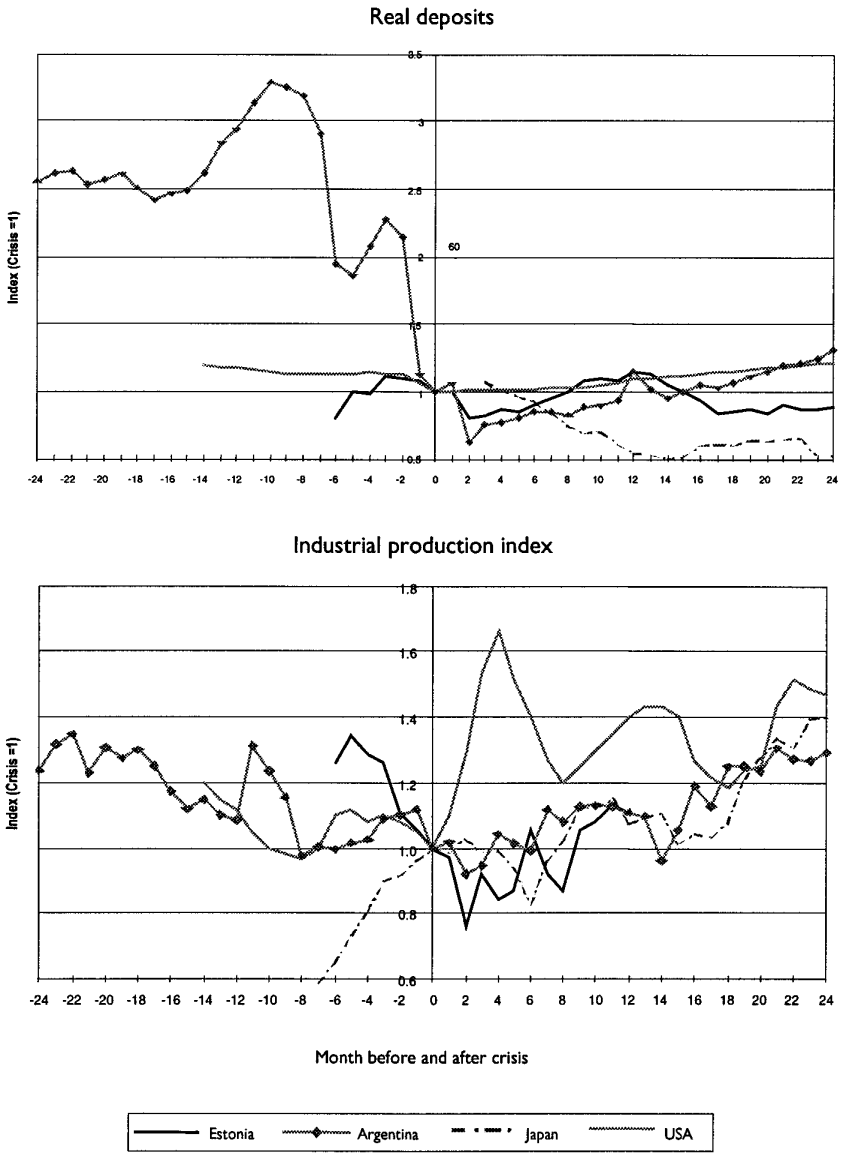
and output. In past crises, most notably the United States (1933), Japan (1946), Argentina (1980–82), and Estonia (1992), governments imposed some losses on depositors and there were few (or no) adverse macroeconomic consequences and little flight to currency (Box 3). Economic recovery was rapid and financial intermediation, including household deposits, was restored within a short time (Figure 1). Financial discipline was further strengthened when management, deemed to be part of the problem, was changed as well, and banks were operationally restructured. Similarly, rapid withdrawals of deposits at a few small banks in Argentina in early 1998 reinforced financial discipline and provided authorities with useful information.

Seek private contributions. Government can help clean up banks' balance sheets in various ways – rehabilitating assets, loss sharing, reducing debt, and injecting new capital (Box 4). The way in which it is done will matter and will depend, among other things, on the existing ownership structure of the distressed financial institutions. In the case of state-owned commercial banks, there is no choice but for the government to step up with public support, provided management is changed and the banks will undertake the necessary operational restructuring. But in the case of privately owned financial institutions,

Figure 1

When depositors absorb losses:

Estonia (1992), Argentina (1980–82), Japan (1946) and the United States (1933)



Box 4

Different kinds of support to banks

Asset rehabilitation involves swapping impaired assets for cash or bonds. These will be at market prices (less, possibly substantially less, than book value). Even so, these swaps will improve capital adequacy, liquidity and the ability to make loans and can reduce funding costs. Risk-weighted capital ratios improve because the swap, generally, replaces risky loans with low-risk investments, such as government bonds or cash.

Loss-sharing arrangements can take various shapes. They might be proportional, or the bank could take the first hit up to a certain amount, with the government covering subsequent losses according to a sliding scale. Loss sharing could also be for a limited period, say three or five years. Put-back options, interest guarantees and options to buy back assets could be used to structure loss sharing. The loans to be covered and loss sharing could be based on an (aggregate) assessment of the distribution of expected loan losses under different economic scenarios by sector. For example, commercial real-estate loans may have more favourable loss-sharing arrangements than home loans, with corporate loans somewhere in between.

Liability reductions involve writing down creditors' claims, which improves capital-to-assets ratios and potential profitability, without raising additional equity. While some East Asian countries have given creditors a blanket guarantee, it may still be possible to write down some creditors.

Equity purchases by government, subordinated debt, or unrequited injections of cash or bonds (negotiable or non-negotiable) will also immediately increase net worth, improve capital ratios, liquidity, and potential profitability. If asset values and corporate earnings are temporarily low, but will recover as the economy strengthens, support through (temporary) government capital injections may make sense. This would follow the model of the Resolution Finance Corporation in the 1930s in the United States, where a systemic economic collapse threatened banks. Temporary government support through purchases of preferred stock allowed viable banks to survive. Self-selection incentives were built in, with private shareholders needing to come up with their own capital. But the 1930s scheme was successful, largely because falling asset values were outside the control (and responsibility) of banks, and many banks were solvent conditional on the economy improving. Incentives to gamble with depositors' and lenders' money were low, partly because deposit insurance was limited. Anyway, opportunities for high-risk, high-reward investment were few and far between.

Where governments give support through purchase of preferred stock, they might forgo dividends for some time to boost banks' income. Options to put back private equity stakes to the government at certain prices and options to buy the government stake could be used to balance burden sharing. Subordinated debt convertible into equity if not repurchased by the bank within a specified time (or in the event of financial problems or managerial ineptitude) can be used to protect the government from banks' inability to service the debt (by allowing government to intervene). Such contingent clauses can also be a powerful incentive for owners and management to rehabilitate the bank as quickly and effectively as they can. Governments can finance equity, subordinated debt and cash injections by selling government paper in the market, or inject bonds, which banks can sell for cash. The main drawback of unrequited cash or bond injections is, of course, that the government does not have any ownership or control rights.

Granting government loans or placing deposits will also improve bank liquidity and provide an opportunity for the bank to buy unimpaired assets. This does not immediately increase capital, however, nor does it improve capital ratios because assets and liabilities increase by the same amount. Moreover, unless the bank has new, fit and proper owners and managers or is under airtight supervision, there is a real danger that the old-style investment mentality will resurface – that is, investing funds in risky assets, as bank owners and managers gamble on recovery.

private capital can be called upon, also as the private sector will have better information to decide on the options. Wherever possible, undercapitalised financial institutions should seek private capital at the same time as public support is offered. Those financial institutions that choose not to participate on the terms offered will either be sound or (more likely) have weak portfolios with private owners not willing to put up new capital and should be closed down. In all cases, assisted financial institutions should be required to draw up an acceptable business plan, verified by third parties, that covers capital restructuring and operational restructuring to reduce costs and improve profit prospects without taking on additional risks. Adequate safeguards, of course, are needed to ensure that financial institutions do not subsequently become undercapitalised – tight and regular monitoring and supervision, on-site and off-site.

Put in place supportive fundamental reforms. Resuscitating financial systems must be done in tandem with other fundamental reforms – initially strengthening prudential regulation, adopting internationally accepted accounting, auditing and financial reporting standards and practices, and toughening compliance and regulation. And then forging all the institutional and legal tools to resolve failed institutions and dispose of their assets.

Applying the principles for banking crises resolution

Even when the principles of restructuring are agreed, governments still have to face critical decisions. What is the best way to provide public support? How should the cost of restructuring be shared by financial institutions, corporations and taxpayers? How to decide on the lead agent for restructuring? How to arrange loan workouts? What should be the speed and sequence of restructuring? And when should financial institutions be recapitalised?

What type of mechanisms for public support?

Maximising private capital contributions – before providing public support – is easier said than done. Potential and existing shareholders, including foreign investors, are often – understandably – reluctant to provide new capital. Often there is no choice but to make public money

Box 5

How Chile handled its banking crisis

Chile's banking crisis in 1981–83 permeated the entire financial system, affecting roughly 60% of total loan portfolios. The crisis stemmed from macroeconomic problems, compounded by unsound financial practices. After an initially delayed reaction, in 1984 the government took an aggressive and comprehensive approach. Depending on their level of solvency, some banks were liquidated, others rehabilitated. Altogether, the government liquidated eight banks of the 14 it had taken over and 26 making up the banking system. It also liquidated all eight finance companies it had taken over, leaving nine operating. Along with mergers, this reduced the number of banks by one-third and finance companies by two-thirds.

Rehabilitation took two forms. One was aimed at improving borrowers' capacity to repay loans to banks. This mainly consisted of across-the-board debt reschedulings (for corporations and consumers) at below-market interest rates and coverage for exchange rate losses, affecting about 25% of the banking system's total loan portfolio. The other was aimed at rebuilding the capital base of the banking system. Distressed loans were transferred to the central bank. Existing shareholders could not receive dividends until the central bank was repaid. Payments due to the central bank depended on the extent of loan recovery, thus shifting the burden of non-performing assets on to old shareholders. This was followed by recapitalisation and equity sales of the restructured banks to small investors, using various credit facilities and subsidies to encourage them to buy.

The government strengthened banking supervision by improving loan portfolio analysis, including an early-warning system for potentially problematic loans, and increasing transparency of financial transactions. Banks were also required to be rated by two private credit rating agencies each year and obligated to the timely publication of information on their financial condition, with stiff penalties for non-compliance.

The break-up of highly indebted conglomerates, closure of perennial loss-making firms, and reprivatisation all helped corporate restructuring. Corporate ownership was deconcentrated and the equity base expanded by selling shares to the general public and encouraging investments by private pension funds, as well as involving foreign investors through debt-for-equity swaps. And more privatisations followed in 1986–88.

available for bank recapitalisation. Any scheme must not be blanket recapitalisation, however. It must discriminate based on asset quality and the reasons for non-performing loans. No support should be given to non-viable banks, which should be closed promptly. At the same time, support programmes need to be broad enough to address the recapitalisation needs of banks on a generally uniform basis. In many countries, no particular party can be tapped for new capital. Banks may have to be directly recapitalised and the government, if it does not already, will have to assume responsibilities of ownership and restructuring, until the bank can be sold to strategic investors with sufficient capital and expertise to manage it.

One aspect in the burden sharing is the structure for dealing with distressed loans. Such loans may be taken over by governments at their face value (less any provisions). To the extent that banks underprovision (which is often), the government will provide support accordingly. Contingent arrangements are also possible. In Chile, government purchases of non-performing loans were conditional on existing shareholders repurchasing those loans from future profits (Box 5). In Mexico, recapitalised banks bore 25% and government 75% of losses on non-performing loans, preserving some incentive for banks to manage and recover on these loans. In the end, non-performing claims continued to mount up (and the government is now the largest holder of financial assets in Mexico, but provides no intermediation) and corporations have not been restructured sufficiently by banks.

Coordinate various reforms carefully

The proper coordination of major structural reforms is essential. Especially, rehabilitation of financial institutions and non-financial corporations cannot be considered separately. With widespread insolvency in the corporate sector, simply restructuring financial institutions will not be enough to ensure business as usual for financial firms and corporations. Indeed, this is an especially risky time for recapitalised banks that now have the resources to resume lending, and are confronted with demands for credit from still shaky corporations. They may be reluctant to lend, but how are they to survive without a corporate clientele? And how are they to resist strong political pressures to lend to enterprises that are insolvent?

Typically, restructuring of banks and corporates is poorly coordinated. In Mexico in 1995, for example, recapitalised banks were formally in charge of restructuring corporate loans but did very little, partly because Mexican bankruptcy procedures are long-winded and cumbersome. Non-performing assets ballooned from $15 billion in 1995 to $64 billion in 1998, or 15% of GDP. Only today are the authorities coming to grips with the problem. That Mexico was still able to recover relatively quickly had more to do with its closeness to (and recent integration through NAFTA with) a major export market, the United States, than with its reform programme. Moreover, domestic financial intermediation was low and many exporting firms were able to obtain financing from

foreign sources, which partly nullified the effects of the financial-sector crisis.

Evidence from transition economies also shows that when non-financial corporate sectors were put on a sounder basis, financial sectors were able to establish and retain viability. But banks in these economies did not restructure enterprises. It was hard budget constraint, and privatisation, that encouraged the necessary restructuring. In other cases – Bulgaria, for instance – delays in restructuring of non-financial corporations have led to repeated recapitalisation of the banking system and periods of sky-high inflation. In contrast, Chile in the early 1980s, after some failed attempts, opted for comprehensive, integrated bank and corporate restructuring (see Box 5).

How to coordinate reforms? There is no blueprint for sequencing of bank, corporate restructuring and macroeconomic policies. One important aspect has been whether to recapitalise banks before, or after, corporate restructuring. Under an ex-ante recapitalisation, with appropriate burden sharing, the government recapitalises banks based on an assessment of probable losses (determined by outside audits and independent portfolio reviews). Some loans may be transferred, at the time of the recapitalisation or afterwards, to asset management companies. For remaining loans to individual corporations, the main function of bank and other creditors is to drive operational restructuring, reduce debt to manageable levels, and, if necessary, provide working capital. (The government does not intervene directly.) This approach has been used in most transition economies (with some success in Poland) and in many developing countries (with limited success) and is used in several East Asian countries.

Ex-ante recapitalisation can be fast and signal to the market that problems are being resolved. It also formalises government guarantees of bank liabilities. And, provided it is accompanied by substantive improvements in corporate governance and bank operations and is well monitored, it can be an up-front investment that leads to lower ultimate costs. But ex-ante recapitalisation has also carried big risks. Governments routinely respond to such systemic bank solvency problems by injecting capital into insolvent banks, without change in governance and bank operations, and recapitalisation is wasted. Banks will have better capacity to work out loans and take losses when recapitalised, but they may still delay restructuring and roll over

non-performing loans since they are able to attract new funds anyhow. And, likewise, corporations may have little incentive to undertake necessary operational restructuring, if they have access to new funds anyway. Banks in Japan, for example, have shown no inclination to undertake corporate restructuring, as they can continue to carry non-performing loans at low costs.

The risks are very real for many developing countries as corporate restructuring is often too heavy a burden for many developing countries' banks. Most banks do not have the necessary skills, technical capacity and institutional development – and that cannot be remedied overnight. Also, banks may not always have enough bargaining power in the restructuring negotiations with corporations. Because of the social and political consequences of restructuring and other "too-big-to-fail" reasons, banks have often not been able to hold their own against large corporates, such as large state-owned enterprises, or big family-controlled conglomerates. This has resulted in weak corporate restructuring and, ultimately, higher fiscal costs.

The other sequencing model involves tighter links between financial and corporate-sector restructuring. In the extreme, this is ex-post recapitalisation, where banks receive public funds as, and when, they provide financial relief to corporations. This model provides more time to undertake the necessary fundamental reforms and maintains pressures on banks and corporations to agree quickly on realistic financial and operational restructuring. The main drawback is uncertainty, as depositors and other creditors can be uncertain about the quality of their claims. One compromise might be to provide some public funds or guarantees immediately with further support conditional on progress in corporate debt restructuring.

Conclusions

Experiences from other countries suggest several important principles for successful systemic restructuring. It requires sufficient public resources, deep changes in institutions, rules of the game, and attitudes, an early and systematic evaluation of the size of the problem, design of an overall strategy, and prompt action. The approach needs to be comprehensive and repair both the flow and stock problems of weak and insolvent financial institutions and corporations. Shifting non-performing

loans from bank balance sheets to loan recovery agencies can be useful in easing the financial institutions' stock problem – but it has risks. The government might have to provide capital to viable financial institutions, but this should not undermine incentives for private-sector equity injections. Extraordinary mechanisms to accelerate operational restructuring of corporations are necessary to return financial institutions and firms to profitability and sustained solvency. This, in turn, requires effective loan workouts and properly structured loss absorption that also take into account the links between financial- and corporate-sector restructuring. Exit policies and procedures – for firms and financial institutions – need to be revamped and strictly enforced. Capital adequacy targets need to be meaningful, but should be enforced as forbearance is risky and costly.

Experience also shows that systemic restructuring is difficult to design and often leads to moral hazard. Appropriate design depends on country circumstances, including the overall macroeconomic environment, its fiscal and external financing situation, and quality of the institutional framework. While there is no catch-all solution, there is no alternative to a comprehensive and integrated solution. Existing institutional weaknesses in many developing countries also make some options less preferable. In particular, a bank-led approach – where banks are recapitalised and take the lead in corporate restructuring – has rarely been sufficient to resolve corporate-sector problems – and thus restore financial institutions' capital positions. It is also clear that more centralised, government-led approaches have many risks for developing countries. Hard budget constraints and complementary actions will be necessary.

In addition to these difficulties, systemic bank restructuring in China poses some specific challenges. Major constraints to bank restructuring in China include: (i) the lack of banking skills at the level where information is gathered and decisions are made, (ii) the government's large role in the credit allocation process, (iii) limited accountability of individuals and local decision making units in credit and restructuring decisions, (iv) limited quality of information for internal control and external supervision purposes, and (v) unreliable information on the financial situation of bank clients. Furthermore, the government has to take into account any adverse social implications of enterprise reform as a result of banking reform.

The government has already embarked on some major reforms including asset classification according to internationally acceptable principles, and the allocation of some fiscal resources for bank recapitalisation. The experience of other countries suggests that bank restructuring is a long process and it will be important to continue to devote substantial financial and human resources over a long period of time.

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China's experience in small and medium financial institution resolution

Liu Shiyu

China has been constantly deepening its financial system reform as it endeavours to construct a socialist market economy. A financial system serving the need of a market economy and characterised by a multi-layer and multi-category structure has taken shape in China. Depository institutions such as regional commercial banks, city commercial banks, urban credit unions and rural credit unions have grown to become an important part of the country's financial system. At the end of 1998, there were 10 regional commercial banks, 88 city commercial banks, 3,200 urban credit unions and 44,000 rural credit unions countrywide. The assets of these institutions totalled RMB 2.9 trillion, representing 28% of the total assets of all depository institutions (see Table 1). Small and medium financial institutions have been playing an important role in supporting the development of small and medium businesses and the expansion of employment. However, due to lack of managerial skills, negligence of the basic principles of asset-liability management and even

Table 1

Balance sheets of small and medium financial institutions in China

Types of institution	Number of institutions	Total assets	Loans	Total liabilities	Deposits
		in billions of RMB			
Regional commercial banks	10	877.6	521.6	822.7	764.5
City commercial banks	88	494.2	230.8	470.9	382.2
Urban credit cooperatives	3,200	267.3	168.9	265.1	246.2
Rural credit cooperatives	44,000	1,261.1	834.0	1,246.0	1,219.1
Total		2,900.2	1,755.3	2,604.7	2,612.0

defiance of relevant laws and regulations, a small number of small and medium financial institutions incurred severe losses and turned out to be insolvent. The People's Bank of China has taken a variety of legal measures such as closure, assistance and management takeover to tackle the problem institutions.

Summary of closure activities concerning small and medium financial institutions and a case study

The PBC closed 42 problem depository institutions: one commercial bank (Hainan Development Bank), 23 urban credit cooperatives and 18 rural credit cooperatives in the course of 1997 and 1998. In addition, The PBC closed three trust and investment companies (China Agricultural Trust and Investment Corporation, China Venture Investment Corporation and Guangdong International Trust and Investment Corporation). The face value of assets of the closed institutions totalled RMB 108.8 billion (see Table 2).

Over the two years, the PBC acquired some operational experience in closing problem financial institutions. Trust liquidation was imposed on the majority of closed institutions. The PBC established a set of standard

Table 2

Summary of closure of financial institutions in China

Closed institutions	Closing date	Face value on closing date (in billions of RMB)	
		Assets	Liabilities
5 urban credit cooperatives in Hainan	16/12/97	5.4	5.9
Hainan Development Bank	21/6/98	16.9	16.6
Urban Credit Cooperative in Luchuan, Guangxi	16/6/98	0.2	0.2
Hongye Urban Credit Cooperative in Qinghai	12/7/98	0	0
12 urban credit cooperatives in Beihai, Guangxi	26/10/98	1.5	1.8
20 urban credit cooperatives in Pingen, Guangdong	7/12/98	8.5	8.3
CATIC	4/1/97	30.1	31.4
CVIC	6/98	10.3	10.4
GITIC	6/10/98	35.9	34.1
Total		108.8	108.8

procedures for closure, liquidation and management takeover. While liquidation of CATIC has been completed, other closed institutions are still in the liquidation process. GITIC has entered the bankruptcy process. Hainan Development Bank is very close to the completion of payment on its deposits. Liability registration of credit cooperatives has been progressing smoothly. In the liquidation process, household savings deposits were paid in batches based on the asset quality of the closed institutions. As priority is given to small and medium depositors, the majority of the creditors remained calm. There was no sign of social instability.

Case study

For a more detailed introduction to the closure of small and medium financial institutions in China, the case of 14 urban credit cooperatives in Beihai, Guangxi Zhuang Autonomous Region will be taken as an example.

A common feature of the 14 institutions was the large proportion (over 50% at the end of 1997) of loans to the real estate sector. As the bubble burst, the bulk of such assets turned into losses of varying degree. Moreover, long-standing chaotic management and moral hazard problems had led to poor asset quality and severe losses in these institutions. On 14 March 1998, the 14 institutions had total assets of RMB 1.75 billion and total liabilities of RMB 1.87 billion. Their accumulated losses over the years reached RMB 180 million.

In September 1997, a sudden run on deposits took place at Dayecheng Urban Credit Cooperative in Beihai and rapidly spread to other urban credit cooperatives. By the end of March 1998, 11 urban credit cooperatives were unable to repay matured deposits. The default on matured deposits reached RMB 560 million. By June 1998, all 14 local urban credit cooperatives had fallen into an overall payments crisis. Upon finding that the 14 institutions could not be bailed out, the PBC decided, after consultation with the Guangxi Zhuang Autonomous Region Government, to close them on 26 October 1998 by revoking their *financial institution legal person licence* and the *financial institution operation licence*. The PBC set up liquidation teams consisting of relevant agencies of the local government and professionals. Twelve of the institutions were entrusted to the Construction Bank of China. It took the liquidation teams and trust teams two months to complete the

clearing of assets and registration of debts. Based on the result of asset clearing and evaluation, it was decided that the first payment on savings deposits was to be made on 28 December 1998. Two payment principles were set: (1) the maximum payment per account was RMB 10,000; (2) the remaining debts were to be paid in instalments and in proportion depending on the proceeds from the sale of assets. By now, small savings depositors (accounting for roughly 60% of all depositors) will have been paid in full.

So far, administrative closure of problem financial institutions that cannot be bailed out has proved to be effective in locking in the levels of losses and liabilities, reducing cost in risk management, protecting small and medium depositors and averting systemic risks. In addition, the closure is conducive to alerting the public consciousness to financial risks and containing moral hazard behaviours. However, the process of liquidation and management takeover took a significant amount of financial and labour resources on the part of the PBC and entrusted banks. Meanwhile, the resolution of non-performing assets proved to be very difficult. It remains to be discussed how to accelerate the resolution process.

Assistance of problem small and medium financial institutions: a case study

Weihai City Commercial Bank basically arose from a merger of five urban credit cooperatives. Due to problems inherited from the former credit cooperatives, mismanagement and deteriorating creditworthiness, the bank had serious liquidity problems and great difficulties meeting its obligations.

In September 1997, the PBC, together with the local government, implemented priority supervision on the bank. The PBC also provided some loans to alleviate the bank's liquidity pressure. Meanwhile, the PBC gave consent to the bank's proposal to increase capital by RMB 250 million to obtain a paid-in capital of RMB 350 million and a nominal capital adequacy of 9.09%. This measure strengthened the bank's capacity to shield against risks. The management was dealt with according to the relevant legal procedures. The bank's operation was gradually put back on track.

As a next step, the PBC will guide the bank's restructuring through conversion of debt into equity. The move is expected to improve the bank's asset-liability ratios and to further strengthen its resilience to risks.

Management takeover as a resolution of problem financial institutions: case study

Hongfeng Urban Credit Cooperative in Guiyang City started to show a high risk of insolvency in 1996. The credit cooperative had deteriorating creditworthiness and repeated payments crises. At the end of 1996, the credit cooperative's assets totalled RMB 14.32 million, liabilities totalled RMB 12.89 million, net worth totalled RMB 1.42 million (paid-in capital RMB 1.44 million) and accumulated loss over time totalled RMB 390,000. The credit cooperative's deposit-loan ratio was 70% and non-performing loan ratio 100%. Its poor asset quality and severe losses mainly resulted from chaotic family-style management. In April 1997, there was a run on the credit cooperative. After a series of measures by the PBC and local government aimed at resolving risks, the PBC took over the management of the credit cooperative on 1 November 1997. After practising strict internal control, clearing assets, recalling overdue loans and developing new business, the credit cooperative's overall asset-liability ratios were significantly improved. Public confidence was restored. The credit cooperative has now normalised its operation.

Some thoughts on closure of small and medium financial institutions

How to protect more fairly the interests of different categories of depositors to avoid systemic risks?

Deposit insurance systems have been set up in many countries to protect small investors, maintain the stability of the financial industry and, in particular, enhance the confidence of medium and low-income groups in the financial system. Deposit insurance funds are established to support necessary takeovers and transfers. As reform in the financial

sector deepens in China, financial risks accumulated from, and dormant in, the past will gradually materialise. Measures need to be taken as early as possible to prevent, mitigate and resolve financial risks. To draw on other countries' experiences and to establish a deposit insurance system with Chinese characteristics is therefore a very urgent task. The principles concerning the protection of small depositors and debt repayment observed in problem financial institution resolution in China have been implicitly a kind of deposit insurance system.

How to handle the assets of closed institutions?

The most difficult aspect of the liquidation of closed institutions is the management of their assets. If discounted immediately, the assets would lose their value more severely. If the assets were not sold at a discount for a long period of time, the administrative and liquidation costs would increase. How to manage the assets of closed financial institutions is therefore a great challenge.

Closure of financial institutions in China

Zhu Jun*

With the deepening of financial reforms and expansion of financial markets, the accumulated financial risks hidden in China's financial system are gradually being exposed. While the big four state-owned commercial banks are facing the problem of non-performing loans, some of the small- and medium-sized financial institutions are running high risks because of keen competition and poor management. Some have even suffered payment crises. Warding off financial risks, keeping financial institutions sound and promoting the healthy development of the financial industry are urgent tasks for China's financial authorities.

Introduction

Over recent years, China has taken a number of measures to strengthen its financial system. In 1998 a special government bond amounting to 270 billion yuan was issued to the four state-owned commercial banks for the purpose of strengthening their capital base while reserve requirements were lowered. A number of small institutions such as urban credit cooperatives were merged, some were acquired by larger institutions, and several institutions in difficulties were closed by the People's Bank of China (the PBC). This paper will focus on one important aspect of recent bank restructuring in China – the closure of financial institutions – and discuss the approaches used, problems with them and ways to improve them.

The first part of the paper describes preconditions, procedures and characteristics of the closure of financial institutions in China. The second part analyses problems in closed institutions and provides a case study of closure. The third part discusses several policy issues related to closures, and the last part presents conclusions.

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Closure versus other restructuring instruments

Legal basis for closure of financial institutions

There is no explicit definition of closure of financial institutions in China. The main legal basis for closure is the *1986 Bankruptcy Law* for general enterprises and the *Provisional Regulation on Financial Institutions* promulgated by the PBC in 1994. Furthermore, the *Law on the People's Bank of China, Commercial Banking Law and Company Law* also provide some reference for closure.

In practice, when a financial institution incurs heavy losses and cannot meet maturing debts because of illegal operations or poor management, the central bank will close it legally. Therefore, to close a financial institution means the central bank uses compulsory administrative measures to terminate the operations of financial institutions, and dissolves them.

Preconditions for closing financial institutions

The PBC sets out the following nine preconditions for closing financial institutions in *its Provisional Regulation on Financial Institutions*. The PBC will close an institution if:

- it violates relevant laws, rules or policies stipulated by the authorities;
- it does not start to operate 90 days after the Licence For Legal Person and Licence For Operation of Financial Business have been granted;
- its capital does not meet the minimum standards required by the central bank, or its management does not meet the "fit and proper" requirements of the central bank;
- it has ceased operation for more than six consecutive months or cumulatively for more than one year;
- it merges with, or is acquired by, another financial institution;
- its losses in each of the last three years have been more than 10% of its capital, or accumulated losses have been more than 15% of its capital;

- it does not make sufficient progress after failing to qualify in an annual review based on major financial statements,[1] or fails to qualify for two successive years in annual examinations;
- it provides false information or behaves inappropriately during application for establishment;
- other situations arise under which the central bank thinks the institution should be closed.

In practice, the PBC will close a financial institution when any of the following three situations emerges:

1. It has been continuously loss-making for several years.
2. It is seriously insolvent, cannot meet maturing debts, and has suffered a bank run.
3. It violates relevant rules or laws.

Closure procedure[2]

Once the central bank has decided to close a problem institution, the following steps are taken:

First, the central bank publishes its decision to close the financial institution. At the same time, the closed institution stops operation.

Second, if necessary, the PBC will designate a financial institution (usually a commercial bank) to take care of the claims and liabilities of the closed institution as well as unwinding its business.

Third, a liquidation team will be set up to liquidate the assets of the closed institution, to calculate its losses and net assets, and to confirm and register its debts. The team usually includes representatives from the central bank, the closed institution and other experts. As to the closure of some small institutions owned by local governments, since the repayment of their debts usually involves public or budgetary funds, representatives from local governments are sometimes also included in the liquidation team.

[1] The PBC and its subsidiaries are authorised to conduct on-site examinations of financial institutions at any time to examine their routine business. Furthermore, the PBC and its subsidiaries are required to carry out annual off-site reviews of financial institutions in the first quarter of each year. For further information, please refer to Chapter IX, *Provisional Regulation on Financial Institutions*.

[2] Closure of banks and other restructuring measures are discussed in general in John Hawkins and Philip Turner's "Bank Restructuring in Practice: an Overview", and with specific reference to China, see Xie Ping, "Bank Restructuring in China", both in *Policy Papers* No. 6, BIS, August 1999.

Fourth, principles are promulgated for the repayment of debts. This decision is usually made with reference to relevant laws such as the *Bankruptcy Law* and the consideration of protecting the interests of residents and foreign creditors. Therefore, in general, the principal and legal interests of foreign debts and household deposits would be repaid in priority.

Finally, if liquidators find that the institution incurred such heavy losses that it is impossible to repay most of its debts, either itself or its creditors may apply to the court for bankruptcy. Once the bankruptcy procedure begins, the procedure of closure and liquidation terminates.

Characteristics of closure of financial institutions in China

Given the existing legal and institutional infrastructure, there are two salient characteristics in the closure of financial institutions in China.

First, the nine conditions for closure are relatively general compared to international standards; some of them are even vague. This is mainly because they were first stipulated in 1994 while the first case of closure occurred in early 1997. The central bank lacks experience with closure, and the old rule cannot fit into current situations given the rapid development of China's financial industry over the last two decades. With the introduction of market mechanisms and development of financial markets, a new regulatory framework for closure has been necessary.

The second characteristic is the combined application of market discipline, government's involvement and legal regulations in closures. Government's involvement was usually embodied in their significant roles in decision-making concerning the disposal of problem institutions as well as the funds they provided for the repayment of household deposits and foreign debts. It is necessary and helpful for the government to provide funds for the repayment of debts given the unsound legal framework and market conditions in China.

Other alternatives for bank restructuring in China

Recapitalisation. This means the governments or shareholders inject new capital or quality assets into financial institutions owned by them to strengthen their capital base.

Bankruptcy. Commercial banks or other financial institutions that are not able to meet maturing debts will be declared bankrupt by the courts with the consent of the PBC. Either the institution itself or its creditors may apply for bankruptcy. Bankruptcy may also result from closure and central bank takeover.

Merger. Usually, merger should be based on commercial principles. In such circumstances, merger is an autonomous decision made by financial institutions. However, mergers can be used as restructuring instruments of the central bank. To deal with problem institutions, the central bank may compel them to merge with a healthy and sound institution.

Central bank takeover[3]. This is another way for the PBC to deal with problem institutions. Takeover means the central bank takes over such an institution and is responsible for it temporarily. This happens when a financial institution is or might be in crisis and this might affect depositors. The purpose of the takeover is to take necessary steps to protect depositors and to help restore it to operation. After a financial institution has been taken over by the central bank, its claims and debts will not change.

The PBC cannot own the institutions it has taken over for more than two years. After this time, the central bank must decide how to dispose of the institution. If its problems have been solved, the institution can resume operations; otherwise, it has to be merged with other institutions or go into bankruptcy.

Central bank or government assistance. When a financial institution is in trouble but basically solvent, the central bank may provide liquidity assistance to it. Usually, when small-sized institutions owned by local governments meet with difficulties, the local governments have responsibilities for assisting or rescuing them through new capital injection or liquidity help.

Sometimes, even if the central bank or local governments have provided assistance to troubled institutions, they still have serious problems. In this case, the central bank will finally close them.

The Chinese authorities have adopted all these approaches in bank restructuring over recent years. In 1995 the PBC took over the Zhongyin Investment and Trust Company for the first time, and an instance of recapitalisation occurred when the government recapitalised

[3] Article VII, Commercial Banking Law.

the four state commercial banks in 1998. Only one institution (GITIC) has gone bankrupt up to now. In contrast, merger as well as central bank or government assistance seem to have been adopted more frequently in resolving small- and medium-sized institutions.

Case study: closure of financial institutions in China

Four medium-sized financial institutions have been closed since 1997: one commercial bank – Hainan Development Bank[4] – and three International Trust and Investment Companies (ITICs) – China Agribusiness International Trust and Investment Company (AITIC), China Venture Technology Investment and Trust Company (VITIC) and Guangdong International Trust and Investment Company (GITIC). In addition, 23 urban credit cooperatives and 18 rural credit cooperatives were closed during the same period.[5]

All these closed institutions are now in conservatorship and liquidation except AITIC and GITIC. AITIC's liquidation has been finished and it has been dissolved; GITIC is now undergoing bankruptcy proceedings.

Problems of the closed institutions

Inadequate internal control and poor risk management

Inadequate capital. The capital ratios of the closed institutions were far below 8%. Even so, they used to extend loans to shareholders to provide them with funds used as equity.

Serious structural imbalances between assets and liabilities. The institutions invested in long-term assets with short-term liabilities and borrowed heavily. Their loan/deposit ratios and leverage ratios were too high.

Low asset quality and high risks. The non-performing loans persisted at relatively high levels since large amounts of loans were either related

[4] Xie Ping, "Bank Restructuring in China", Policy Papers No. 6, August 1999, BIS.

[5] Liu Shiyu, "China's experience in small and medium financial institution resolution", in this volume.

loans or were invested in property. Furthermore, the proportion of loans without guarantees or collateral was relatively high.

High credit concentration or market concentration. The closed institutions used to extend large amounts of loans to a single borrower or market. Once the borrower or the market failed, the institutions incurred heavy losses. For the 14 closed urban credit cooperatives, 50% of their loans were for property. When the property bubble burst, most of them became bad loans, and the institutions made large losses.

Weak governance and absence of positive incentives

Most of the closed institutions were set up only a few years previously by bigger institutions or local governments. Their operations were mainly based on administrative instructions and good relations with relevant authorities so as to enjoy priorities in their operations. Effective governance was absent; the assessment of staff was not based on performance and staff therefore lacked a positive incentive to promote the sound development of the institution.

High concentration of financial institutions and strong competition

By the end of 1998, there were a total of 104 commercial banks (four state-owned, 10 joint-stock banks, two regional housing savings banks and 88 city commercial banks) operating in China, as well as 239 ITICs, 91 securities firms, 25 insurance companies, a large number of urban and rural credit cooperatives and some other institutions. Most of these institutions set up their own networks of subsidiaries across the country. Given the limited size of the market, these institutions competed heavily, some of them even conducted illegal and risky business.

Weak basis since establishment due to wrong decisions

Though establishing a financial institution is subject to the approval of the central bank, some local governments exerted great pressure on the local branches of the central bank to get approval for small institutions aimed at meeting their financing demands. In this way, some institutions did not have enough capital, or the market for them was very narrow, which led them into distress immediately after establishment.

Moral hazard

To some extent, the risky behaviour of some small- and medium-sized institutions resulted from the belief that the central bank or local governments would come to the rescue when they got into trouble. Moral hazard is a long-standing problem with financial institutions, and has proved difficult to remove.

Closure of GITIC and its impact

The history and nature of ITICs

ITICs were born in the early 1980s when China's economic reform unfolded. With the development of the economy, domestic entities' demand for finance increased sharply and inflows of foreign funds grew rapidly. At the same time, the market infrastructure was still in its infancy, so it was very difficult for creditors, especially foreign creditors, to obtain enough information and to oversee borrowers efficiently. In response, some financial institutions, including ITICs, were founded by local governments and some big commercial banks, aiming at serving as intermediaries between companies in need of funds, financial institutions and suppliers of funds.

The main business scope for ITICs was stipulated by the PBC in 1986 in its *Provisional Regulation on the Trust and Investment Company*.[6] Some of the larger ITICs were also licensed by the central bank to conduct foreign business, including raising foreign debt in international markets. However, given the great pressure from local governments or their parent institutions and strong competition, some ITICs also conducted banking business in disguised forms. Non-performing assets of ITICs stood at relatively high levels and some of them got into trouble.

The PBC had consolidated the ITIC industry several times to ward off the risks to which it exposed the whole economy (Table 1). The number of ITICs decreased steadily during the last two decades, from more than 620 in 1982 to 239 at the end of 1998. The most significant

[6] ITICs are allowed to conduct the following business: (i) trust business specified by settlors or testators; (ii) general trust business requested by settlors or testators without any special specifications; (iii) financial leasing business; (iv) agency services related to trust asset management, including collection, custody and securities issuance; (v) securing and issuing currency debt; (vi) other business approved by the PBC.

Table 1
Consolidations of ITICs

Time	Main measures	Number of ITICs
1982	Consolidation of institutions. The State Council decided all ITICs sponsored by local governments had to stop operations. Only banks could set up ITICs, and all ITICs had to be subject to banking credit quotas.	620
1984 and 1985	To deal with the overheating of the economy, the State Council and the PBC urgently consolidated trust business, and required ITICs to restrain trust loans and to withdraw non-trust loans. Trust loans and trust investments were suspended temporarily in 1985.	–
1988–91	Most ITICs established subsidiaries all over the country and conducted unauthorised business, collecting deposits with high interest rates. This coincided with the market disorder and high inflation at that time. The State Council and the PBC decided to segregate trust business from banking business.	1991: 371
1993	In a situation similar to 1988, the State Council required ITICs to sever links with their funding sources – mainly commercial banks.	376

Source: PBC (1994): *Fourteen years of reform and opening up*. China Finance Publishing House, pp. 20–2.

step by the Chinese authorities in consolidating ITICs took place in 1993 when they severed the links between the 376 ITICs and the banks, which were their major funding source. It was one of the efforts by the authorities to pull the financial system back on track from disorders during that period. By 1995, out of the total of 391 ITICs, the number of those attached to banks dropped from 186 to 38. At the end of 1998, the total assets of the 239 ITICs stood at more than 600 billion yuan (7.5% of GDP), and 21 of them operated nationwide.

Background of GITIC

Founded by the Guangdong provincial government in July 1980, GITIC became a non-bank financial institution in 1983 with the approval of the

PBC and was licensed for foreign exchange business. In 1989, it was appointed by the former MOFTEC (Ministry of Foreign of Technical and Economic Cooperation) as one of the so-called "Big Ten Funding Windows"[7] for borrowing abroad. Over the past two decades, GITIC sponsored and supported a number of important infrastructure projects in Guangdong Province and was once ranked the second biggest ITIC in China. At the end of 1980s, it expanded from a trust company into an enterprise group involved in both the financial market and industries, and established more than 200 subsidiaries. Some famous enterprises in Guangdong Province formed its good assets. It was a famous investment arm of Guangdong Province and China's best-known borrower on world capital markets.

Closure and bankruptcy of GITIC

However, due to its poor management, deposits with unusually high interest rates, illegal interbank business, illegal investment and evasion of supervision, GITIC failed to meet its maturing debts in 1998. The PBC declared it closed on 6 October 1998 to protect creditors' interests. The three-month liquidation found GITIC's aggregate assets were only 21.5 billion yuan while liabilities were as high as 36.2 billion yuan, which meant the liability/asset ratio was 168% and GITIC was apparently insolvent.

Its Board of Directors decided that GITIC and three of its over 200 subsidiaries – GITIC Shenzhen Company, Guangdong International Leasing Company and Guangxin Development Enterprise – would apply for bankruptcy in January 1999. Proceedings are now under way.

Among the total of 240 creditors of GITIC, 135 were foreign creditors, and their claims accounted for about half of the total. Among the foreign debts, part had been raised without approval from the State Administration of Foreign Exchange (SAFE), and were unregistered illegal

[7] These were appointed by MOFTEC in 1988 to curtail the extremely high growth of foreign debt. Foreign debt increased significantly in the 1980s, and the funding cost increased sharply. After the appointment, only the ten funding windows could raise funds on international markets.

The ten funding windows included three commercial banks and seven ITICs: the three banks were Bank of China, Bank of Communication and China Investment Bank; ITICs were China International Trust and Investment Company (CITIC), Shanghai ITIC, GITIC, Dalian ITIC, Tianjin ITIC, Fujian ITIC and Hainan ITIC.

debts. Therefore the central government of China would not accept responsibilities for them. Registered legal foreign debts, instead of being fully honoured by the government, were therefore to be treated equally with domestic debts, and how much of them can be repaid depends on the net realisable assets after liquidation.

This decision differed from market expectations. Many foreign creditors believed that the Chinese local or central governments, especially the Guangdong provincial government, would honour their claims as in earlier cases. Without priority for being repaid fully, they would suffer heavy losses. Hence some creditors tried to lobby the Chinese authorities for GITIC to be restructured instead of being made bankrupt, but China's *Bankruptcy Law* allows restructuring plans only when creditors force bankruptcy on the company, whereas GITIC had entered bankruptcy voluntarily.

Implications for China

The most significant feature of the closure of GITIC is the different treatment of foreign debts compared with earlier cases, and it has had some significant consequences for China. On one hand, it had some adverse effect in the short term. After the episode, foreign creditors began to reassess the soundness and profitability of other ITICs with some even withdrawing their credit lines. A few ITICs, such as Huitong ITIC based in Hainan Province and Guangzhou ITIC in Guangdong Province, suffered due to the contagion effect of the loss of confidence. At the end of July 1999, Standard & Poor's announced a downgrade of China's sovereign credit ratings. In the near future, capital inflows might slow and the confidence of foreign banks in China might be weakened. If foreign banks no longer roll over their claims for fear that they might be unrecoverable, some Chinese financial institutions and firms will be in difficulty due to the short-term nature of their liabilities.

On the other hand, it also has some positive implications for the sound development of China's financial system in the longer term. First, it shows that the Chinese government is now determined to make companies responsible for their own problems and warns the world not to take the creditworthiness of an enterprise as equal to that of central government credit. Second, it is an alarm signal to foreign financial institutions that they should be responsible for their own decisions.

Foreign institutions have become more aware of individual institutions' merits and creditworthiness and fully recognise financial risks ahead. In short, an important step has been taken towards establishing a healthier financial system in China. To some extent, the bailout of some problem institutions by the government in the past contributed to the moral hazard among domestic and foreign institutions. With the introduction of market mechanisms, a proper way of market exit and of "bailing-in the creditors" of problem institutions should be established.

China is going to restructure the ITIC industry mainly through merger and takeover. The authority is considering consolidation of its 239 ITICs into 70 or 80, each with a minimum capital of 300 million yuan. The main measure would be for local governments to inject quality assets or money into problem ITICs and take over bad debts. Foreign participation is also under review.

Policy issues related to closure

Different treatment of domestic and foreign debts

In most cases, the Chinese authorities treated domestic debts and foreign debts differently in closures. Foreign debts enjoyed priority of repayment, as did household deposits, while domestic entity debts had to wait for repayment after liquidation.

This different treatment does not find legal support in laws concerning closure and bankruptcy of enterprises. The consideration for the Chinese authorities was to protect the interests of foreign institutions and foreign investors, to maintain the creditworthiness of Chinese financial institutions and, most importantly, to keep the confidence of foreign investors in the sound development of the Chinese economy.

Some Chinese creditors thought it unfair that the interests of foreigners were protected, as there were no explicit clauses giving foreign creditors priority and the nature of the debts was the same regardless of nationality. Therefore, foreign creditors should be treated equally. With the establishment of a diversified financial system and strengthened financial supervision, this kind of protection should be removed gradually to create competitive equality. However, the abrupt policy change in the case of GITIC produced an unexpectedly strong reaction in the markets.

Legal infrastructure

As mentioned above, there is no specific law or rule for the closure of financial institutions in China, while several laws provide guidance for it. In 1995 the *Law on the People's Bank of China* and the *Commercial Banking Law* were enacted, which established the framework for financial supervision and the scope of business for commercial banks. Apart from this, the *1986 Bankruptcy Law* and *Provisional Regulation on Financial Institutions* are the main legal references in practice, while the latter only set outs conditions for closure.

All these laws and regulations are not specific laws for closing financial institutions, nor do they have detailed clauses for financial institutions. None of them contains detailed information on closure. Under such circumstances, there is no consistent way for the closure and liquidation of financial institutions. Therefore, the decisions of the authorities concerning liquidation and other matters may sometimes be made case by case. This ad hoc approach inevitably means that the procedures applied are not always sufficiently transparent to foreign investors.

However, some improvements have been achieved. A series of laws, such as the *Securities Law* and *Insurance Law*, as well as regulations and rules have been promulgated in recent years to safeguard the financial system as a whole. All these efforts constitute an important step towards a sound legal infrastructure for China's financial markets.

Inadequate transparency and disclosure

The transparency of bank restructuring and supervisory policies in China needs to be improved – to match the great progress made in enhancing transparency of monetary policy over recent years. In addition, although certain disclosure requirements for financial institutions have been formulated, only a few institutions publish their fundamental indicators regularly, and the reliability and accuracy of the information disclosed by other institutions remains doubtful. Hence, independent external auditing agencies can contribute to the improvement.

Pace of policy changes

The GITIC experience suggests that policy changes aimed at improving the way of dealing with failures of financial institutions should be implemented cautiously. Unexpected or abrupt policy changes may lead

to effects opposite to that originally intended. It is certainly necessary for China to deal with closed institutions by not covering all debts. But how specifically to implement this general policy and how long it should take to allow market participants to adjust should be studied carefully.

The role of the central bank and governments in closure

Ensuring the central bank enjoys independence of action is a long-standing issue in China. Usually, the local governments that own the medium and small-sized institutions have a right to vote on the destiny of these institutions. In this way, the central bank is not able to make decisions completely according to market principles. Sometimes local governments even impede the closure process in order to protect local interests.

The institutional restructuring of the PBC, aimed at reducing governments' intervention last year, consolidated its branches into nine, each covering several provinces, stepping forward to a more independent central bank.

Greater use of other restructuring instruments

China has taken a number of measures to strengthen its financial system in the past few years. With other restructuring instruments being applied, the frequency of closure also seems to be rising. It is unusual that during such a short period so many institutions were closed. Although it shows the determination of the Chinese authorities to consolidate their problem institutions, it also produces adverse implications for China in terms of the magnitude of the problem and difficulties. Frequent closure may undermine the confidence of market participants in China's financial system.

The Chinese authorities are fully aware of the drawbacks of closure. The principle of more restructuring, less bankruptcy and less closure has been announced as guidance for bank restructuring in the future.

Enhancement of the oversight capability of the supervisory authorities

Over recent years, drawing lessons from disorders in domestic financial markets and the recent Asian turmoil, China has been implementing

the principle of segregation of financial institutions' business lines to contain risks. After the disturbances of the ITICs, this principle will be reinforced in that securities and other business, except trust business, will be separated from ITICs to limit their speculative operations.

Accordingly, the recent segregation of financial supervision in China divides supervisory responsibilities clearly among three supervisory bodies. The Securities Regulatory Commission is responsible for the sound operation of securities firms, while the Insurance Supervisory Commission supervises all the insurance companies. The PBC's responsibility is to ensure the health of all the commercial banks, ITICs, credit cooperatives and other financial institutions. In the current immature market and institutional environment, this kind of segregation helps China to prevent financial risks from rapidly spreading among sectors and is conducive to more efficient and more specialised supervision.

In addition, a sound capital framework and the introduction of new supervisory techniques can also help to improve the supervisory capability of the Chinese authorities. The establishment of early warning systems is critical to effective supervision. In essence, supervisory authorities should be an ex ante "watchdog" rather than an ex post "fireman".

Foreign participation in dealing with problem institutions

Foreign banks can bring advanced techniques and sound management to developing countries. Hence some Asian countries such as Korea and Thailand encouraged foreign banks' participation in dealing with the non-performing assets of their crisis-hit financial institutions. To a certain extent, their experiences have some implications for China's financial reform.

Conclusions

China has continued its efforts in bank restructuring over recent years, and some financial institutions have been closed during the last two years. The Chinese authorities have taken a series of measures to improve their ability to deal with closed institutions, whereas the lack of a legal basis, inadequate transparency and government intervention still constitute the main problems in closure. Further improvements in all these areas are critical.

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OPTIONS FOR CHINA'S FINANCIAL SYSTEM

A panel discussion chaired by Tommaso Padoa-Schioppa[1]

The first discussant, **Edgar Meister**,[2] stressed the importance of banking supervision in keeping financial systems stable. Only healthy and profitable banks are able to function as financial intermediaries for credit and savings business on a lasting basis. If stable and efficient, the financial sector can support economic growth and contribute to higher employment; but if financial institutions are weak (unprofitable or under-capitalised), the sector may also become the trigger or catalyst of macro-economic disturbances.

As a result of globalisation, crises in one part of the world may spread very rapidly to other countries. Even those countries which have opened their markets only partially to global competition may ultimately be affected through exchange rate movements and changed capital. A strengthened banking system can prove to be a protective wall: by providing the economy with a sufficient volume of loans, it can contain the negative effects on growth and employment.

Although the papers presented at this conference have illustrated the complexity of the situation in China and the features that set China apart from other countries, he nevertheless believed that it was worthwhile to analyse the reasons which have led to the weakening and destabilisation of the banking system in other parts of the world. He said that developments in central and Eastern Europe, which he was particularly familiar with, showed that a large volume of delinquent bank loans narrows everybody's room for manoeuvre and ultimately destabilises the financial system. Mistakes committed in the past may accumulate and develop into a genuine problem: for example, an overheating of the markets ("bubbles") or some other form of resource misallocation.

[1] Member of the Executive Board, European Central Bank and former Chairman of the Basel Committee.

[2] Member of the Board of the Deutsche Bundesbank and Chairman of the ECB Committee on Banking Supervision.

This system has proved to be generally successful in east European countries. The RTC has the task of buying delinquent loans from the banks, recovering valuable asset components wherever possible, and utilising any available collateral. To this end it has to be furnished with budgetary means by the government; however, it could also borrow in the local capital market. Bad loans would be written off using funds made available by the public authorities.

The much needed revamping of supervision of the financial sector needs to be carried out in accordance with international standards: the basis for this should be the Core Principles drawn up by the Basel Committee. Not only were representatives of the People's Bank of China actively involved in formulating those principles, but the PBC is also a member of the Core Principles Liaison Group, which deals with the implementation and refinement of the core principles. As the core principles have been generally accepted, their implementation should be given a high priority in China. He said it is important to identify local risks in the financial sector as quickly as possible, to change the legal framework and, in this way, to extend banking supervision increasingly to risk-prone areas.

He stressed three important requirements. The first was capital. On the basis of the Basle Capital Accord of 1988, capital should be adequate in both quantitative and qualitative terms to take due account of the risks incurred by the banks, thus also stabilising the financial sector. Capital must exist in actual fact and not just on paper. This means above all that the assets and liabilities of the banks must be valued cautiously and must not include undisclosed losses – which is sometimes the case.

The second was that certain types of risk can be minimised by introducing a fit-and-proper test for bank managers as a precondition for their taking up or continuing their activities. The cases of mismanagement that have already come to light recently, and the financing of obscure speculation have shown what the consequences can be if the requirements of professional qualifications and the reliability of bank managers are ignored.

The third requirement is that bank managers are able to make their business policy decisions independently and autonomously. Monitoring business activities requires that banks and other institutions have independently operating internal control systems. The German banking supervisory system attaches great importance to this.

Even after successful restructuring, it is still necessary to manage future risks. This presupposes the existence of an efficient banking supervisory system which is as independent as possible of political influence. Sound supervisory practices, such as rules on risk diversification and limits imposed on the granting of loans, are essential. So too is a reliable accounting system that gives a true and fair view of the bank's economic position. His view was that the accounts of networks of subsidiaries should be consolidated in order to make the risks incurred transparent, both for the institutions and for supervisors, and to disclose the amount of capital actually available. He also noted that several countries in Europe had found that a Central Credit Register helped to create greater transparency. It shows both supervisors and creditors the volume of loans extended per debtor, and thus also any concentrations of risks. If the threshold is sufficiently high (e.g. US$2 million), such a registration and evaluation programme can be established at an acceptable cost and still provide detailed information on major risks. China might consider this system.

Akira Nagashima[3] agreed that China's banking system faces very difficult problems related to state-owned enterprises in the transition of its economy: the lack of an effective bankruptcy law limited options for China.

The state-owned commercial banks in China had a high proportion of non-performing loans, and the supervisory authorities should fully recognise this and compile accurate information on the condition of financial institutions and on asset quality. Loan classification and provisioning standards must be up to internationally accepted norms.

He said it was essential for China to avoid repeating the mistakes of Japan, where loan classification standards had been lax by international standards. The definition of the structure of loans had been very vague; the valuation of the quality of the assets of non-bank subsidiaries had not been strict because bank balance sheets were not consolidated. The true size of the bad loans was underestimated so that the scale of the problem was not well recognised by the general public. The financial statements of banks and others in China should be prepared so as to

[3] Executive Adviser, The Tokio Marine and Fire Insurance Co. Ltd. Former Executive Director, Bank of Japan.

conform to strict international accounting standards. The financial information about the financial condition of individual institutions should be disclosed to the public in a transparent way.

He recognised that dealing with troubled state banks in China was complicated because the root cause of the problems was the loss-making state-owned enterprises which have to be restructured. The treatment of state-owned enterprises in China raises difficult political problems because some of the firms are big enough to affect entire segments of society. Hence the treatment of state banks will have to co-ordinated with the disposal of state-owned enterprises. Substantial consolidation, rationalisation and recapitilisation will in any case be necessary for state banks. He suggested that although privatisation is at present out of the question for state banks in China, the idea of establishing new banks through the reorganisation of existing institutions, introducing some elements of private commercial banking management, with particular emphasis on risk management, deserves consideration.

Turning to non-bank financial institutions, Nagashima thought that their difficulties came directly from lending for investment in real estate or securities and from loans to local government for infrastructure investment. These difficulties should be dealt with quickly. When deciding how to restructure the state-owned enterprises, the Chinese authorities should also consider how to deal with the relatively large share of losses incurred by foreign international institutions. In the past, foreign banks usually extended credit on the assumption that the Chinese local authorities would compensate them in the event that a non-bank institution fails. However, it is the responsibility of private financial institutions to make allowances for credit risks when there is no explicit state guarantee – they should therefore share the losses. This would mean that risk premia would of course rise. In any case, it is important that the liquidation procedures are made transparent with foreign and domestic institutions receiving equal treatment.

Nagashima concluded by saying that China has three important advantages compared with other countries with severe problems. First, there is a clear and strong political will to solve the problem and China's social and political system can ensure that this political will is realised. It could be quite different from the situation in Japan, where the strong public and media reaction against the use of the public funds led to delays that made banking problems all the more serious.

Secondly, the general public's confidence in the financial system in China remains. He said that the financial system in Russia does not work because people do not believe that the government will honour their deposits. It is important that Chinese authorities proceed expeditiously in this restructuring basis while public confidence in the financial system is maintained.

Thirdly, high saving and low national debt ratios make it easier for China than other countries to absorb the cost of financial restructuring. In Indonesia, the cost of recapitalization of the banking system is estimated at about 30% of GDP. It would be a considerably more difficult task for Indonesia to raise such an amount of funds, where capital flight is worse and interest rates are much higher than in China. In short, he said, China should take advantage of its comparatively favourable environment to implement its reform programme in a decisive manner, and to succeed in solving their problems.

Roberto Zahler[4] said he was not an expert on China and that his comments were tentative. He thought that the Chinese situation had two favourable aspects. The first was that China has quite a closed capital account which meant that it had not had a massive inflow of foreign funds intermediated by the banking system. China should therefore act now to rapidly reform its banking system because economic development leads to a more open capital account. In the future, China will face very significant capital inflows, probably largely intermediated by the domestic banking system. This will generate both an appreciation of the domestic currency and a relaxation in bank credit standards.

The second aspect was related to the structure of competition in China. The pattern in other countries had been that troubled banks try to attract deposits by increasing interest rates, forcing other banks to respond. This competition will lead to pressure for higher interest rates on loans. This increases the risk portfolio of banking system, tends to create more distress borrowing and tends to increase moral hazard. Such risky behaviour can be all the more marked when banks are inadequately capitalised. Moreover, there was an agency problem – the lending bank becomes the agent of borrowers who have the right

[4] President of Zahler & Co. Former President of the Central Bank of Chile.

connections. It appears, however, that the Chinese banks do not compete with each other to push up deposit interest rates to unsustainable levels.

However, he warned that the fact that the Chinese economy has enjoyed growth of around 8% a year in the recent past had masked some of the problems in the banking system. If the economy were to slow, these problems would become more acute. The competitive situation of banks would change. As earlier speakers had done, he underlined the need for prompt action.

As for policy choices for China, he thought the first priority was to develop proper framework for risk analysis – which could be simpler than in countries with a sophisticated capital market. A key distinction was between the tradable and non-tradable sectors. Lending to state-owned enterprises was in effect related lending: if both borrower and lender belong to the same owner there was a major problem of credit-risk monitoring. He agreed with Nagashima that state-owned enterprises were the main source of banking or loan problems. He said China should impose a capital requirement higher than the 8% in the Basle Accord.

He pointed out that the supervision of the financial system does not depend only on official institutions. "Auto-regulation" was becoming more important, allowing banks to manage their own situation, with the authorities acting in a strategic monitoring mode. The stability of banks depends not only on official supervision but also on market mechanisms, including external auditors, credit-rating agencies and so on. He concluded with a very important question related to political economy: how to allocate the losses of financial system, including the losses of foreign banks in China. The owners and shareholders of problem banks should lose their shares, their capital and assets. But what this meant when the banks were state-owned was unclear.

In any event, countries trying to eliminate or minimise financial crisis should reform the governance of banks so as to minimise future losses and risks. A deep capital market can help. To deal with the huge financial crisis of 1984 (the estimated loss was around 25–30% of GDP), Chile had had the foresight to develop a pension fund scheme to absorb the large issuance of domestic public bonds. This had created a very sophisticated domestic capital market. This has some implications for China.

John Heimann[5] explained that the Financial Stability Institute was a joint undertaking between the BIS and the Basel Committee on Banking Supervision. The aim was to assist developing nations in improving their financial sectors – including banking, securities and insurance. He outlined three main functions.

First, the Institute will bring together supervisors from around the globe through a series of symposiums, to discuss problems and to analyse the changes in their systems and their societies. It would provide a venue for them to work together to share their experiences. It is very important that bank supervisors understand not only the principles of supervision and the Core Principles of Banking Supervision published by the Basel Committee, but also techniques for implementation and enforcement that can be applied, partially or wholly, in their own systems. The FSI will help supervisors with this. The focus will be on case studies, which will cover the implementation of the Core Principles in some countries, experiences of financial/banking crises and policies to restructure of banking and financial systems. These case studies will analyse what happened, why it happened, and what could have been done better.

The second function will be to provide continuing support and assistance to supervisors that have participated in the programme. The FSI recognises that there is a need for supervisors to disseminate the correct information as the world changes, as financial intermediation changes, as markets change. But they also need somewhere to ask questions and to seek assistance or help. The FSI will play an important role in this respect. When one country faces a given problem, the Institute might try to identify similar problems in other countries, enabling the supervisor to understand what others did when faced with a similar problem.

The final function will be to take up some special projects for individual countries and coordinate experts from around the world, to help them deal with their problems.

Heimann concluded by saying that the central purpose of the Institute is finally to prevent crises. It will assist countries in improving the quality of supervision in the financial sector, thereby strengthening the financial sector. In addition, he stressed, foreign banks could inject new capital, introduce new techniques into the developing countries and train professional

[5] Chairman, BIS Financial Stability Institute.

staff for the host country. These functions are clearly critical in all these countries. Foreign banks should be treated equally with domestic banks.

Xie Ping[6] thought China is facing a number of choices in strengthening financial supervision.

The first choice is whether the ownership structure of Chinese financial institutions (especially the state-owned commercial banks) could be diversified. He thought that it is, in essence, a question of privatisation and joint-ownership, as discussed by Nagashima and Zahler. He pointed out that China's banking sector remains one of the few industries where private investments are still considered taboo. While it is generally acknowledged that privatisation goes hand-in-hand with improved efficiency, this might not be the case in China because the very fact that the banks are owned by the state reassures the depositors. None the less, he said, it should be realised that joint-ownership helps commercial banks to strengthen their capital bases and to improve governance.

Second, should China establish a deposit insurance mechanism and, if so, how? At present, the structure of China's bank deposits is unique in that the big four state commercial banks account for 64% of the market. If all banks are involved in deposit insurance scheme, the "big four" will have to bear most of the cost. If the big four opt out, 64% of the deposits will be left uninsured, in which case the premiums of hundreds of small and medium-sized institutions can hardly cover the payment risks of two of them. Another alternative is to establish a deposit insurance system covering rural credit cooperatives, which means treating the 40,000 credit cooperatives as a whole. A few of the institutions might be allowed to go bankrupt in the future.

The third is whether the government should commit itself to fully repaying the household deposits of ailing institutions. Japan and most other major countries do so. Though no legally binding commitment has been made in China yet, such commitments were made on the closure of China Agricultural Trust and Investment Company, Hainan Development Bank and Guangdong International Trust and Investment Company. The moral hazard risk is that, if the government makes such a commitment, the management of individual institutions may become lax. If the government does not commit itself, deposits may rush to the state

[6] Director of Research Bureau of the People's Bank of China.

commercial banks. The consequent crowding-out effect will discourage the development of the financial sector.

The fourth choice is the issue of division of responsibility between the central and local governments. The principle is that "one must take care of one's own children": the owner of a financial institution is responsible for the repayment of its debts in case of liquidation. However, it should be noted that action by financial institutions (especially deposit-taking institutions) always has externalities. When the local government does not take care of its "baby", or even allows the baby to die, negative externalities will probably spill over across the country. For instance, if an ITIC owned by a local government goes bankrupt and the local government does not act responsibly, then its peer groups will be penalised by the public. These negative spillover effects are observable in real life recently.

The fifth choice is relevant to foreign participation in bank restructuring in China. In bank restructuring and auctioning non-performing assets, a commonly used strategy is to introduce the participation of foreign banks or investors. The typical practice of foreign participation in Southeast Asian countries was merger (acquisition), sales of non-performing loans and even some stakes to foreign institutions. This is in essence a strategy of market access for foreign institutions. It should be studied whether it would be available for China and how strong the opposition would be. He thought this is also a question to be faced in China's accession to WTO.

The sixth issue is whether the central bank's liquidity support to problem institutions should become a regular practice. Then the questions are how? And how much? He pointed out that the current practice is to follow a case-by-case approach rather than an institutionalised arrangement. It is known that, as the lender of last resort, the central bank has to provide liquidity support to help ailing institutions. But the cases given by Liu Shiyu showed that more often than not such liquidity support does not work well. At times of payment crisis of financial institutions, the liquidity support is financed by public funds. Here the fundamental question is whether public funds and budget resources should be used to rescue ailing financial institutions.

The seventh issue is the disposal of non-performing loans by the asset management company. The question is how should China proceed. This

method presents as a new alternative to resolve non-performing assets by means of a commercial institution. However, some say that an asset management company can only resolve the stock of non-performing assets but not the flow. If poorly managed, it may even exacerbate moral hazard.

Eighth, China now practises both the segregation of financial business for financial institutions and the segregation of supervision by the supervisory authorities. In this way, one institution can get involved in only one kind of banking, insurance, trust and securities business. The People's Bank of China, the Insurance Regulatory Commission and the Securities Regulatory Commission are assigned different jurisdiction competencies. It has not been long since this system was put into practice and how effectively it can run in the long-term remains unanswered. Facing fierce global competition and booming development of information technology, it is not certain how long this approach can last.

Ninth, the governance of Chinese commercial banks (financial institutions) is problematic: what kind of governance should such banks adopt? No optimal approach is in sight yet. The mechanism used at present to improve commercial banks' (financial institutions') governance is to strengthen leadership of the Party through the establishment of the Steering Committee of the Party on the Financial Industry. In fact, what is at work is bureaucratic incentives rather than meritocracy. How well this system will work in the future remains to be seen.

Finally, Xie Ping talked about the issue of transparency and disclosure. He thought there are a lot of problems in this respect in China and discussed the feasibility of the establishment of mandatory requirements on disclosure for financial institutions. One point of view is that such requirements would jeopardise public confidence since all financial institutions have serious problems. He wondered how long it would take to get ready to be able to implement disclosure requirements. He concluded by saying that without the disclosure requirements and transparency standards, financial supervision will be built on sand.

Dai Genyou[7] agreed with Lardy's opinion that, at present, the level of bad loans in Chinese commercial banks was high, and reflected loans to state-owned enterprises. To solve this problem, the authorities should

[7] Director of Monetary Policy Department of the People's Bank of China.

focus not only on the stock of non-performing loans, but also on the flow. To do this, the mechanism of competition should be introduced into the financial sector while the tax burden of financial institutions should be reduced. He said that China was fully aware of the challenges it faced in this respect and complimented Lardy for his perceptive study of China.

Dai Genyou was optimistic about China's financial prospects. He said that problems and their remedies usually come forth simultaneously. China is solving its banking problems by "seeking truth from facts" in Deng Xiaoping's memorable phrase: the financial crises that have afflicted some other countries recently could therefore be avoided.

He offered three reasons for this optimism. The first is that most banks and other financial institutions in China are state-owned or collective-owned. Because about one-half of deposits belongs to enterprises and institutions, restructuring is relatively easy: the evidence was that China has successfully resolved the problems of a number of trust and investment companies at municipal or prefecture levels and has restructured some local commercial banks and urban credit cooperatives. Moreover, the closure of several non-bank financial institutions did not disrupt social stability because individual deposits and institutional deposits were dealt with in separate ways. The second reason is that the guiding principle of China's plans to safeguard itself from financial risks is "less liquidation, more restructuring". In this particular respect, China has certain political advantages and the government enjoys strong administrative ability. The third reason is that the central bank is fully able to offer liquidity support to those financial institutions experiencing temporary payment difficulties in the present situation of sluggish external demand.

He then argued that the nature of current problems in the Chinese financial sector should be seen in the context of a monetary and financial system that was evolving against the background of very rapid economic development. China had maintained high economic growth for a long time and this momentum would continue in the coming years provided the appropriate policies are pursued. The Chinese economy is still resilient. Several foreign speakers at this conference have echoed this optimism – which would, he added, be confirmed by a visit to Guandong, a province said to have the most financial problems in China but which is still prosperous as a whole. He thought that this case exemplifies

the continued momentum of high growth of the real economy, which provides a favourable environment for China's financial problems. As Wu Jinglian has pointed out, the saving rate in China is very high: new saving replenishes the funding of the banks, and thereby mitigates the liquidity pressures faced by some problem financial institutions.

He concluded by saying that the solution to China's financial problems depended in part on devising policies to use the country's high level of savings in an appropriate way. One mechanism would be to transform private savings – at present largely held as deposits with state banks – into bank capital. In this way, banks might meet the 8% capital requirement target. A second mechanism could be the greater use of fiscal resources. He explained that the debt dependency of the Chinese central government is quite high because local governments are forbidden to issue debts. In addition, the development of the tax system in China still lags behind the development of the economy: the ratio of fiscal income in total GNP is relatively low. Even a modest change would transform the situation. In any event, China had adequate resources to overcome the difficulties faced by its financial sector.

The Chairman, **Tommaso Padoa-Schioppa**, concluded the discussion with four brief reflections. The first was that banking supervision was an extremely difficult function in an economy that was to some extent still in the transition from a centrally planned to a market economy. Supervision in its very essence did not fit in with central planners' idea of the market. It required the market to be based on the idea of a market as something needing guidance, which meant that regulations on banks were needed.

The second remark emphasised the importance of the prerequisites for a strong banking system. He thought such prerequisites had been discussed many times during the conference. Bank supervision was absolutely crucial. But it would not, by itself, be enough: the priority for China was to stop the losses of the state-owned enterprises that had produced the bad loans. If those losses were not stopped, dealing with banks' bad loans might be very difficult. He also said stopping the losses was something that implied a huge amount of work and fundamental change: this was not the primary task of supervisors.

Thirdly, he pointed out some similarities between the banking problems in advanced economies and those in China. He thought it

was very important to separate the different responsibilities of the central bank, commercial banks and fiscal agencies. He was not sure that China had fully achieved this.

Fourthly, he thought most of the participants from other countries were deeply impressed by the extreme openness and frankness with which China's policy dilemmas had been discussed. This had been a very worthwhile conference.

CLOSING ADDRESSES

Summary remarks by Andrew Crockett

This has been a remarkably productive conference, rich in content and fruitful in its exchange of ideas. It would be impossible to review all the points that have been made. Let me, however, summarise what I personally take away from our discussions, under ten headings.

1. The importance of a strong and efficient banking system

Banking systems play a central role in mobilising and allocating resources in a market economy. This stands in fundamental contrast to a planned economy, where financial institutions play a largely incidental role in resource allocation. China is in the process of transition from a centrally-planned to a market economy. It follows that if its banking system is not made compatible with its expanded role and responsibilities, it will act as a drag on China's economic growth.

2. Non-performing loans are a cancer in the banking system

Initially, non-performing loans (NPLs) may not seem to have serious negative effects. Banks remain liquid, and depositors retain their confidence in the system. Over time, however, the size of the problem grows, especially if banks are allowed to accrue interest on their NPLs. Eventually, the efficiency of the banking system is comprehensively undermined, as the task of making new loans to productive enterprise takes second place to juggling a portfolio of bad loans whose collectibility is very low. The fiscal cost of cleaning up the banking system can become so large as to be itself an obstacle to needed action.

3. The bad loans problem in China is essentially a fiscal problem

Most of the non-performing loans are to state-owned enterprises (SOEs). Credit was extended to them not just to finance production, but to cover a number of quasi-governmental functions performed by the

SOEs. So cleaning up the banks' balance sheet will involve a substantial charge on the state budget. This cannot be avoided, and delay is only likely to add to the cost.

4. The need to limit moral hazard

However, it is important to recapitalise banks in a way that minimises moral hazard. It should be made clear that a one-shot recapitalisation is not a precedent for future operations of a similar kind. Reforms are needed so that banks can be held accountable for their future lending, and are able to base their credit judgements on economic criteria. Where banks have themselves been responsible for bad lending decision, those responsible should pay a price.

5. The need for a comprehensive strategy to deal with the problem of non-performing loans

Several speakers have emphasised the importance of an honest recognition of the scale of the underlying problem. Japan delayed doing this and paid a heavy price. Following an appraisal of the size of the problem, there must be a fully worked out game-plan for resolving it. A piece-meal approach, dealing with immediate issues but leaving the fundamental problem unresolved, will lack conviction and be counterproductive. So it is necessary to remove the burden of bad loans; provide for their financing, strengthen the banks capital base, and implement reforms to prevent the problem re-emerging. The strategy outlined by Governor Dai shows that the Chinese authorities are fully seized of the need for comprehensiveness. Still, much remains to be done, given the ambitious and wide-ranging nature of the economic transformation taking place in China.

6. The need to deal with the flow as well as the stock problem

It would be of limited value to recapitalise the banking system if the underlying source of the problem were not dealt with. In that case, the problem would simply re-emerge, with added moral hazard. To avoid this, it will be necessary to: build a proper credit appraisal capacity within commercial banks; ensure that the economy is not dependent on bank financing for current expenditure (i.e. reform the finances of the SOEs);

provide funds for bank recapitalisation as a "one-shot" rather than a continuing exercise. Nothing would be more damaging to credibility than for the Government to come back with a second recapitalisation.

7. The importance of developing a true "credit culture"

This is naturally difficult in a transition economy where credit appraisal skills are scarce. Bank lending officers are unused to their new, and vastly more important role. Lending should be grounded in the capacity of the borrower to repay, based on an objective review of cash-flow projections. Banks should know their customers and have a fundamental understanding of their business and its risks. Lenders need to insist on adequate information to make an objective credit appraisal, which implies robust accounting techniques. Above all, the development of a credit culture means avoiding the mistakes that weakened banking systems in other countries: connected or directed lending; currency and maturity mismatches; insufficient recognition of problem loans, etc.

8. The importance of infrastructure

A financial system cannot function efficiently in the abstract. It needs a clear framework of contract law and predictable law enforcement. Bankruptcy provisions are particularly important. Also vital are appropriate and transparent accounting conventions; adequate transparency and disclosure; strong payment and settlement systems; appraisal techniques (particularly important in assessing collateral adequacy) and so on. This is all at a relatively early stage in China. Priority must continue to be given to pushing the process forward.

9. Good supervision

Everything I have said so far leads up to the proposition that good financial supervision is of paramount importance. But good supervision is much more than signing up to the Basel Committee's Core Principles. As John Heimann said, the aim of supervision is to create good bankers. This points to the key importance of qualitative factors, such as arrangements for risk management, control and pricing, as emphasised by Andrew Sheng. It was clear from the presentations of western supervisors in our meeting that the key sources of weakness in banks are to

be found not so much in weaknesses in quantitative ratios (important though these are) but in such factors as the absence of a coherent business strategy, weaknesses in the control structure, and so on.

10. Building a strong banking and financial system takes time

Removing current sources of weakness and building a firmly-rooted credit culture cannot be done by administrative decision. This is one reason why it is important to begin the process as soon as possible, and to pursue the task with determination. Mr Ueda made it very clear that Japan suffered from delaying deregulation. And a similar point could be made about many other countries. It would be dangerous to believe that because China still has capital controls and a large state sector, it has the luxury of time.

Conclusion

China is at a critical stage in its economic and financial development. Until now, rapid economic progress has been possible with a fairly rudimentary financial system. As the Chinese authorities realise, sustaining this pace of progress (and avoiding costly setbacks) will depend increasingly on a strong and efficient banking and financial system. The process of restructuring that has been begun will have to be carried forward with determination. If it is, the prospects for a continuation of the Chinese economic miracle are bright.

We have had an excellent seminar here with a lot of issues, a lot of talks, and a lot of experience. These are very valuable to the People's Bank of China, and to the people sitting here, people staying here, with regard to China's policy-making and banking reform.

What I should say is that all these points are very helpful, but on hearing them, I can draw the conclusion that there is no perfect recipe for strengthening the banking system of a country like China. We have got to deal with our own problems according to the international standards and experience. And, more important, we have got to combine all of these with our country's situation. Nowadays, we are facing a lot of challenges. We know we need rules and laws, and we know we need a quicker response and thorough reform of our SOEs, and we know we need good governance in state-owned banking and in all the commercial banks and non-bank institutions of China.

Of course, we acknowledge the opportunities and risks involved in every step of the reform. They are just like strawberries and cream, always going together. So what I should say is what we can do. The PBC has got to concentrate on mobilising its resources as much as possible to make supervision better. Eddie George once told me that, according to the British way, the regulators used to keep half a step behind the market changes in order to maximise the creativity in the market. But our philosophy is that the central bank has got to keep half a step ahead of the changes, because we must keep up the pressure on the banks and their customers all the time. This is the management of change. And we have got to face change and accept the challenges in the future.

To put these challenges in perspective, I think it is very, very important to bear in mind that the bank supervisory process in the near future will entail no fewer than eight related tasks or functions, and these supervisory functions in China must include the following:

- first, granting charters for banking institutions and non-bank institutions and approving major changes in their activities, strategies, ownership or other important structures of such institutions;
- second, establishing and adapting essential prudential norms in such areas as capital, total bank lending to a single customer, liquidity, etc.;

- third, establishing and adapting rules for the regular reporting of key statistical information to us and, as a related matter, establishing rules for the public disclosure of key statistics and other information;
- fourth, the ongoing and systematic analysis of all such information by us and by our experts, as part of an "early warning" system to detect problems before they become serious;
- fifth, the semi-annual on-site examination of all banking institutions, with particular emphasis on the quality of their assets and the adequacy of internal controls, audits, risk management and credit due diligence systems, must be built up;
- sixth, the regular, systematic and timely communication of the results of examinations and other supervisory initiatives to the top management and boards of directors of all banking institutions, and all shareholders of non-bank institutions;
- seventh, a well-defined framework for initiating remedial actions against banks or non-bank financial institutions that have, or are developing, problems that might threaten their viability;
- eighth, clear rules and procedures in explicit form for dealing with insolvent banks and non-bank financial institutions.

I think all these functions have been elaborated by the Basel Committee on Banking Supervision in framing its "Core Principles for Effective Banking Supervision". China's central bank should be, and remain, strongly committed to full compliance with the letter and the spirit of these Core Principles.

More generally, as part of the reform effort in our country, a substantial upgrading of supervisory capability is needed in order to ensure that the banking system is not confronted with a new wave of systemic problems in the future. Consistent with this, and as noted earlier, the objective of bank supervision is to protect the wellbeing of our whole banking system, not to protect the shareholders and managers of poorly managed institutions, or those which are committing market malpractice, or even suffer failure.

To attain a goal like this, we need a lot of resources, we need a lot of highly professional experts in our bank and we need firm backup in technical and strategic fields. That is the reason why we value this seminar highly, that is the reason why I should like to extend my heartiest thanks to every single expert we invited for your rich contributions to the seminar. That is the reason why I should like to extend my

particular thanks to Andrew Crockett, who sponsored and initiated the meeting, and that is the reason why I should like to reiterate our confidence and commitment to strengthening our ties with the BIS, because we need your help, and we need our friends. China's tomorrow, as Governor Dai mentioned yesterday evening, will definitely be better, but we know that China's tomorrow can be better only if we think harder, we learn harder and we respond quicker.

BIS POLICY PAPERS

No. 1 Changing financial systems in small open economies. December 1996.

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