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Market-Based Policy Instruments for Systemic Bank Restructuring

Prepared by Claudia Dziobek¹

Authorized for distribution by William E. Alexander

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Abstract

Since the early 1980s, well over 100 countries have experienced systemic bank insolvencies. An important innovation among the resulting policies for reestablishing bank soundness has been the reliance on market-based instruments and policies, in contrast to the largely non-market-oriented approach taken in the 1930s during the last big wave of banking crises. This paper surveys and assesses market-based policy instruments employed to overcome systemic bank problems. Considerations regarding the design and mix of instruments as well as cost-sharing arrangements are shown to be key aspects of effective bank restructuring. Selected country examples are used to illustrate best practices.

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Author's E-Mail Address: cdziobek@imf.org

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SUMMARY

In the last 20 years, more than 100 countries have experienced systemic bank insolvencies—the first occurrence of significant banking problems since the 1930s Great Depression. Common problems include volatile economic environments, weak financial supervision, inadequate legal and accounting frameworks, ineffective payments systems, and insufficient risk management. In many cases there has also been protracted state support to weak state and private banks, together with a lack of effective exit policies.

Because of the high costs involved in bank restructuring, governments are under pressure to keep these to a minimum. This pressure has led to an important change in the way banks approach restructuring. While efforts during the Depression focused on **nonmarket instruments**, the current strategy uses **market-based instruments**. This strategy also recognizes the need for continuing financial market liberalization and globalization of banking services. With this in mind, most countries design instruments that will lead to an open, market-oriented, and competitive banking sector.

This paper provides an overview of the major instruments and cost-sharing arrangements that can be used to address systemic banking problems. Country examples illustrate how the design and mix of instruments are aimed at restoring market conditions. Bank restructuring instruments can be grouped into three broad categories: **financial instruments** that address immediate problems and generally involve a direct financial transfer to banks; **operational instruments** that deal with governance, individual bank efficiency, and profitability; and **structural instruments** that focus on restoring open competition and soundness. In the end, an appropriate instrument mix will address immediate as well as underlying structural problems. Sharing the costs of bank restructuring among the state, the bank stakeholders, and to a lesser extent the depositors is also an important general principle of efficient bank restructuring.

I. INTRODUCTION

Since the early 1980s, well over 100 countries have experienced systemic bank insolvencies in the first wave of significant banking problems since the world financial crisis of the 1930s. Common problems include relatively volatile economic environments, weak financial supervision, inadequate legal and accounting frameworks, unreliable financial infrastructures such as payments systems, and, more generally the absence of a “credit culture” necessary for proper risk assessment and management. In addition, there is often a tradition of protracted state support to weak state and private banks and an absence of exit policies.

Inevitably, the state is called upon to play an active part in restoring systemic soundness in the banking sector. The role of the state in systemic banking crises is to diagnose the extent of the problems, and to implement policies to avoid recurrence of systemic problems in the future. Bank restructuring is very costly and governments are under pressure to devise cost-effective measures. The high priority given to minimizing costs has led to an important change in the way bank restructuring is being undertaken. Whereas in the last wave of banking crises (during the 1930s) **nonmarket instruments** and techniques were frequently used, the current approach focuses on **market-based instruments**.

Recognizing the importance of restoring banking soundness while maintaining, as much as possible, open capital markets, contemporary policies emphasize **market-based instruments** for bank restructuring. Such a strategy implies improving market discipline and fostering good governance by establishing a commitment to a clearly defined exit policy (closure of insolvent banks), loss sharing arrangements in which owners and managers pay a price, and raising the standards for bank management skills, prudential oversight, and public disclosure as part of the bank restructuring process.

This paper is structured as follows. The experience with nonmarket bank restructuring during the 1930s is briefly reviewed in Section II. The market-based approach and the main policy instruments that have been used to address systemic banking problems are discussed in Section III. Selected country examples are presented to illustrate the market-based design of policy instruments. Section IV contains some observations on ways that market-based instruments are used to contain costs and promote the ongoing profitability of the banking system. Conclusions are drawn in Section V.

II. NONMARKET BANK RESTRUCTURING: LESSONS FROM THE 1930s

The emphasis on market-based instruments during the current financial crises contrasts with the prevailing views during the 1930s and after World War II, where the authorities in many of the affected countries felt that the most effective way of restoring stability in the financial sector was to limit competition, and to restrict the scope of banking activities. In response to the 1930s banking crises, many countries opted for interest and exchange controls, directed lending to priority sectors, and strengthened state banking. Limiting competition was seen as a way to raise stability.² In some countries, national and regional barriers to banking activity were established.³ In general, bank restructuring policies reflected great scepticism in market mechanisms while underestimating the inefficiencies and costs associated with nonmarket instruments. The restructuring efforts to rescue the Austrian Credit-Anstalt, the largest and most complex international financial institution of its time, provide interesting lessons on the importance to combine financial, operational, and structural instruments to overcome systemic banking problems. These are briefly summarized below.

The collapse of the Austrian Credit-Anstalt in 1931 occurred two years after the bank had taken over the troubled second largest Austrian bank, the Allgemeine Oesterreichische Boden-Credit-Anstalt, (BCA), which, itself had absorbed numerous failing small- and medium-sized banks. BCA's collapse in 1929 resulted from a combination of poor management, imprudent credit growth, excessive dividend payments, and an inefficient governance structure. Upon the removal of its privileges as (imperial) state bank in 1919, BCA had failed to adjust (and downsize) its operations. Both BCA and Credit-Anstalt needed to downsize operations to adjust to the break-up of the Monarchy in 1918.⁴

²For instance, in Germany a system of competition among three bank groups was specifically designed to foster stability through market segmentation.

³Prominent examples are the Bank Act of 1933 (Glass-Steagall) in the United States prohibiting payment of interest on demand deposits, establishing interest rate ceilings on savings and time deposits and separating investment from commercial banking. In 1936, Italy enacted banking legislation which forbade banks to hold industrial participations. Sweden reverted to interest controls and credit ceilings. (Kindleberger, 1983)

⁴Pressburger (1966) p.420

The merger between BCA and Credit-Anstalt was mainly politically motivated as the government was convinced that BCA should not fail because of its close linkages with domestic industries and international investors (half of the BCA's shares and important portions of other debts were foreign-held). With Credit-Anstalt controlling over half of total bank assets in Austria, the merger created an even larger bank of systemic size that could consider itself protected under the notion of "too big to fail."

In May 1931, Credit-Anstalt reported a loss about the size of its capital base.⁵ A prudential supervisory system that might have served to anticipate some of the losses was not in place. Credit-Anstalt was instantly recapitalized using funds from the government, the central bank, and some new capital from the bank's owners. However, the measure failed to restore public confidence. Within two days, Credit-Anstalt lost over 30 percent of total liabilities and withdrawals of funds from domestic and foreign creditors continued for several weeks. Closure or downsizing of Credit-Anstalt was not seriously considered. In June, a full government guarantee for Credit-Anstalt's liabilities was put in place.⁶ The central bank provided liquidity support without proper collateral prompting the resignation of the deputy governor. Foreign exchange advances to Credit-Anstalt's foreign creditors drained the central bank's reserves. Because of potential losses relative to the government's own financial capacity, monetary financing, and the expectation of a large devaluation, these actions failed to restore confidence. Credit-Anstalt's total assets were about 1,200 million schillings while the federal budget of Austria amounted to roughly 1,800 million.⁷ To stem the outflow of capital, Austria introduced comprehensive exchange controls in October 1931 (as had other countries when England left the gold standard). The government took on major responsibilities in negotiating settlements with foreign debtors. In the final settlement of the bank's problems, the state became the bank's principal shareholder (51 percent).

Because of the systemic proportion of the crisis, the restructuring measures also extended to the overall banking sector. Under the auspices of the Austrian National Bank, and in cooperation with an accounting firm, an **asset management company** (AMC)

⁵ Losses mainly originated from: the merger with BCA, the securities portfolio, and nonperforming loans. Total losses were estimated at 140 million shilling. The bank's next annual report showed total losses of 828 million schillings. Pressburger (1966) p.430

⁶ Against the background of the guarantee, the central bank provided short-term and longer term support to Credit-Anstalt. In 1934, about 80 percent of central bank claims on Credit-Anstalt were absorbed by the budget; the guarantee was lifted. Salaries and pensions for bank employees were cut twice and some management contracts were discontinued.

⁷ Central bank support amounted to at least 571 million schillings. Pressburger (1966); see also Schubert, 1991.

(Revisionsgesellschaft) was created to relieve major banks of significant portions of their nonperforming loans in exchange for high quality assets (claims on the asset management company). In addition, the banks received capital infusions as the AMC purchased equity shares. The AMC was financed by contributions from the state and the central bank. This constituted yet another, very costly support measure with substantial costs absorbed by the central bank and with relatively few conditions attached. There was little emphasis on loan collection as these assets were considered to be losses. The AMC, therefore, was little more than yet another form of subsidy to major banks. In 1934, the government concluded its restructuring activity by arranging a merger among the three major banks, creating a highly concentrated banking sector with significant state ownership and with little competition.

Lessons

In addressing the systemic banking crisis, the authorities' primary objective was to prevent bank closures. The focus of the rescue operations was on **financial restructuring** in the form of central bank liquidity support, guarantees, bonds, new equity. When these measures failed to restore confidence, the crisis became a currency crisis with implications beyond Credit-Anstalt. Limited attention was given to **operational restructuring**, although salaries and pensions were cut and some staff released. **Structural** measures to restore competitiveness of the banking sector remained another neglected dimension of crisis management. The authorities favored mergers to avoid outright closure with the result that stronger banks were weakened by assuming the business of failed banks. The restructuring efforts involved very substantial long-term funds from the central bank, including the purchase of bank shares, which compromised the central bank's primary policy objectives. While the authorities took prompt action, the underlying problems, which were widely known, were not addressed. The confidence crisis was, therefore not halted.

The nonmarket approach to bank restructuring was very costly. Costs are estimated at about 15 percent of 1931 GDP (1,550 million schillings). There was some cost sharing but not enough given the deep insolvency of the bank. Estimates suggest that 70 percent of the costs were borne by the state, 25 percent by the shareholders, and 5 percent by the central bank. (Noetel, 1984). The nonmarket approach led to the creation of a highly concentrated banking structure with little competition and a dominant position of the state.

III. MARKET-BASED INSTRUMENTS

Current approaches to bank restructuring recognize the need for and desirability of continuing financial market liberalization and globalization of banking services. In most countries, therefore, instruments for systemic bank restructuring are explicitly designed to bring about or restore a market-oriented, open and competitive banking sector. As the following survey of instrument illustrates, this is done by attaching appropriate conditions to restructuring instruments and by taking a comprehensive approach to restore soundness.

This section provides an overview of the major instruments that can be used to address systemic banking problems. Some country examples are used to illustrate how the design and mix of instruments is aimed at restoring market conditions. Bank restructuring instruments can be grouped into three broad categories: *financial instruments*, *operational instruments*, and *structural instruments*, (Table 1). Financial instruments address immediate problems and generally involve a direct financial transfer to banks. Operational instruments focus on governance, individual bank efficiency and profitability, while structural instruments address the underlying problems at the sectoral level, with a focus on establishing or restoring open competition and soundness. The three types of instruments complement each other, and successful bank restructuring requires a comprehensive approach involving all three types of instruments. Additional aspects of successful bank restructuring strategies are a strong and independent lead agency (for example a deposit insurance corporation) and improvements of the accounting, legal and regulatory environment. These latter issues, however, are not the subject of this paper.⁸

A. Financial Instruments

The use of financial instruments is characteristic of systemic crises as governments and central banks must respond to widespread illiquidity. Financial instruments can be defined as immediate rescue measures which instantly improve bank balance sheets, and involve direct financial transfers. Financial instruments aim at improving asset quality, boosting liabilities, or directly raising capital, all of which improve bank balance sheets and help the bank return to solvency.⁹

⁸For a discussion of these issues see Dziobek and Pazarbasioglu (1997) and IMF (1998)

⁹Financial instruments may have structural implications. For example, in 1986, the Philippines, two major banks were recapitalized and downsized by 54 and 84 percent respectively. As a result, these banks' previous market share of close to 50 percent of banking assets was sharply reduced and the structure of the banking market changed significantly.

Table 1. Instruments of Systemic Bank Restructuring	
Type of Instruments	Examples
<p><i>Financial</i></p> <p>Immediate financial support to banks.</p>	<p>Central bank liquidity support</p> <p>State guarantees</p> <p>State support (bonds, grants, loans, etc.)</p> <p>Private equity and bond injections</p>
<p><i>Operational</i></p> <p>Improving governance and efficiency.</p>	<p>Additional capital</p> <p>New management</p> <p>More efficient staffing</p> <p>Twinning</p> <p>Facilitate entry for reputable foreign banks</p>
<p><i>Structural</i></p> <p>Restore competition</p>	<p>Closure</p> <p>Merger/splits and downsizing</p> <p>Asset management; debt restructuring</p> <p>Privatization</p> <p>Enterprise restructuring</p>
<p>Market-based instruments should be implemented and monitored by a designated <i>lead agency</i> and supported by measures to improve the <i>accounting, legal and regulatory</i> environment.</p>	

While unavoidable during systemic crises, the use of financial instruments involves some risks which must be carefully managed, because of the large element of “throwing good money after bad”(IBRD 1995). Financial instruments do not address the underlying causes of weakness of the banking sector or of individual banks and therefore are not sufficient to restore confidence. To ensure market conformity, financial instruments must hence be linked to other operational and structural measures addressing the underlying causes of bank instability and insolvency.

Central bank liquidity support to banks

Central bank financial support to problem banks is common at the initial stage of bank distress. As **lender of last resort**, the central bank is often the first agency that banks turn to when liquidity problems arise. Lender-of-last-resort loans are (or should be) limited to liquidity support for illiquid but solvent banks, and in theory, such loans should be fully collateralized and granted at penalty rates. When problems are systemic, the distinction between illiquid and insolvent is difficult. Moreover, the central bank often finds itself in a position where lender-of-last-resort loans are granted with less than full collateral.

Central banks are often under pressure to provide other, more indirect forms of support such as **overdraft loans** to support the payment system, **reduction of required reserves**, **broad discounting** of eligible paper, or **foreign exchange loans** to banks.¹⁰ Some central banks have resorted to measures such as to discount eligible paper at face rather than market values. This is relevant when bond prices fall as a result of interest rate hikes, which would otherwise force banks to sell bonds in the market at a loss. As a systemic banking crisis unfolds, the central bank may find it necessary to **reschedule short-term liquidity loans** into medium- and long-term obligations in order to keep the system afloat.

Guarantees and Deposit Insurance

To stop bank runs or panics the state may announce **guarantees**. Guarantees can apply to entire banks, all bank liabilities, or target specific groups of creditors. Small depositors may be explicitly protected when deposit insurance is weak or absent, or when a bank is closed and the government wishes to protect all depositors to avoid further repercussions.¹¹ Guarantees may also protect creditors, specifically target foreign exchange liabilities, or cover entire banks. Guarantees are known to have significant moral hazard effects although these may be mitigated through appropriate terms and conditions.¹²

More important, however, guarantees may fail to end a bank run. Depositor and creditor guarantees were used widely during the recent Asian crises and in transition countries, and in several cases, the runs did not halt (Bulgaria, Indonesia, Thailand) until the underlying problems were forcefully addressed. In a climate of economic instability and tight fiscal

¹⁰In 1995, the Bank of Mexico, through the deposit insurance corporation provided foreign currency loans to banks facing difficulties in rolling over their external credit lines. Interest rates were 25 percent and 17.5 percent per annum with the lower rate applicable to outstanding balances below a certain threshold. Given the high rates, the balances were repaid within several months.

¹¹Most countries chose not to enforce depositors' liability. However, depositors may take some losses through delayed or limited access to deposits or because accrued interest is not fully compensated. Delayed access may imply important losses in high inflation countries.

¹²In Sweden the government guaranteed all banks, and banks were forced to pass a special inspection before exiting from the guarantee. The blanket guarantee was effective because the authorities were able to convince the public that the problems were manageable. A national consensus on the need for prompt action emerged and steps were taken to address the underlying banking problems. (Dziobek and Pazarbasioglu 1997). In Indonesia and Thailand, banks were charged a fee for the guarantee.

conditions, a blanket guarantee may not be credible to the public. The credibility of a guarantee appears to be best demonstrated by decisive action to address the underlying problems. To avoid recurring bank runs, guarantees should also be accompanied by direct and ongoing relations with major creditors to negotiate **stand-still agreements with major bank creditors** or orderly withdrawal of funds.

State financial support to banks

To improve a bank's balance sheet, and to improve current income, **bond instruments** are commonly used, generally in combination with other instruments, (e.g. bonds replacing nonperforming assets).¹³ Bank asset quality improves because government bonds are high-quality assets. Income improves to the extent that interest is paid on the bonds.

Because bond transfers involve government subsidies, clearly-specified conditions should be attached. For example, **governance or performance contracts** can be concluded with the bank to spell out the conditions attached to bond instruments. Some countries have used low interest **grants or loans** instead of bonds. These have similar effects on the bank's balance sheet but give the bank a more front-loaded liquidity injection.¹⁴

Governments also engage in **deposit transfers** whereby state funds are shifted to weak banks. The effect depends on the source of the deposit. Withdrawing funds from strong banks to transfer them to weak banks can produce new problems for those banks that experience outflows of government deposits. Similarly, governments may purchase **subordinated debt**(bank bonds). From a prudential perspective, subordinated debt is a weaker instrument

¹³A good case can be made for using nonnegotiable bonds as these limit the potential for abuse. In Poland, special 30-year bonds were issued to banks which were effectively nonnegotiable. In Spain, 12-year bonds were issued at below-market rates, helping banks overcome liquidity shortages while forcing them to bear part of the costs.

¹⁴Japan and Korea used this method. In Japan, grants were channeled to troubled banks through the Deposit Insurance Corporation in 1996 and 1997.

than a bond transfer.¹⁵ From a macroeconomic policy perspective, an infusion of subordinated debt may be preferable since it provides the bank with additional loanable funds and hence supports credit expansion.¹⁶

Equity injections by the government are sometimes chosen as a way to transfer cash to a bank in exchange for ownership rights. Acquiring equity has the advantage that the government obtains the right to realize gains once the bank has returned to profitability, either by selling its equity stake or by collecting dividends. However, ownership also carries the obligation for the state to actively exercise ownership rights which may be politically undesirable. The state may prefer to play a role as outsider in the process of bank restructuring and exercise any control through conditionalities in the form of governance contracts.

Private equity injections

Support for failing banks should, in the first instance come from the bank's owners and shareholders. However, a "wait and see" attitude may prevail among shareholders, postponing necessary action and possibly leading to further deterioration of the bank's financial condition. Banking laws may have provisions whereby the central bank can convene shareholder meetings under special circumstances and order shareholders to inject new capital. For example, Article 52 of the French banking law permits the central bank to intervene in weak banks with the intent of raising shareholders' equity without committing any government funds. This measure can be effective because by calling for additional shareholders' funds the central bank signals to depositors, creditors, and potential new owners that it will implement a workable rescue plan. In the absence of such a reassurance, shareholders may not be willing to provide new capital.

Alternatively, the state may play the role as mediator in soliciting new private investments in problem banks and commit some state funds as well. In Spain, during the 1980s, the authorities used a system of matching fund contributions to induce shareholders to add additional funds to offset previous losses until a minimum adequate level of capital was restored. An important role of the state to assure markets of the bank's viability which can

¹⁵Basle capital rules exempt local currency government bonds from capital coverage. Replacing nonperforming loans by government bonds, therefore raises the capital to asset ratio. Subordinated debt is an element of bank capital, but it is considered to be "tier II" capital which may not exceed tier I capital (fully paid-in capital). A bank with less than 4 percent tier I capital may not reach the minimum required level using subordinated debt.

¹⁶The latter was the case in Japan, where the authorities authorized the deposit insurance corporation to issue bonds for the purpose of injecting subordinated debt and preferred stock in certain problem banks. One intention was to encourage new lending.

keep stock market prices from plunging to zero. A similar technique was used in Mexico in the 1990s when the authorities made support to banks contingent upon new capital injections by owners. The authorities may also seek to find new owners for problem banks to dilute the impact that former shareholders will have.¹⁷ However, recapitalization from private sources assumes that owners have sufficient funds and confidence in the bank's future profitability which is often not the case.

B. Operational Restructuring Instruments

Management deficiencies in practice are always a major contributing cause of banking problems' and therefore, replacing management, is one of the most important immediate measures to restore confidence.¹⁸ Instruments to address **management** weakness and more generally internal governance are referred to as operational instruments. Measures further include: improving **loan valuation, product pricing, and risk management skills** and streamlining **internal procedures**, including **internal review**, which is part of an overall improvement of the **governance structure** of a bank. Operational restructuring may also refer to improving relations between managers and owners, and, particularly in the case of state banks, establishing checks and balances through an active exercise of state ownership rights. Operational restructuring cannot be accomplished over night but it is a necessary aspect of overcoming systemic banking problems.¹⁹

Implementation of good governance is often hampered by resource limitations. For example, hiring new management may be difficult and expensive, particularly in small countries or in countries with limited expertise in banking. Additional incentive measures may be considered, such as closely monitored, performance-related contracts, salary reductions for existing management, and demotion of top management. **Staff consolidation** is frequently necessary to return to solvency, particularly when fast growth of a bank and its labor force were contributing factors to the banking crisis. Legal barriers may prevent banks from releasing staff, and high costs in the form of severance pay may be involved. Refocusing a

¹⁷In Chile in the 1980s, the government attracted new shareholders by excluding former owners from benefiting from dividends until state support funds were fully repaid. A problem with such techniques is that enforcement may be legally complicated, time-consuming, and therefore costly. Bank closure and liquidation (including through the sale of assets) may be a cheaper option.

¹⁸Sheng (1996); Caprio and Klingebiel (1996); Roulier (1995).

¹⁹In Korea for instance, the operations of two troubled banks have been taken over by the government. Management changes and labor shedding has already begun to increase the banks' efficiency.

problem bank's attention on core business is a central aspect of operational restructuring. This may involve **closing or downsizing unprofitable entities or branches** domestically or abroad, downsizing or closing down secondary product lines, and other measures aimed at focusing on the bank's comparative strengths. Operational instruments may also affect the pricing of banking services and thus affect the bank's borrowers and depositors. To the extent that deposit insurance coverage is raised or insurance premia are increased to better reflect actual risks, the bank's operating costs may increase.

Twinning

Twinning is an arrangement where reputable foreign banks are hired to lead the internal operational restructuring effort of a weak domestic bank. Twinning arrangements were used in many transition countries; the idea was that twinning partners may use this arrangement as a precursor to equity investments in the twinning partner banks. It was hoped that, through twinning, foreign capital, would take a lead role in banking sector restructuring. Many twinning arrangements appear to have been relatively short-lived and rarely appear to be fully successful. The scope of the task may be underestimated, especially by the foreign bank. Foreign twinning partners may have been discouraged by the lack of supporting legal, regulatory, and accounting structures and, sometimes, the slow implementation of their suggestions. Perhaps, the lesson is that twinning arrangements need to be defined more narrowly or, to consider hiring specialized consulting services. More effective ways of attracting reputable foreign banks may simply be to relax their limitations, including limits to purchase equity in domestic banks.

C. Structural Instruments

Structural measures are those aimed addressing the underlying problems at the level of the financial sector and focus on strengthening open competition and overall systemic soundness. Underlying problems may be the result of too lax or too rigid licensing policies, leading to overbanking and too much competition. On the other hand, overly rigid licensing policies may lead to weak competition. An uneven playing field between state and private sector banks may have led to segmentation and inefficient market outcomes. Examples for structural measures are bank closure, merger, and other instruments aimed at insulating nonfunctioning segments of the banking sector, and measures to bring reputable international banks into domestic markets. As pointed out below, the main difficulty for the authorities is to employ these instruments in conformity with market principles.

Closure

As a general rule, all insolvent banks should be closed and liquidated.²⁰ Insolvent banks operate under perverse incentives and, hence, contribute to an exacerbation of the problems. In the absence of profitability, managers and owners of insolvent banks have strong incentives to “loot” the bank. A firm exit policy provides strong incentives for all banks to cooperate actively in the bank restructuring efforts and should, therefore, constitute a centerpiece of systemic bank restructuring.

Many countries have a tradition of avoiding bank closure which may be reflected in poorly defined modalities of bank closure. A relatively common obstacle is that banking laws directly or indirectly (through the banking association) permit banks to participate in the decision of bank closure. Therefore, establishing a policy of bank closure can be a complicated task requiring, in addition, legislative action and the establishment of appropriate court procedures.²¹

In an environment of systemic bank insolvency, there may be additional obstacles to implementing a firm exit policy. Bank closures affecting significant portions of the system’s bank deposits) may threaten to disrupt the payments system, erode public confidence, and hence lead to further disruption of the financial market. Closure also becomes a difficult instrument to use because of its selective and potentially arbitrary application. The decision to rescue one insolvent bank but not another can lead to accusations of favoritism and discrimination.²² A market-based approach to bank closure may therefore need to take into account a bank’s track record of weak performance and recurring problems. Bank

²⁰Banks may be closed even before they have become insolvent when capital levels fall below a minimum threshold. Banks that are in noncompliance with prudential rules typically are subject to a graduated system of sanctions and mandatory remedial actions with closure as the strongest measure. See for instance FDIC Handbook on Bank Closure.

²¹Transition countries did not have a recent tradition of bank closure. Recent bank closures in Indonesia, Korea, and Thailand constitute a sharp break with the past and in some instances required legal changes to allow bank closures to proceed.

²²In some countries, courts overturned bank closings ordered by the bank supervisor or the central bank. Examples are Bulgaria, Romania, and Ukraine, where the authorities found it virtually impossible to establish precedents for bank closings given the rescue operations for a number of insolvent banks.

rehabilitation may be reserved for “first time problem banks” while banks with an established track record of near-insolvency might be closed. An even less discretionary policy option is to offer support to all banks which produce a convincing and realistic rehabilitation plan. This self-selective process gives banks an opportunity and an incentive to actively cooperate to restore soundness.

Sometimes the authorities evoke a “**too big to fail**” argument to justify why large banks are rescued, while small banks are closed. This practice has its own problems because it provides adverse incentives to large banks, while squarely discriminating against smaller banks.²³

Mergers/splits

Mergers can be an effective instrument to reduce inefficiencies especially in countries with excessive market segmentation, which may reflect an unnecessarily fragmented banking legislation. Simplifying the banking legislation and abolishing special rules for special banks may pave the road to voluntary mergers. From a market perspective, **efficiency gains** (economies of scale or scope) are an important precondition for a successful merger. Examples which are intended to realize economies of scale are mergers among savings, cooperative or small commercial banks with similar profiles. For such mergers, the authorities may play a catalytic role.²⁴ On the other hand, scale economies for banks are known to be limited and mergers resulting in very large banks often fail to produce such results. Indeed, they can exacerbate the problems by increasing the number of banks considered “too big too fail”.

²³In 1984, the U.S. authorities did not close the insolvent Continental Illinois Bank because of the potentially disruptive impact on the payments system. However, in 1991, the Federal Deposit Insurance Corporation Improvement Act (FDICIA) aimed at abolishing the principle of “too large to fail” as a quasi-guarantee for major banks. In **France**, where a major bank was rescued because of its size, the rescue plan emphasizes downsizing the bank by selling assets, branches, and subsidiaries. With these conditions attached, the bank may cease to be a “too large to fail” bank in the future. In **Japan**, Hokkaido Takushoku Bank, one of the largest 20 banks was closed in 1997, breaking with the tradition of rescuing large banks.

²⁴In Argentina the central bank encouraged consolidation within the cooperative banking sector and provided some legal advice (such as sample contracts) on how to accomplish this.

On the other hand, economies scope can be realized by bringing together banks with different comparative advantages. However, harmonizing different corporate cultures, especially across the spectrum of private and state-owned banks, and overcoming technical problems (such as different administrative procedures or electronic systems) is associated with high costs. These must be weighed against expected gains.²⁵

Sometimes, mergers are used to avoid closure and in such cases the authorities may resort to politically motivated “forced mergers,” for instance by requiring state-owned banks to assume assets and liabilities of inviable state or private banks. Such mergers are counterproductive as they generally fail to improve the stability of the banking system and they are known to weaken the stronger bank.

Split-offs can be used to help focus a bank’s business on fewer products or otherwise reduce a bank’s scope of operations, while encouraging competition in highly concentrated banking system. Split-offs can be an aspect of bank closure, with viable portions of an insolvent bank isolated and sold separately. Split-offs may also be a part of downsizing operations.²⁶

Privatization

Inefficiently operated or insolvent state-owned banks are frequently an important contributing factor to the systemic banking problem. Ironically, during systemic stress, state banks often become “safe havens” because the public assumes that they are fully guaranteed by the state, and therefore fare better than private banks. Where state banks contribute to the systemic problem, restructuring strategies may include privatization as an important element. Privatization may be initiated as part of an effort to abolish privileges of state-owned banks. This would level the playing field and increase business opportunities for all banks. In this case, the entire banking sector benefits.

Privatization is not an immediate measure, however. Many countries have found that privatizing state banks is a long-term process and requires substantial prior action, including financial and operational restructuring of the banks. Speedy privatizations carry significant risks for the state, including the risk of having to “renationalize” the bank, if the new owners

²⁵A successful merger for scope economies was done in Sweden where the two problem banks (one state and one private) were merged and subsequently privatized.

²⁶In Hungary, the authorities closed two banks and subsequently split off and sold these banks’ branches and valuable assets to other banks. Variants of so-called “split-offs” are used in other transition countries. In France, the restructuring operations of Credit Lyonnais involve splitting off most foreign entities.

are not capable of operating the bank profitably.²⁷ Successful privatization also presupposes available (“fit and proper”) buyers to allow a competitive bidding process and foreign investors may play an important role in assuring a fair procedure.

Handling bad assets and loan restructuring

Managing bad assets is a central aspect of successful bank restructuring efforts. To the extent that bank problems can be traced to relatively well-defined chunks of nonperforming assets (real estate loans for example), banks can be strengthened if these assets are isolated. Isolation of bad assets permits the bank to refocus its activities on core business. Having provided relief to individual banks, it is important to continue managing the assets to maximize the recovery value and to limit the cost of bank restructuring. Neglecting asset management can have detrimental consequences for all banks exempting delinquent debtors from sanctions can have negative effects on the payment morale of other borrowers. For reasons of cost minimization and payment morale, professional asset management is also important in the case of bank closure.

An agency specializing in asset management and loan resolution can take a managed approach to asset sales while banks may be forced to accept significant losses due to “fire sales” to remain liquid. Such agencies can also be useful in developing standard legal procedures for loan collection (and asset sales) and realize economies of scale in interacting with the judicial system. If this process is well designed, asset management companies can be instrumental in developing secondary asset markets where such markets did not exist. Sufficient funding, staffing, and the monitoring of the agencies is key to their success.²⁸

There are various institutional arrangements for specialized loan workout and asset management (Table 2). One approach is to create a new agency specifically for the purpose of handling loan workouts. This may be a “**central**” **asset management** company, serving many banks, or a **bank-based** agency serving primarily a single bank. The central approach implies that bank-client relations are terminated, which may not always be necessary or desirable.

²⁷In Chile in 1974 and in Mexico in 1991, the governments attempted to reprivatize banks quickly in order to reverse the previous government’s policy of nationalization. In both cases, preferential access to credit given to some bidders, overpricing of bank assets, and weak legislation against concentration of ownership allowed a few large business conglomerates to acquire a large portion of the financial system. In addition, insolvencies and excessive loan concentration lead to government intervention in these banks.

²⁸Successful loan workout agencies emphasize the need to hire above-average staff, paying performance-based market salaries and limiting the existence of the agency, frequently to five years.

Bank-based loan workout makes it easier for bank-client relations to be rehabilitated once the problem loans are repaid or rescheduled. It is sometimes argued that bank-based loan workout is inherently more successful than a more centralized loan workout.²⁹ Such differences were perhaps exaggerated and the more important issue is the agency's funding and efficiency. Some countries use both bank-based and central approaches for different types of problem assets.³⁰

In some cases, existing banks were declared as **collector banks**. For example, existing banks may be split into a "good" and "bad" bank with the staff of the latter put in charge of loan workouts. An obvious attraction to the authorities is that staff reduction can temporarily be avoided. On the other hand, a danger is that the collector banks are left with the least efficient segments of bank staff, and therefore fail to accomplish their important mission.

Asset management or loan workout activities can also be directly tied to **bank rehabilitation or bank liquidation**. For example, in the United States, the Federal Deposit Insurance Corporation (FDIC), is responsible for closure and liquidation of commercial banks, as well as disposing of all assets, including nonperforming ones. In the case of the Savings and Loan crisis during the late 1980s, the Resolution Trust Corporation (RTC) was formed to perform these functions specifically for failing savings banks. The RTC has since closed. In Mexico, the deposit insurance company (FOBAPROA) through its loan workout subsidiary (Valuacion + Venta de Activos) was put in charge of asset management. In Japan, the deposit insurance corporation (DIC) handles support for troubled banks and the bank liquidation. Loan workout is performed by the Resolution and Collection Bank (a DIC subsidiary), and for cooperative banks by the Housing Loan Administration Corporation (HLAC) which is also under DIC control. Some transition countries have taken similar approaches by tying loan workout to bank rehabilitation.

²⁹A debate erupted over this issue in the early 1990s in the transition countries. The Polish authorities argued for bank-based workout so that banks would develop the skills of loan resolution and take responsibility for nonperforming assets. A similar approach was taken in Hungary. Czech Republic argued for a central approach on the grounds that bad assets were inherited from the previous regime and had little to do with banks' core business.

³⁰The Mexican government in 1995 and 1996 introduced a bank-based loan restructuring scheme for bank loans that were considered to be fundamentally sound, but whose servicing had been hampered by the financial crisis. For example, floating rate loans were converted into long-term, fixed rate loans; some foreign exchange loans were restructured to relieve debtors of the foreign exchange risk. The programs were based on cost-sharing between the government, the banks, and debtors. A centralized approach to loan restructuring was applied to some commercial loans with more doubtful repayment prospects. The deposit insurance fund purchased nonperforming assets at a discount. (Bank of Mexico, 1996)

Table 2. Institutional Arrangements for Handling Bad Assets	
Type of Agency	Country Examples
Central (or national) asset management company	Czech Republic (Konsolidation Bank); France : Consortium de Realisation (CDR); Indonesia (Indonesian Restructuring Agency), Korea (Koren Asset Management Company) Lithuania ; Mongolia (Mongolian Asset Realization);
Bank-based asset management company	Finland (two agencies); Mexico (Loan restructuring programs which keep the loans on banks' books) Sweden ; (e.g. Securum);
Existing bank is designated as collector bank for bad assets	Albania (BAD bank); Hungary (Inv. and Dev. Bank);
Asset Management integrated with bank rehabilitation or bank closure	Mexico (Deposit Protection Agency, FOBAPROA supplemented by: Coordinating Unit for Corporate Loans UCABE; and Asset and Valuation and Sale Agency, VVA.) Japan (Deposit Insurance Corporation and two subsidiaries: Resolution and Collection Bank and Housing Loan Administration Corporation). Slovenia (Bank Rehabilitation Agency); Spain (Deposit Guarantee Fund, 1980s); United States (Federal Deposit Insurance Corporation, FDIC and from 1989-1995 Resolution Trust Corporation, RTC);
Source: Annual Reports and IMF staff	

An important issue is monitoring the performance of asset management activities. There are relatively little data on the performance of asset management companies. Published financial statements of asset management companies suggest modest success at least in the early phases of the companies. In some prominent cases, such as the RTC in the United States and the Swedish asset management company, recoveries over the medium term (5–10 years) appear to have exceeded the government's initial outlays plus a modest interest. While these cases may be exceptional, they underscore the fact that a well designed restructuring strategy can be a good future investment.

Enterprise Restructuring

In some countries, nonperforming loans could be traced directly to insolvent enterprises. This was the case in most transition countries, where insolvent state enterprises accounted for a sizable amount of the commercial banks' bad loans, and in some of the Asian countries (e.g. Korea where large-scale *chaebol* insolvencies caused banking problems). While enterprise restructuring can be a crucial complementary aspect of the bank restructuring strategy, it can not be a substitute for bank restructuring as the banking problems originate in and reflect the behavior of bank management.³¹

IV. COST SHARING OF BANK RESTRUCTURING INSTRUMENTS

Systemic banking problems, and hence, bank restructuring instruments inevitably entail relatively significant costs for the public sector.³² It is often overlooked that even inaction is costly: in the short term, government revenue falls as loss-making banks no longer pay taxes. Insolvent banks usually stop transferring payroll taxes, social security and pension fund contributions to the state. As banking is a labor-intensive industry, with employment frequently amounting to 5 percent or more of the labor force, these shortfalls can amount to significant fiscal costs.

Consistent with the market-based approach to bank restructuring, cost and loss-sharing arrangements should be a basic principle of any government action. Rescue operations that place the entire financial burden on the state budget are plagued by obvious moral hazard. Table 3 lays out cost-sharing options that are commonly used during bank restructuring. The two columns show the form the costs may take for the bank's stakeholders, and the state respectively.

³¹This lesson was learned in Hungary. The authorities introduced a tough bankruptcy law and hoped that banks would take a lead in pushing the restructuring process of state enterprises. However, banks themselves were in need of restructuring. (Long, 1995)

³²In one Asian country, *central bank liquidity* support reached the equivalent of 1 percent of GDP, in another case it reached the equivalent of 9 percent of GDP. In the transition countries, *bond transfers* to banks were often at the order of several percentage points of GDP. In Japan budget allocations in 1998 to strengthen *deposit insurance* (including loan workout) amount to the equivalent of 6 percent of GDP. In Thailand, *recapitalization bonds* were estimated to amount to about 10 percent of GDP. In Sweden, the value of *guarantees and direct financial support* amounted to about 4 percent of GDP. In Mexico, as of 1996, the fiscal cost of financial rehabilitation programs amounted to 5.5 percent of GDP.

Implementing a limited deposit insurance may be one response, whereby depositors are informed that in future, they may incur losses. In the case of bond transfers, especially when combined with swaps against nonperforming loans, the cost distribution can be accomplished through the pricing or valuation of the nonperforming loans. If the authorities assume the ailing

Table 3. Costs and Cost Sharing in Bank Restructuring	
Costs to bank stakeholders	Costs to the State (Fiscal /Quasi-Fiscal Costs)
Financial Instruments	
<ul style="list-style-type: none"> ◆ Collateral commitments ◆ Future liabilities to state ◆ Fresh capital. 	<ul style="list-style-type: none"> ◆ Central bank budget remittance falls ◆ Contingent liabilities (guarantees) rise ◆ Government debt increases ◆ Deficit increases
Structural and Operational Instruments	
<ul style="list-style-type: none"> ◆ Owners can lose their stakes ◆ Managers, staff may lose jobs ◆ Creditors and depositors may take losses ◆ Higher deposit insurance premia for banks ◆ Fees for twinning /management services 	<ul style="list-style-type: none"> ◆ Costs of liquidation (courts etc.) ◆ Unemployment compensations ◆ Severance pay to state bank employees ◆ Budget transfer to deposit insurance ◆ Fee to acquiring bank (for mergers) ◆ Inv. banking services for privatization ◆ Budget allocation for asset management ◆ Fees for twinning /management services

loan portfolio at book value (effectively above the true value), the transaction implies a significant direct subsidy to the bank while the costs are assumed by the state. Instead, the authorities may value the nonperforming loans at a level that is considered more reflective of actual market values, in which case the costs are shared between the state and the bank. In many countries, banks' premia for deposit insurance were raised during the bank restructuring operations as part of the loss-sharing arrangements.³³

³³In Japan the premium was raised fourfold in 1997 from 0.012 percent of eligible deposits to 0.048 percent. In Thailand, the premium is raised from 0.4 percent to 0.6 percent in 1998. In the United States, a risk-based pricing system has been established, but actual rates are not published.

V. CONCLUSIONS

Effective use of market-based instruments to resolve systemic banking system involves careful design to ensure that the immediate problems are addressed while appropriate incentives ensure long-term viability. Some instruments, including general guarantees and mergers appear to be particularly difficult to use effectively. Due to its unpopularity, perhaps, depositor liability is rarely enforced. The importance of loan workout is easily underestimated as the authorities may focus on the (negligible) revenues from loan collection. Stringent loan resolution efforts can have an important positive impact for establishing a credit culture that will benefit the entire banking sector. One ground rule for appropriate instrument mix is to always combine the various types of instruments in order to address immediate as well as underlying structural problems. Sharing the costs of bank restructuring between the state, the banks, and to a lesser extent with depositors is also an important principle of efficient bank restructuring.

VI. REFERENCES

- Alexander, William E., Jeffrey M. Davis, Liam P. Ebrill, and Carl-Johan Lindgren, 1997, *Systemic Bank Restructuring and Macroeconomic Policy* (Washington: International Monetary Fund).
- Bank for International Settlements, 1996, *Banking Crises in Emerging Economics. Origins and Policy Options* (unpublished paper, Basle).
- Banco de Mexico (1996) *The Mexican Economy 1996* (Bank of Mexico)
- Basle (1997) Committee on Banking Supervision, *Core Principles for Effective Banking Supervision* (Basle: Bank for International Settlements).
- Borish, Michael S., Millard F. Long, and Michel Noel, 1995, "Restructuring Banks and Enterprises," World Bank Discussion Paper No. 279 (Washington: The World Bank).
- Caprio Jr., Gerard, and D. Klingebiel, 1996, "Bank Insolvency: Bad Luck, Bad Policy, or Bad Banking," Paper presented at the Annual Bank Conference on Development Economics (Washington: The World Bank).
- Deposit Insurance Corporation of Japan *Annual Report* (1997)
- Dhar, Sanjay and Marcelo Selowsky, 1994, "Dealing with Bad Debt Problem in Transition Economies," *Finance and Development* (Washington: International Monetary Fund, June).
- Dziobek, Claudia and Ceyla Pazarbasioglu, 1997, "Lessons from Systemic Bank Restructuring: A Survey of 24 Countries," Working Paper 97/161 (Washington, IMF)
- Federal Deposit Insurance Corporation (1997) *Resolutions Handbook. Methods for Resolving Troubled Financial Institutions* (Washington, D.C.)
- Federal Deposit Insurance Corporation Improvement Act of 1991, *House of Representatives Report 102-330* (November 19, 1991).
- Garcia, Gillian, 1996, "Deposit Insurance: Obtaining the Benefits and Avoiding the Pitfalls," IMF Working Paper No.96/83 (Washington: International Monetary Fund).

- Guttentag, J., and R. Herring, 1987 "Emergency Liquidity Assistance for International Banks" in *Threats to International Financial Stability*, edited by R. Portes and A. Swoboda. Cambridge: Cambridge University Press.
- International Bank for Reconstruction and Development, 1995, *Bank Recapitalization: If and When*, a DEC Policy Review Note (Washington: The World Bank, January).
- International Monetary Fund (1998) *Toward a Framework for Financial Stability*, IMF World Economic and Financial Surveys, IMF (Washington)
- Kawalec, Stefan, S. Sikora, and P. Rymaszewski, 1994, "Dealing with Bad Debts: The Case of Poland," in *Building Sound Finance in Emerging Market Economies*, ed. by Gerard Caprio and others (Washington: International Monetary Fund and The World Bank) pp. 51-59.
- Lindgren, Carl-Johan, Gillian Garcia, and Matthew I. Saal in *Bank Soundness and Macroeconomic Policy* (Washington: International Monetary Fund).
- Long, Millard and Izabela Rutkowska, 1995, "The Role of Commercial Banks in Enterprise Restructuring in Central and Eastern Europe," *World Bank Staff Working Paper* No. 1423, (Washington: The World Bank, February).
- Noetel, R. (1984) "Money, Banking and Industry in Interwar Austria and Hungary" *Journal of European Economic History* 13 (2): 137-202
- Pressburger, S. (1966) *Oesterreichische Notenbank 1816-1966 Geschichte des Oesterreichischen Noteninstituts* (Vienna, Austrian National Bank)
- Richard, Roulier, 1995, "Bank Governance Contracts. Establishing Goals and Accountability in Bank Restructuring," *World Bank Discussion Papers* No.308.
- Schubert, Aurel (1991) *The Credit-Anstalt Crisis of 1931* Cambridge University Press
- Sheng, Andrew (ed), 1996, *Bank Restructuring Lessons from the 1980s* (The World Bank).
- Sundararajan, V. and T. J. Baliño, 1991, *Banking Crises: Cases and Issues* (Washington: International Monetary Fund).