

# PART ONE

# **INTRODUCTION**



#### ONE

# **Introduction and Overview**

## Patrick Honohan and Luc Laeven

#### INTRODUCTION

Financial sector crises present exceptionally difficult challenges for the policy maker. They often emerge unexpectedly, evolve with breakneck speed, and threaten to strangle a large part of national economic activity unless promptly and decisively addressed. Whether this action is to involve closures of banks, or the introduction of government guarantees to substitute for a loss of confidence, or a realignment of exchange rates, future economic prosperity depends on the relevant decisions being made with a sure sense of what is feasible and credible.

Whatever action is taken to contain the crisis in the initial days and with whatever success in restoring confidence, much work remains. Banks and other firms will be insolvent, leaving broken contracts and a lack of credit to allow business to move forward. If the ground has been well prepared, clearly defined bankruptcy procedures will facilitate a restructuring of ownership. But government intervention may be called for to ensure resolution of these problems and place the system on a sound basis.

Crises can recur, and the probability of this happening likely depends on the actions taken in the past. The threat of moral hazard behavior based on market participants' expectations of bailout, though not necessarily decisive, has to be factored in to the judgment on how to deal with crises.

The chapters of this volume throw light on all of these aspects. Drawing on their findings, this introductory chapter traces the decision points of the typical banking crisis – recognizing that no two crises are the same. We start by offering a brief review of the scale and severity of recent crises, highlighting the difficulty of assessing just how bad things are going to



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get – indeed there have been some cases from which the bounceback has been so strong that some have argued that the crisis provided a necessary clearing of the air.

Although each of the chapters of Part II has something to say about both containment and resolution phases of the crisis, it is useful to distinguish between these two phases of a crisis. It is the containment stage that attracts the most attention. Here we see bank runs, weekend crisis meetings, emergency liquidity loans, interest rate spikes, and exchange rate pressure.

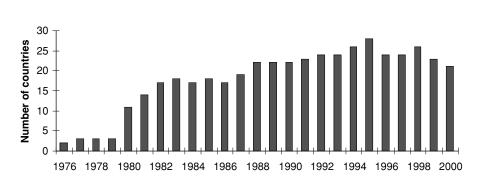
In the containment stage, speed is of the essence. How can the authorities judge whether forbearance, last resort lending, or official guarantees should be employed, at potentially high fiscal cost, in the hopes of forestalling or minimizing the scale of collapse? If banks are to be closed, how is this to be done without aggravating the loss of depositor confidence? Should banking regulations take explicit advance account of macroeconomic fluctuations so that forbearance is not needed during nonthreatening downturns?

When confidence has been restored and markets are functioning normally, there is usually still a legacy of overindebtedness and undercapitalization: we have moved into the resolution phase. With the crisis contained, policies must be chosen for the resolution of financial and nonfinancial firms in order to minimize overall social costs, restore the corporate system to solvency, and ensure safe and sound banking going forward. The effectiveness of alternatives depends on preexisting legal and governmental infrastructures so that what works well in Sweden (asset management companies, for example) may have disappointing consequences in Senegal. And the lessons of history are not always well learned, as in the recent partial replication in Mexico of selective subsidies to delinquent borrowers of a type employed at considerable cost in Chile in the early 1980s.

The diversity of banking crises means that learning the lessons has been largely based on a case-study approach. But theory and econometrics can also help. Part III of this book provides an insight into the potential contribution of mathematical modeling and of cross-country econometric studies. The complexity of the behavioral interaction between bankers, their customers, and the regulator is such that theory often generates ambiguous predictions. Thus, there is no substitute for looking at available data.

Part IV highlights some of the distinctive structural features and financial reforms that may influence a country's ability to weather a financial shock or prevent future crises. The presence or not of foreign





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Figure 1.1. Systemic Financial Crises in Progress Worldwide, 1976–2000. *Note:* This figure shows for each year the number of countries in crisis. We exclude transition economies and countries with incomplete data on the timing of the crisis. We only include systemic financial crises. *Source:* Authors' calculations using data from the Caprio, Klingebiel, Laeven, and Noguera (Appendix this volume) database.

Year

banks, their entry in response to crisis, and their preparedness to ride out trouble is one of these dimensions. Another is the nature of bankruptcy law. Finally, the case of Japan, often seen as being stuck in a chronic banking crisis, is examined.

### 1. REVIEW OF THE SCALE AND SEVERITY OF RECENT CRISES

Even though recurrent crisis has been a feature of banking for centuries, it is clear that banking crises of systemic importance increased in frequency and probably in severity from the 1970s, whether compared with the previous quarter century (which was an exceptional lull period), or with earlier historic periods (Bordo et al. 2001, Caprio and Klingebiel 1996, and Lindgren et al. 1996). Figure 1.1 shows the number of countries in crisis over the past two decades. A concentration of very severe events in 1997–1998 in East Asia and Russia may represent a permanent high water mark, but each subsequent year has brought new cases: Turkey, Argentina, and most recently the Dominican Republic.

There have been several contributory causes to the increase in banking crisis frequency since the early 1970s. It has been a period of change and volatility. The increase in inflation variability and in exchange rate volatility after 1971 increased the vulnerability of the banking system more than other sectors. The great expansion of banking depth in recent decades meant that banking losses, when they occurred, were more



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likely than before to represent a larger share of GDP. Heightened government involvement in ownership and credit allocation of the banking system in many developing countries during the 1960s and 1970s left a legacy of weak credit culture and a stock of unserviceable loans that became evident from the mid-1980s. Structural change, drastic changes in relative prices, and deep recessions in transition economies added many other cases. Finally, financial and macroeconomic liberalization in weak institutional environments both revealed preexisting insolvencies and exposed many banks to risks for which they were unprepared, having previously functioned in a protected environment of high and stable margins and uncomplicated financial contracts. Botched privatizations were part of this story, as were bank management errors in adapting to and trying to take advantage of the increasingly sophisticated financial engineering of the global market to which they were newly exposed.

The costs of these banking crises have been large, though it is difficult to place a precise value. Some of the losses of the banks themselves have been borne by shareholders and depositors, but most have been assumed by government and thereby socialized, being covered partly through a reduction in government spending and partly through increases in taxes, including the inflation tax. Total estimated fiscal costs of crises in developing countries in the past 25 years exceeds \$1 trillion – an amount greater than the cumulative total of international development assistance since World War II.

Fiscal costs may in part be seen as merely a transfer, though the deadweight costs of this transfer are appreciable. But banking collapse also has contributed to economic downturns, partly because of the disruption of financial contracts, including the flow of credit as well as the payments system. Attempts have been made to estimate these economic output losses also, though, as many banking crises - although contributing to recession – have themselves been triggered by economic downturns with other prime causes, it is difficult to isolate that part of the economic downturn that should be attributed to the banking weakness per se. In practice, although estimates of total economic costs differ from fiscal costs in each country, on average across countries they come to about the same magnitude. In some cases, the economic downturn following recognition of the crisis has been short-lived or even absent altogether – as in Ghana. A plausible interpretation of this pattern is that, by clearing the air and re-establishing the banking system on a firmer basis, recognizing and dealing with the crisis can unleash a new dynamism that was absent



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as long as policymakers were in denial and banks labored under a hidden burden of unacknowledged loan losses.

Predicting systemic banking crises is by no means an easy task. Indeed, the best models that have been developed for this purpose – though they do identify some statistically significant variables, mostly macroeconomic in character – have proved to be unable to predict crises out of sample with any degree of success (Demirgüç-Kunt and Detragiache 1999; Honohan 2000). This is partly because the timing of such crises is often related to an exchange rate or other financial asset price collapse, and these can be inherently unpredictable. It is also partly because the information necessary to infer that a crisis is imminent is closely held, because of the lack of transparency of banks and their assets. Some economies (such as Argentina and Turkey) have experienced multiple crises; for some (such as Korea) the crisis, though profound, has been brief and recovery vigorous; others (such as Japan and the thrift sector of the United States) have remained in a state of barely suppressed crisis for long periods. These experiences confirm the need to be prepared and alert for a crisis, and suggest that good policies and strong institutions can make a big difference.

### 2. CONTAINMENT STAGE

It is the fast-moving way in which banking crises can often evolve that makes it important to distinguish a containment stage from the policy response. But not all banking crises are the same, and the source, scale, and nature of the rapidly evolving events that need to be dealt with differ, depending in particular on whether the trigger for the crisis is a loss of depositor confidence, regulatory recognition of insolvency, or the knock-on effects of financial asset market disturbances outside the banking system including exchange rate and wider macroeconomic pressures.

The most dangerous form of crisis is that which begins with a depositor run, and it is this form that has been most extensively considered in the theoretical literature. This is both because the short-term and demandable liabilities of banks make them uniquely vulnerable among business entities to a sudden loss of creditor confidence, and also because the payments system for the economy as a whole depends heavily on the smooth functioning of all of the larger banks. Failure of any one of these creates immediate disruption to the payments system and this, as has been observed in recent years, notably in Argentina and Indonesia, is associated with widespread economic distress, at least in the short term and perhaps with lasting consequences.

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In other cases, the initial indications of trouble come from a regulatory evaluation of bank capital. A judgment that one or more large banks are insolvent can reflect a reassessment of the viability of their borrowing clients (the reassessment triggered, perhaps, by such extraneous factors as a political event that removes protection from hitherto favored borrowers), or because of the revelation of bank fraud or mismanagement on a large scale (recent events in the Dominican Republic mirroring in some respects the earlier crisis of Venezuela show how large these can be; the 1991 collapse of the Bank of Credit and Commerce International, affecting many countries, also falls into this category). Depositors may not at first react to the regulator's emerging awareness of solvency problems, whether because of lack of information, or because they are confident that the authorities will protect them; instead, it is the potential for looting of the insolvent bank by insiders that generates the urgency for containment action.

The third source of problems, a collapse in financial asset prices, or pressure on the exchange rate, may prompt liquidity demands on the banks that do not reflect a loss of confidence by depositors in the banks themselves. The threat here is of a generalized debt deflation process (modeled as far back as the year 1933 by Irving Fisher), whereby defensive reaction by the banks could result in forced asset sales and a severe credit squeeze both of which in turn threaten the solvency of bank borrowers and others, contributing to a general economic slump.<sup>2</sup>

Containment strategies need to be attuned to the source of the trouble and the behavior that requires containment. The range of possible containment tools is fairly well defined: each has its limitations in terms of direct effectiveness, cost, and likely contribution to moral hazard whether during the current crisis or in subsequent years.

Deposit withdrawals can be addressed by liquidity loans, usually from the central bank when market sources are insufficient (which is all that is meant by the term "lender of last resort"), by an extension of government guarantees of depositors<sup>3</sup> and other bank creditors, or by a temporary suspension of depositor rights in what is often called a "bank holiday."

 $<sup>^{1}</sup>$  Founded in 1972, by 1990 Bank of Credit and Commerce International had offices in  $69 \, {\rm countries}$ .

An interesting, albeit relatively mild, recent example of this process comes from the interaction of a tightening of solvency regulations for U.K. insurance companies and pension funds with a downturn in global equity markets in 2000–2002. Compliance with the regulations, until amended, triggered extensive equity sales by the institutions, and these sales are themselves thought to have accelerated the equity market decline.

With a handful of exceptions, formal deposit insurance schemes have ceilings on the size of covered deposits sufficiently low that their capacity to prevent a fatal bank-run is very



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Each of these techniques is designed to buy time, presumably because the authorities believe or hope that the underlying financial condition of the bank is sound and, in the case of the first two, that depositor confidence can soon be restored. None of these techniques is guaranteed success, especially if the credibility and creditworthiness of the government is insufficient. Each is prone to abuse – even the bank holiday, during which corrupt insiders may loot a bank by engineering backdated deposit withdrawals.<sup>4</sup>

Depositor runs often do reflect hidden but suspected solvency problems in some or all of the banks. In such cases, even if effective in stopping the panic, liquidity loans and blanket guarantees have the effect of socializing most of any such insolvency. The scale of losses in recent banking crises means that the decision to adopt either of these policies, usually taken in haste, often proves to have been the single most costly budgetary decision in a country's history. Ideally, armed with adequate information, the authorities could intervene with the insolvent bank in good time and offer guarantees or loans only for the rest if needed.

Preventing looting of an insolvent or near insolvent bank, whether through fraud<sup>5</sup> or desperate, reckless gambling for resurrection (to use the colorful term of Kane, 1989) requires a different set of containment tools, which may include administrative intervention including the temporary assumption of management powers by a regulatory official, or closure, which may, for example, include the subsidized compulsory sale of a bank's good assets to a sound bank, together with the assumption by that bank of all or most of the failed entity's banking liabilities; or more simply an assisted merger. Here the prior availability of the necessary legal powers is critical, given the incentive for bank insiders to hang on, as well as the customary cognitive gaps causing insiders to deny the failure of their bank.

Most complex of all are the cases in which disruption of banking is part of a wider financial and macroeconomic turbulence.<sup>6</sup> In this case, the

limited. In practice, it is interbank lines and wholesale deposits that are withdrawn first and in the largest amounts.

<sup>&</sup>lt;sup>4</sup> Liquidity loans have often simply been used to fund international transfers out of the system as a whole by large and well-informed depositors until official foreign exchange reserves were close to being exhausted.

Several recent large bank failures have involved the fraudulent concealment of a sizable fraction of the bank's liabilities from supervisors.

<sup>6</sup> It is important for the authorities to recognize their own limitations in this kind of environment. The credibility of government guarantees may be questionable (especially to the extent that fiscal difficulties are at the root of the problem) and liquidity loans may be



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bankers may be innocent victims of external circumstances, and it is now that special care is needed to ensure that regulations do not become part of the problem. Forbearance on capital and liquid reserve requirements may prove to be appropriate in these conditions, even though on average banking crises in which forbearance has been exercised have proved to be more costly than those in which it was avoided.<sup>7</sup>

Adopting the correct approach to an emerging financial crisis calls, then, for a clear understanding of what the underlying cause of the crisis is, as well as a quick judgment as to the likely effectiveness of the alternative tools that are available. The actions taken at this time will have a possibly irreversible impact on the ultimate allocation of losses in the system. In addition, the longer term implications in the form of moral hazard for the future also need to be taken into account, as has long been appreciated.<sup>8</sup> To make advance preparation, therefore, adequate sources of information must be put in place through the supervisory process, as well as sufficient legal powers to prevent socially necessary actions being blocked by unwarranted judicial delays. Although, as the crisis matures, it will likely become necessary to establish a special purpose crisis management team, it is important that there should already be a definite assignment of responsibilities between different official agencies including the deposit insurer, the central bank, and the bank regulator in order to ensure that the crucial early stages of containment are dealt with appropriately.

All too often, central banks privilege stability over cost in the heat of the containment phase: if so, they may too liberally extend loans to an illiquid bank that is almost certain to prove insolvent anyway.

In this, or other ways, closure of a nonviable bank is often delayed for too long, even when there are clear signs of insolvency. Furthermore, the process of closure is subject to many pitfalls. This is the refrain of Carl Lindgren's discussion in Chapter 3, which draws on extensive

insufficient (especially where dollarization is high, or a fixed exchange rate peg is being adhered to). There may be no good way to protect the real value of bank deposits in such cases, whose ultimate resolution has often involved currency devaluation or forced de-dollarization.

- And it may well be that other instances of forbearance had the effect of containing emerging disturbance so well that they are not recorded among the systemic crises a point that Charles Goodhart has stressed. To that extent, studies of the cost of forbearance may be subject to a sample selection bias though one that is difficult to correct for with available data.
- $^8$  Kindleberger (1978) cites Lord Liverpool's principled opposition to banking bailouts in the 1820s as an early example.



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cross-country experience in containment, especially of the second type of crisis discussed earlier, where the trigger is regulatory recognition of insolvency. He points out that, rather than being a negative or terminal step, closure is better seen as a way of bringing the business of a failed bank back into the market under new ownership. The interval between the initial administrative intervention and a clear resolution of the bank's problems should, he argues, be short for fear of the process triggering contagion throughout the system. But, although some banks may be too big to be closed (because of the implications for the functioning of payments and the rest of the system), no bank is too big for intervention. Lindgren reviews the key requirements for successful intervention policy and how difficult it is to meet them. They include the need from the outset for good information on the financial condition of the bank and clear triggers for action. The reliability of asset valuations, however, deteriorates in the course of a widespread crisis.

Closure of banks with losses distributed to creditors and depositors is, Lindgren observes, a high-wire act in an environment of weak financial institutions and poor macroeconomic prospects. Because few regulators are would-be circus artists, there is a tendency to rely instead on blanket government guarantees, which, if the government's fiscal and political position makes them credible, can work, albeit at the cost of placing the burden on the budget, typically squeezing future provision of needed public services.

More generally, as is clear from Charles Calomiris, Daniela Klingebiel, and Luc Laeven's discussion in Chapter 2, poorly chosen containment policies undermine the potential for successful long-term resolution. Whether containment policies should be strict or accommodating is a matter on which both theory and empirical evidence has been brought to bear as discussed in Section 4. Above all, to ensure a good outcome in the containment phase, the authorities need to have clear objectives.

### 3. RESOLUTION STAGE

Even when containment has been successful, the panic abated, and corrupt or incompetent bank management removed, much work usually remains before the crisis can be said to be resolved. At this point, the crisis has left banks and nonfinancial firms insolvent and many are in government ownership or under court or regulatory administration. Economic growth is unlikely to resume on a secure basis until productive assets and banking franchises are back in the hands of solvent private entities.