The Art of Bank Restructuring
Issues and Techniques

Andrew Sheng
The Art of Bank Restructuring

Issues and Techniques

Andrew Sheng

Abstract
This paper starts with a short review of the main issues involved in bank failure, organized according to the analytical framework provided by the New Institutional Economics. However, the emphasis is on the discussion of the different techniques of bank restructuring used in different countries. The techniques identified are designed to assist policymakers and financial sector professionals in considering various ways to restructure banks under different sets of conditions. An appendix presents a summary of key case studies on bank restructuring (Spain, the United States, the United Kingdom, Colombia, Chile, Thailand, the Philippines, Malaysia, Guinea).

EDI Working Papers are intended to provide an informal means for the preliminary dissemination of ideas with the World Bank and among EDI's partner institutions and others interested in development issues. Copies are available from:

Training Materials Center, Room M-P1-010
Economic Development Institute, World Bank
1818 H Street NW, Washington, DC 20433, USA
Telephone: (202) 473-6351, Facsimile: (202) 676-0962

The Economic Development Institute
of The World Bank
1991
Foreword

The focus of EDI’s program on the financial sector is on the improvement of decision-making in seven important areas dealing with the structure, reform and development of financial systems in developing countries. The areas covered are:

- reforms of the structure of financial systems;
- policies and regulations to deal with insolvency and illiquidity of financial intermediaries;
- the development of markets for short- and long-term financial instruments;
- the role of institutional elements in the development of financial systems;
- the links between the financial sector and the real sectors, particularly in the case of restructuring financial and industrial institutions or enterprises;
- the dynamics of financial systems management in terms of stabilization and adjustment; and
- access to international financial markets.

The program is articulated around cycles of regional and worldwide roundtables and seminars. Policymakers and professionals are brought together to discuss agendas of specific issues and problems, often identified beforehand by the participants themselves. The papers circulated at these seminars are published in the EDI Working Papers series, to make them available to a broader audience than is possible within the framework of the seminars themselves.

This paper was prepared for the Senior Policy Seminar on Financial Systems and Development in Africa, held in Nairobi, Kenya, from January 29 to February 1, 1990. The author is currently an economist in the Financial Policy and Systems Division of the World Bank. The views presented in this paper, however, are entirely those of the author and do not necessarily reflect those of the World Bank.

Xavier Simon
Division Chief
Finance, Industry and Energy Division
Economic Development Institute
THE ART OF BANK RESTRUCTURING: ISSUES AND TECHNIQUES

Andrew Sheng

Confucius, when asked what are the three key elements of good government: "Adequate arms, food and faith in government."
"If you had to give up one of three, which would you choose?"
"Arms."
"If you had to give up one of the last two?"
"Food—for death is inevitable, but human society cannot survive without trust in government."

I. INTRODUCTION

This paper is about bank restructuring as one aspect of good government because bank failure is mainly about the failure of a key human institution: money and banking; and about the restoration (or maintenance) of faith and confidence in government. Most economists deal with financial distress (or bank failure) as an economic or financial problem. The causes of financial distress are usually attributed to one or a combination of two factors: microeconomic (bank mismanagement) or macroeconomic (changes in relative prices, poor macroeconomic policies, or external shocks).

This paper starts with the premise that bank failures are the failures of human (financial) institutions, involving losses to the participants. Bank failures are, therefore, questions of political economy, incurring losses to participants arising from the failure of contracts, legal systems, or the lack of a political mechanism to allocate such losses equitably. There is no unique or optimal solution in bank restructuring. The resolution of bank failures will depend on the individual society’s legal, social, and political framework, and more generally, on its social utility function/value systems. Our knowledge of bank failure and its successful resolution is too recent and too sketchy to attempt a comprehensive report on the scientific methodology of bank restructuring. What this paper attempts to do is to bring out some general approaches to bank restructuring, based on the author’s personal experience in bank restructuring in five countries, and from the case studies of a number of countries, which have been compiled for the first time for the Research Project on Bank Restructuring from the World Bank papers and specially commissioned studies.¹

¹ Case studies of bank restructuring have been documented in the following countries: Thailand, Malaysia, the Philippines, the United States (savings & loans), the United Kingdom (secondary banking crisis), Spain, Chile, Argentina, Colombia, and Guinea. Currently, the World Bank is involved (through technical assistance or credit projects) in bank restructuring exercises in a number of other developing countries, including Uruguay, Yugoslavia, Turkey, Pakistan, Hungary, Kenya, Ghana, Nepal, and Nigeria. These have not yet been fully documented.
The paper owes a huge intellectual debt to the pioneering work of Long (1988) in identifying the crises in the financial sector of many developing countries, Hinds (1988) in charting the economic consequences of financial distress, and the two insightful papers by de Juan (1991 and Chapter 4 of this collection) on the importance of bank management in the resolution of banking crises. This paper also tries to build on the comparative studies on banking crises by Sundararajan (1988), and Thorne (1988), as well as the important paper on the need for a prudential regulatory framework in rebuilding any financial system by Polizatto (Chapter 10 of this collection). Various techniques of bank restructuring have already been highlighted by Popiel (1988). This paper does not depart from those studies except in trying to synthesize different approaches to the complex issues involved, using a New Institutional Economics (NIE) analytical framework, and drawing on the lessons of these case studies. An analysis of the theoretical issues of bank failure using the NIE approach has already been made in a separate paper (Sheng 1989b), and that discussion will not be repeated here. What follows is a short review of the main issues involved in bank failure, leading to a discussion of the different techniques of bank restructuring used in different countries. The techniques identified are designed to assist policymakers and the World Bank staff in the field in considering various ways to restructure banks under different sets of conditions.

II. THE NIE APPROACH TO FINANCIAL INSTITUTIONS

The NIE approach starts with the premise that firms (including financial institutions) may be viewed as a bundle of contracts between members or participants of the institution, which are designed to protect property rights. Specifically, we can view a bank as a financial institution that engages in intermediation through two basic sets of contracts: a civil contract between the depositor and the bank (in which the bank borrows funds from the depositor and warrants to return the nominal value of the deposit plus interest at due date); and another contract between the borrower and the bank on a loan in which the bank deploys its resources. Both contracts are made subject to conditions precedent, that is, general assumptions as to the prevailing conditions of law and order, or even the existence of normal economic conditions. Some contracts could be voided through force majeur, that is, changes in conditions outside the anticipation of both parties.

In general, these contracts protect property rights through the warranty of solvency. The bank warrants (assures but does not guarantee) to the depositor that so long as it is solvent, with strong capital adequacy, the

---

nominal value of bank deposits will be secure. Similarly, the entrepreneur/borrower warrants to the bank that he or she will repay his loans, through either a personal pledge, or the specific charge against collateral assets.

There is, however, a second set of contracts that may be binding or not wholly binding on the civil contracts of borrowing and lending. For want of a better phrase, these may be called the social contract between the state and the banks and the depositors and borrowers. Through the social contract, the citizens expect that the state will protect individual property rights by enforcing the civil contracts through regulatory agencies and an impartial judiciary system. In developed economies, where there exists a written constitution, a well-established judiciary system and legal history, property rights of citizens are relatively well defined. Established financial systems, for example, have explicit deposit insurance schemes where the rights of depositors are protected. In developing economies, these property rights are not so well defined, with little historical precedence to go by. Greater opportunities exist for cheating, shirking, and opportunism, especially where enforcement of laws is lax. Where colonial contractual laws have been adapted in developing economies, the social contracts are often an amalgam of western contractual or constitutional law, with customary and religious laws that can be contradictory to each other. Gary (1989) has commented on the role of informal legal systems in economic development, where lack of objective standards, reliable enforcement, and conflict resolution procedures lead to high cost of information and higher risks, which can retard economic development. This is certainly true in the field of banking regulations and accounting standards, the vagueness of which compound problems of bank restructuring.

Banking crises or distress occur when depositors fear the loss of their property rights and the breakdown of contractual obligations. This leads to bank runs, run to quality and even capital flight, as depositors seek to avoid capital loss. The uncertainty generated often raises real interest rates, creates higher costs of transactions, and disrupts the payments mechanism. If left unchecked, financial distress tends to generate massive misallocation of resources.

To prevent this, governments engage in bank restructuring mainly in order to restore (or maintain) public confidence in banking and preserve therefore, the sanctity of the social contract (that is, the state protection of private property rights). Even though in most economies, civil remedies exist for depositors to (attempt to) recover their losses from failed banks through legal channels, depositors generally expect the government to protect their deposits through either explicit deposit insurance schemes or drastic action (bank rescues or restructuring) to protect their property rights. Failures to do so have often been associated with capital flight, changes in governments and social disorder, hence the importance of bank restructuring as a demonstration of good government.
III. CIVIL CONTRACTS, ENFORCEMENT, AND SOCIAL IMPLICATIONS

Using the above framework, it can be argued that bank failure can be seen as the failure of a civil contract by a bank to honor its debts to its depositors. This failure could be the result of a related failure of civil contracts of borrowers to the bank, the lack of suitable enforcements of such contracts by the regulatory authorities, deliberate breaches of contract through fraud or conflict of interest transactions by bank management or even force majeure—catastrophic events that void the fulfillment of contracts. Bank failure can also be caused by bad macroeconomic policies, where governments apply inflationary policies to finance fiscal deficits, impose excessively high statutory reserves on banks, maintain negative real interest rates, and force banks to channel resources to inefficient projects.

Financial intermediation contracts are important to any market-based economy because such contracts protect property rights, reduce the cost of transactions, provide certainty of information, and reduce risks of settlement default generally. The externalities of civil contracts related to deposit taking and general financial intermediation can be so large that the enforcement of contracts by the state and the establishment of efficient dispute-resolution mechanisms are important public goods in any developed financial system.

Viewed in this manner, illegal behavior (breaches of contract) can result in individual gain of resources at large social costs. For example, bank mismanagement occurs because bank owners and management can obtain insider information on market transactions or have privileged access to bank resources not generally available to other persons. In less developed economies, where the rules of the game are not clear, bank management and owners can use the resources of banks to attain oligopolistic or monopolistic positions in the financial system, as well as the industrial or agricultural sectors, thus creating inequitable distributions of income and wealth.

Becker’s classic 1968 economic analysis of crime and punishment showed that optimal policies to combat illegal behavior are part of an optimal allocation of resources. The calculus of illegal behavior suggests that criminals will engage in maximizing private benefits at the expense of social losses, depending on (p) the probability of the offense being discovered and the offenders apprehended and punished, and the size of the punishment (f). The state can minimize such social losses by improving the definition of crimes, increasing the expenditure on law enforcement (thus raising p), and raising the level of punishment (f). These general principles of legal reform and law enforcement are common in almost all instances of bank restructuring. What is less obvious is the degree to which the state should bear the cost of bank failure and how such costs are ultimately distributed to the different components of society. Such questions ultimately boil down to political issues, which partly explain why governments are often unwilling to recognize the existence of financial
distress and even more unwilling to take action on resolving bank failures. One common observation that supports this view is that the willingness of a government to undertake bank restructuring is inversely proportional to the proximity of the next general election date. The corollary of this is that most decisions to undertake bank restructuring exercises are undertaken by new administrations or upon the success of a fresh general election.

IV. COMMON ELEMENTS OF BANK RESTRUCTURING

The common elements of a bank restructuring exercise, which have already been well covered by de Juan (Chapter 4 of this collection) and Popiel (1988), are broadly as follows:

1. diagnostics
2. rules reform
3. who should bear the loss?
4. restructuring options
   - regulatory forbearance
   - across the board solutions
   - rehabilitation in situ
   - sale/merger
   - liquidation
5. restructuring mechanisms
   - market based solutions
   - carving out bad assets
   - bank hospitals
   - changing of the guard
   - phoenix from the ashes

To the above, I would add the following:

6. restructuring macroeconomic policies
7. counting the costs
   - monetary
   - fiscal
8. restructuring borrowers

The following sections discuss the experience and issues involved in bank restructuring based upon the lessons culled from the available case studies. The lessons are by necessity tentative, since most of the bank restructuring exercises are still on-going, and the verdict on the success of these exercises is still out.

3. Summaries of case studies for nine countries (Spain, the United States, the United Kingdom, Colombia, Chile, Thailand, Malaysia, the Philippines, and Guinea) are presented in the appendix. The case studies for other countries earmarked in the Research Project on Bank Restructuring (Yugoslavia, Hungary, Argentina, Pakistan, Mauritania, Kenya, and Ghana) have not been completed as restructuring exercises are still ongoing and data are not fully available.
Groups of Countries

For the sake of convenience, the experience in bank restructuring can be broadly grouped into four major country groups:

A. high-income countries with established banking systems, such as Spain, the United States, the United Kingdom and recently Norway (which unfortunately has not yet been fully documented)
B. low- to medium-income countries with (mixed) developing banking systems and modest inflation levels, such as Malaysia, Thailand, Philippines, Kenya and Colombia
C. centrally-planned economies with broadly nationalized banking systems in process of transition to market based economies, such as Hungary, Poland, Guinea, and Pakistan
D. high-inflation, high-debt economies, and badly affected banking systems, with the most extreme example being Argentina, but would also include countries such as Turkey, Yugoslavia, and Chile.

The above groupings cannot be carved into stone, because certain countries share common characteristics, even though they may be placed in different groups. For example, the sharp decline of energy prices affected badly the banking systems of the southwest United States, Norway, and Malaysia. Yugoslavia could be included in the centrally planned economy group C, but the existence of high inflation, which requires major macroeconomic adjustments together with microbank restructuring, would place it instead in group D.

Diagnostics

There is ample evidence that bankers and policymakers all develop disaster myopia in the face of an impending banking crisis. de Juan has already highlighted the tendency of bankers to engage in cosmetic behavior, evergreening bad credits, assetizing losses, and hiding material risks and losses from the public and bank supervisors.

The same can be said of many governments, which have allowed banking laws to become outdated, neglected enforcement of existing laws and regulations, or worse still, engaged in perverse or financial repressive policies that use the banking system to finance large fiscal deficits. Sundarajan’s (1988) study of banking crises in six countries showed that banking crises were typically associated with large internal and external imbalances due mainly to the pursuit of inappropriate macroeconomic policies.

In a number of instances, the bank failures were the result of financial liberalization having been done without first putting into place appropriate regulatory and monitoring systems. The banking crises in Argentina and Chile in the early 1980s followed the extensive financial sector liberalization
in the 1970s without creating a strong supervisory regime. A key lesson of
the U.S. savings and loan debacle is the danger of permitting the thrift
institutions to diversify out of traditional housing finance into commercial
lending without adequate supervisory checks and balances.

Typically, when banking problems begin to surface, the supervisory
authorities fear to face up to the issues because of the high budgetary costs
involved, the sensitive political issues, and the bureaucratic wishful thinking
that the problems would go away. In many instances, the authorities refrain
from the reform of the laws and accounting standards and even engage in
regulatory forbearance—allowing more and more ailing institutions to break
the law, hoping that time and economic recovery will resolve the problems.
As Hinds (1988), de Juan (1991, a & b) and others have amply
demonstrated, such problems do not simply go away; rather, they
compound the problems of macroeconomic management and worsen the
recovery process.

The World Bank is getting quite good at helping countries to get out of
the dark (de Juan, 1991b). The measures typically include improving the
bank accounting standards, especially loan classification and interest accrual
standards; auditing portfolios and studying the diagnostics of ailing banks;
creating greater bank financial disclosure; reforming banking laws and
regulations; and upgrading the bank supervisory capacity, especially in off-
site surveillance and onsite inspection. This is the easy part of the game.
Many governments, induced by prospects of funding, have undertaken such
reforms with zeal, including even the establishment of deposit insurance
schemes. Many, however, have hesitated at the great divide between
aspirations and reform, especially when the size of the problems—financial,
legal, institutional and political—come into clearer focus after the diagnostic
studies become known.

One aspect of diagnostic studies needs special mention: the issue of bank
asset valuation. Asset valuation is relatively straightforward in developed
economies, with established markets, professional valuation expertise, and
set accounting and asset valuation standards. Asset valuation is much more
difficult for less developed economies where the markets are narrow, there
is little or no professional valuation expertise, and accounting standards are
vague or nonexistent. This is particularly true of economies in transition,
such as centrally planned economies switching to a market-based economy.
It is therefore the job of the authorities to develop such standards and
expertise.

In many countries, however, bankers and supervisors spend an
inordinate amount of time arguing whether such standards on loan
provisioning are too stringent or not, because that affects basic bank
solvency. This misses the whole point of bank accounting: bank assets
should be valued on the basis of current cash flow and revenue, on current
economic conditions, rather than on future or expected events, which is
speculative in nature. This banking principle remains true, even in centrally
planned economies and high inflation systems. Bank assets should be valued on borrower viability rather than collateral.

It should be noted that high inflation economies have one additional problem in valuation. Under hyperinflation situations, such as in Argentina recently, domestic currencies no longer serve as numeraire, and adjustments to asset valuation using price indices can be quite meaningless in the face of rapidly changing markets. In such circumstances, valuation may have to use acceptable foreign currency as numeraire, such as the U.S. dollar.

In sum, getting out of the dark really means setting objective standards of measurement, independent verification of results of bank operations (through auditors or supervisors), and full disclosure of results to all parties involved in bank restructuring, including depositors, shareholders, bank employees, and management and the supervisory authorities. The true extent of losses and implications of loss distribution should be transparent to all parties, as perceptions of inequitable distribution of gains or losses, based on imperfect information, can sabotage any restructuring efforts.

**Rules Reform**

Bank restructuring essentially involves the apportionment of losses arising from the failure of a set of existing contracts, and the renegotiation of a fresh set of contracts—a new institutional setup. Elements of game theory therefore apply to bank restructuring. Under conditions of imperfect information and uncertainty as to behavior of other game participants, should all parties cooperate in a mutual contract that maximizes social gains (Coase’s Theorem), or should each participant maximize self-interest, leading to large social loss (Prisoner’s Dilemma)? Indeed, to what extent should the gainers compensate the losers (or minimize their losses) in order to achieve social optimality?

Conventional rule changes typically emphasize the importance of prudential re-regulation, redrafting of banking laws, enforcement powers, clearer bank entry requirements, regulations to prevent insider trading, connected lending, ownership concentration, and clearer bank exit (restructuring) rules. In many developing countries, the existing bank laws and regulations, many of which were retained from colonial regimes, have become hopelessly outdated. The simplistic banking laws of the preindependence era cannot cope with the technological advances in banking and innovation in banking services. Moreover, the emergence of indigenous bankers amid enclaves of foreign banks, together with the rise of public-owned banks with socioeconomic objectives, has created new pressure groups with their own agendas of priorities, which do not

---

4. See Michael Lipton (1985). Lipton views the prevalence of noncooperation situations (Prisoner’s Dilemma) in developing countries as partly due to risk aversion among the poor, and a transition of trust, where the new state authority has not yet fully acquired the information or the power to penalize or reward, relative to the old clan or tribal authorities, who apply common law or traditional customs.
necessarily include economic efficiency. In Pakistan, for example, unionized employees in the nationalized banking system make it highly difficult to retrench staff to improve bank productivity. Under the Marcos regime in the Philippines, political connections could determine priorities in obtaining funding from government banks, rather than pure project viability and efficiency. From a political perspective, banks (and especially government-owned banks) play a major role in control over economic resources and are power centers in themselves. Bank licenses to politicians in some developing countries are franchises to support political activities, with disastrous consequences for asset quality and bank efficiency.

Improving the rules of the game generally implies improving competition and bank intermediation efficiency, leveling the playing field, preventing monopolistic or oligopolistic practices, and defining more clearly (and, it is hoped, more equitably) the gains and losses of banking. Included in such reforms are the establishment of deposit insurance schemes to protect the small depositors, and bank ownership dispersion rules to prevent concentration of ownership in a single economic class.

However, prudential re-regulation and institutional reforms take time to renegotiate and develop. Normally, a social consensus has to develop before such laws and institutional reforms can be implemented. The dangers of market liberalization without clearly defined prudential rules and enforcement are clearly demonstrated in the financial liberalization experience of the Southern Cone economies. Such liberalizations resulted in excessive concentration of wealth (with interconnecting ownership of banks and enterprises) that developed oligopolistic practices, retarded competition and efficiency, and in many instances, created massive fraud that was borne ultimately by depositors and the taxpayer. The Chilean and Colombian bank restructuring experience contained deliberate attempts to broaden bank ownership and cut out interconnected lending, with limited results. These lessons are particularly applicable to nationalized banking systems in Eastern European economies seeking to divest ownership and control to the private sector.

A final word on the rules of the game. The best bank laws and regulations are useless if they are not enforced. In the face of entrenched interests, many bank supervisors fear to enforce even existing laws, preferring to wait for legal changes. Even the Bank of England would agree that raising the governor’s eyebrow will not suffice today to deter wrongdoing, hence the recent prosecution on the Blue Arrow affair.

**Who Should Bear the Loss?**

Conventional western thinking assumes that losses in banking should be borne, in broad descending order, by borrowers, shareholders, fellow bankers, other creditors/employees in situations of liquidation, government, and, lastly, the depositors.
The experience of banking in developing economies is not so clear-cut. Certainly, in some cases, bank debts owed by politicians have sometimes been known to have been repaid through political favors rather than in cash. In other cases, borrowers prefer to reduce their losses through bribing bank management to lose security documents, or delay enforcement by bribing court servers to lose their files. In many developing countries, bank losses do not necessarily occur because of poor credit evaluation, but because of borrowers' unwillingness to repay, reinforced by the delays in courts to enforce repayment, and the use of political clout to pressure banks not to pursue repayment. In other words, where governments do not enforce contracts, borrowers gain by cheating and shirking such contracts, passing on more losses to the banks.

In the same vein, the principle of shareholders bearing the first brunt of losses is not always followed in developing countries. In Colombia, government injection of capital into one bank helped cushion losses for existing shareholders. Before laws were changed in Thailand and Malaysia, initial bank restructuring efforts involved only losses being borne partially by shareholders. In Thailand, the finance company shareholders only surrendered 25 percent of their shares to the ministry of finance in return for lifeboat support, while in Malaysia, central bank injection of capital absorbed pari passu losses of three commercial banks with existing shareholders. Subsequently, both countries required full capital reduction of losses before government assistance became forthcoming.

The issue of forcing fellow bankers to absorb losses of failed banks is an open one. The European banking community, especially the British, maintain a tradition of inducing established bankers to absorb small bank failures, thus encouraging greater bank concentration through mergers. European bankers tend to tolerate banking cartels, which offer greater banking stability at the expense of higher spreads and lower competition, although this has changed recently. In Hong Kong, for example, the Hong Kong & Shanghai Bank absorbed Hang Seng Bank when the latter faced difficulties in the late 1960s, and the strengthened subsidiary was instrumental in absorbing smaller banks in difficulties in the early 1980s.

A protracted problem in bank restructuring is the position of employees. In many developing economies, banks are large employers. The Argentinian banking system has a labor force of 145,000, three times that of Malaysia with only twice the latter's GDP. The bank employees become a strong lobby against the closure of banks, particularly government-owned banks. For insolvent banks, staff retrenchment may be inevitable, but the labor laws must have equitable retrenchment benefits, which must be taken into consideration under the costs of restructuring. One of the worst excuses for keeping insolvent banks open is that of maintaining employment.

Developed banking systems with explicit deposit insurance schemes typically shelter depositors fairly fully from bank losses, particularly if there is quick action by supervisory authorities to merge with or acquire ailing
banks before they fail. The assumption is that depositors must be protected to encourage savings and maintain confidence in the banking system. This assumption is certainly not held in high-inflation and financially repressed economies, where the authorities have not hesitated to pass on losses to the depositors through the inflation tax or through negative real deposit rates.

In low-inflation economies without explicit deposit insurance schemes, however, some losses have been borne by the depositors. Two interesting cases deserve special mention. In the case of the failed finance company depositors, the Thai authorities agreed to repay only the deposit principal, without interest, over 10 years, at the rate of 10 percent per year. With an average inflation rate of 5 percent per annum, the depositor bore, in real terms, approximately 50 percent of losses. In the case of the failed Malaysian deposit-taking cooperatives, the Malaysian authorities agreed to repay the principal, 50 percent in cash over 2 to 3 years at a positive (but low) interest rate and 50 percent in equity or convertible bond in a licensed finance company that absorbed the assets of the failed cooperatives, and whose shares would be publicly quoted in the near future. The depositors effectively had a put option. If the finance company succeeded in turning around, they stood a good chance of future capital gains, possibly in excess of their lost interest. If the finance company failed, the depositors’ loss would not be worse than if the cooperatives were liquidated.

The deposit-equity conversion of banks is a good way of recapitalizing banks and building safety cushions in the banking system against shocks, provided management is in good hands, and an efficient domestic capital market exists. Deposit-equity conversion in the case of phoenixes (ailing institutions merged into a viable institution under sound management) is probably a technique that should be explored further. This is no different from the debt-equity conversion solutions for international debt.

The question remains on how much of the residue losses should be borne by the public sector. Moreover, should the bank failure losses be absorbed by the treasury or the central bank? Conceptually, the central bank forms part of the public sector, and there should be no difference between the treasury and the central bank. In practice, the financing of the losses can be critical in the design of the bank restructuring scheme. The key lies in the solvency of the central bank and its net savings in foreign exchange reserves.

A traditional central bank with only non-interest bearing monetary liabilities, high capital, and reserves represented mainly by foreign exchange assets should have little problems in absorbing the bank failure losses. The stock of savings of the public sector is reduced by the extent of the write-off. To the extent that the private sector engages in capital flight, the central bank may lose some foreign exchange reserves. The losses in the failure of some small banks in Hong Kong in the early 1980s were written off partly against the reserves of the Exchange Equalization Fund. For such solvent central banks, devaluations create large revaluation surpluses that could
easily absorb the losses from banking failures, while at the same time correcting for deflation arising from the decline in export incomes.

On the other hand, central banks with high interest-bearing liabilities and net foreign exchange liabilities do not have the capacity to absorb bank failure losses. These central banks would monetize such losses through the growth of their monetary liabilities, generating the inflationary pressure that in effect distributes the losses to the holders of currency and central bank liabilities. Indeed, devaluations to combat external imbalances have worsened the inflation situation, since the central bank incurs further foreign exchange losses from its net foreign exchange liabilities. Large quasi-fiscal deficits incurred by the monetary authorities have been a major source of inflation in countries such as Yugoslavia and Argentina.

Experience would suggest that where central banks do not have the capital and reserves to absorb bank failure losses, the losses should be absorbed by the treasury. In essence, the treasury may finance bank failure losses through six options: raising additional taxes, cutting expenditures, introducing domestic long-term borrowing, introducing external borrowing, using the inflation tax, or selling its real or financial assets. All involve passing on the burden of bank failure losses ultimately to either the taxpayer or the holder of public debt. The implications of different forms of financing is discussed in the section on the monetary and fiscal costs of bank restructuring.

Restructuring Options

The options for restructuring distressed banks depend on the circumstances specific to each country. It will be useful to classify countries in four groups: the developed countries (group A), the developing countries with a relatively stable macroeconomic environment (group B), the centrally planned economies (group C), and the highly indebted/high inflation countries (group D).

Group A

Up until 1980, well-documented bank restructuring experiences have been confined mainly in the group A (developed) countries, such as the lifeboat scheme of the United Kingdom, and the Federal Deposit Insurance Corporation (FDIC)/Federal Savings and Loan Insurance Corporation (FSLIC) purchase and assumption model in the United States. Initially, bank rescue schemes involved primarily liquidity support by either the central bank or a deposit protection scheme (funded by the government), but as most liquidity cases deteriorated into solvency problems, concrete restructuring techniques and mechanisms had to be developed.

The U.K. Lifeboat scheme was fairly straightforward in operations. Banks seeking support came to a control committee staffed by clearing bank representatives and chaired by the deputy governor of the Bank of England. Each applicant was assigned a related bank (the clearing bank that had the
most exposure), which evaluated its solvency. Those found solvent were given liquidity support from the fund. Some were sold or merged into other institutions. Those that were found insolvent and could not be sold were put into receivership and eventual liquidation.

These relatively informal private sector/central bank efforts were more formally developed in the U.S. FDIC/FSLIC failure management models. These involved basically a purchase and assumption technique, which required a healthy bank to buy the good assets of the failed bank and assume all deposit liabilities. The FDIC/FSLIC made up the difference through an income maintenance package that replaced the lost income due to non-performing loans, or FDIC bought out the bad assets. To replace lost capital, the FDIC issued net worth certificates to ailing banks, which had to be repaid over time. Banks that could not be sold were liquidated by the FDIC liquidation division. As the number of failed banks increased, the FDIC merged some of them together, changed management and sold or merged them to healthy banks as phoenixes. For banks on the borderline of insolvency, the FDIC even engaged in regulatory forbearance, which relaxed capital adequacy standards and other compliance requirements.

The Spanish experience brought an innovation in the form of the bank hospital, the Guarantee Fund. The accordion principle, which wrote off all losses against existing capital before providing fund help, was a clear legal mechanism to place the burden on existing shareholders to absorb losses. It also made the fund the majority owner and gave considerable latitude and flexibility to rehabilitate the ailing bank by changing management, redesigning a financial package, and selling to another institution.

The group A countries all had the following favorable features: strong central banks and highly professional bank supervisors, a large pool of professional bankers to help rehabilitate ailing banks, and a deep market for bank sales or mergers because of the existence of strong banks. These generally helped to resolve banking failures quite successfully, except in the case of the U.S. savings & loans, which turned out to be very expensive, partly because of the compartmentalized approach to regulation over U.S. financial institutions, and the close links between the regulators and the thrift industry, which led the regulators to underestimate the problems and delay early resolution.

**Group B**

Group B countries' bank restructuring mechanisms were generally modeled on the developed country systems. The Thai Rehabilitation Fund had elements of the U.K. Lifeboat Fund, while the Colombian Guarantee Fund was based on the Spanish model.

An interesting development in the spread of technology on bank supervision and bank restructuring was the coordination of bank supervision in the Southeast Asian Central Banks (SEACEN) region. Malaysia was able to benefit from the experience of the emergence of
problem banks in Thailand and the Philippines through regular consultations with fellow bank supervisors at SEACEN meetings. Consequently, Malaysia was one of the few countries to bring into force legislation that empowered the central bank to handle the banking crisis when it emerged. Of particular significance was the emergency legislation that allowed the central bank to freeze assets of failing institutions, to allow time for investigation, and to apply to the high court for speedy decision of cases, which included important rulings on staff retrenchment, priority of claims, and the principle of deposit-equity conversion.

The Philippines' experience with bank restructuring had several important lessons. First, a rapid carve-out of bad assets from the two ailing government-owned banks into a special fund, together with a change in management and minimal government interference in day-to-day operations, quickly turned around the banks. One of the banks divested 30 percent of its shares to the public, which was oversubscribed. Second, the existence of a deposit insurance scheme did not necessarily prevent bank runs. The slowness in repayment of deposits (due to delays in liquidations and shortage of funds for the Philippine Deposit Insurance Corporation) worsened the confidence problem.

Most of the medium-income countries had sufficient domestic banking expertise to call on to help resuscitate ailing institutions. This may not necessarily be true for the smaller and lower-income countries. The relatively successful bank restructuring exercises in Thailand, Malaysia, the Philippines, and Colombia all demonstrated considerable political will in addressing the banking problems. In all four cases, the committed adjustments in the fiscal and external imbalances, together with the stabilization of the banking system, probably aided economic recovery and the revival of confidence. Nevertheless, not all the nonperforming loans have been eradicated in the recovery, and the supervisory authorities will have to face the second hurdle on how to manage the banking system in the next economic downturn.

**Group C**

The centrally planned economies' banking systems are still at a point of transition. The problems facing the nationalized banking system are fourfold:

1. There is a lack of banking professionals with good understanding of market-based banking (as well as shortage of bank supervisors).
2. There is a lack of good pricing mechanism to determine asset valuation and quality. Most of the loan assets inherited from the single national bank structure in socialist economies have been at historical cost, which do not reflect their true market values. A
mechanism for recapitalization of the banks to adjust for the loss when markets begin to develop will have to be established.

3. Under the state ownership of banks, or in the transition period, the lack of experience in banks and bank supervisors in managing credit and other bank risks could cause some losses. Nationalized banking systems do not encourage competition and innovation. On the other hand, credit losses and inefficiencies can be very large because of insufficient checks and balances in the system, as all risks are borne by the state. Incentives for professional bank managers may not be great in situations where key executive posts in the government-owned banks change with every new government, as has been the experience in Pakistan.

4. There are difficulties in separation of the ownership of banks from enterprises and the interconnection of loans to shareholder/enterprises. This must be addressed in order to develop independent and objective credit evaluation and supervision for the banks.

The nationalized banking systems, without inadequate checks and balances in the system, can be subject to many incidents of fraud and mismanagement. Because public-owned bank management are fellow civil servants or political appointees, with similar pay or equal rank to bank supervisors, the supervisory mechanism is not as effective as normal public sector supervision of private sector banks and enterprises. The most extreme example of fraud and abuse in the nationalized banking system is Guinea, which had to close down six wholly government-owned specialized banks in 1985 because of massive fraud, where fictitious assets accounted for as much as 76 percent of total reported assets.

**Group D**

The group of countries facing the most severe financial distress in their banking systems are the highly indebted/high inflation countries, of which the most spectacular example is Argentina, which is still reeling from one crisis to another. The only country that has so far emerged relatively successful out of this, after a painful adjustment process, is Chile. In one of the few across-the-board solutions attempted and recorded, the Chilean central bank bought out the bad loans from the banks in exchange for 10-year bonds, repayable over 20 installments at 5 percent real interest rate per annum. This innovation managed to keep the banking system functioning during the crisis, however tenuously, until fundamental structural adjustments on the real front could help turn the tide.

The exact causes and processes that generate the high inflation in these economies, and their relationship with the banking system, are fully understood (at least by this author, who comes from a low-inflation economy). My own personal interpretation is that the public sector attempts
to transfer its high debt burden (arising from cumulative large fiscal deficits and the inability for one reason or another to tax the population sufficiently) to the private sector through the inflation tax. The inflation that arises completely distorts allocation of resources, erodes the real value of private sector savings in currency and public debt, and constitutes a distinct breach of the social contract.

Once the social contract is breached, faith in the government as a protector of private property rights is eroded, and a massive prisoner’s dilemma game is played by all citizens. All kinds of cheating, shirking, and opportunism, as well as speculation occur in order to maximize individual gains (if necessary, at large social costs).

In the initial stages, the public sector is able to finance its deficits from external borrowing. However, once the foreign sector is no longer willing to extend further credit (and indeed begins to demand early repayment), the public sector can only finance its growing deficits through domestic borrowing or the printing press. The overhang of a large public debt with little prospect of repayment implies that wealth holders would be taxed sooner or later, either through direct taxes or through the inflation tax. Such wealth holders can escape the pending tax burden through capital flight. The banking system can also be exploited, because large borrowers having access to bank funds can borrow to speculate against the domestic currency, creating self-fulfilling devaluations. These devaluations serve to worsen the debt-servicing burden of the public sector. At the same time, the bank failures (partly because of nonrepayment by borrowers engaged in capital flight and partly because of failure of enterprises) imposes a further burden as the public sector is forced to provide liquidity to the banking system in order to prevent a wholesale banking collapse. To stem the capital flight, the tight monetary policy raises real interest rates to such a level that private sector borrowers begin to fail from the interest burden, leaving the banking system in greater dependence on the public sector. In Argentina, more than 70 percent of bank assets comprised forced savings with the central bank. These have now been compulsorily converted into dollar-denominated bonds with the government.

In varying degrees, the highly indebted countries in group D all suffer from the above-mentioned problems. Bank restructuring in such circumstances cannot be divorced from drastic macroeconomic adjustments, including generating a primary surplus in the budget, debt rescheduling and part-forgiveness, removing the source of the inflationary pressure, and major currency and banking reforms. The Chilean experience shows that the vicious circle can be broken, but at a high cost. Of crucial importance is the need to restore public faith in the government, and this may mean budget balancing, currency reform such that the currency used is a meaningful numeraire and store of value, and general protection of property rights. In essence, the government has to move the economy from a prisoner’s

---

5. There is increasing awareness in the literature on this problem. See Thorne (1989).
The dilemma into a cooperative Coase's outcome, where everyone shares the burden equitably.

**Restructuring Mechanisms**

The above survey indicates that restructuring techniques may have to vary according to the economic condition of the country and the resources available for restructuring. However, some comments about the general restructuring mechanisms are in order.

As a general rule, market-based solutions appear to be the most efficient and least costly to the taxpayers. If private sector purchasers cannot be found for a failed bank, in general, liquidations are cheaper than keeping insolvent banks open. However, in a number of developing countries, ailing public-sector banks have been kept open for employment purposes, or for purposes of national pride. This imposes a drain on public resources that few developing countries can afford. In Malaysia and the Philippines, even partial privatization of government banks can raise profitability and efficiency quite noticeably.

A common dilemma that arises is whether bad assets should be carved out of banks, in exchange for, say, government bonds or central bank liabilities. Alternatively, should the bad assets be retained in the books, and the lifeboat assistance comprise long-term loans or equity? The experience varied in results. In Chile and the Philippines, the bad assets were carved out. In Malaysia, Thailand, and the United Kingdom, the assets were retained in the banks' books. In the United States, the disposal of assets of failed thrift banks have been centralized in a corporation run by FDIC. Much would depend on the legal issues of whether the new asset managers have full power of disposal of assets, and whether the bank managers can be trusted to dispose of such assets at fair market value. The Thailand experience suggested that central bank examiners are not the best equipped to act as receivers or liquidators of banks, and the strategy was quickly switched to consign management to healthy commercial banks under the supervision of the Rehabilitation Fund.

As a general rule, central bankers should not be involved in credit decision-making, which can compromise their supervisory authority. The business of loan rehabilitation, sale of assets, and bank liquidation are best delegated to a separate agency (with or without central bank support with full powers to manage and dispose of failed bank assets at market prices.

A common restructuring mechanism is the idea of a bank hospital, the deposit insurance scheme being the vehicle for rehabilitation and liquidation. In the context of the United States, where there are more than 14,000 banks with relatively free entry, an official exit mechanism is probably indispensable. The question is whether in a small economy with a relatively small number of banks, another public institution with a (it is hoped) temporary mission to rescue banks is efficient and necessary. On balance, an independent and objective institution, with the flexibility to recruit
professionals to do the job, working closely with the bank superintendency or central bank, is probably a good way to deal with bank failures flexibly and pragmatically. Many developing country central banks have low civil service pay, restrictions on recruitment, and also limited powers to act in liquidation and rehabilitation work.

In almost all bank restructuring experiences, a common feature stands out across countries—the need for a complete change in bank management for failed banks. Leaving old management to look after assets can lead to even greater losses. As the Malaysian central bank governor remarked during the 1986 cooperative crisis, “You cannot allow monkeys to look after bananas.” This adage must also apply to senior bank staff and even down to the supervisory level. In many instances, retaining staff with suspect integrity had resulted in continuing weaknesses in control over asset quality.

A final comment on the mechanism of creating phoenixes, in which a number of failed institutions have been grouped together under one umbrella with new management with the objective of turning around the operations. This has been tried in the United States (by the FDIC), in Malaysia and, recently, in Kenya. In conditions of scarce managerial talent, it is not a bad idea to consolidate resources. The Malaysian experience is that integrating diverse groups of staff and procedures into one new institution have turned out to be much more difficult than initially envisaged, and public appointed boards may not be as dynamic and market-oriented as private sector ownership. As in the case of the FDIC, the creation of phoenixes is a third best solution, devised in order to package disparate assets together into a viable institution such that these can be sold later into private hands.

**Changing Macroeconomic Policies**

Many economists engaged in structural adjustment programs feel that if the macroeconomic policies are set right, with the right price incentives, correct level of exchange rates, reduced fiscal deficit, and elimination of subsidies and market distortions, the banking sector would take care of itself. The (relatively) successful experiences of Chile, Malaysia, and Thailand certainly show that strong supervisory laws and enforcement, together with appropriate macroeconomic adjustments, have aided the recovery process. In both Malaysia and Thailand, the recovery of property prices and improved national income had reversed substantially previously non-accrued income and bad debt provisions, but the Malaysian experience is that even with a strong recovery, roughly one-third to one-half of bad debt provisions may never be wholly recovered. This implies that fraud and asset mismanagement can exist even in the best of times, and that strong bank management with prudent bank accounting standards, asset diversification, and risk control, can minimize the damage from macroeconomic shocks.

A lesson for developing countries, therefore, is that fiscal expansion or development planning must take into consideration the performance and
behavior in the banking industry. In many countries, such as the Philippines, policy makers failed to anticipate the sharp and deep contractionary impact of fiscal retrenchment on the fragility of the banking system. Neither did many countries calculate the ultimate monetary and fiscal costs of bank restructuring in their structural adjustment programs.

**Counting the Monetary and Fiscal Costs**

There has not been much work done on the calculation of the monetary impact of bank restructuring. Sundararajan (1988) tracked the behavior of monetary aggregates during the crisis periods of six countries and observed tentatively that the money multiplier declined sharply during the crises. Central bank lending to aid banks is generally expansionary on money supply, but this could easily be offset by losses in foreign exchange assets arising from capital flight. Unfortunately, data are not readily available for this aspect of bank restructuring. Further research is needed to examine the monetary budgets of the different central banks during the crises period to explore this point further.

In recent years, macroeconomists working on structural adjustment programs have caught onto the sizable impact of the quasi-fiscal deficits generated by central banks. A major component of such quasi-fiscal deficits is the cost of bank restructuring. Are bank failure losses a one-off cost or a recurring cost? The answer is that bad debt losses of banks are a stock loss (comprising partly cumulative operating losses), which ideally should be written off against capital and reserves. If the losses cannot be wholly written off in one year, and must be amortized over time, then there is an annual finance cost of nonperforming assets.

If the decision of the government is to replace the bad assets with government bonds, then the fiscal cost to the government is not the gross size of the bonds issued, but the annual interest burden on such bonds. The swap of bonds with the bad assets of, say, government-owned banks, is only a financial transaction, recognizing explicitly losses and making transparent the fiscal cost of such losses. The continuing operating loss in the government-owned banks (without such a bond swap) is a quasi-fiscal deficit, which should be calculated and included in the structural adjustment program.

One possible technique to replace bad assets of banks is to inject government financial and real assets into the banks as part of a privatization package. For example, government-owned shares in development banks or even specialized banks can be sold to the private sector to raise resources to finance bank restructuring. Alternatively, such government banks can be merged into ailing banks as part of the recapitalization scheme. By placing low-yielding assets into private-sector management, the government hopes that overall efficiency improves in the economy. The fiscal costs remain the lost interest or revenue earned on such financial and real assets. However, the economy as a whole gains, if the banking system or the private sector is
able to generate greater revenue from the use of the real assets or the injection of the financial assets helps to develop the domestic bond or money markets.

**Restructuring Borrowers**

A case can be made that the priority of the government during a financial crisis is to restructure the real sector and not the financial sector. After all, bad loans are due to ailing enterprise borrowers. For various reasons, restructuring enterprises and banks have always been treated as separate exercises. Other than in the post-war reconstruction period, when specialist development banks were set up to help revive key industries, group A economies have tended to let the banks work out their own problem loans. The German banks, in particular, have been much more active in helping to manage industrial recovery, because of their universal banking structure.

In the aftermath of the international recession and debt crisis on the developing countries, much of it accompanied by bank failures, special attention perhaps is needed on the restructuring of ailing enterprises. The problem is most acute for countries in groups B, C and D. In group B, Malaysia is the only country that has attempted to establish a special Enterprise Rehabilitation Fund to assist ailing but viable small to medium (indigenous) enterprises to revive, with seed capital, soft loans and professional advice. The problem is highly important in the group C economies, where the nationalized banks have lent considerably to large and inefficient industry/enterprises that have to be restructured into market-based competitive institutions. Neither the enterprises nor the lending banks in these economies are equipped to handle this problem. This problem is also acute in the group D economies, but it can be argued that in some cases, the problem borrower is the government, rather than private-sector enterprises. Clearly, reform of the banking industry must include the development of its expertise and knowledge of the operations and viability of its borrowers. This has to be a critical element in the next important phase of bank restructuring, particularly in the context of developing countries.

**V. CONCLUDING REMARKS**

In conclusion, bank restructuring is a process of political economy, in which the interplay of gains and losses among different groups in the economy determine very largely the success of its outcome. This paper has surveyed the available experience in the field, and showed that the restructuring work is much more multidimensional than pure economics. Policymakers involved in bank restructuring must understand the contractual nature of institutions, the importance of law and regulations, formal and informal, the need for government enforcement of such laws, the correct diagnostic of the causes and effects of bank failure, and the careful design of reform measures.
There are several broad trends discernible from the disparate experience of different countries. Most banks fail because of overgearing of their enterprise borrowers, and through their own undercapitalization, mismanagement of asset quality, and, possibly, fraud. The lack of capital depth (including inappropriate bank accounting that disguised the risks and exposure of the asset portfolio) were primary reasons for the fragility of the banking system when subject to macroeconomic shocks or the mistakes of inappropriate government policy. There is certainly a case to be made for higher levels of bank capital and a more prudent approach to valuation of bank assets.

The interesting point about the level of enterprise capital, bank capital, and public-sector solvency is that those economies with high levels of savings, strong market depth, and professional expertise, and capable public-sector management, generally had little difficulty in dealing with bank failure. At the other end of the spectrum, those countries with high debt, especially an insolvent public sector unable to service its debts except through inflationary financing, had almost no room to maneuver. Indeed, the insolvency of the public sector very quickly translated into insolvency of the banking system, with resulting capital flight and further turmoil.

There appears to be an important lesson for developing banking systems and evolving capital markets. Banking systems should be developed in parallel with capital markets, to establish the capital cushions against shocks. This calls for higher domestic savings—savings not only in the form of enterprise and bank capital, but also public-sector savings. The importance of high foreign exchange reserves, plus low external debt as cushions against external shocks has not been accorded sufficient academic interest. The full faith of money and banking rests on the level of government solvency, that is, its financial discipline to maintain at least a primary surplus, and to engage in policies that promote competition, efficiency, and general equity in income distribution and wealth.

In general, bank restructuring work cannot be conducted independently of an appropriate package of macroeconomic adjustment policies. While the resolution of the banking sector, through improved supervision and recapitalization, will help to aid economic recovery, the longer lasting reforms must include not only changes in the real sector, but also political will and public financial discipline, that civil laws are clear and strictly enforced, and the fundamental social contract—the state protection of property rights—is strictly adhered to. Without such faith in the sanctity of the social contract, financial discipline breaks down in the banking system, and disorder multiplies. The bitter experience of many distressed banking systems is that breaches of the social contract can only be remedied at high social and human costs.
Appendix:
Summary of Key Case Studies on Bank Restructuring

I. Spain

I. Period of banking crisis: 1978-83

II. Institutions affected: 52 out of 110 banks, mainly small- and medium-sized banks, with recent history. Seven largest established banks had limited damage.

III. Size of deposits affected: Ptas 2 billion, or 20 percent of total deposits


V. Macroeconomic factors: Oil shock; terms of trade fell from 106 in 1973 to 84 in 1980; real growth declined between 1975 and 1980 to 2 percent.


VII. Restructuring technique: Two key approaches:

1. "Accordion operation" to reduce capital to net asset value, with fund buying control at nominal value of 1 ptas per share; or
2. Fund subscribes to share capital increase. After control, fund removes old management, cuts back on overhead and staff, and provides financial package, comprising:

   - purchase of bad assets
   - provision of guarantees
   - long-term soft loans
   - regulatory forbearance, temporary relaxation of super-visory ratios for ailing banks.
VIII. Burden of losses: Sale of bank to highest bidder within one year of fund take-over.

First cut, shareholders; deposits and creditors did not suffer directly. Fund costs borne through joint contributions of banking system and Bank of Spain. Peak Bank of Spain lending at 7.25 percent p.a. was US$2.9 billion in 1984. For 20 Rumasa banks, Bank of Spain lent US$2.5 billion at 8 percent p.a., on top of government loan of US$2.5 billion (interest free).

VIII. Key lessons:

1. Pragmatic and flexible response to crisis.

2. Specific restructuring machinery (Guarantee Fund) with ample resources and clear-cut mandate.

3. Availability of established banking sector, and sufficient professional expertise to deal with problems.

4. Mature banking community was able to deal with limited shock (20 percent of total deposits affected).

Source: Larrain and Montes-Negret (1986).
2A: U.S. Savings and Loans Crisis

I. Period of banking crisis: 1979-90

II. Institutions affected: 346 out of 3,147 thrift banks insolvent at end of 1987 (4,242 at end of 1979). Between 1979-87, 1,506 thrifts merged, 111 were terminated, and 65 were liquidated. Southwest thrifts badly affected by oil and property price declines. 109 out of 281 Texas thrifts insolvent.

III. Size of assets affected: Insolvent thrifts accounted for US$99.1 billion in total assets (or 7.9 percent of total thrift assets). Insolvent thrifts lost in 1987 US$10.2 billion, resulting in industry loss of US$7.8 billion.

IV. Key background: Interest rate shock of 1981 hit major thrift assets of 25-30 year fixed rate mortgages. Authorities allowed thrifts to grow out of initial losses, through regulation forbearance, and liberalized lending powers in 1982. Authorities underestimated credit risks and did not tighten supervision sufficiently. Deterioration due to poor asset quality in commercial loans and real estate financing.

V. Macroeconomic factors: Interest rate shock in 1981, when tight monetary policy increased interest rates costs. Southwest thrifts and California thrifts badly hit by decline in oil and farm prices in second half of 1980s. Fraud rose due to inadequate supervision.

and Enforcement Act, 1989 (FIRREA) passed.

VII. Restructuring technique: Two key approaches:

1. Acquisition or merger, with FSLIC purchase of problem assets and financial assistance.

2. Liquidation, after pay-off insured deposits (S&Ls not subject to general bankruptcy laws). Depositors have priority over other creditors and shareholders.

Under Acquisition/merger, FSLIC agrees to income mainte-nance program, whereby FSLIC pays acquiring thrift difference between earnings on assets of failed thrift and cost of funds.

Accounting forbearance—allow good will—shortfall in assets to be written off over 30 years.

Phoenixes—mergers of groups of insolvent thrifts with new management and board for turnaround.

Management consignments—placing troubled thrifts in hands of professionals or other well-run thrifts.

VIII. Burden of losses: First cut, shareholders; depositors did not lose, as most insolvent thrifts were merged or acquired into ongoing concerns. Main burden was on FSLIC. Resolution costs are quite high—in first half of 1988; resolution of 44 insolvent thrifts cost US$4.5 billion or 42.4 percent of total assets.

Total losses for the thrift debacle have been estimated at about US$100 billion, or 2 percent of GDP.

IX. Key lessons:

1. Fixed rate lending institutions with limited manage-ment capabilities, limited investment options highly vulnerable to interest rate fluctuations.

2. Regulatory system too closely tied to industry to identify problems in early stages and impose discipline.
3. Deposit insurance scheme without adequate supervision encouraged moral hazard. Thrift managers sought high growth strategies with low capital and high risk to FSLIC.

4. Risk position of insured institutions must therefore be monitored by supervisors on timely and accurate basis, with quick enforcement response.

5. Political involvement in some cases delayed resolution, at high cost.

2B: U.S. Banking Sector

I. Period of banking crisis: 1982-90

II. Institutions affected: FDIC reported 1,575 problem banks (CAMEL rating of 4 or 5) in 1987 or 11 percent by number of 14,289 FDIC-insured banks.

III. Size of deposits affected: Bank failures rose from 40 in 1982 to over 200 in 1988 (184 in 1987 with total deposits of US$6.4 billion or 0.27 percent of total U.S. bank deposits of US$2.3 trillion.

   In 1987, the 29 largest national banks with assets exceeding US$10 billion made loan loss provisions of US$16 billion (US$6 billion in 1986), incurring losses of US$4.7 billion in 1987. Total bank profits were down from US$9.5 billion to US$0.3 billion in 1987.

IV. Key background: In the 1980s, oil shock, increasing competition, deregulation, and the international debt crisis led to large loans domestically in real estate and farm loans, as well as provisions for international debt. In 1982, claims on rescheduled countries of nine U.S. internationally active banks was 233 percent of capital (101 percent by March 1989). Real estate loans was 32.8 percent of total bank loans at the end of 1987. Nonperforming loans peaked at US$75 billion or 4 percent of gross loans in 1987. Southwest banks particularly hard-hit. Thirty-six percent of banks there lost money in 1987. Nine out of the 10 largest Texas banks failed.

V. Macroeconomic factors: Decline in farm prices affected midwestern banks. In southwest, decline in oil prices and collapse of real estate affected regional banks. Internationally active banks became highly exposed to sovereign debt risks in the 1980s.

VI. Policy response: Tightened up overall bank supervision. New capital adequacy guidelines to meet Bank for International Settlements (BIS)

VII. Restructuring technique: FDIC approaches similar to FSLIC:

1. Assistance with transactions—FDIC provides financial assistance to prevent closing of insured bank, where cost of such assistance is less than cost of liquidation. Assistance requires additional capital and management commitment. Assisted banks are then merged or sold to other banks. 72 percent of failed banks underwent “purchase and assumption” transactions. Healthy bank assumes written down assets of failed bank, with some assistance from FDIC.

2. Liquidation, after pay-off insured deposits. Depositors have priority over other creditors and shareholders.

For bank approaching insolvency, FDIC can issue net worth certificates under 1982 to meet capital guidelines. Such certificates were issued subject to restrictions on deposits growth and investment policies.

Bridge banks—The Competitive Equality Banking Act of 1987 allows FDIC to establish bridge banks for 3 years to take over failed banks.

Accounting forbearance—allow good will or agricultural loan losses to be written off over long term.

VII. Burden of losses:

First cut, shareholders; depositors did not lose, as most insolvent banks were merged or acquired into ongoing concerns. Losses of FDIC was substantially smaller than FSLIC. FDIC costs of handling failed banks of US$150 billion in 1980 was US$2 billion, compared with FSLIC cost of US$80 billion for thrift asset size of US$600 billion.
IX. Key lessons:

1. Tighter supervision and prompt action can limit bank failure losses.
2. Banks with regional or sectoral focus with less geographical spread are subject to high risks when economic conditions change.
3. Owners and managers must have adequate capital at risk and be given incentive to control their risk exposure.
4. Prompt action must be taken to recapitalize or close banks that are close to insolvency. Allowing these institutions to operate with little capital by living off the deposit insurance safety net is highly costly to the taxpayer.
5. Loans whose repayment is not realistic in terms of current (as against future or expected) cash flow and economic conditions are highly speculative, of junk bonds.

3. **U.K. Secondary Banking Crisis**

I. **Period of banking crisis:** 1973-76

II. **Institutions affected:** 26 “fringe banks” of which eighteen were deposit-taking institutions and 5 were authorized banks. Eighteen were reconstructed or merged into other companies, while eight eventually were liquidated or placed into receivership. None of the major clearing banks were affected.

III. **Size of funds affected:** Not published. However, total lifeboat support was Stg 1.2 billion, equivalent to 40 percent of total capital of capital reserves of all English and Scottish clearing banks.

IV. **Key background:** Growth of fringe banks and deposit-taking companies in 1960s and early 1970s. Such institutions were effectively not supervised under the law, nor were they subject to credit control. These fringe banks borrowed heavily from money market and financed property boom of early 1970s. Tight monetary policy in 1973 following volatile currency markets and deterioration in balance of payments caused liquidity squeeze. Collapse of commercial property prices led to failure of London and Counties Securities in November 1973.


VI. **Policy response:** In December 1973, establishment of joint committee of Bank of England and clearing banks chaired by deputy governor (lifeboat). This provided liquidity loans at commercial rate to solvent deposit-taking
companies or banks up to Stg 1.2 billion limit. Thereafter, burden was borne solely by Bank of England.

VII. Restructuring technique: Initially concentrated on deposit recycling. Lifeboat lent to fringe bank under liquidity attack, subject to security and proof of solvency.

After liquidity crises turned to solvency crisis in 1974/75, failed institutions sent to receivership or liquidation. Bank absorbed sole risk after ceiling of Stg 1.2 billion was reached in March 1975. In 1975 and 1976, bank took over Slater Walker Ltd., and helped reconstruct Edward Bates. These were subsequently sold to private sector.


IX. Key lessons: 1. Clear need for supervision of deposit-taking institutions and legal powers for the central bank to do so.


3. Availability of established banking sector, and sufficient professional expertise to deal with problems.

4. Mature banking community responded positively and quickly to deal with crisis in the secondary banks, enabled the containment of problem.

4. Colombia

I. Period of banking crisis: 1982-87

II. Institutions affected: Six out of 26 banks, including the largest and second largest commercial banks, 5 development finance companies, and 8 finance companies.

III. Size of assets affected: The 6 banks accounted for 23.5 percent of total bank assets.

IV. Key background: Financial sector and interest rate liberalization in 1974. High concentration of bank ownership linked with enterprises, coupled with excessive borrowing. Fraud and failure in offshore affiliates. At peak (1984), nonperforming loans were 25 percent of total loans.

V. Macroeconomic factors: Overvaluation of currency; excessive external borrowing; sharp slowdown in growth between 1981-84 after coffee boom of 1976-80. Current account deficit worsened to 11.3 percent of GDP in 1982, and high fiscal deficit (5-6 percent of GDP).


VII. Restructuring technique: Guarantee fund empowered to nationalize by purchasing 100 percent of shares, or officialize, by holding majority control, and the government guarantee is proportionate to government equity share.

Not only can fund invest in bank equity, it can also extend loans, buy real estate, assume domestic or foreign debt, offer guarantees, establish a deposit insurance scheme, and administer viable institutions.
Techniques applied similar to Spanish guarantee fund.

In the Banco de Bogota case, shareholders were also bailed out through central bank loans to trust fund, in which existing shareholders pledged their shares, and funds were used to increase bank capital.

VIII. Burden of losses:

First cut, shareholders, although not all shareholders lost, as policy attempted to prevent further concentration of bank ownership. Small depositors did not suffer, but other depositors and creditors had to await results of liquidation. Major burden fell on the central bank and the government.

IX. Key lessons:

1. Need for strong supervision to reduce loan concentration and bank fraud.
2. Need to control bank overseas affiliates and subsidiaries as means to bypass domestic bank regulations and exchange control.
3. Need for early warning system to alert the government to solvency problems.

**5. Chile**

I. **Period of banking crisis:** 1975-85

II. **Institutions affected**

   Government intervened in 13 out of 25 domestic banks, and 6 financial companies out of 18. These included 2 of the largest banks.

III. **Size of loans affected:**

   1983 intervention involved 45 percent of total bank loans. Nonperforming loans reached as high as 113 percent of total bank capital and reserves by May 1983. At peak (end of 1986), bad loans sold to central bank amounted to 23.8 percent of total loans.

IV. **Key background:**

   In 1974, government denationalized 20 banks. Interest rate liberalization led to high real interest rates, averaging 77 percent p.a. between 1975 and 1982. Overborrowing by private sector from 5 percent of GDP in 1974 to 61.7 percent by 1982.

V. **Macroeconomic factors:**

   Collapse of major export prices (mainly copper), deterioration of competitiveness, high domestic interest rates, and deterioration in balance of payments.

VI. **Policy response:**

   Devaluation in 1982, monetary policy aimed at reducing interest rates, 1983-84 introduced schemes to help domestic borrowers by rescheduling debt at reduced interest rates (one-fifth rescheduled in 1985).

VII. **Restructuring technique:**

   Emergency loans to banks subsequently converted into equity.

   Central bank (CB) subsidies to banks and finance companies to allow rescheduling of borrowers.

   Central bank purchase of bad loans, initially up to total bank capital and reserves, by swap with non-interest-bearing central bank bonds (5 percent repurchased every 6 months for 10 years).
In 1984 revised to cash purchase of bad loans up to 150 percent of capital and reserves, repay CB debt and balance buy CB IOUs. Loans sold for cash had to be rebought over 10 years plus 5 percent real rate. No dividends allowed until repurchase was completed.

Forced capital increases, first by existing shareholders, then new subscribers, then CORFO (state development agency). Emergency loans converted into equity. CORFO shares limited to 49 percent, balance of loss absorbed by central bank.

CORFO would sell bank shares within 5 years, balance unsold to be transferred back to shareholders that had contributed to equity increase. Share sale was on attractive terms of 10 years, small down payment at 5 percent real interest.

Preferential exchange rate scheme for external debt servicing, subsidy paid with CB six-year notes.

Interest subsidies on swap operations eliminated in 1987.


1. Drastic relief program at high cost to central bank kept banking system functioning and stabilized confidence.

2. Financial liberalization without adequate banking supervision does not lead automatically to well-functioning markets.

3. In the Chilean experience, bank supervision should prevent loan concentration and interconnected lending.

4. Financial crises can aggravate macro-economic disequilibrium. Distress borrowing can escalate, generating a widespread cry for bailout.
5. Wait-and-see attitude delays macroeconomic recovery. Problem should be tackled as decisively and quickly as possible.
6. Across-the-board solutions are quick, but costlier in being unable to distinguish between different levels of insolvencies. Case-by-case solutions are administratively complicated and face political obstacles.

6. Thailand

I. Period of banking crisis: 1983-87

II. Institutions affected: In 1983 finance company crisis involved closure of 19 finance companies, involving 12 percent of total financial system assets. In 1986-87, government intervened or supported 5 commercial banks, involving 24 percent of total commercial bank assets. Between 1983 and 1988, 50 finance companies and 5 banks intervened, involving one-quarter of total financial system assets. Twenty-four finance companies and security companies have been closed and 9 merged into other companies.

III. Size of deposits affected: Bht 168 billion (1986) for 5 banks supported, involving 25 percent of total local bank deposits.

IV. Key background: High concentration of banking, lack of professional bankers, and heavy family ownership and control. Initial lax supervision of rapidly growing finance companies, which became heavily involved in speculation in shares and real estate. After failure of Raja Finance in 1979, flight of deposits to banks.

V. Macroeconomic factors: Oil shock in 1979-80; sharp decline in growth in early 1980s, led to macroadjustment; devaluation and tight monetary policy led to deterioration in loan portfolios. Recovery of economy since 1987 helped to increase bank capitalization and recovery of bad debts sunk in real estate.

VI. Policy response: At macrolevel, devaluation, tight monetary policy and budgetary restraint, plus export push helped turned around economy.

In 1983 crisis, establishment of Bht 5 billion joint government/commercial bank “lifeboat fund.” Liquidity provided at commercial rates. Lifeboat also provided capital through government bank (Krung Thai) Bht 2.4 billion, and soft loan from
Bank of Thailand of Bht 6.4 billion at 0.1-2.5 percent p.a. Funds deployed in government bonds. Central bank takeover of ailing finance companies not found to be successful.

Entrants to lifeboat scheme had to inject fresh capital, or surrender 25 percent of shares to government, plus 50 percent to be resold to original owners at price to be fixed within 5 years.

In 1987, establishment of Fund for Rehabilitation and Development of Financial Institutions (Rehab Fund). Krung Thai Bank added credit lines of Bht 4 billion, bringing total fund to Bht 19 billion.

VII. Restructuring technique: Cease and desist powers applied, but initial assumption of control by Bank of Thailand of finance companies not successful in rehabilitation. Management subsequently consigned to Krung Thai Bank, and ailing finance companies sold to banks or new investors.

After Emergency Decree of 1985 gave powers to Bank of Thailand, capital of ailing bank/finance company reduced before Rehab Fund intervention. Thereafter, voluntary capital increase encouraged.

VIII. Burden of losses: For finance company depositors, principal assured and repaid over 10 years, interest-free. Financing through Bank of Thailand soft loans. Depositors of ailing banks did not suffer because of takeover or rehabilitation. Burden mainly fell on central bank, with outstanding loans to banks and finance companies of Bht 28 billion at end June 1987.

IX. Key lessons: 1. Need for clear lines of supervisory authority and legal powers. Full bank supervision powers were transferred to central bank from ministry of finance only in 1979. Law had to be amended
several times, and twice by Emergency Decree to deal with crisis.

2. Direct central bank intervention exposes central bank staff to confrontation on labor/credit issues, which they may not be best equipped to handle. Subsequently, rehabilitation was indirect through management consignment to government bank or Rehab Fund.

3. Correct macroeconomic policies, together with firm handling of financial crisis, aided recovery process.

7. Philippines

I. Period of banking crisis: 1981-87

II. Institutions affected: Total of 182 banks (3 commercial banks, 32 thrift banks, and 147 rural banks) with 14 billion pesos failed between 1980-87. Two of the largest government banks, Philippine National Bank (PNB) with P79 billion, and Development Bank of Philippines (DBP) with P74 billion, had to be rehabilitated.

III. Size of assets affected: Rural and thrift banks only accounted for only 9 percent of total bank assets, however PNB plus DBP before rehabilitation accounted for more than one-third of total banking system (exclude central bank) assets in 1986.


V. Macroeconomic factors: Rapid growth in late 1970s reversed by oil shock. Terms of trade deteriorated from commodity price falls, while oil import bill rose. From 1983 to 1985, economy contracted under large balance of payments deficit (4 percent of GDP in 1983) and capital outflow due to drying up of international credit. Fiscal adjustment caused further contraction in enterprise income, leading to large debt arrears (amounting to peak of 22.9 percent of total bank loans in 1985.

VI. Policy response: Deposit insurance scheme established in 1970, but slow payments due to
insufficient funds exacerbated confidence in banking system. Monetary board allows central bank of Philippines (CBP) to intervene, but case dragged to courts. Problem banks generally put into “conservatorship,” with new management and loans from CBP. After 1983, key decision to allow ailing banks to fail. In 1986, key decision to rehabilitate ailing government banks.

Powers of CBP strengthened to aid bank restructuring, including cease and desist powers.

Credit Information Bureau Inc (CIBI) formed by CBP to monitor bank credits to connected borrowers and prevent excessive borrowing and DOSRI.

VII. Restructuring technique: Large amount of CBP liquidity loans to ailing banks, after “conservator” installed.

After evaluation, and monetary board (CBP governor chairman, and minister of finance member) decides, insolvent institution liquidated, and PDIC pays off insured deposits.

For PNB and DBP, hived off non-performing assets to government account, Asset Privatization Trust (APT) for workout, while corresponding liabilities, especially external debt, also transferred to government’s books. DBP assets size cut from P 74 billion to P 10 billion, while PNB size cut from 79 billion to P 26 billion. PNB subsequently sold 30 percent of its equity to public successfully. Six government-acquired banks also fully or partly privatized.

VIII. Burden of losses: First cut, shareholders; however, depositors bore large part of loss. Out of P7.6 billion deposits of closed banks (1980-87), only P3.5 billion or 46 percent covered by insurance. Loss equivalent to 5.2 percent of average total deposits or 0.6 percent of GNP in 1987.
Government bore brunt of bailout of government banks; absorbed US$3.9 billion of DBP external debt, and PSS billion of PNB liabilities, including write off of P5 billion in losses.

At its peak, CBP loaned P19.1 billion in assistance to financial institutions in early 1986, equivalent to 47.3 percent of reserve money.

IX. Key lessons:

1. Design of macroeconomic adjustment policies after oil shock perhaps underestimated impact on financial system, and contraction exposed structural weaknesses of connected lending/fraud, which after exposure created lack of depositor confidence in system.

2. Supervisory machinery may be in place, but execution and enforcement may not be effective because of political interference and interconnected lending.

3. Extreme danger of funding fiscal deficit through international inter-bank borrowing by government banks, which shuts out liquidity when debt crisis erupted.

4. Delays in closing down ailing banks are doubly costly, in losses as well as tying down scarce supervisory staff.

5. "Distributing political patronage through government banks is a way of killing banks." Having independent boards and public accountability (through financial disclosure) helps checks and balance abuses.

6. Slow payments of deposit insurance scheme (due to shortage of funds) worsens confidence, rather than improves it.

7. Applying professionals with minimal political interference can turn around bad banks.

8. Malaysia

I. Period of banking crisis: 1985-88

II. Institutions affected: Government intervened in 32 out of 35 deposit-taking cooperatives (DTC); 4 out of 38 banks; 4 out of 47 finance companies.

III. Size of deposits affected: M$9.4 billion, or 10.4 percent of total deposits

IV. Key background: Interest rate liberalization in 1978. Lax supervision of DTC led to failure of 24 in July 1986. Significant problems of undercapitalization, mismanagement, speculation in property and shares found in DTC investigation. Central bank intervention in DTCs, 4 banks and 4 finance companies. Nonperforming loans of banking system reached peak of 31 percent of total loans. Total losses of financial institutions in 1985/6 amounted to as much as 4.7 percent of 1986 GNP.


VI. Policy response: 1986—Emergency legislation empowered central bank freeze of failed DTCs. Merged 12 failed DTCs into one licensed finance company. Central bank inject soft loans to assist rehabilitation and refund of depositors, who received 50 percent in cash and 50 percent in shares in finance company. For 4 banks intervened, central bank inject fresh equity. Assumption of control over 4 ailing finance companies.

VII. Restructuring technique: Assumption of control and investigation. In viable institution, central bank soft loans provided. For commercial banks, central bank injection of equity, with buy-back option by shareholders after recovery. After 1988 law reform, capital of ailing financial institution must be reduced by extent of losses, before central bank assistance.
After control, central bank removes old management, cut overheads and staff and appoints new management seconded from other banks.

Merger/acquisition of ailing finance companies into bank groups.

VIII. Burden of losses: DTC shareholders took first cut losses. Depositors took up to 50 percent, received shares in finance company in exchange. For licensed banks and finance companies, shareholders increase capital, failing which central bank injection of capital. (No explicit deposit insurance scheme). central bank injected M$672 million in equity, plus total Government soft loans of M$1.3 billion.

IX. Key lessons: 1. Pragmatic and flexible response to crisis.
2. Extensive powers given to central bank to act on ailing financial institutions, including powers to freeze assets and investigate fraud.
3. Availability of established banking sector, and sufficient professional expertise to deal with problems
4. Strong political commitment and backing to bank restructuring vital to success.
5. Importance of firm macroeconomic adjustment package to address fundamentals. Economic recovery helped bank recovery and reduced nonperforming loans.

9. Guinea

I. Period of banking crisis: 1982-85

II. Institutions affected: Closure of six government-owned specialized banks, accounting for 95 percent of total deposits of banking system.

III. Size of deposits affected: 10.3 billion Guinea francs, or approximately 95 percent of total deposits of banking system.

IV. Key background: Extensive fraud and mismanagement, with lax supervision. Loans mainly to loss-making public sector enterprises. Private sector loans less than 5 percent of total assets. Fictitious assets and accounts accounted for 76 percent of total assets at point of closure in end-1985.

V. Macroeconomic factors: No material macroeconomic impact on banking system. Economy depended almost exclusively on foreign-managed bauxite exports.


VII. Restructuring technique: Complete liquidation as balance of assets comprised only claims on public sector, and other assets minimal.

VIII. Burden of losses: Government settled depositors’ claims, amounting to .41.2 billion Guinea franc (US$100 million), equivalent to 7 percent of 1987 GDP.

IX. Key lessons: 1. Poor management, complete lack of supervision, fraud created large losses.

                        2. New banks established with domestic equity control, but foreign manage-
ment and equity participation proved banking can be profitable.

BIBLIOGRAPHY


The Art of Bank Restructuring: Issues and Techniques


