Recent experience in emerging markets has demonstrated that financial crises can be highly damaging for economies, government budgets and living standards. This realisation has reinforced interest in improving financial sector regulation and supervision. The objective of prudential regulation is to protect the stability of the financial system and protect deposits so its main focus is on the safety and soundness of the banking system and on non-bank financial institutions (NBFIs) that take deposits.

In low income countries effective prudential regulation is impeded by weak accounting standards, the poor quality of financial information available, acute shortages of necessary professional skills, poor public sector pay, the politicisation of regulatory processes and the difficulty in enforcing bureaucratic and legal regulations which also is partly due to political interference in the regulatory process. Also small financial systems do not offer opportunities for economies of scale in, for example, data collection and information technology systems.

Many developing countries have implemented reforms to strengthen their prudential systems over the last decade or so. Indeed conditionality relating to bank supervision and regulations featured in 79% and 71% respectively of World Bank financial sector adjustment loans in the 1990s. However these reforms were sometimes poorly implemented and in some cases implementation was delayed until after financial systems had been liberalised.

The prudential reforms in developing countries are usually based on upgrading banking laws in accord with international “best practice” such as bringing minimum capital requirements in line with the Basle Capital Accord and strengthening the supervisory capacities of regulatory agencies. Many developing countries are also setting up deposit insurance schemes. However some research has suggested that “best practice” regulatory reforms may not significantly reduce the probability of a banking crisis (Barth, Caprio and Levine, 2001). Moreover, deposit insurance has been found to significantly increase the probability of such a crisis (Demirguc-Kunt and Detragiache, 2000).

Why have the prudential reforms already implemented in developing countries not been more effective in preventing banking crises and how can prudential systems be made more effective?

Weak Regulations and Gaps in Regulation

Our research found weaknesses in several critical areas which undermined bank regulation. In Zambia and Kenya lax bank licensing regulations and procedures allowed banks without adequate capital and managerial resources to be licensed. In Zambia high inflation eroded the minimum capital requirement to very low levels, there was no effective investigation of the source of applicants’ funds and no “fit and proper” test of their directors and managers.

The loan classification and provisioning rules in the East Asian countries hit by the financial crisis of 1997/98 were much laxer than international norms especially for secured loans. So, for banks with impaired asset portfolios, provisions were insufficient to cover losses and as a result regulatory capital was overstated. Stricter rules would have helped reduce East Asia’s financial distress because either banks would have had to raise more capital earlier, to meet minimum capital standards, or else they would have had to reduce the rate of growth of their loan portfolios.

The rules covering foreign exchange transactions were another area of weakness in East Asia. Banks held large mismatches between foreign currency denominated assets and liabilities, leaving themselves exposed to exchange rate depreciation. Also, insufficient regulatory attention was paid to the...
risks entails banks making foreign currency denominated loans to borrowers, such as those in the non traded goods sectors, whose ability to service them was vulnerable to exchange rate depreciation. Thus foreign exchange risk was converted into credit risk. Another weakness in East Asia was the much laxer regulations applied to NBFIs.

Many developing countries have prudent restrictions on insider lending and large loan exposures. But these are undermined either because the banking laws lack clear definitions of related parties or because regulators can waive restrictions if they wish. Also banking laws often lack restrictions on banks being owned and controlled by one individual or family group, the situation in which insider lending is often most extensive.

**Weak Enforcement of Regulations**

Prudential regulations, even when not themselves seriously deficient, are often weakly enforced. Regulatory forbearance is commonplace. This includes failing to penalise insider lending and large loan exposures and failing to intervene promptly in insolvent banks and NBFIs.

Several factors contribute to this weak enforcement. First, the banking laws usually lack clear rules mandating the type and timescale of intervention in problem banks which regulators should make. Instead the laws allow the regulators scope to exercise discretion leading to forbearance. Secondly the regulators are often not actually independent from politicians even in situations where they have de jure legal independence. Often the Finance Minister's approval is required before a bank can be intervened. Politicians are very reluctant to close banks because of the perceived political costs.

Regulatory forbearance can also arise as a result of administrative procedures within the regulatory authority. In Zambia, for example, we found that procedures to deal with distressed banks were sometimes too slow to match the pace at which the banks were deteriorating financially. The regulators were themselves concerned about the possible knock on effects of bank closures on public confidence. They were also over-optimistic about rehabilitating distressed banks because they underestimated the scale of such banks' losses.

**Supervisory Capacity Constraints**

Supervisory capacities have improved significantly in many low income developing countries since the 1980s due to recruitment and training of bank supervisors, better supervisory methodologies and improved reporting formats for off-site supervision. Nevertheless regulators still face capacity constraints. They often lack skills such as forensic accounting and the ability to evaluate the quality of bank management. As banks and NBFIs engage in more sophisticated financial activities - such as the use of derivatives - regulators' skills will need to be continuously upgraded.

Supervisory capacity constraints however are often not the most critical cause of regulatory failures. Sometimes regulators are aware of the problems afflicting distressed banks but the lack of regulations, or problems relating to their enforcement, prevent them taking timely action.

**Strengthening Prudential Regulations**

For developing countries prudential regulations need to be easy to understand and enforce in situations where accurate financial information is at a premium and supervisory capacities are weak. They should reward prudent risk management and punish reckless and abusive management.

Higher minimum capital requirements for banks would mean that bank owners, with more of their own capital at risk, would have stronger incentives to ensure that their bank is managed prudently. Also, by increasing entry barriers into the banking industry, higher capital requirements would enhance the franchise value of banks.

Developing countries' banks face more risks than do those in OECD countries because their economies are less diversified and more volatile - therefore minimum capital adequacy levels should be set higher than the eight percent minimum of the Basel Capital Accord. Several developing countries have already done this. For example in Uganda the minimum total capital to risk adjusted assets ratio has been raised to 12 percent and the minimum core capital to risk adjusted assets ratio has been raised to eight percent. Proper loan classification and provisioning rules and rules governing the recognition of unpaid interest income are also essential since without these higher capital adequacy regulations will be ineffective.

Tougher bank licensing procedures - especially scrutinising the fit and proper status of applicants, their financial resources and the managerial and technical expertise they can mobilise - have several potential advantages as well as the obvious one of denying licences to banks with weak ownership and management which are likely to fail. Where regulators are subject to much political pressure, implementing a tougher licensing policy may be a relatively easy option. Denying a licence to a bank whose owners are considered unsuitable will probably attract less political opposition than closing one which is already in operation. Also, reducing the numbers of small, poorly managed banks and NBFIs by screening them out at the licensing stage will help to reduce the supervisory workload. However, licensing policies should not be so restrictive as to stifle entry from banking investors able to serve small and medium sized enterprises which are often poorly served at present by the international banks in low income developing countries.

As financial systems become more diversified, prudential regulations need to be extended to deposit taking NBFIs. These regulations need not be identical to those imposed on banks, although all deposit-taking institutions should have the same regulator. For example NBFIs which mobilise only wholesale term deposits might be allowed to take more risks than commercial banks which mobilise retail and demand deposits. Regulations will also have to evolve to deal with new sources of risk arising from the increasing sophistication and international integration of developing countries' financial systems.

**Better Bank Intervention Policies**

In general when banks become insolvent, unless this poses a risk to the whole banking system, the regulator should intervene promptly and close the bank. This is because the chances of successfully rehabilitating an insolvent bank are likely to be poor. Its losses are probably far higher than the regulator realises and private investors are very unlikely to inject capital into an already insolvent bank. Keeping an insolvent bank open is likely to lead to further losses at the expense of its depositors and/or taxpayers.

Liquidity support to distressed banks should be restricted in terms of both quantity and timeframe. Other than in situations of systemic banking crisis, insolvent banks should not be propped up with liquidity support.
Central Banks must develop clear guidelines to distinguish between systemic and non systemic banking crises. In many low income countries much of the banking industry consists of subsidiaries of international banks which will not be affected by the failure of smaller banks thus making a systemic crisis unlikely.

Sometimes, rather than close a bank, the regulator takes it over under statutory management. This allows the existing unsuccessful management to be removed but poses many problems for the regulator who is then forced either to assure uninsured creditors that their money is safe or to provide the liquidity support needed when such investors withdraw their funds. Keeping a distressed bank open under statutory management is likely to protect uninsured creditors at the expense of public funds and should be avoided in all cases except where the government has already guaranteed bank liabilities, such as in the case of a government owned bank.

The banking laws should include a clear set of mandatory intervention rules, such as the Prompt Corrective Action (PCA) rules in the U.S. where specified regulatory intervention is automatically triggered by reductions in a bank’s regulatory capital. Such rules should mandate regulators to force capital impaired banks to take remedial action immediately and should permit regulators to close banks even when their reported capital is still positive.

PCA regulations can improve bank regulation for three reasons. Since PCA regulations force regulators to intervene and direct the bank to take remedial action before it becomes insolvent the chances of successful rehabilitation are greater than if intervention were delayed until later. Also, because PCA regulations impose a legal requirement on the regulator they not only strengthen the incentives on regulators to intervene promptly but also provide a defence against political pressure, since the regulator will be able to point out to politicians that they are legally required to act. Further, once PCA regulations are part of banking law, bank owners and managers will have less reason to expect forbearance from the regulator and therefore more incentive to manage banks prudently.

PCA regulations are no panacea however, for improved bank regulation. If the regulators lack accurate and timely information on banks’ balance sheets they may not realise a bank has crossed an intervention threshold until long after the event, by which time it may be insolvent. PCA rules will only work if they are accompanied by a strengthening of bank accounting standards, especially loan classification and provisioning, backed up by meaningful penalties on those who fail to comply with these standards. Regulators also need to strengthen their on-site examination capacities, to improve their ability to evaluate the financial condition of banks.

**Improving the Institutional Environment for Regulation**

Reforms to bank regulation must confront a difficult principal agent problem. The regulator is an agent who has multiple principals whose objectives do not coincide. These principals include politicians and depositors and arguably taxpayers (i.e. the general public) because it is often taxpayers who bear the cost of regulatory failure. Lacking strong institutions which can represent the public interest rather than simply sectional interests, depositors and taxpayers in developing countries are likely to have limited influence over the regulator. This is compounded by the (partly necessary) lack of transparency of bank regulation which gives the regulator plenty of scope to act against the public interest.

Strengthening prudential regulation requires institutional reforms which not only protect the regulators from political interference but also stimulate the regulators to act in the best interests of depositors and the public.

Regulators need an unambiguous legal mandate to protect deposits and the stability of the financial system, and should not be given potentially conflicting mandates such as promoting economic development. This mandate, and the operational independence of the regulator to carry it out, should be explicitly set out in the relevant legislation such as the written constitution of the country. However this legal independence will be meaningless unless the head of the regulatory agency has a legal guarantee of job security for the duration of his or her contract.

More-effective regulation will also require continuous strengthening of supervisory capacities. This may entail a programme of sustained capacity building within the regulatory agencies, including measures such as ensuring remuneration is competitive and staff have clearly defined career paths.

Better regulation will not be achieved unless the regulators are made more accountable to the public for their actions and performance. They should be made accountable to a body representing the public but independent of the executive. The representatives of the public to whom the regulators should be made officially accountable will depend on the nature of the political system. Where strong legislative bodies and independently minded legislators exist it may be possible to make the bank regulators accountable to a committee of the legislature (such as a Parliamentary Committee on Banking). The bank regulators should report to this body at least on an annual basis with a full account and justification for their actions. A summary of this account and the committee’s comments, minus any confidential information, should be made publically available.

**Risk Based Supervision**

Risk based supervision involves the regulators focusing on those aspects of the financial system which pose the greatest risk to its stability. Since supervisory resources are very scarce in developing countries regulators should concentrate on those banks that present the largest risk, and within banks, on the business activities that most threaten the safety and soundness of the bank. The risk profile of a bank and the assessment of its risk management should be used to guide the level and nature of supervisory activity directed towards that bank. By focusing on risk (which may be external to the individual bank) such supervision could help regulators detect potential risks which more traditional methodologies might overlook.

**Market Based Approaches to Regulation**

Some researchers have argued for greater use of the market to monitor banks, because they doubt that public regulators will ever have strong enough incentives or resources to monitor banks as effectively as would private investors with their own money at stake. One proposal for a market based approach entails banks being required to finance a minimum percentage of their assets with subordinated and unsecured debt carrying a yield capped at a maximum premium above the riskless market interest rate (Calomiris, 1997). To mobilise such debt banks would have to convince potential private sector subordinated debt holders that the bank’s asset portfolio, management and
capital was good enough to justify their providing such credit. Subordinated debt holders would have incentives to monitor the bank and the threat of a run by informed debt holders would restrain the bank from imprudent risk taking.

This proposal might be applicable in some emerging markets but it requires sophisticated market agents with capital to invest in subordinated debt. It is unlikely to be feasible in those low income developing countries where capital markets are underdeveloped and the veracity of audited accounts is often unreliable. In such circumstances banks would find it very difficult to mobilise subordinated debt regardless of the quality of their asset portfolio, their capital and their management. Also, if a bank is close to insolvency, uninsured subordinated debt becomes similar to equity capital and therefore subordinated debt holders are not well motivated to impose conservative management on the bank to protect its deposits (Dewatripont and Tirole, 1994).

**Key Points**
- Developing countries have made much progress in strengthening their prudential systems since the 1980s. Banking legislation has been upgraded and supervisory capacities expanded.
- Important weaknesses remaining include lax bank licensing, weaknesses in prudential regulations and poor enforcement of regulations.
- In most cases of bank insolvency, unless a systemic risk to the banking system is involved, the bank should be closed down.
- Bank regulators need stronger incentives to undertake effective regulation and supervision in the public interest. They need to be made more accountable to a body representing the public interest.
- Bank regulators also need proper protection from political interference.
- Risk based supervision can help make best use of scarce supervisory resources and help regulators deal with the increasingly complex financial services now evolving.
- Relying on market based supervision is unlikely to be feasible for many low income developing countries.

**Deposit Insurance**

Moral hazard caused by government guarantees of financial institutions’ liabilities makes a major contribution to banking crises as was evident from the East Asia financial crisis. Many developing countries have set up deposit insurance schemes in the last decade. If the alternative is implicit deposit protection without clear rules then such schemes may have advantages. Deposit insurance for small deposits may also be justified on grounds of equity because it protects the savings of poor investors. Nevertheless there is much cross-country evidence to suggest that the more generous the deposit insurance scheme the more likely is a banking crisis. Therefore the size of protected deposits must be strictly limited so that a substantial share of the banks' deposit base is uninsured.

**Further Reading**


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