

# 1

## The Resolution of Systemic Banking System Crises

*David S. Hoelscher and Stefan Ingves*

“For every complex problem, there is a solution which is simple, neat, and wrong.”

H. L. Mencken

### I. Introduction

Banking crises can be chaotic and confusing events. Although pressures can build for a long time, crises emerge suddenly, triggered by unrelated events or sudden changes in private sector perceptions of financial sector soundness or macroeconomic policies. The authorities' goal is to reestablish macroeconomic stability and financial intermediation using a combination of macroeconomic and microeconomic tools. Immediate action may contain the situation but delays are common. The authorities may be slow to react or unprepared for the emerging crisis, hoping that macroeconomic instability is temporary and the banks' emerging weaknesses are manageable.

In this environment, financial difficulties become intertwined with political and social problems. Delays in action can generate uncertainty about the state of the financial system, rumors, and growing panic. This uncertainty brings out political rivalries and may lead to social chaos. The social and political deterioration, in turn, affects economic decision-making.

Crisis management under these conditions becomes both difficult and complex. Deciding on policy options is often made more difficult by an unclear picture of the true financial conditions of banks and by limitations in the legal and institutional framework. Political instability can add an additional layer of confusion and can limit the range of resolution options.

The Fund is often in the unenviable position of being required to act under conditions of extreme uncertainty and time pressure. The Fund is typically called in only once the crisis has erupted and conditions are rapidly

deteriorating. Fund programs (including their bank restructuring component) have to be developed and implemented quickly. The premium is on rapid containment and effective implementation of a broad strategy. Staff involved in crisis management need to combine deep country-specific knowledge and an understanding of the lessons from past crises. Effective teams, therefore, are composed of local authorities, international experts, and, where useful, private sector financial consultants.

Crisis management can be organized into three broad stages. The initial priority is to contain the banking crisis. Once achieved, the authorities must turn to two additional components of a crisis management strategy: restructuring the banking system and managing assets from intervened and closed banks.

- Deposit runs must be contained before the authorities can turn to structural reforms. Measures should be taken to restore private sector confidence in the financial system.
- Restructuring the banking system involves the complex tasks of diagnosing the conditions of the banking system to distinguish viable from unviable banks; steps should aim at strengthening viable banks and resolving unviable ones.
- Asset management requires the choice of the appropriate institutional framework for asset resolution (public or private) and the introduction of incentives to reestablish sound relations between banks and borrowers.

This simplified framework is just that: simple and stylized. While providing a framework for organizing action, the complex economic, political, and social environment must be taken into consideration. Predetermined strategies—even ones that worked well in other cases—do not always work. As practitioners, we must be aware of the strengths and weaknesses of our tool kit, and select the mix of policy instruments that is appropriate and germane to the specific country circumstances.

This chapter has three objectives. First, the chapter will define systemic crises and describe the tools frequently used to contain and resolve the crisis. Second, the chapter will describe the pitfalls frequently encountered in applying those tools. It will be argued that crisis management tools can be extremely powerful and effective but they also carry risks that, if not considered in the strategic design, can distort the resolution process and jeopardize the final results. Finally, the chapter will outline some of the lessons learned concerning crisis prevention and resolution.

## II. Managing systemic banking crises

A systemic crisis is identified by its threat to the stability of the banking system. Systemic crises are sufficiently severe to affect adversely the payments

system and, in consequence, the real economy through reductions in credit flows, or the destruction of asset values. A typical feature of a systemic crisis is the difficulty in distinguishing between solvent and insolvent banks. Accordingly, creditors, including depositors, run from all banks and/or from the currency, threatening the stability of the entire banking system. The run is fuelled by fears that the means of payment will be unobtainable at any price, and in a fractional reserve banking system this leads to a scramble for high-powered money and a withdrawal of external credit lines.

Treatment of a systemic banking crisis contrasts in important ways with the treatment of individual bank failures in stable periods. Policies considered appropriate in stable periods may aggravate uncertainties in a systemic crisis, worsening private sector confidence and slowing recovery. In stable periods, for example, deposits have only limited protection, emergency liquidity assistance is given under very restricted conditions, and insolvent banks are resolved. In a systemic crisis, however, policies aim at (i) protecting the payment system; (ii) limiting the loss of depositor confidence; (iii) developing and implementing a strategy to restore solvency to the banking system; and (iv) preventing further macroeconomic deterioration.

A variety of tools have been used to achieve these objectives. These tools include emergency liquidity support, mechanisms for strengthening creditor confidence and bank strengthening and resolution techniques. While they have proven to be effective under some conditions, they are also subject to limitations. Understanding the conditions under which these tools can be used is critical to the effective management of systemic crises. In the following sections, the uses and limitations of these tools are discussed.

### **Crisis containment**

The immediate priority of the authorities must be to contain the banking crisis. Adequate structural policies cannot be implemented in the face of depositor panic, macroeconomic deterioration, or an imminent threat of interruption in essential financial services. Experience points to the importance of emergency liquidity support and the potential for using blanket guarantees as part of the policies to address these problems. When these tools are ineffective, the authorities may be forced to turn to more intrusive, administrative measures.

Containment measures buy time but are not by themselves a solution. To have a lasting result, containment measures must be combined with strong macroeconomic adjustment policies and comprehensive bank restructuring strategies. Containment measures alone cannot restore market confidence when the macroeconomic situation continues to deteriorate, and the political and social situation is unsettled.

#### *Emergency liquidity assistance*

Emergency liquidity support is an essential element of crisis containment. In the early stages of a financial collapse, depositors are running from all banks

in the system. As described above, the inability to distinguish good from bad banks, together with the fear that bank liquidity will disappear, cause even good banks to fail. Failure to ensure liquidity to banks will only accelerate the deterioration and collapse of the banking system.

An example of the importance of providing adequate liquidity was seen during the Turkish banking crisis. Sparked by a political dispute, depositors began withdrawing funds from the banking system in February 2001. Concern about domestic inflation and exchange rate stability led the Turkish central bank to withhold emergency liquidity support. Rather than stabilizing the situation, deposit withdrawals accelerated, leading to the collapse of the payment system and threats of deposit freezes. Once the central bank re-opened the emergency window (combined with appropriate open market policies to absorb the excess liquidity) depositor confidence stabilized and the Turkish government turned to the medium-term task of bank restructuring.

The experience during the Asian crisis also points to the importance of emergency support in the early phases of a banking crisis. The central banks in all four East Asian countries (Indonesia, Korea, Malaysia, and Thailand) provided liquidity to allow the withdrawal of deposits. Most central banks combined liquidity support with significant efforts at sterilization. Such efforts were largely successful in Korea and Thailand but less so in Indonesia, where protracted political and macroeconomic uncertainties resulted in continued deposit withdrawals and only limited opportunities for sterilization operations.<sup>1</sup>

Notwithstanding the importance of providing liquidity support, the instrument carries serious risks.

- The increase in monetary aggregates resulting from the use of emergency liquidity support can put pressures on both prices and the exchange rate.
- Banks that eventually become insolvent may be the most frequent users of central bank liquidity support, exposing the central bank to significant losses.
- The usual terms of emergency lending, such as penalty rates, short maturity, and acceptable collateral, may need to be relaxed during a systemic crisis to accommodate the implementation of a bank restructuring strategy. However, such action reduces the safeguards of the central bank and may introduce moral hazard if the new terms discourage banks from seeking alternative sources of liquidity.
- Liquidity support to weak banks is prone to abuse, and might in particular be relied upon to increase the bank's assets instead of reducing its depositor liabilities. In Indonesia, for instance, a Parliamentary inquiry commission concluded that during the 1997–98 crisis a large proportion of emergency support had been used to cover overhead expenses.

- Dollarized economies may not have the luxury of emergency liquidity support. Liquidity support results in a reduction of net international reserves that may not be replenished through open market operations.

The liquidity support mechanism must be designed in a way that takes these risks into account.

- The monetary authorities must sterilize monetary pressures. Macroeconomic policies should be adjusted to prevent any prolonged “overshooting” of domestic interest rates. In Indonesia, the inability to implement such macroeconomic policies worsened the environment for crisis management. In contrast, in Argentina the central bank introduced central bank bills in 2002 following the crisis outbreak, successfully absorbing excess liquidity and preventing an inflationary surge.
- Liquidity triggers should be introduced to reduce the likelihood that liquidity assistance is provided to insolvent banks. As liquidity assistance increases as a percent of bank capital, increasingly severe supervisory measures should be triggered. Banks are first subject to special on-site inspections, followed by placement of supervisors on the boards of directors. At a point determined by law, liquidity triggers can permit supervisory intervention in the bank, thus overcoming other deficiencies in the bankruptcy regime.
- Enhanced supervision of banks receiving emergency support is necessary to reduce moral hazard and ensure that central bank liquidity is used as intended. Attention needs to be paid to corporate governance in these banks, particularly if problems are the result of poor banking rather than pure contagion.
- Central banks in highly dollarized economies have established (i) higher liquidity requirements than customary in non-dollarized economies and (ii) contingent loans from international banks.

### *Blanket guarantees*

Blanket guarantees have proven useful in ending banking panics. Faced with accelerating deposit runs, many countries have found blanket guarantees effective in restoring private sector confidence in the financial system. Four Asian countries—Indonesia, Korea, Malaysia, and Thailand—relied on this instrument in the late 1990s, as did Turkey in its more recent banking crisis. A blanket guarantee gave the authorities time to diagnose fully the condition of the banking system, find agreement on the appropriate strategy, and then intervene and resolve unviable banks without risks of contagion.

But restoration of confidence comes at a cost, which has varied considerably among countries. When credible and effective, the immediate costs of blanket

guarantees are minimal as, once the runs stop, the guarantee is not called. However, a guarantee also commits the authorities to restoring the solvency of the banking system. The costs of that guarantee depend on a number of factors. Key determinants are (i) the state of the financial system (its capital shortfall), and (ii) the effectiveness of the authorities' overall banking strategy. Recent analysis on Indonesia, for instance, suggests that failure to move quickly to halt the deterioration in the banking system, rather than the blanket guarantee, allowed resolution costs to soar. Half of the crisis costs in Turkey were due to the need to restructure the large public banks—an obligation of the government even in the absence of a blanket guarantee. Finally, countries that have been unsuccessful in the recovery of assets taken over as part of the resolution process have faced significantly higher crisis costs. Asset recovery is a powerful tool for reducing crisis costs, as seen in Sweden. Delays or inefficiencies create lost opportunities for addressing the limitations in other resolution tools.

While concern about the costs of guarantees is valid, the difficulty policymakers face is evaluating the counterfactual. The authorities must weigh the costs arising from the potential failure of a higher number of banks in the absence of a guarantee against the cost of resolving individual banks under a blanket guarantee. The case of Indonesia is telling. In January 1998, the exchange rate depreciated by almost 300 percent, half the deposit base was withdrawn, and Bank Indonesia had almost run out of currency notes. Announcement of the blanket guarantee on January 15, 1998 halted the

Table 1.1. Fiscal Costs of Selected Banking Crises  
(In percent of GDP)

	Crisis Period	Gross Outlay	Recovery	Net Cost	Assets <sup>a</sup>
Chile	1981–1983	52.7	19.2	33.5	47.0
Ecuador	1998–2001	21.7	0.0	21.7	41.3
Finland	1991–1993	12.8	1.5	11.2	109.4
Indonesia	1997–present	56.8	4.6	52.3	68.1
Korea	1997–present	31.2	8.0	23.1	72.4
Malaysia	1997–2001	7.2	3.2	4.0	130.6
Mexico	1994–1995	...	...	19.3	40.0
Norway	1987–1989	2.5	...	...	91.9
Russia	1998	...	...	0.0	24.9
Sweden	1991	4.4	4.4	0.0	102.4
Thailand	1997–present	43.8	9.0	34.8	117.1
Turkey	2000–present	31.8	1.3	30.5	71.0
United States	1984–1991	3.7	1.6	2.1	51.4
Venezuela	1994–1995	15.0	2.5	12.4	28.3

Source: Hoelscher and Quintyn, 2003.

<sup>a</sup> Assets of deposit money banks in the year before the first crisis year.

outflows and gave the authorities time to reassess the causes of the meltdown and identify a strategy. It is unclear what would have happened had the blanket guarantee not been announced. One possible outcome would have been an even greater collapse of the financial system and even greater political and social chaos.

When deciding on the appropriateness of a blanket guarantee, the following factors should be considered:

- A blanket guarantee must be credible. The private sector must believe that the government is in a position to honor the guarantee. The government debt position needs to be sustainable and the fiscal accounts relatively strong.
- The blanket guarantee must provide only the minimum protection needed, as excessive coverage only increases moral hazard. The coverage of blanket guarantees should be designed to meet the needs and conditions of the country. However, generally, groups that are not covered include shareholders, subordinated debt holders, connected depositors, and depositors in offshore subsidiaries. External interbank creditors may be included if they are an important source of instability.<sup>2</sup>
- The worse the financial conditions of the banking system, the higher will be the cost of the blanket guarantee. The authorities will have to recognize that the blanket guarantee would have to be accompanied with sufficient fiscal effort to ensure that the medium-term costs of meeting the guarantee can be incorporated in the fiscal accounts.
- The authorities must have adequate legal powers and the tools and the determination to restructure banks and move quickly to restore the system's solvency.
- A credible guarantee in highly dollarized economies would require some combination of low expected costs of restructuring the banking system, and sufficient international reserves to back the guarantee.
- The authorities must have adequate controls to prevent misuse of the blanket guarantee. Fraud can increase the cost of a guarantee through a host of possibilities, including the creation of fake deposits, misuse of lending to related parties, and uncontrolled transfer of offshore deposits (if uncovered).

Both emergency liquidity support and blanket guarantees have proven to be controversial. Concerns about the cost implications of both have led to suggestions that such instruments not be used in crisis management. The alternative proposed is to impose haircuts on the creditors of insolvent banks in the hope that confidence will eventually return and the deposit runs stabilize.<sup>3</sup> Were runs to continue in otherwise solvent banks, reflecting a generalized loss of confidence, this policy option would allow depositors to continue withdrawing funds until a number of these banks would become

illiquid and be closed. This strategy aims at leaving only solid banks in the banking system and limits the resolution costs to the government.

There are serious limitations to this alternative resolution approach. First, as stated above, systemic banking crises are different from bank failures because of the difficulties in distinguishing between viable and nonviable banks.<sup>4</sup> As a result, depositors flee from all banks in the system.<sup>5</sup> Allowing all banks facing runs to fail implies accepting unnecessary and irreversible damage to some healthy sections of the financial system. Second, the economic and social costs of this alternative have not been evaluated. While the counterfactual arguments are difficult to quantify, eliminating an excessively large segment of the financial sector will result in significant disruptions in the distribution of financial services that will hurt the real sector and thus compromise the economic recovery. Third, government authorities have been reluctant to try such an alternative because of the political and social implications.

Imposing nominal losses (haircuts) on creditors during systemic crises is particularly disruptive to the financial system. Imposition of reductions in deposit balances is more costly to the depositor and more intrusive than modifying contract terms. Restoration of confidence, therefore, becomes more problematic. Moreover, depositors with residual balances in the bank may immediately withdraw remaining balances in the bank to prevent further confiscation, thus aggravating the banking crisis. The political costs of deposit haircuts are often seen as prohibitive. For these reasons, this policy has been used in only a few, extreme cases—Argentina (1989), Estonia (1992), Japan (1946), and the United States (1933).<sup>6</sup> Two of the cases (Japan and the United States) occurred when deposit insurance systems were not in place and the more recent cases (Estonia and Argentina) were part of a fundamental restructuring of not just the banking system but the entire economic framework for the country. For example, Argentina imposed depositor haircuts in 1989 following a prolonged period of hyperinflation and both a political and social collapse. The stabilization package reversed decades of populist macroeconomic policies, stabilizing prices and the exchange rate, revamping relations between the national and regional governments, and restructuring public sector finances. Under these circumstances, the negative impact of deposit haircuts may have been overshadowed by a positive impact arising from the wide ranging structural reforms.

### *Administrative measures*

Plans for stabilizing systemic crises can go awry. The country may not meet the necessary conditions for efficient use of the stabilization tools, mentioned above. Macroeconomic developments can slip, worsening the crisis and preventing stabilization of private sector expectations. High levels of dollarization can so limit the effectiveness of traditional resolution tools that they are not viable options. Political or social developments can impede prompt crisis resolution.



Under such conditions, administrative measures may be the only alternative available to contain the generalized collapse of the financial system. These measures change the contractual terms of bank deposits, and can be referred to collectively as “deposit freezes.” In designing these measures, three basic options are available: restrictions on deposit withdrawals, an extension of deposit maturities, and securitization of deposits. Such measures have been used sparingly in recent times. However, Argentina, Ecuador, and Uruguay have all relied on some form of this containment tool.

Administrative measures have serious limitations and should be used with caution. Such measures are disruptive to the payment system and to economic activity. Moreover, depositors will react negatively to all administrative measures. The measures, therefore, should be viewed as a final, desperate measure to stop a run on banks if all other measures fail. They should also be designed to mitigate as far as possible their negative impacts.

- All deposit freezes are disruptive to the economy as they limit access to the means of payments. When properly designed, securitization is the least disruptive in this sense, as deposits are converted into negotiable instruments that can be redeemed for liquidity in case of need, albeit at a discount.<sup>7</sup> More generally, administrative measures should always allow for a small amount of funds to be withdrawn to facilitate financial transactions.
- Deposit restrictions tend to lose effectiveness quickly as market participants learn ways of circumventing them. Country experiences suggest that restrictions used to substitute for necessary policy adjustments to address the fundamental causes of crises could not provide a lasting protection. Thus, if restrictions are imposed, they should be in place for limited time-periods and be used to buy the authorities time to work out a permanent solution.
- Political and social pressures have resulted in exemptions and the abuse of exemptions. Any exception to the general policy concerning deposit restrictions should be limited in order to avoid circumvention and loss of credibility.
- Unwinding deposit restrictions can be problematic. While a premature removal of deposit restrictions exposes the banking system to the risk of a new run, an excessively drawn out process can harm confidence in the banking system, increase uncertainties, and delay reintermediation.

In principle, any limitation on deposits should be applied uniformly across all banks. Asymmetric treatment can put extra financial burdens on those banks treated unfavorably, deteriorating their financial position and making them a drag on the recovery of financial intermediation. Asymmetric treatment of banks has been implemented in some cases. In Uruguay, for example, foreign banks were exempt from the deposit freeze imposed in 2002,

on grounds that deposits were invested in high-quality, dollar-denominated securities that were easy to liquidate to meet deposit demand. Exceptions to the principle of uniformity of treatment, however, should be limited to exceptional circumstances, where the asymmetry is not perceived as arbitrary, the financial recovery is not jeopardized, and the motives are communicated in a transparent way to the public.

### **Bank restructuring**

The main objective of the restructuring strategy is to restore individual banks and the system to profitability and solvency. The strategy should identify measures to strengthen viable banks, improve the operating environment for all banks, and resolve unviable banks. Bank restructuring is a multi-year process, often requiring the establishment or revision of laws and institutions; the development of strategies to liquidate, merge, sell, or recapitalize banks; and the restructuring and recovery of bank assets, operations, and procedures.

The bank restructuring strategy begins with a diagnosis of the financial condition of individual banks. The size and distribution of bank losses must be identified. As supervisory data may be outdated and not reflect the full economic impact of the crisis, supervisors may attempt to update available information based on uniform valuation criteria. The supervisors will also examine information on banks' ownership structures (public or private, foreign or domestic, concentrated or dispersed) to help determine the scope for upfront support from existing or potential new private owners.

Diagnosis of banking sector conditions in a crisis is typically hampered by data limitations. A frequently used measure of solvency is the risk-weighted Basel capital adequacy ratio (CAR). However, when data limitations delay the evaluation of banks' capital levels, supervisors may need to rely on other sources of information to determine bank viability. A bank is viable if (i) it can remain profitable and earn a competitive return over the medium term; and (ii) the shareholders are committed and able to support it. Supervisors may require banks to produce forward-looking business plans based on common assumptions with time bound, measurable targets for monitoring purposes.

Once the diagnosis is complete for each institution, the supervisors classify banks and develop appropriate resolution strategies. Typically, three categories are used: (i) viable and meeting their legal CAR and other regulatory requirements; (ii) unviable; and (iii) viable but undercapitalized. In the latter classification, an additional assessment will be needed to determine whether the existing shareholders can recapitalize their bank within an acceptable period or if the use of public funding should be considered. Once classified, the authorities must go through the arduous process of monitoring the restructuring process for viable banks.

Banks determined to be nonviable and insolvent must be removed from the system. Depositor protection will facilitate this clean up, as banks can

be closed without fears of contagion. Countries in the Asian crisis as well as Turkey moved aggressively in removing failed banks, once the blanket guarantee was in place.<sup>8</sup>

Restructuring strategies for viable banks in a systemic crisis can be broadly divided into private sector solutions and public sector assisted solutions.

- Private sector solutions. Shareholders should always have the responsibility to recapitalize and restructure their bank. If the shareholders are unable to recapitalize fully their bank immediately but they are fit and proper and the bank is deemed viable, consideration could be given to allowing solvent but undercapitalized banks to remain in the system under strict conditions.<sup>9</sup> The bank's recapitalization could be phased in, with tight monitoring and requirements, including the suspension of dividend distributions until the required level of capital has been restored. If the original shareholders are unable to recapitalize, other private owners should be sought.
- Public sector-assisted solutions. Failure of private sector solutions and bank insolvency does not necessarily result in bank liquidation. Circumstances can exist where public sector action may be warranted to limit the costs to the real economy of too large a number of banking failures. Public sector assistance can use a variety of techniques: (i) joint recapitalization schemes; (ii) resolution through purchase-and-assumption (P&A) transactions or other sales methods, when public funds are used to back transferred liabilities or guarantee asset values; and (iii) nationalization (with a view to future reprivatization).

This restructuring phase is fraught with difficulties and potential setbacks. The efficiency with which the authorities implement these steps will determine both the overall cost of the bank restructuring efforts and the extent to which a vibrant and efficient banking system emerges from the crisis. However, experience points to a number of implementation problems.

- *Delays.* Failure to move expeditiously in restructuring will only allow the financial condition of the banks to deteriorate further and increase resolution costs. Banks rarely, if ever, grow out of serious financial difficulties.
- *Excessive forbearance.* Crisis resolution should not aim at protecting all banks. Viable banks should be closely monitored and nonviable banks should be removed from the system. The judgment on the viability of a bank is difficult but must be made based on the best information available.
- *Loss-sharing of shareholders.* In all cases, shareholders must be responsible for the accumulated losses of their banks. Otherwise, shareholders have the wrong incentives in managing their bank.

- *Comprehensive treatment of banks.* The resolution of banks must address all their outstanding problems. Partial resolution (while “praying for redemption”) rarely works. The supervisors must be convinced of the inherent strength of the banks that remain in the banking system.
- *Inappropriate resolution tools.* Supervisors have a range of resolution tools such as liquidation, sale as a whole or in parts (including through P&A transactions), and nationalization. Authorities must ensure that the market conditions are appropriate for the tools used. For example, reliance on P&A transactions in an environment of shallow private markets can distort the resolution process.
- *Lack of political support.* Bank resolution necessarily implies redistribution of resources within the economy. Shareholders are expected to be first in line to absorb losses up to the full amount of their stake, but any additional losses might need to be absorbed by other stakeholders, such as holders of subordinated debt, depositors, other creditors, and the government (ultimately, the taxpayers). Differences within the government on how this burden will be shared can be exploited resulting in higher fiscal costs and a less efficient banking system.
- *Poor communications.* Lack of an appropriate communications strategy can limit the effectiveness of a resolution strategy. Private sector support is an important factor in implementing bank restructuring. Stability of private expectations gives a period of peace and calm; understanding of the government’s objectives can generate important support.

Limitations in the legal system have been a key reason for suboptimal results in bank restructuring. Even when the banking strategy is comprehensive and fully agreed, weaknesses in the legal system have hampered bank resolution efforts. Such weaknesses have resulted in (i) incentives to postpone adequate treatment of failing banks; (ii) higher costs for bank resolution; and (iii) weaknesses in the banking system. Limiting legal factors include:

- *Inability to write down shareholder capital.* Bank supervisors should have legal powers to write off shareholders’ equity to facilitate bank resolution.
- *Limited legal authority to facilitate bank sales.* Many supervisory authorities face restrictions on the sales or transfer of bank assets of failed banks. In some jurisdictions, shareholders continue to have legal rights even after bank failure, thus preventing the authorities from taking cost-reducing resolution actions.
- *Weak mandate of supervisory, deposit insurance, or resolution agencies to restructure banks.* Bank resolution entities should have a clear organizational framework, be adequately capitalized, and have a board composed by reputable professionals.

- *Ineffective procedures to implement P&A transactions.* In practice, banking legislations should give supervisors the necessary legal authority to transfer to a third institution a portion of “privileged” liabilities from a failed institution along with its good assets. This is meant to contain the risk of legal challenges from the remaining creditors.
- *Insufficient knowledge of judges on banking matters.* In some jurisdictions, judges have limited knowledge of banking matters, which has impeded the resolution of banks or the legal prosecution of the former managers and directors of failed banks.
- *Lack of legal protection to staff and board members of agencies responsible for bank restructuring.* Lack of legal protection from litigation for bona fide actions taken in the exercise of their duties impairs banking resolution efforts.

### Asset management and corporate debt restructuring

**Asset management and corporate debt restructuring are the final component of crisis management.** Corporate and financial sector restructuring are inextricably intertwined, being two sides of the same issue. A key aspect of this process is the orderly transfer of ownership and management of weak assets. Strengthening this process may include both legal and institutional reforms. For this reason, resolution of the banking system issues is ideally carried out in conjunction with resolution of corporate sector issues.

The objective in establishing an asset management company (AMC) is to remove the nonperforming loans (NPLs) from the books of the banks, allowing banks to return to their normal business, and maximize the recovery value. Asset management is complex and one of the important benefits of establishing an AMC is the managerial. Managing nonperforming assets is different from managing a lending institution. Techniques for managing assets may include restructuring of loan terms, disposition through auctions or other sales methods (which transfers management decision to the purchaser), conversion into equity stakes, and liquidations through court or administrative procedures.

There are a number of institutional options for managing impaired assets (Figure 1.1). Banks can manage them directly, or sell them to a specialized AMC, either privately or publicly owned. Specialized institutions are necessary when managing NPLs interferes with the daily running of the bank or when specialized skills are needed. While each institutional setup has advantages and disadvantages, experience suggests that, in general, privately owned asset management companies can respond quickly and efficiently while government-owned centralized AMCs (CAMCs) may be relatively more efficient when the size of the problem is large, special powers for asset resolution are needed or the required skills are scarce.<sup>10</sup>

		Institutional Arrangement	
		Decentralized	Centralized
Mandate	Narrow	Private AMCs Private resolution trusts	Rapid resolution vehicles (US, RTC, Thai FRA)
	Broad	Bank workout units Private resolution trusts	Broad mandate CAMCs (Danaharta, KAMCO)

Figure 1.1. Options for Asset Management

Empirical assessments of the effectiveness of AMCs have suggested that the most successful ones have had narrow mandates.<sup>11</sup> AMCs can have either narrow or expanded mandates—the former take over and liquidate assets from closed institutions; the latter purchase assets from going concerns with a view to expediting corporate restructuring. AMCs have had only limited success in corporate restructuring. Political pressures, limitations of market discipline, and conflicting objectives have hampered the expanded role of CAMCs. Moreover, expanded-mandate CAMCs have been used to recapitalize financial institutions by buying nonperforming assets at above market value. This recapitalization option is less transparent than more direct methods, converts the AMC into a loss-making operation to be covered by additional fiscal expenses, and provides the government with less leverage in the recapitalized institutions.<sup>12</sup>

An important issue in determining the effectiveness and impact of AMCs is asset pricing. As long as the ownership of the bank and the AMC is the same, NPLs can be transferred relatively rapidly as the transfer of assets is only an internal transaction. When ownership is different, pricing often becomes difficult. If an independent AMC is set up to purchase assets from going concerns, NPLs should be purchased at a price as close to a fair market value as possible. While it is difficult to price nonperforming assets (especially in the midst of financial crises), an approximation of their value, based on estimated recovery, cash flow projection, and appraisal of collateral, should be used for the purpose of the transfer.

In spite of considerable work on establishing and managing AMCs, success in resolving NPLs has been limited. AMCs have taken a significant portion of the failed assets arising from the Asian crisis of 1998. Similarly, an AMC was established in Turkey. Six years after the outbreak of the Asian crisis, progress has been made in resolving NPLs in both Malaysia (57 percent of assets resolved) and Korea (47 percent). Less striking progress has been made in Indonesia and China (a little over 30 percent in both cases).<sup>13</sup> In Turkey,

the sale of assets of liquidated banks was significantly delayed and the process has just begun.

This slow pace reflects a number of common problems that arise with respect to asset disposition.

- *Weak market demand.* Market demand for distressed assets may be weak, depending on the depth of the local market, openness to foreign investors, and the type of assets. Local investors may lack resources for sizeable asset purchases in the midst of a crisis, particularly if the aggregate size of NPLs is large compared to the economy. Political sensitivities and legal restrictions to foreign ownership of assets may reduce market demand.
- *Weak property rights.* With unclear property rights and an inability of courts to enforce collateral, banks have little incentive to purchase NPLs or restructure existing NPLs. In effect, the bank restructuring process designed to date assumes that a well functioning legal and institutional framework for property rights already exists. If that is not the case, it is likely that NPLs will not only remain but also grow.<sup>14</sup>
- *Unrealistic expectations about the recovery rate.* The authorities may have unrealistic expectations about the market price of assets put up for sale. This may lead auctions to be cancelled. The low recovery rate may aggravate fears of legal action, making it important to provide staff and board directors of the AMC with legal protection.

### III. The way forward

Given the chaotic nature of banking crises and the numerous sources of missteps and implementation problems, what is the best way forward? It is tempting to say that each crisis should be approached as a new case, avoiding a “cookie cutter approach” to resolution and seeking to identify the peculiarities of each country’s legal, institutional, and cultural characteristics. However, broad guiding lessons can be identified for crisis prevention and crisis resolution.

The first best approach is to prevent or to minimize banking crises. The better we are at preventing crisis, the less necessary will resolution become. Experience also points to best practices or general principles for crisis resolution.

#### Prevention

Contrary to a common saying, “the best offense is a good defense.” Efforts to prevent crises pay off handsomely in lowering the incidence of crises and lowering the costs when crises emerge. The supervisory and regulatory framework must be sufficiently robust to ensure rapid identification of banking weaknesses and implementation of corrective actions.

Prevention of systemic crises requires a broad based effort, aimed at establishing appropriate macroeconomic and microeconomic policies. Macroeconomic policies that aim at stable price levels and strong economic growth will support a strong banking system. Microeconomic policies should target a variety of internal factors to strengthen financial intermediation, including an appropriate operating environment, and internal governance of financial systems.<sup>15</sup> These factors should be supported by strong supervision and bank resolution framework.

Supervisory practices are an essential component of the framework for preventing banking crises. In reviewing international experiences of supervisory actions, the following framework has proven important for early warning and prevention of crises:

- Bank resolution framework. The authorities need sufficiently clear powers to implement their desired strategy.
- An independent bank supervisor with discretionary powers to act at an early stage. In a number of jurisdictions, as a result of legal limitations or political interference, bank supervisors have no independence to impose remedial actions to weak banks at an early stage. Furthermore, sometimes they must follow very rigid steps before intervening a bank, including a mandatory requirement for requesting weak banks to submit rehabilitation plans, which in some cases may simply delay bank resolution actions.
- Supervision on a consolidated basis. In some cases, financial groups have used unregulated affiliates (including offshore banks) to evade supervision and hide their true financial condition.
- Careful monitoring of loans to related parties. Due to political interference or weak supervisory capacity to enforce credit limit to insiders, a number of banks have failed as a result of large exposures to insolvent related parties.
- Strong legal protection for bank supervisors. The risk of legal retaliation from former bank shareholders also postpones the adoption of early bank resolution measures by banking supervisors.
- An additional factor in preventing crises is adequate planning. Good supervision will identify problems when they are still manageable. The earlier difficulties are detected, the more options are available. However, the authorities must move quickly to address small problems before they become big problems. Rapid and efficient action can limit subsequent costs and economic disruption. An equally important part of crisis prevention is planning for crises. Supervision cannot prevent banking failures. The authorities should be prepared, with clear options for addressing emerging and worsening crisis cases.
- Proper rules and practice runs during stable times pays. Countries find it useful to have considered the appropriate range of options concerning



the management of systemic crises before the crises emerge. While not able to predict the exact course of a crisis, identification of the key decisions that must be made, the sources of information and identifying who is responsible can speed development of an appropriate policy response.

## **Resolution**

Supervision alone cannot resolve all crises once they have begun. Once a crisis breaks out, what are the policy principles that will limit the extent of the crisis and reduce the eventual costs?

- Strong political support. Crisis management and resolution implies a redistribution of wealth within the society. Political leadership is essential if this process is to be seen as fair. Moreover, public disagreements or expressions of doubt among prominent government participants can undermine confidence in the containment and restructuring process.
- Prompt recognition and resolution of banking distress lowers the cost of resolution. The sooner the problems come to light, the greater will be the options available to the authorities to tackle them. The faster the authorities get control of failed institutions, the lower will be the resolution costs and the faster the reestablishment of financial stability.
- Banks should be allowed to fail. Bank failure can be a positive force for banking system stability. The presumption should not be that all banks must be protected. In any decision to use public money to support a bank, the benefits of keeping a bank open must be judged explicitly against the costs to the public sector and to the banking system of maintaining a weak bank.
- Bank resolution should follow a principle of equity and fair treatment. Restructuring policies should be applied to all banks on a uniform basis. Existing shareholders should be the first to either inject additional capital or lose their investment.
- Bank restructuring must be comprehensive or financial difficulties will persist and, with time, grow. The resolution options chosen should not only resolve current banking problems, but also address the medium-term structural problems found in the legal and institutional framework. Any nationalized bank should be run by a third party with an established reputation and experience in bank management, or by new managers and board members that are fit and proper and isolated from political interference.
- Economic authorities must maintain close coordination. While a clear legal and operational division of labor is necessary to facilitate bank resolution, it is critical that a fluid mechanism to coordinate and

communicate actions is put in place. Furthermore, strong leadership is vital to shepherd the restructuring process and avoid influence from third parties.

- Restructuring of the banking system will be easier if depositors and other creditors are protected. When faced with a systemic crisis, experience suggests that, where feasible and when the costs can be covered by fiscal resources, a blanket guarantee can ease creditor fears and facilitate the closure of weak banks.
- Legal action must be taken against those responsible for banking failure. The prosecution of managers and directors responsible for wrongdoing in banks is the best recipe to impose market discipline. In cases when legal action has been taken, remaining actors in the market understand that the authorities are determined to have a sound and safe banking system. In the absence of such resolve, similar accidents will be repeated in the future.
- Asset resolution is an essential complement to bank restructuring. An early and active involvement in impaired asset management prevents credit discipline from eroding. A variety of institutional arrangements and techniques are available. They should be chosen in order to achieve the desired trade-off between rapid resolution and recovering the value of the impaired assets.
- Exit from guarantees. Any guarantees introduced as part of the restructuring strategy will have to be phased out as soon as possible without jeopardizing financial stability. Fears of renewed financial deterioration may lead to the tendency to postpone such a phase out. However, the longer guarantees are in place, the greater are the moral hazard implications. Successful guarantees have been phased out in progressive stages where each stage is seen by markets as a nonevent.

#### **IV. The role of the fund**

During the period 1980–2006, virtually every country in the world has undergone some form of financial crisis.<sup>16</sup> However, only a few countries have suffered multiple crises. Fortunately, at the country level, banking crises are low frequency events. As a result, the local knowledge of managing banking crises is often lost, as staff involved with the intensive period of crisis containment and post-crisis reconstruction retire or move to other responsibilities.

The Monetary and Financial Systems Department in the IMF is charged, in part, with assisting countries facing such crises. Following the Asian crisis, the Fund recognized the importance of assembling teams of professionals with experience in managing systemic banking crises. In response, the department established a dedicated division, staffed with experts who have helped resolve some of the most devastating banking crises. Experts in the division have

been involved in every systemic crisis since the mid-1990s and have assisted countries address a myriad of banking difficulties. This staff provides a source of knowledge and experience concerning best practices and experiences in other countries and stands ready to assist members' countries within days of being called. Constant practice builds a knowledge base that is hard to maintain at the national level.

An important part of our work is the drawing of lessons and the identification of preferred practices. The department has published a series of papers drawing broad lessons from the crises since the mid-1990s. In addition, we are finalizing a series of detailed Ex Post Analyses that review the development of specific crises and a step-by-step review of the advice provided, the success in implementation of that advice, and the results. We hope that such work will strengthen our understanding of the forces unleashed in banking crises and the appropriateness of different combinations of containment and resolution tools.

## V. Conclusions

Banking crises are chaotic events. Uncertainties and fears make identification of the problems and design of the solutions difficult. Moreover, economic difficulties become intertwined with political and social problems. Uncertainties about the conditions of the economy bring out political rivalries and may lead to social chaos. The social and political deterioration, in turn, affects economic decision-making.

Crisis management under these conditions is complex. As H. L. Mencken stated, as quoted at the beginning of this chapter, you can always find answers to complex problems that are "simple, neat, and wrong." The solutions tried during the last two decades have been innovative. Their effectiveness, however, has been mixed. To blame the instruments is too simple. A complex mix of economic, political, and social factors all affect how and when these instruments can be best used.

Crisis containment must be a priority in the initial stages of crisis management. Emergency liquidity support and blanket guarantees have proven to be powerful tools to achieve this containment. However, they must be used appropriately and there are conditions under which the tools are not credible or when they increase sharply the cost of the crisis. The authorities must be in a position to carefully evaluate the appropriateness and risks of these tools.

Bank restructuring is a bank-by-bank activity. It involves bank diagnosis and the design of appropriate bank-specific resolution strategies. There is no presumption that all banks must survive the resolution phase. Successful restructuring requires sound banks and strong shareholders, able to ensure the profitable management of their bank over the medium term.

The bank restructuring phase is fraught with difficulties and potential setbacks. Experience suggests that the biggest threats to successful restructuring of the banking system include failure to complete the restructuring, excessive forbearance, failure to ensure loss sharing of shareholders, inconsistent treatment of banks, and lack of political support for the process.

Given the difficulties and uncertainties of crisis management, prevention should be of significant concern to the authorities. A number of measures can strengthen the supervisory framework and the authorities' ability to prevent crises. Among these measures are creation of an independent banking supervisor with discretionary powers to act at an early stage, consolidated supervision of financial sector groups, careful monitoring of loans to related parties, and strong legal protection for bank supervisors.

Once prevention fails, bank resolution should be as efficient as possible. Bank resolution strategies should be comprehensive and complete. Moreover, the faster the recognition and resolution of banking distress, the more efficient and less costly will be the resolution. For that reason, strong political support is necessary to ensure the full implementation of the strategies designed. Particular efforts should be made to ensure that the legal system is adequate for the strategy adopted.

## Notes

1. Lindgren and others (1999), p. 18.
2. This is because deposits are typically moved offshore in the first place for tax and regulatory evasion.
3. Haircuts are defined as nominal reductions in the deposit; net present value (NPV) reductions through maturity extensions or interest rate reductions are not termed a "haircut."
4. Under normal times, failed banks should be resolved and depositors protected only up to the maximum in the deposit insurance system. Imposing losses under such circumstances will not cause contagion as other depositors in the system will know the condition of their banks.
5. In the Argentina case, for example, deposit withdrawals were suffered by all banks in the system, including the strong international banks.
6. Baer and Klingebiel (1995). They also studied Malaysia (1986) where insolvencies emerged in financial cooperatives. Cooperatives represented about 3 percent of total deposit-taking institutions. Depositors in insolvent cooperatives received 50 percent in cash and the remaining 50 percent in securities. While representing an NPV reduction, nominal haircuts were not imposed.
7. This, however, can have adverse redistributive effects if the neediest depositors are forced to liquidate the securities at a discount, while the most affluent ones can afford to hold the bonds to maturity.
8. For example, Korea removed licenses of 19 banks; Indonesia removed the licenses of over 90 banks, Thailand closed 58 finance companies and intervened 5 banks; and Turkey removed licenses from 22 banks.
9. Undercapitalized banks are banks operating below the legal minimum CAR. Insolvency is often defined as operating with a CAR of zero or less. In some

countries with prompt corrective action regimes, the law may oblige supervisors to intervene a bank when its CAR falls below a certain threshold (between 2–4 percent in some countries).

10. Ingves, Seelig, and He (2004).
11. Klingebiel (2000) and Woo (2000).
12. Lindgren and others (1999).
13. Fung and others (2004).
14. Sheng (2003).
15. Lindgren, Garcia, and Saal (1996).
16. Lindgren and others (1996), and Hoelscher, “Issues in Bank Resolution,” IMF Regional Conference on Bank Resolution, Honduras, 2004.

## Bibliography

- Baer, Herbert, and Daniela Klingebiel, 1995, “Systemic Risk When Depositors Bear Losses: Five Case Studies,” in George Kaufman (ed.) *Research in Financial Services: Private and Public Policy*, Vol. 7 (Stanford, Conn: JAI Press), pp 195–302.
- Fung, Ben, Jason George, Stefan Hohl, and Guonan Ma, February 2004, *Public Asset Management Companies in East Asia: A Comparative Study*, Occasional Paper No. 3, Bank of International Settlements.
- Hoelscher, David, and Marc Quintyn, 2003, *Managing Systemic Banking Crises* (Washington: International Monetary Fund).
- Hoggarth, Glenn, and Jack Reidhill, 2003, “Resolution of Banking Crises: A Review,” *Financial Stability Review*, December, pp. 109–23.
- Ingves, Stefan, Steven Seelig, and Dong He, 2004 “Issues in the Establishment of Asset Management Companies,” Policy Discussion Paper 04/03 (Washington: International Monetary Fund).
- Kane, Edward J., and Daniela Klingebiel, 2004, “Alternatives to Blanket Guarantees for Containing a Systemic Crisis,” *Journal of Financial Stability* (forthcoming).
- Klingebiel, Daniela, 2000, “The Use of Asset Management Companies in the Resolution of Banking Crises: Cross-Country Experience,” World Bank Policy Research Paper No. 2284 (Washington: International Monetary Fund).
- Lindgren, Carl-Johan, Gillian Garcia, and Matthew Saal, 1996, *Bank Soundness and Macroeconomic Policy* (Washington: International Monetary Fund).
- Lindgren, Carl-Johan, Tomas Baliño, Charles Enoch, Anne-Marie Gulde, Marc Quintyn, and Leslie Teo, 1999, *Financial Sector Crisis and Restructuring: Lessons from Asia* (Washington: International Monetary Fund).
- Sheng, Andrew, 2003, “Reflections on Financial Sector Restructuring,” World Bank/IMF/SEACEN Regional Seminar.
- Woo, David, 2000, “Two Approaches to resolving Nonperforming Assets during Financial Crises,” IMF Working Paper 00/33, Washington: International Monetary Fund.