## Box 4.1. Sound Policies to Resolve Financial System Stress and Restore Sound Financial Intermediation

How can policymakers respond to financial stress, including the current global financial turmoil, in a way that ensures that the financial system is restored to health, while limiting the fallout on the economy and avoiding longterm moral hazard? Well-timed interventions aimed at financial institutions and borrowers can help restore balance sheets and incentives, mitigate the negative shock to the economy of a financial system under stress, and help to restart productive investment. But in undertaking these interventions, governments face the key challenge of restoring financial intermediation while keeping the costs to taxpayers down, avoiding misallocations of capital, and maintaining proper incentives.

## General Principles of Intervention

The experience from past episodes of financial system distress suggests that the effectiveness and cost of policy responses depend on four key elements:<sup>1</sup>

- Having a sound framework for ensuring financial sector stability helps prevent and contain financial stress. Key elements of this framework include (1) pre-crisis sanctions on undercapitalized financial institutions that pose systemic risks; (2) legal and institutional mechanisms to deal swiftly with weak financial institutions, such as bank-specific bank-ruptcy regimes; (3) well-defined tools and processes for closing and rapidly reopening banks; and (4) an effective deposit insurance system.
- Speed is of the essence to minimize the impact on the real economy. Too often, regulatory forbearance and liquidity support have been used to help insolvent financial institutions recover—only to have it become

The author of this box is Luc Laeven. This box draws heavily on Calomiris, Klingebiel, and Laeven (2005).

<sup>1</sup>For an overview of existing literature on crisis resolution policies, see Hoelscher and Quintyn (2003) and Honohan and Laeven (2005).

- clear later that delaying decisive intervention increased the stress on the financial system and the economy. To avoid this, policymakers should force the early recognition of losses and take steps to ensure that financial institutions are adequately capitalized.
- The adverse impact of financial system distress on the real economy may need to alleviated through measures that directly support firms and households—for example, through targeted debt relief programs to distressed borrowers and corporate restructuring programs.
- Steps should be taken to limit the costs and moral hazard implications of these policy responses. Shareholders must first absorb losses by a write-down of their equity capital. In the case of large losses, creditors also need to contribute by reducing and restructuring their claims. Borrowers must absorb some of the costs, especially if they have been imprudent. Mechanisms that link government support (such as preferred stock purchases) to privately raised capital can also help identify those banks that are truly worth saving and limit future distortions arising from moral hazard.

## Specific Policy Responses

Policymakers can employ a wide range of specific emergency measures (aimed at containing the crisis) and restructuring tools (aimed at restoring the normal functioning of the credit system and rebuilding banks' and borrowers' balance sheets).

Emergency measures include (1) regulatory capital forbearance, (2) emergency liquidity support, (3) government deposit guarantees, and (4) suspension of convertibility of deposits.<sup>2</sup> Each of these actions can have very

<sup>&</sup>lt;sup>2</sup> Examining a sample of 40 banking crisis episodes, Laeven and Valencia (forthcoming) show that emergency measures have often included emergency liquidity support and government deposit guarantees. Regulatory capital forbearance—suspending pruden-

## Box 4.1 (concluded)

different consequences on the supply of credit and thus on economic activity. The appropriate policy measure depends on whether the trigger for the crisis is a loss of depositor confidence, the (regulatory) recognition of existing insolvency, or the knock-on effects of asset price volatility, including exchange rate or house price pressures. Even during the emergency phase, however, longer-term implications must be taken into account—the risk being that restoring stability in the heat of the crisis may lead central banks to extend loans to some financial institutions that are almost certain to prove insolvent.

Specific resolution policies include (1) recapitalizating financial institutions, (2) using asset management companies (AMCs) to resolve distressed loans, (3) offering debt forgiveness, and (4) providing incentives for loan loss write-offs. Countries typically apply a combination of resolution strategies—with some directed more toward financial institutions and others geared more toward borrowers—and in the process the government often incurs substantial fiscal costs. Here are some experiences with these types of resolution policies.

Recapitalization: Measures aimed at quickly improving the capital bases of financial institutions do not directly improve debtor capacity, but they make it easier for banks to recognize losses and thereby facilitate corporate restructuring. Government-assisted recapitalizations can, however, create moral hazard for share-holders, especially if government intervention

is small relative to the negative net worth of recipient institutions. Looking at the recapitalization schemes adopted in the United States (starting in 1933) and Japan (1998 and 1999) helps illustrate some key issues.<sup>5</sup> In the United States, the program mainly involved the purchase of preferred stock to enhance bank capital and included appropriate screening and incentives for participants so that only banks worth saving and those that managed their risk and capital structure more prudently received taxpayer funds. Moreover, banks receiving assistance were monitored to ensure that they made proper use of public aid. In Japan, the first program (launched in 1998) involved only small amounts, was mostly targeted to purchases of subordinated debt and loans, and was broadly spread across the banking system. A more successful recapitalization program was launched in 1999, which involved much larger purchases of preferred stocks, included more rigorous benchmarks, and participation was more narrowly focused.6

Asset management companies (AMCs): The main objective of government-owned AMCs is to accelerate financial restructuring by taking over nonperforming assets from banks. Two examples of successful AMCs are Securum and Retrieva in Sweden, created in 1992 to manage the problem loans of two major Swedish banks, Nordbanken and Gota Bank. Both companies managed to recover much of their initial investment by selling off their assets. Factors that contributed to their success include an efficient judicial system, which allowed them

tial regulations and allowing technically insolvent banks to continue operating—is also a rather common response. By contrast, measures aimed at avoiding bank runs through deposit freezes and bank holidays are rarely used.

<sup>3</sup> Laeven and Valencia (forthcoming) show that bank recapitalization occurred in three-quarters of the crises they considered, with an average fiscal cost of 6 percent of GDP. AMCs were set up in slightly more than half of the episodes in their database.

<sup>4</sup>The average fiscal cost of government intervention in the cases studied by Laeven and Valencia (forthcoming) is about 16 percent of GDP.

<sup>5</sup>The two Japanese programs together involved public purchase of ¥10 trillion (2 percent of GDP) of bank capital.

<sup>6</sup>The specific form of bank recapitalization often depends on the country's insolvency regime for financial institutions. In many countries today such regimes do not allow for a speedy resolution of crises but rather prolong them. Another lesson for successful bank recapitalization is that bank capital regulations must be enforced rigorously, which can involve imposing limitations on the distribution of dividends.

to force insolvent debtors into bankruptcy; the real-estate-related nature of their assets, which made it easier to restructure; and the strong governance mechanisms and skilled management teams in place at the companies. However, other countries have found it harder to realize these advantages, in part owing to weak legal, regulatory, and political institutions—banks' assets often are transferred to the AMC at prices abovemarket value, resulting in backdoor bank recapitalization and creating moral hazard.

Debt forgiveness: Key advantages of this measure are its simplicity and speed—debt forgiveness recognizes loan losses up front and thus provides immediate relief to borrowers. At the same time, however, debt forgiveness poses incentive problems because it does not impose losses on borrowers and bank shareholders. It can also undermine trust in monetary institutions and the rule of law, as it can violate monetary standards and interfere in private contracting. Whether it works ultimately depends on the frequency of its use and the specific circumstances of financial

distress. Because of the risks of moral hazard, however, debt forgiveness should be considered only as a last resort.

Loan loss write-off programs: Loan loss write-off programs are directed at supporting borrowers. Although they can be implemented quickly, loan loss write-offs may worsen incentives for prudent behavior as they do not impose losses on banks or their borrowers.

Overall, the mix of policy responses will ultimately be crisis-specific and must reflect a variety of factors, including the nature and depth of the financial crisis and the specific country circumstances. The four principles for intervention outlined here have proven to have general applicability and should be followed in every crisis, including the current one.

<sup>7</sup>The U.S. experience in the 1930s, when gold payment clauses in debt contracts were abrogated, shows that debt forgiveness can help solve coordination problems in renegotiating debt. While few individual creditors were willing to voluntarily remove these clauses, when they were forced to do so collectively, the improvement in aggregate economic circumstances left both creditors and debtors better off.