



Development Economics  
The World Bank  
January 1990  
WPS 340

*Background paper for the 1989 World Development Report*

# **Prudential Regulation and Banking Supervision**

## **Building an Institutional Framework for Banks**

Vincent P. Polizatto

To establish an effective program of banking supervision and prudential regulation, the public policy role of bank supervision must be clearly defined and understood and actions taken along several parallel tracks to strengthen the bank supervisory process, the legal framework, accounting and auditing, and the institutions themselves.

The Policy, Planning, and Research Complex distributes PPR Working Papers to disseminate the findings of work in progress and to encourage the exchange of ideas among Bank staff and all others interested in development issues. These papers carry the names of the authors, reflect only their views, and should be used and cited accordingly. The findings, interpretations, and conclusions are the authors' own. They should not be attributed to the World Bank, its Board of Directors, its management, or any of its member countries.

Policy, Planning, and Research

**WORKING PAPERS**

Office of the Vice President

Economic deregulation and financial liberalization are important for a country to develop a viable and robust financial system. But deregulation will remove the protections previously afforded the banking system. Increased competition, a changing price structure, new market entrants, and other factors will increase the risks banks assume and the instability of the financial system. The failure of a large bank or multiple bank failures may force a sudden contraction of the money supply, a failure of the payments system, a severe dislocation of the real economy, and real or implicit obligations on the part of the government.

So, the government's goal to ensure the stability of the financial system is of paramount importance. Prudential regulation and supervision are designed to remove or lessen the threat of systemic instability. In addition, the safety and soundness of the banking system must be supported by an adequate legal framework governing a bank's contractual relationship with

its customers. Satisfactory accounting and auditing standards are also crucial to ensure that financial statements adequately reflect each financial institution's condition.

Different countries have adopted different models of bank regulation and supervision. In some cases, the basis is consultation and moral suasion, in others, "hands-on" verification through on-site inspection. Organizational approaches also vary from country to country. But no model will be effective if significant political interference is permitted.

The primary line of defense against banking insolvency and financial system distress is the quality and character of management within the banks themselves. Therefore, efforts to strengthen the financial system must also focus on strengthening management and management systems through a process of institutional development.

This paper, a background paper for the 1989 World Development Report, is a product of the Office of the Vice President, Development Economics. Copies are available free from the World Bank, 1818 H Street NW, Washington DC 20433. Please contact the World Development Report office, room S13-060, extension 31393 (33 pages).

The PPR Working Paper Series disseminates the findings of work under way in the Bank's Policy, Planning, and Research Complex. An objective of the series is to get these findings out quickly, even if presentations are less than fully polished. The findings, interpretations, and conclusions in these papers do not necessarily represent official policy of the Bank.

## ESTABLISHING A SOUND PUBLIC POLICY FOR BANKS

Banks<sup>1</sup> hold a unique position in most economies as creators of money, the principal depositories of the public's financial savings, the primary allocators of credit, and managers of the country's payment systems. For this reason, governments establish public policy for banks in the public interest. In most market economies, the goals of these policies are to control the supply of money, prevent systemic financial instability, and meliorate concerns about the efficiency and equity of financial intermediation. In socialized, or centrally-planned economies, public policy for banks may differ -- emphasizing instead, the role of the banking system in channeling funds to priority sectors of the economy.

Because banks perform an intermediary function as gatherers of deposits and allocators of credit, they are necessarily highly leveraged making them vulnerable to depositor withdrawals and losses of public confidence. Since most banking assets are usually held as loans and advances which cannot be easily valued, there is a lack of transparency as to the actual financial condition of any given bank. This lack of transparency further adds to the vulnerability of banks since depositors may be forced to act upon incomplete or inaccurate information and rumors concerning the health of such institutions.

From a public policy perspective,<sup>2</sup> the government's goal to ensure the stability of the financial system should be of paramount importance. The failure of a large bank or multiple bank failures may force a sudden contraction of the money supply, a failure of the payments system, a severe dislocation of the real economy, and real or implicit obligations on the part of the government. The failure of any bank, no matter how small, may lead to contagion and loss of confidence in the system, unless the government can demonstrate its ability to handle bank failures in an orderly and systematic fashion.

Public policy towards banks is captured or codified in the various laws, rules, and regulations issued by governments. These may generally be classified according to their intent as either economic<sup>3</sup> or prudential<sup>4</sup> regulation, although

---

<sup>1</sup> The term "bank" is used in this paper as a generic term covering all types of deposit and credit institutions (commercial and savings banks as well as building societies, savings and loan associations and credit unions).

<sup>2</sup> For more on prudential supervision as an aspect of public policy, see Robert R. Bench: "International Lending Supervision" mimeo.

<sup>3</sup> Economic regulation refers to regulation designed to achieve economic goals. Examples include reserve requirements (control of money creation), directed credit and credit allocation (lending to priority sectors in the interest of social and developmental objectives), financial transaction taxes (revenue generation for the fiscal budget), etc.

in some instances regulation has both economic and prudential aspects. This paper will primarily concern itself with the prudential aspects of regulation and supervision which are designed to remove or lessen the threat of systemic instability.

If prudential regulation is the codification of public policy towards banks, banking supervision<sup>5</sup> is the government's means of ensuring the banks' compliance with public policy. By providing timely and accurate information, bank supervisors play a critical part in supporting the government's role as lender of last resort, deposit insurer, and/or investor of last resort when financial instability threatens the economy. Lacking such information, public policy-makers may make faulty decisions in response to a problem, potentially worsening it. The more decision-makers know about a problem, the more likely is the chance that confidence in the system will be maintained or restored through effective and timely action. Bank supervisors can provide this vital information and the means to prevent and correct unsafe and unsound banking practices.

#### PUBLIC POLICY GOALS FOR BANKING SUPERVISION

Public policy towards banks can differ from country to country. In many countries, banks are used as a means to achieve important developmental and social goals through programs such as rural branching and priority sector lending. However, these goals often conflict with prudential concerns for the safety and soundness of the banking system. Balancing different, and often conflicting, goals can be difficult at best. Such differences in public policy are also embodied in perceptions concerning the proper role of bank supervisors. In Turkey, for example, a major role of the Board of Sworn Bank Auditors had been, until recently, determining tax compliance for the fiscal authorities. In many centrally planned economies such as China, India, and Yugoslavia, supervisors have had to enforce compliance with credit quotas and targets under a national credit plan. Bank supervisors may also be called on to enforce foreign exchange control regulations, check reserve computations, and ensure compliance with directed credit programs.

Conflicting goals and the lack of a well-defined prudential role for bank supervision can only detract from its effectiveness in ensuring a safe and sound banking system. In most industrialized countries, public policy goals tend to be more clearly defined and better-balanced. While desirable social objectives such as consumer protection may be embedded in public policy goals, emphasis is usually directed towards the protection of depositors, monetary stability, and an efficient and competitive financial system.

---

<sup>4</sup> Prudential regulation refers to the set of laws, rules, and regulations which is designed to minimize the risks banks assume and to ensure the safety and soundness of both individual institutions and the system as a whole. Examples include lending limits, minimum capital adequacy guidelines, liquidity ratios, etc. These are discussed in greater detail later in the paper.

<sup>5</sup> Banking supervision refers to the banking agency's ongoing monitoring of banks and enforcement of banking regulations and policies.

### BOX 1: PUBLIC POLICY IN THE U.S.

The Office of the Comptroller of the Currency, the supervisor of nationally-chartered banks in the U.S., lists the following public policy objectives for banking supervision:

- a) To prevent undue concentration of economic power and promote competition in banking markets;
- b) To moderate banking instability and protect the public against the worst consequences of instability;
- c) To encourage and promote a high level of operating efficiency and innovation in banking;
- d) To meet the needs of the public for conveniently available banking facilities and services;
- e) To encourage and promote a high level of efficiency and equity in the allocation of credit to various sectors of the economy; and
- f) To promote an equitable distribution of costs and benefits among the management, stockholders, creditors, and customers of banks.

Note that the prevention of individual bank failures is not a goal of U.S. public policy toward banks. Instead, it is the health and stability of the system which is the principal concern.

For banking supervision to be effective then, the role of bank supervision must be clearly defined and understood by public policy-makers. In addition, supervisors must enjoy the support of government officials and the banking industry and political interference must be held to a minimum. When required, high ranking government officials may need to exhibit the courage and political will to undertake strong, and possibly radical, actions to preserve the integrity of the financial system. To achieve these ends, government officials need to understand clearly the linkages between macroeconomic performance and the health of the financial system. In addition, they will need to demonstrate the foresight to put aside short-term benefits for the long-term good. Banking supervision will not be effective unless government officials at the highest levels support a strong and active supervisory process and the public policy role of bank supervision is clearly defined. Assuming that these preconditions are met, actions can be taken to strengthen the institutional framework to achieve effective bank supervision and a healthy banking system.

### CREATING AN EFFECTIVE FRAMEWORK OF PRUDENTIAL REGULATION

A broad body of banking legislation is essential to ensure that bank supervisors can carry out and enforce their responsibilities. In most countries, the legal

framework applicable to banks encompasses prudential laws and regulations, the laws governing commercial transactions and debt recovery, and bankruptcy laws. When an appropriate framework does not exist, it is a significant contributor to financial sector problems.

## PRUDENTIAL REGULATION

Prudential regulations establish the outside limits and constraints placed on banks to ensure the safety and soundness of the banking system. They are the key elements to prevent, limit or stop the damage caused by poor management. The establishment of an appropriate regulatory framework is essential to ensure that government supervisors can carry out and enforce their responsibilities. The absence or weakness of prudential regulation in certain areas takes on critical proportions and could lead to banking failures and systemic instability.

The manner in which prudential regulations are implemented can have a profound effect upon the financial marketplace, possibly leading to fragmentation of the financial markets. Care must be taken to implement the regulatory framework in a manner which is not distorted but which provides adequate protection to ensure a safe and sound financial system. For instance, it may be appropriate for all banking institutions in a country to be subject to the same banking laws and supervision in order to create a competitive market.<sup>6</sup> This is particularly important as a financial system develops and becomes more integrated with the international financial system. There is a need to harmonize regulation with international standards and create a level playing field so that domestic institutions can compete effectively and prosper both home and abroad.

Broad authorities are needed to deal with troubled financial institutions, incompetent or abusive managements, insider or related company abuses, and concentrations of credit. Bank supervisors should have the ability to enact specific regulations under broader powers granted by the law-making body in the country. In this way, the regulations can be easily amended to reflect changing conditions through regulatory action rather than new banking legislation.

Notwithstanding the necessity of an appropriate regulatory framework, it is important to recognize that regulation cannot preclude, nor should it attempt to preclude, every improper or ill-advised banking practice. Nor can regulation and supervision prevent all bank failures. However, good regulation and supervision can serve to minimize the adverse impact of moral hazard and relative price shocks upon the financial system. This section reviews the principal types of regulations required to ensure the establishment of a sound financial system and the problems caused by their absence.

### Criteria for Entry

Since newly-licensed banks are particularly vulnerable to failure, the initial

---

<sup>6</sup> For example, regulations that impose restrictions on branching and bank mergers are often motivated by political considerations. In addition to fragmenting banking systems, such regulations limit the ability of banks to diversify their risks and thus increase the fragility of banking systems.

decision to grant a license is an important one. In making this decision, bank supervisors should have the ability to screen access to ownership and management to prevent individuals lacking professional qualifications, experience, financial backing, and sound ethical standards from obtaining a banking license either through de novo entry or acquisition of an existing institution. Unfortunately, in many developing countries, licenses are granted by agencies of the government other than those with direct supervisory responsibility. Often the granting of licenses is politically motivated and a form of patronage or is designed to serve a special interest group, e.g., agriculture or housing. Where this has occurred, problems and banking insolvency have often followed.

In many countries, commercial and industrial conglomerates attempt to establish banks to ensure their access to preferential or subsidized credit. In others, special purpose banks created outside the banking laws under various government ministries have led to distortions in the financial marketplace caused by credits granted to priority sectors at heavily subsidized interest rates. To eliminate or reduce these distortions and abuses, all decisions concerning licensing and other corporate activities, such as mergers and acquisitions, should require the satisfaction of specific criteria prior to approval by the supervisory authority. For example, for de novo entry, regulations should address the minimum amount of capital, the qualifications of management, the development of a reasonable business plan and projections, and the financial strength of the proposed owners. Failure to meet the minimum criteria or to present reasonable projections should result in the denial of a banking license. The establishment of specific criteria which must be met reduces the potential for political interference in the licensing process. The ease or difficulty of complying with such criteria can be used as a means of regulating new entrants into the marketplace. To further reduce political interference or the influence of special interest groups, decisions regarding licensing should be delegated to the supervisory unit as one of its normal operating functions.

#### Capital Adequacy

Capital is necessary to absorb unusual losses. In most developing countries, financial institutions are significantly undercapitalized and in many cases stated capital is negative -- even before portfolio and other losses are recognized. The regulatory framework often lacks meaningful minimum capital adequacy guidelines and the ability to impose restrictions on dividend payments when the bank is incurring losses. As a result, capital, as a cushion for unusual losses, is simply not sufficient for the risks which exist both on and off the balance sheet. Lacking adequate capital, the banks' potential for failure is greatly enhanced. Because banks are undercapitalized, management is often forced into hiding losses that would make insolvency apparent. Without appropriate action by bank managements, government officials, and bank supervisors, this unhealthy situation may continue until the banks face a liquidity crisis and the government is forced to act.

In some countries, government-owned banks operating with inadequate or negative capital are particularly vulnerable. Government officials and the public-at-large may believe that because of government ownership, there is no danger of failure. In such cases, management often lacks the discipline which would otherwise be required in managing a privately-owned institution. A common result

## BOX 2: THE AMERICAN SOUTHWEST

Banks in Texas and Oklahoma provide examples of the risks involved in concentrating credit to a particular industry. Banks in these states were primary lenders to borrowers engaged in oil and gas production, oil field services, oil refining, and other related activities. In addition, a large proportion of their lending activities depended upon the success of the oil industry. For example, residential and commercial real estate lending depended, to a large extent, on the employment generated by the oil industry and the favorable business climate the energy sector created. When oil prices were high, the banks in the Southwest were among the most profitable in the United States. However, following the decline of oil prices at the end of 1982 and thereafter, the economy of the entire region was adversely affected and the banks sustained significant losses. These losses resulted in the failure of several of the nation's leading regional banks including First City National Bank, Houston, Texas, Interfirst Bank, N.A. Dallas, Texas, and First Republic Bank, N.A., Dallas, Texas. Similar problems occur in the developing countries, particularly where the economy is not fully diversified or dependent upon only a few commodities.

is that losses multiply at much higher rates than in privately-owned banks with the losses eventually absorbed by the fiscal budget. The ensuing distortions impact both economic development and financial intermediation.

To combat these problems, minimum capital adequacy guidelines should be established. In countries where banks' internal systems are weak, these guidelines may be expressed as a percentage of total assets. A level not less than 5-8% should be the absolute floor. However, this percentage may need to be increased on a case-by-case basis due to a bank's particular risk profile or where substantial off-balance sheet risks exist. In countries where accounting and management information systems in banks are more sophisticated, it may be appropriate to adopt the risk-based capital adequacy guidelines formulated by the Basle Committee of Bank Supervisors. In either case, the components of what constitutes capital should be clearly defined. Dividends should not be permitted if the minimum capital percentage is not met. Given that the purpose of capital is to absorb unusual losses, the measurement of capital adequacy should be related to the areas of greatest risk, i.e., assets and off-balance sheet contingencies. Therefore, a minimum capital adequacy guideline based on assets is to be preferred to one based on deposits.

### Asset Diversification

Banks can increase their returns or reduce their risks or generally achieve a better combination of risk and return by diversifying their operations. Restrictions on geographical expansion or on product diversification often increase the exposure of banks to particular risks. From the prudential point of view, such restrictions should not be condoned. However, lending limits, investment limits, and other exposure limits, which prevent the concentration of risk in a single borrower or a related group of borrowers, are necessary for prudential purposes. Such limits are normally expressed as a percentage of a



bank's capital. In high income countries, credit to any one borrower cannot normally exceed 15% or 20% of capital. In some developing countries, lending limits do not exist. In others, the limits are established at imprudent levels, in some cases exceeding 100% of a bank's capital. In such instances, just one large problem borrower can render the bank insolvent if the borrower's loans become uncollectible. Fearing this eventuality, bank management loses control of the credit relationship to the borrower and may become involved in deception to avoid recognizing a problem situation.

While many developing countries have adopted lending limits, these limits are often circumvented by borrowers who borrow through nominees. Therefore, banking regulations should specify rules for combining loans to the ultimate user of credit. These rules would combine loans extended to a group of related borrowers, to borrowers exhibiting a common source of repayment, or in which the proceeds of loans can be shown to have been used by or for the benefit of one party.

A lending limit of 15% of the bank's capital is generally considered reasonable. In no event should the maximum lending limit exceed 25% of a bank's capital. To accommodate large borrowers, a mechanism should be in place to syndicate or sell participations in the credit. In such cases, the purchasing bank should conduct its own credit evaluation and must assume the full credit risk for its share. Lending limits should normally apply equally to both unsecured and secured credit, except where readily marketable collateral is obtained and properly pledged. Examples of such collateral include government securities and bank certificates of deposit.

Many argue that lending limits impose an unwarranted constraint on banks in capital-short economies or on indigenous banks in systems where foreign-owned banks are dominant. Notwithstanding these concerns, the failure to abide by reasonable prudential limits frequently results in banking insolvency and systemic distress. The costs of bank failures invariably outweigh the short-term constraints imposed by lending limits. By imposing a reasonable lending limit, bank supervisors will be sending a strong message that banks must have sufficient capital to attain a scale of operations which will permit them to compete effectively and serve their large customers.

#### Loans to Insiders

A frequent cause of loan problems is credit granted to bank insiders and other connected parties. Such credit may not meet the same standards as that extended to outside borrowers and the amount of credit often exceeds prudent levels. Invariably, the close linkages result in losses. Therefore, limits on loans to insiders, including large shareholders, and related companies should be established. These limits should not only limit the amount of credit extended but should also require that the terms and conditions of such credits not be on more favorable terms than credit extended to similarly situated outside borrowers.

#### Permissible or Prohibited Activities

Prudential regulations in some countries do not adequately define permissible or prohibited activities. As a result, banks may engage in commercial activities

### BOX 3: CONNECTED LENDING

Connected lending is the extension of credit to individuals or firms connected through ownership or the ability to exert control, whether direct or indirect. Examples of connected parties include a firm's parent, major shareholders, subsidiaries, affiliated companies, directors, and executive officers. Firms are also connected where they are controlled by the same family or group.

In Spain, connected lending to the Rumasa Group led to widespread distress among a large number of banks. The Rumasa group was a holding company which owned twenty banks and more than 700 other companies. The banks were used to finance many of the connected firms. When the loans to these firms went bad, a number of the banks became technically insolvent. In the aftermath of the crisis, it was discovered that some 400 of the firms were phantom companies created to borrow money, hide the use of loan proceeds, and maintain the appearance of financial health.

The experience of Spain is not unlike that of many developing countries where ownership links with commercial firms and connected lending have led to preferential treatment, abuses, and, ultimately, portfolio losses for banks. This occurs because: 1) the loans to connected companies are made according to less rigorous criteria than those to similarly situated outside borrowers; 2) excessive credit is frequently extended in the form of loans and investments because of the parental or affiliate relationship between the bank and the companies; 3) the managerial attitudes of the related or subsidiary companies deteriorate because of the easy and systematic access to credit; 4) the bank's representatives on the related or subsidiary companies' boards develop close relationships with the firms and the people they are supposed to supervise and, as a result, become obstacles to information and control; and 5) the bank tends to prop-up or support a connected company which is in trouble rather than recognizing the subsidiary or related company as a problem borrower.

To preclude the problems of connected lending, procedures should be established to ensure that borrowing firms are treated at arms length as if they are ordinary third parties, ownership is scattered among a number of parties, proper internal controls and credit limits are in place, and concentrations of credit are avoided.

or enter lines of business which are unsuitable for financial institutions because of the risks involved and the specialized expertise required. A subtle example is Turkey where some banks speculate in real estate by purchasing office buildings which far exceed their banking needs. In other countries, banks engage in activities which are clearly non-financial such as the ownership of manufacturing firms by many Latin American banks. The lack of clear definitions for permissible and prohibited activities increases the risks banks assume in their quest for profits and growth.

Regulations should detail, therefore, the permissible activities for banks,

or, conversely, prohibited activities. Such regulations should address whether banks can engage in commercial activities, own equity stakes in firms or enterprises, and participate in non-banking financial activities.

#### Asset Classification and Provisioning

One of the most serious deficiencies in developing countries is the failure to recognize problem assets through classification, provisioning, write-off, and interest suspension. In a majority of cases, banks simply do not identify problem assets, establish realistic provisions for potential losses, write-off or fully provide for actual losses, or suspend interest on non-performing assets. As a result, the balance sheet does not reflect the bank's actual condition and the income statement overstates profits upon which dividends and taxes are paid. In many cases, if all losses were formally recognized, the banks would be insolvent.

Bank supervisors, in the course of their on-site examinations, may identify problem assets but are frequently powerless to require banks to make adequate provisions, direct the write-off of bad assets, and cause the suspension of interest on non-performing assets for lack of the necessary legal powers. As a result, widespread abuses often continue unchecked and defer the recognition of financial system distress until it reaches nearly uncontrollable proportions. Frequently, it is only when the level of non-performing assets gives way to a liquidity crisis that a government is able to mobilize the political support and the resources necessary to deal with the problems which have been allowed to accumulate. If problem assets were appropriately identified and potential losses provided against in a timely manner, actions could be taken to strengthen or collect the problem assets, to prevent additional advances to problem borrowers, and to reflect upon and change lending policies leading to problems with the effect of containing actual losses at a controllable level.

There is a need, therefore, for banks to systematically and realistically identify their problem assets and provide adequate reserves for possible losses. One way to accomplish this is for developing countries to introduce regulations which require banks: 1) to classify their assets as to quality according to specific criteria,<sup>7</sup> 2) to define non-performing assets,<sup>8</sup> 3) to require the suspension of interest and reversal of previously accrued but uncollected interest on non-performing assets, 4) to preclude the refinancing or capitalization of interest, and 5) to mandate minimum provisions to the reserve for possible losses based on the classification of assets. The percentages established for provisions may in some sense be arbitrary. However, on balance, they will establish some discipline in the credit process and force the banks to more accurately reflect their actual state of affairs.

---

<sup>7</sup> Many countries use categories called substandard, doubtful, and loss; however, the titles are not as important as the conceptual process of grading actual and potential risk.

<sup>8</sup> A frequently used definition defines non-performing assets as those which are ninety days or more past due and not well-secured and in process of collection.

#### BOX 4: STRUCTURING LOANS

In a generic sense, there are five basic ways in which loans are repaid: 1) asset conversion where inventory is converted to receivables and then to cash; 2) cash flow; 3) refinancing; 4) sale of a fixed asset; and 5) new equity or debt financing. For a typical going concern, the first two ways are the normal methods of repayment. Short-term loans for working capital purposes are paid from the conversion of inventory to receivables to cash. For example, a toy retailer may wish to stock up on inventory before the holiday season and is granted a note with a ninety day maturity. During the holiday, the inventory is sold for cash or on account. After the holiday, the accounts receivable are collected and the retailer repays the working capital advance.

Term loans are normally paid from cash flow. For instance, a manufacturing concern wishes to install new machinery in its factory. It obtains a term loan for the purchase of the equipment. The loan is then structured to repay over several years from the cash flow generated by the firm. Note that the loan payments should require repayment at a rate that exceeds the depreciable life of the equipment.

When loans are structured improperly or where they are based upon a speculative event such as the sale of a fixed asset, credit risk is greatly increased. In many developing countries, where there is an absence of long-term sources of funding and appropriate lending instruments, banks frequently lend short-term through vehicles which may not be appropriate for long-term purposes. An example is the case of Turkey where current account advances represent two-thirds of the loans made by the banking system. Current account advances should be used for self-liquidating working capital needs. But, because of high inflation and the lack of long-term funding for bank loans, these advances are used for machinery and equipment, vehicles, plant expansion, and other term requirements. By using the current account to extend credit for these purposes, supervision and enforcement of repayment becomes significantly more problematical and credit problems ensue.

#### Submission of False Financial Information By Borrowers

In many countries, the quality of financial information submitted to banks for the purpose of obtaining credit is frequently poor and, in some cases, intentionally incorrect or incomplete. If banks are to become more prudent and sophisticated in their management of credit risk, they must base credit decisions on a borrower's ability to repay. This ability is determined, to a large extent, by an analysis of financial information submitted by the borrower. To strengthen the position of banks in obtaining sound financial information upon which to base their credit decision, regulations should make it illegal for a borrower to submit false financial information to obtain a loan. This would provide a means of recourse within the legal system through which banks could pursue damages.

#### Scope, Frequency, and Content of the Audit Program

External audits serve as a means to independently verify and disclose the financial condition of the bank or enterprise audited. However, in some countries, external audits of banks are not required. In others, audits are performed but there are no clear guidelines concerning the standards to be used, the scope and content of the audit program, nor the frequency of audit activities to be carried out. Where audit standards do exist, they may differ substantially from recognized international standards and practices. Frequently, audits are carried out in accordance with local customs, tradition, and practices. This leads to inadequate and misleading financial statements that fail to accurately portray the true condition of the institutions. In point of fact, there are many examples of banks having clean audits even though they are known to be technically insolvent.

The weaknesses in bank auditing standards and practices may require an active role on the part of bank supervisors to establish minimum standards for the scope, frequency, and content of the audit program as well as the form and content of financial disclosures based on such audits. Depositors, investors, and creditors of a bank should have reliable and timely information to make informed decisions when transacting business with a bank. Regulations governing the scope and content of financial statements provide a means for disseminating information that is complete, timely, and uniform, thus permitting comparison, informed decision-making, and market discipline.

Therefore, regulations should empower bank supervisors to establish auditing standards and minimum disclosure requirements. Key elements of the audit program should include an examination of portfolio quality and standards for valuing assets, establishing reserves for losses, and treatment of interest on non-performing assets. In addition, supervisors should have the power to appoint or dismiss auditors. Auditors should also be under an affirmative obligation to inform the supervisors of significant findings in a timely manner. This can be done in a manner which respects the bank's right to know, except where criminal acts are involved.

#### Enforcement Powers

Bank supervisors can usually impose fines and penalties for criminal acts and violations of specific statutes. However, there may be very little they can do to address unsafe and unsound banking practices that are not specifically addressed by statute. In such instances, their options very often are to cancel the banking license or to do nothing -- neither of which is acceptable. As the result, the lack of intermediate enforcement powers often leads not only to inaction on the part of bank supervisors but to a perpetuation of problems and abuses within a given institution.

In countries where the legal systems are more developed, there are a number of intermediate actions which can be taken. These include a full range of enforcement powers to deal with incompetent or abusive ownership and management including: 1) the ability to remove management or directors; 2) monetary fines or penalties which can be assessed against individuals, as well as institutions, for criminal acts or violations of the banking regulations; 3) civil money penalties which can be assessed against individuals for engaging in unsound and

unsafe banking practices; 4) the right to restrict or suspend dividend payments; 5) the ability to withhold branch or other corporate approvals; 6) cease and desist authority; and 7) the ability to impose financial liability against bank directors for losses incurred due to illegal acts carried out by the bank, e.g., violations of the lending limit which result in loss.

Cease and desist orders put the power of the legal system behind the supervisors in requiring changes in unsafe, unsound, or abusive practices. Banking legislation does not need to limit or prohibit the specific activity that is the focus of supervisory concern. However, any willful violation of the cease and desist order is accorded the same legal status as a violation of a specific statute and is subject to civil or criminal remedies in the legal system. Supervisors should also have the authority to issue temporary orders to cease and desist, pending confirmation by the legal system, so that the bank will be forced to stop imprudent or abusive practices immediately.

The ability to impose joint and several personal financial liability upon directors for losses arising from illegal acts committed by the bank is designed to encourage greater involvement by a bank's board of directors in actively supervising the affairs of the bank and to guard against potential abuses committed by the directorate. Directors should take an active interest in the bank's affairs and insist on proper controls and reporting so that they may remain sufficiently informed to carry out their responsibilities in a prudent manner.

#### Treatment of Problem and Failed Banks

In many developing countries, banks are subject to the same bankruptcy laws as normal corporations. Therefore, the bank supervisors lack the authority to close a bank, appoint a receiver, and liquidate or merge it in an appropriate fashion. Instead, the bank must go through a normal bankruptcy process, initiated by a depositor or creditor, which may take months or years to complete. As a result, depositors may not have access to their monies. In addition, shareholders may retain an interest in their shares. This effectively prevents any attempt to recapitalize the institution or transfer ownership to the government or new investors.

Legislation is necessary, therefore, to permit supervisors to declare banks insolvent, close banks, and place them in receivership outside the normal corporate bankruptcy process. This is necessary if supervisors are to protect depositors' interests and ensure public confidence in their ability to handle financial distress in an orderly and efficient manner. As part of this process, supervisors will also need broad powers to remove and replace management, eliminate the interests of shareholders, and purchase, sell, or transfer problem assets.

#### Deposit Insurance

Many countries operate deposit insurance or deposit protection schemes as part of their prudential regulatory frameworks. Participation in such schemes is often compulsory. The primary objectives of deposit insurance schemes are to avert bank runs and protect the stability of the banking system. However, such schemes may

also serve to protect small depositors, thus promoting competition by small banks. Under certain circumstances, deposit insurance schemes may act as catalysts for improving the system of prudential regulation, strengthening the effectiveness of bank supervision and streamlining the machinery of bank restructuring.

However, deposit insurance suffers from the problem of moral hazard that may affect bank owners and bank depositors as well as bank supervisors. In countries with inadequate and ineffective supervision, deposit insurance may provide a false sense of security and lead to the taking of imprudent and unacceptable risks. The establishment of deposit insurance schemes must be assessed on a case by case basis taking account of the administrative capabilities of different countries, the structure of the banking system, the sophistication of depositors, etc. Deposit insurance can take many different forms; however, questions pertaining to the design of deposit insurance schemes are not addressed in this paper.

#### COMMERCIAL LAW, DEBT RECOVERY, AND BANKRUPTCY

In addition to prudential regulations designed to ensure the safety and soundness of the banking system, there is another important aspect of the legal framework which affects banks. This is the body of commercial laws and regulations governing a bank's contractual relationship with its customers. A key aspect of this legislation that often causes problems for the banks is that involving debt collection or recovery. In many countries, the commercial law dealing with debt collection and recovery overwhelmingly favors the banks' borrowers. Foreclosure and other legal actions involve a cumbersome legal process that may take years to complete at great expense to the banks. This cumbersome process is a disincentive to banks to take strong action to collect their problem debts. It may also encourage bankers to lend additional funds to carry the problem borrowers in the hope that the borrowers may recover and pay off their debts. All too often, though, the borrowers are unable to recover and the losses incurred by the banks multiply to even greater levels.

If banks are to remain viable, the legal system must be able to balance the rights of banks to foreclose on collateral with the rights of individuals and firms so that debts can be recovered in a timely manner. This may require changes in laws governing commercial transactions and bankruptcy and a wide range of actions to improve the effectiveness of the legal system, e.g., hiring more judges and establishing courts specifically designed to hear commercial law and bankruptcy cases. Experts in commercial law, debt recovery, and bankruptcy should be consulted for specific actions on a case by case basis.

#### BUILDING AN EFFECTIVE FRAMEWORK FOR BANK SUPERVISION

An ineffective legal framework may result in banking system distress but, more often than not, lack of enforcement and supervision are equally at fault. Supervisory problems may be rooted in conflicting public policy goals for supervision, political interference, a lack of political will to deal with problems, organizational weaknesses such as understaffing, inadequate

compensation, poor leadership, and divided supervisory responsibilities, and the lack of a clear view on the role of supervision. Problems may also result from examination methodologies which focus on technical compliance with laws and regulations or which are diluted by responsibilities for non-prudential concerns such as tax compliance, foreign exchange controls, and special lending programs. In some cases, problems also occur because of the lack of an early warning system and offsite surveillance capabilities. More often than not, though, supervisory problems result from a combination of these factors.

#### BANK SUPERVISION MODELS IN THE INDUSTRIALIZED COUNTRIES

Bank supervision in the industrialized countries developed in response to financial crises, economic events, and political phenomena. Very often, the form of bank supervision reflected philosophical and social differences in the role of government and in the organization of society, e.g., the "clubby" approach in 19th century Britain, where the Bank of England exerted its moral authority and leadership through "nods and winks", versus the strongly populist and confrontational tradition of the United States, which was based on more or less detailed "rules of the game" and required a more elaborate mechanism for ensuring compliance with these rules. These differences were embodied in two principal models of bank regulation and supervision: an informal approach that relied on consultation and moral suasion; and, a formalized approach which required active, "hands-on" verification through on-site inspection. In continental Europe, a legalistic approach was developed that was less "hands-on" than in the United States and delegated much of the verification and inspection of bank records to external auditors.

#### Bank Supervision in Britain

The informal approach to bank supervision is best exemplified by the approach taken by Bank of England. In Britain, supervision was traditionally carried out by the Bank of England in consultation with banks. Moral suasion, discretion, and personal contact were the principal tools of bank supervisors. Each bank had an individual relationship with the Bank of England. Banks made prudential returns but, unlike other systems of supervision where examiners conduct on-site examinations to verify and extract information, the responsibility for passing on information to the Bank of England rested solely with the banks.<sup>9</sup> For many years this system worked relatively well in a highly concentrated banking industry. However, the system came under stress when the number of banks increased as a result of the creation of so-called secondary banks and the influx of foreign banks in the late 1960s and early 1970s.

The flaws of the informal system, which relied on information provided by management but without an independent assessment of the quality of bank portfolios and of the adequacy of provisions for possible loan losses, became apparent. Gradually, the British authorities adopted a more legalistic approach to bank regulation and supervision which brought British practice closer to

---

<sup>9</sup> Chris Blackhurst, "What Lurks Behind UK Bank Supervision?", International Financial Law Review, February 1985, pp. 4-10.



continental European practice. Following the Johnson Matthey affair<sup>10</sup>, which precipitated a reappraisal of the supervisory approach of the Bank of England, the British authorities effectively delegated on-site inspections to external auditors by strengthening the reporting requirements of banks' auditors to the Bank of England. Steps were also taken to improve the off-site surveillance capability of the Bank of England.

For the informal approach to be effective, the UK experience would seem to suggest that several key conditions must exist: a small number of banks, a strong central authority, a tradition of close cooperation between government and industry as well as close personal relationships between bankers and supervisors, a highly skilled work force, effective management systems within the banks themselves, strong auditing and accounting practices, and full disclosure to ensure market discipline. Even then, dishonest or fraudulent management could deceive bank supervisors and cause irreparable damage to an institution. This system of informal supervision left a legacy of "hands-off" bank supervision in many former British colonies, which made them ill-prepared for the problems of banking in a developing environment. While this does not appear to have created difficulties in some countries, problems have emerged in many other Commonwealth countries in Africa and Asia where indigenous banks were promoted to compete against the hitherto dominant role of foreign banks.

#### Bank Supervision in Continental Europe

The model of bank supervision found in continental European countries is based on a legalistic approach that stipulates various ratios that the banks must observe but delegates the on-site examination of banks and the verification of their records to external auditors. In Belgium, special auditors are appointed and paid by the authorities. In Switzerland, the auditors are licensed by the Federal Banking Commission and are subject to special statutory duties. In Germany, general auditors perform the examinations of banks and must inform the authorities if they discover facts which justify the qualification of an audit. However, supervisors retain the right to examine a bank's books and carry out examinations at any time. In each of these countries, the supervisors have established detailed rules concerning the form and content of the auditors' reports.

Delegating on-site bank examinations to external auditors effectively represents the privatization of the inspection process, although under strict government rules and guidelines. There are several advantages to this approach. Auditing firms may escape the resource and salary constraints that often prevent supervisory authorities, and governments generally, from employing and retaining highly skilled staff. Moreover, auditors may achieve operating economies by combining a prudential inspection with ordinary accounting audits.

However, this approach also raises some concerns. There are risks that if not properly structured and controlled, auditors may be placed in potentially

---

<sup>10</sup> For a discussion of the Johnson Matthey Bankers affair and the role of the Bank of England, see "How the Bank of England Failed the JMB Test", Euromoney, February 1985, pp. 49-56, by Will Ollard and Nick Routledge.

#### BOX 5: THE COLONIAL LEGACY IN AFRICA

During Africa's colonial period, many banks operated in the colonies as branches, subsidiaries, or affiliates of major European banks. It was, therefore, possible for colonial governments to carry out bank supervision in a manner similar to that at home. Like many former British colonies, the laws and regulations governing banking in countries such as Ghana, Nigeria, and Kenya are today rooted in the legal systems inherited from the British colonial governments. One feature of these systems is that banks are incorporated under the provisions of a companies act, subjecting them to the same bankruptcy proceedings that apply to other corporations. This has caused considerable problems for prudential supervisors since the power to quickly intervene in insolvent banks is lacking.

Another legacy of the colonial period is the emphasis by some banks on secured real estate lending. Reliance on real estate collateral afforded some protection against losses that would otherwise have occurred had reliance been placed on other forms of collateral or on unreliable financial information. However, the belief that real estate collateral afforded adequate protection against loss also led to dangerous concentrations of credit to small groups of borrowers, in some cases exceeding a bank's capital. In some sense, the preoccupation of relying on real estate as collateral has acted as a constraint on the development of modern credit principles, which focus on cash flow and the asset conversion cycle, and the development of the accounting industry. In addition, the distribution of wealth and economic growth has been constrained since only the land-owners possessed the collateral necessary to borrow.

As a result of relying too much on collateralized lending and insufficiently on basic project/credit evaluation, many banks in these and other developing countries are now burdened by large portfolios of non-performing assets. Although the amount of losses may ultimately be limited if the mortgages are adequately perfected and the collateral realized, the banks are, nonetheless, saddled with non-earning assets that will affect their operating profits for some time to come. If their economies are to grow and prosper, banking practice in developing countries must go beyond collateral-based lending to embrace modern credit principles.

Simply stated, the legal framework, supervisory capabilities, and banking practices of many former colonies following independence failed to keep pace with change. Positive actions now being taken by these countries to modify their supervisory, legal, and accounting infrastructure reflect a growing awareness of their importance as integral components in the process of financial reform.

conflicting roles with dual loyalties to both the banks and the government, particularly in cases where the auditors are permitted to undertake other work. In addition, there is a concern that, in their efforts to control costs and maximize profits, auditors may not devote sufficient resources to ensure proper performance of the audit.

The appropriate modality for on-site inspection, i.e. supervisors or auditors, for any particular country ultimately depends on an evaluation of which group is best able to perform the on-site verification function. Factors to be evaluated include skills, competence, experience, and independence from political and other influence. This evaluation is best performed on a case-by-case basis.

#### Bank Supervision in the United States

Bank supervision in the United States exemplifies the formal approach to supervision that requires an active, on-site presence to verify conditions existing within banks. In the U.S. model, periodic on-site examinations have been the cornerstone of the supervisory process. The American approach is justified by the large number of small banks and on unit banking within particular states, both of which result from restrictions on geographic expansion. Whereas the concentrated banking systems of the European countries internalize most of the costs of policing branches and losses are dispersed at the branch level, in the American banking structure, policing costs are incurred to a much greater extent by the regulatory agencies, while bank losses are covered to a greater extent through formal deposit insurance schemes.<sup>11</sup> This creates greater social and political pressures for a hands-on approach to bank supervision.

Unlike countries where the authorities rely on outside experts, bank supervisors in the U.S. must themselves possess the skills to evaluate asset quality and other areas of a bank's activities. A major disadvantage of this approach is that it can be labor intensive and can be inhibited by budgetary constraints. U.S. supervisory agencies have responded to resource constraints in recent years by targeting on-site examinations, making greater use of offsite surveillance and early warning analysis, and taking advantage of advances in computer technology. These steps have permitted the supervisory agencies to hold the number of examining staff relatively constant despite the growth in assets and growing complexity of the financial system.

The more than 14,000 banks supervised by U.S. regulators is a major reason that a formal approach to supervision has been required. It also explains the adoption of the CAMEL rating system and the use of the Uniform Bank Performance Report. The CAMEL rating quantifies a supervised institution's condition in five critical areas and assigns an overall composite rating,<sup>12</sup> while the Uniform Bank Performance Report (UBPR) is a statistical analysis of bank performance that is based on data from quarterly prudential reports. This report compares and ranks each bank against its peers. There are 25 peer groups, bringing together institutions with similar characteristics. These reports are publicly available and the computer tapes are made available to stock analysts and others. By using this technology, supervisors also have the ability to prepare ad-hoc reports or to download data into microcomputer models where simulation or forecasting is

---

<sup>11</sup> See Dimitri Vittas: "The Complementary and Competitive Interaction of Financial Intermediaries and Markets", CECFP, World Bank, mimeo, September 1989.

<sup>12</sup> CAMEL is an acronym for Capital adequacy, Asset quality, Management, Earnings, and Liquidity, asset and liability management.

performed. In the latest stage of technological advance, expert systems, i.e., artificial intelligence, are being used to analyze prudential reports and generate written comments.

#### Harmonization and Convergence of Bank Supervision

Despite the differences in supervisory approaches, there is a growing consensus that bank supervision and regulation should be harmonized across national boundaries due to the ever-increasing global interdependence of financial markets. In a world where financial transactions occur around the clock and banks enter into financial transactions with any number of foreign correspondents and counter-parties, the global financial system may only be as strong as its weakest links. Differences in regulation can distort the financial markets as well as increase the risks for banking activities performed beyond national borders. There is also a danger that domestic institutions operating abroad may escape supervision.

The failure of the West German *Bankhaus Herstatt* in 1974 due to foreign exchange and other losses had damaging effects on the international interbank market and focused attention on the need for greater international supervisory cooperation. This led to the formation of the Basle Committee later that year under the auspices of the Bank for International Settlements. This forum comprises banking supervisors from the Group of Ten<sup>13</sup> countries plus Switzerland and Luxembourg. Following its creation, the committee addressed the issue of supervision of financial institutions operating abroad by developing broad guidelines to ensure that no institution escaped supervision. These guidelines are contained in the "Basle Concordat", which embodied the following key principles:

- 1) supervision of foreign banking establishments is the joint responsibility of parent and host authorities;
- 2) no foreign banking establishment should escape supervision;
- 3) supervision of liquidity should be the primary responsibility of the host authorities;
- 4) supervision of solvency is essentially a matter for the parent authority in the case of foreign branches and primarily the responsibility of the host authority in the case of foreign subsidiaries; and,
- 5) practical cooperation should be promoted by the exchange of information between host and parent authorities and by the authorization of bank inspections by or on behalf of parent authorities on the territory of the host authority.<sup>14</sup>

---

<sup>13</sup> The Group of Ten countries are: Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Sweden, the United Kingdom, and United States.

<sup>14</sup> Richard Dale, "Issues in Bank Supervision Around the World", The World of Banking, September-October 1982, p.16.

Other important initiatives prompted by the work of the Basle Committee include recommendations that supervision of banks' international business be conducted on a consolidated basis, so that risks can be evaluated globally, and the adoption of risk-asset based capital adequacy standards. Continuing work focuses on banks' exposure to country risk, liquidity and interest rate risk, and off-balance sheet risk.<sup>15</sup>

The growing integration of financial markets, especially among member states of the European Community, has led to a convergence of systems of bank supervision. It is now widely accepted that an adequate system of bank supervision should allow for both off-site surveillance and on-site inspection. The task of off-site supervisors is to analyze the reports submitted by the banks, identify possible problems, and propose remedies. After receiving the banks' prudential returns, the off-site analysts should check their completeness, accuracy, and consistency, as well as compliance with prudential ratios and regulations. The financial situation and significant trends or changes in financial ratios of reporting banks should be analyzed. Thereafter, a summary should be prepared for the management of the supervisory agency. This summary should go beyond the numbers to explain the reasons or causes for declining trends, unsatisfactory performance, or unusual items. Where necessary, the analysts should recommend action with the objective of providing early warning of future problems. Information from prudential returns should also be used to compile analytical and statistical reports that contrast the performance of individual banks to their peer groups and which assist the supervisors to in tracking performance of the banking industry generally.

On-site inspectors should verify the accuracy of the periodic reports submitted to the supervisory agency and analyze those aspects of a bank that cannot be adequately monitored by off-site surveillance. Inspectors should focus on the banks' main activities and on the potential problems identified by off-site surveillance. In particular, they should assess the quality of assets, management, earnings, capital, and funds management, as well as the bank's internal control, audit, management information, and accounting systems. In evaluating asset quality, the inspector should review the bank's lending policies, written or implied, to determine whether they are reasonable and complete. Thereafter, he should examine the credit files of large borrowers, problem borrowers, and a sample of files belonging to smaller borrowers, to assess the quality of the loans, management's credit practices, and adherence to credit policies. Minutes of meetings of the credit committee and the board of directors should be reviewed. The inspector should also evaluate the bank's procedures for suspending the accrual of interest, writing off bad debts, and determining an adequate loan loss provision.

A more fundamental task of bank supervisors is to review the business and strategic plans of individual banks and to assess the capabilities of management to fulfill objectives. They should also check that management systems in place are sufficient to ensure compliance with policies and are functioning properly.

---

<sup>15</sup> Committee on Banking Regulations and Supervisory Practices, Report on International Developments in Banking Supervision, Report number 5, September 1986.

Bank supervisors should also encourage banks to establish and strengthen their own internal management systems as the first lines of defense against unsound, unsafe, or illegal banking practices. Management systems should include written policies and procedures, formalized planning and budgeting, management information systems, internal loan review, compliance systems, internal and external audit activities, and internal controls. The development of management systems should be encouraged in both large and small banks, although their sophistication and complexity may differ.

## THE POLITICAL DIMENSION

### Political Interference

The basic models for bank supervision provide some guidance as to the form bank supervision should take in a particular country. However, no model will be effective if significant political interference is permitted. In many countries, it is not unusual for the head of a ministry to place a phone call to a banker with instructions to make a loan to a particular individual or firm. Similarly, it is not atypical for an influential individual to use his influence to prevent effective enforcement by supervisory authorities. The Philippines during the Marcos rule was an extreme example where bank supervisors, though competent and well-trained, could not take appropriate action against certain banks and bank managers for fear of reprisals. Interference in banking matters at that time was said to have originated at the highest levels of government.

### Lack of Political Will

Closely linked with political interference is the lack of political will to deal with problems. Even in cases where bank supervisors have adequately identified problems in banking institutions, follow-up and enforcement by their superiors and higher level government officials has often been inadequate. There are several reasons for this. For one, the problems may appear insurmountable and government officials and policy-makers genuinely lack the knowledge and ability to deal with the problems. Secondly, the problems may require short-term adjustment. Policy-makers may forego the long-term benefits of strong action for short-term political expediency and leave the problems for a future government administration. In some cases, the supervisory staff may lack strong leadership and may not bring the problems to the attention of higher level officials. In other cases, government officials and bank supervisors may not recognize the extent of distress in the system and the implications this holds for economic development. Regardless of the reasons, inaction in the face of widespread distress leads to mounting losses and further deterioration in the health of the financial system.

## ORGANIZATIONAL ISSUES

Bank supervision is often placed under the umbrella of a country's central bank. Since the function of bank supervision is to ensure a safe and sound banking system and to prevent financial system instability, the central bank, as manager of a country's monetary policy and lender of last resort, is a logical place to house banking supervision. However, there is no compelling evidence to suggest that operating from within the central bank affords a distinct advantage over

the creation of an autonomous supervisory agency provided that bank supervision is insulated from political influences, information derived in the supervisory process is shared with those managing monetary policy, and the agency is adequately funded -- either through assessments or direct budget allocations. In fact, some argue that an agency which is solely responsible for bank supervision will devote greater attention to the fulfillment of its role than one which also has responsibilities for managing the nation's monetary policy. On the other hand, there is an argument that where supervisory responsibility is centered in a central bank, it is likely to be exercised with a wider degree of discretion than where the primary supervisory agency is autonomous and operates within defined statutory limits.<sup>16</sup>

In general, in countries that have strong central banks, it would seem inappropriate to dilute their influence and authority by assigning supervisory responsibilities to another institution. If the central bank is weak, then the case for an independent supervisory agency is stronger. In many high income countries, the division of responsibilities reflects historical factors.

A third alternative is to place the supervisory agency within the Ministry of Finance or Treasury. In most countries, this alternative is the least desirable since these ministries tend to be highly politicized and the coordination of policy with other government agencies tends to be problematic.

Ultimately, it would seem that the effectiveness of a bank supervisory body depends not so much on its organizational location but on its leadership and independence from political influence. If a particular institutional arrangement in a given country permits the bank supervision unit to operate free from inappropriate outside interference, that arrangement is probably the most desirable for that country.

Regardless of where supervision is located within government, there are important organizational steps that can be taken to enhance its effectiveness. The bank supervision unit should possess its own identity on at least a par with other important units within the central bank or ministry or as an independent agency. The director of bank supervision should be a high ranking government official and report directly to the central bank governor or deputy governor or the minister of finance or treasury. This is necessary to establish an appropriate degree of credibility with the banking industry so that directives issued by the supervisor will have effect.

#### Supervisory Responsibilities

The responsibilities of the bank supervision unit should encompass both on-site and off-site supervision. These should not be split between different agencies as is the case of Turkey where the Board of Sworn Bank Auditors is responsible for on-site examination and the Central Bank of Turkey conducts off-site surveillance. In such cases, communication and coordination difficulties may occur and supervisory priorities may differ. The division of responsibilities

---

<sup>16</sup> Richard Dale, "Issues in Bank Supervision Around the World", The World of Banking, September/October 1982. pp.14-24.

affects the supervisor's ability to prioritize and focus supervisory concerns and corrective action where it is needed most.

Responsibilities for non-prudential concerns, such as tax collection and compliance with currency controls and credit constraints, should be held to a minimum.

### Staffing and Compensation

In most developing countries, bank supervisors face resource and budget constraints. As a result, supervisory units are often understaffed. This affects the supervisor's ability to conduct bank examinations and perform other supervisory duties. The most capable and qualified individuals are frequently employed in the private sector or in other activities where compensation is greater. In some cases, compensation for bank supervisors may not be as great as for other parts of government even though the responsibilities may be greater. This affects the supervisor's ability to attract and retain qualified staff.

Needless to say, adequate staffing for bank supervision, both in terms of quantity and skill levels, is a must. To attract and retain qualified staff, compensation should be competitive within government and with the private sector. Governments frequently argue that they cannot afford additional staff or higher salaries. Nor can they justify differentiated salaries within government. However, there is an argument to the contrary that governments cannot afford banking crisis and its debilitating effects upon economic growth and development. It should be noted that there are precedents for banking supervisors to be exempted from normal civil service guidelines and salary scales. Further, the cost of even one bank failure may far exceed the costs incurred in employing and retaining competent staff, a situation clearly demonstrated by the U.S. savings and loan crisis when requests for additional staff were denied by the government administration then in power.

### Career Path

In some countries, bank supervision is not viewed as a career and employees are rotated in and out of the bank supervision unit in only a few years. This contrasts with countries such as the U.S. where bank supervisors require about five years just to learn the skills necessary to examine small, well-managed institutions. If bank supervision is to be effective, it must be considered a full-time career option. Career paths and job descriptions should be developed to provide meaningful and challenging responsibilities as well as upward mobility. This could include career milestones such as promotion from an assistant examiner to a full fledged examiner to a senior examiner and, ultimately, into the ranks of management. Rotational assignments in other departments could be accommodated as a means of broadening an individual's knowledge and skills. However, it should not mean the end of a career as a bank supervisor.

### Training

Training is often conducted solely on-the-job in a less than systematic manner so that skills are acquired in a hit-or-miss fashion. Inadequacies in training



and development affect the supervisor's ability to build a skilled, knowledgeable, and competent staff. Training programs should ensure that each supervisor receives not less than two weeks training per year -- more for new staff. This training should combine formal instruction, case study, and seminars. In addition, on-the-job training should be conducted in a systematic fashion. Senior staff should have the opportunity to mix with supervisors from other countries for a cross-fertilization of ideas.

## SUPERVISORY METHODOLOGIES

The ongoing task of bank supervisors is typically to ensure the safety and soundness of the financial system -- as opposed to individual banks. Similarly, the responsibilities of bank examiners are to depositors, not the shareholders of banks. Therefore, supervisory activities should focus on the areas of greatest risk to the system, e.g., large financial institutions or banks whose activities may lead to contagion within the system. Supervisors' tools include on-site examinations of individual institutions and off-site surveillance from both macro and micro perspectives. For most developing countries, on-site examinations are most important. This is because problems of insolvency in developing countries usually occur due to credit losses which are best determined while within an institution. Therefore, supervisors must concentrate on assessing asset quality and mandating provisions for bad debts and suspension of interest on non-performing assets through on-site examination and verification. By determining asset quality and the condition of an institution, bank supervisors provide critical information to government policy-makers on the health of the financial system.

### On-Site Examinations

On-site examination methodologies frequently focus on compliance with banking regulations and directives. As a result, prudential concerns for safety and soundness are often overlooked. Even in cases where supervisors attempt to address safety and soundness concerns, the examination process may only provide a "snapshot" of the institution's condition as of a given date without addressing potential risks and the management systems needed internally by the bank to control risk in a dynamic, changing environment. For example, examiners may try to determine the condition of a bank's loan portfolio but fail to evaluate the lending policies and practices leading to loan problems or which may give rise to future loan problems. Indeed, in many cases, bank examiners fail to identify and quantify the extent and severity of problem assets -- a major failure. Even when problems are identified, supervisors may lack the powers to require provisions and write-offs or other necessary actions.

To correct these weaknesses and improve the effectiveness of their on-site examination activities, supervisors need to move away from checking compliance with laws to assessing risk and assisting banks in managing risk. To accomplish this, bank supervisors should embrace a top-down approach which places emphasis on the direction and policies formulated by the board of directors and executive management. It is not enough to quantify problems -- although this is certainly a necessary step. The causes of problems must also be understood and preventive action taken to reduce the likelihood of their recurrence.

In addition, efficient use of scarce supervisory resources should be made by targeting examination efforts of individual institutions to the areas of greatest risk, e.g., asset quality, interest rate risk, foreign exchange activities, etc.

Examination activities should also avoid the examination of each and every branch office or operating subsidiary of an institution. Instead, the examination should focus on the condition of the consolidated institution by examining those units which have a significant impact on the institution's overall position. The remaining units should be evaluated on a sample basis.

The failure to follow-up on problems and to enforce corrective action is another common weakness in the supervisory process. This occurs for many reasons including those discussed above, i.e., weak leadership, political influence, temerity in dealing with problems, organizational weaknesses, and a lack of appropriate enforcement tools. However, it also occurs because examination results and the type of corrective actions needed are not adequately communicated to the bank's board of directors and senior management. It is extremely important that examination results are clearly communicated to the bank through a written examination report and meetings with the board of directors and executive management. A transmittal letter attached to the written examination report and signed by the head of bank supervision or his designee should highlight the report's major conclusions and recommendations. In addition, the transmittal letter should require a formal response by the bank within a stated time frame. If progress reports concerning corrective actions to be taken by the bank are required, these should be outlined in the transmittal letter. Administrative procedures should be established for monitoring the bank's response and verifying corrective actions.

In most developing countries, written examination procedures are less than adequate, or lacking altogether, so that the examiner must rely totally on his experience, knowledge, and skills. This leads to a lack of uniformity and consistency in the conduct of on-site examinations from one examiner to the next. As a result, the head of bank supervision can never be sure which bank functions were reviewed and the manner in which the examination was performed. The lack of written examination procedures also deprives new staff of an essential training tool. Therefore, to ensure consistency and uniformity, and to provide a training tool for new examiners, written examination procedures and questionnaires should be developed for use in on-site examinations. These are not meant to supplant the examiner's judgment. However, they do provide a framework and support for the work to be carried out.

A complementary aspect to written examination procedures is the documentation of work performed and the maintenance of working papers. These are necessary to demonstrate that the actions recommended by the examiner are not arbitrary but are based upon valid concerns and criticisms. This documentation may also be necessary to support legal enforcement actions proposed by the supervisors.

Over the long run, bank supervisors can use the on-site examination process as a catalyst for changing the fundamental ways in which banks operate by recommending actions for financial institutions to upgrade their operations. This usually involves the strengthening of management systems in banks including written policies and procedures, formalized planning and budgeting, internal

controls and audit procedures, management information, and loan review. The rationale for this approach is that supervisors will always face resource constraints. The banks themselves, therefore, must establish the first lines of defense against unsound or unsafe practices. Once management systems are in place, supervisors can determine that the systems are working by testing the systems. If the systems are inadequate, the scope of an examination should be expanded so that risks can be identified and quantified.

#### Off-Site Surveillance

An off-site surveillance capability provides an important complement to on-site examinations by providing early warning of actual or potential problems and a means for monitoring and comparing financial performance. However, off-site surveillance should not be viewed as a means to replace on-site examination as the primary form of supervision in a developing country. The quality of information and integrity of data provided by banks in all countries must be verified. In developing countries, the quality of information is frequently incomplete and inaccurate. Often, banks do not have the internal accounting and control systems to ensure timely and accurate preparation of information. Therefore, in most cases, it would be inappropriate to rely on off-site surveillance as more than a complement to on-site examinations.

In most developing countries, prudential reports, which form the basis for most off-site surveillance activities, are frequently limited to those concerning liquidity, reserve requirement computations, and credit guidelines. Analysis often consists of simply checking compliance with certain balance sheet ratios. Rarely is information gathered to meaningfully appraise risk.

For off-site surveillance and early warning analysis to be effective, prudential reports must move away from statistical inputs, liquidity and reserve requirement computations, and simple balance sheet calculations to inputs which permit the measurement of risk. This means that supervisors should collect data concerning a bank's loan portfolio, including delinquencies and problem assets, foreign exchange position, off-balance sheet commitments, and other risk areas, as well as balance sheet and profit and loss statements. To ensure uniformity, supervisors should have the ability to prescribe the timing, content and format of the prudential returns so that comparative data can be prepared and used in a consistent fashion.

It is critical that the off-site surveillance function be fully integrated into the supervisory process so that weaknesses may be corrected. In some cases, it may be sufficient to contact the bank by phone or letter to discuss concerns identified off-site. However, in other cases, it might be necessary to send examiners into a bank to follow-up on the weaknesses identified through the off-site surveillance function. In any event, information and reports prepared off-site can provide important comparative data on areas of risk and efficiency and should be used by examiners during their on-site examinations.

#### Inaction In Restructuring Banks

In the industrialized countries, bank supervisors attempt to minimize potential losses and liability to the government by closing banks near or at the point they

reach technical insolvency. However, in the developing countries, the absence of reliable information, an inadequate legal framework, and the lack of political will often permit banks to remain open and losses to multiply, even though the banks may have lost their reported book capital many times over. Inaction in dealing with insolvency may also occur because the institutional framework for dealing with insolvency is inadequate. Experience indicates that ad hoc approaches to dealing with insolvency generally do not succeed. Because banks are not closed, the effectiveness of bank supervision may be compromised. Bankers may know that supervisors are powerless to take appropriate action. In order to counter this, a systematic approach and mechanism for dealing with insolvency is necessary.<sup>17</sup>

#### STRENGTHENING THE ACCOUNTING AND AUDITING FRAMEWORK

The development of a strong accounting profession can ensure the establishment of uniform accounting standards which accurately and properly reflect each financial institution's true condition. The rise of the accounting profession also gives way to the preparation of reliable financial information by which credit can be assessed. Auditors play an important role by providing a system of checks and balances, making recommendations to improve accounting and administrative controls, checking for compliance with laws and regulations, as well as fraud, and certifying financial statements for public disclosure.

However, in many developing countries, an accounting and auditing tradition is lacking. There may be a shortage of skilled practitioners and, frequently, a professional accounting body does not exist. In addition, accounting and auditing systems and financial disclosure may be non-existent. The effect is to hinder the development of a well-functioning financial system.

A major weaknesses in bank accounting and auditing for many developing countries is the absence of adequate accounting standards. Criteria for determining non-performing assets is subjective, problem assets are not identified or properly valued, interest continues to accrue on non-performing assets and, in many cases, it is capitalized or refinanced, and foreign exchange or other losses go unrecognized. These practices lead to inflated profits and overstated balance sheets, often hiding technical insolvency. Dividend payout often drives reported income and banks manage their loan loss provisions and write-offs to achieve desired levels of profitability. Thus, the essential link between portfolio quality and the level of loan loss provisions is missing.

In some countries, banks may operate without the benefit of a uniform chart of accounts, consistent terminology, and standard accounting methodology. Charts of accounts often vary in structure and terminology and the accounting principles used to determine account entries and classification are inconsistent from bank to bank. These weaknesses create distortions which make analysis and comparison difficult.

---

<sup>17</sup> For additional information on bank restructuring, see Aristobulo De Juan: "Does Bank Insolvency Matter? And What to Do About It?", mimeo, CECFP, 1988.

The absence of an accounting and auditing tradition extends beyond banking however. Credit is extended to borrowers without the benefit of current and reliable financial information. The lack of current and satisfactory financial information contributes to the perpetuation of collateral-based lending since lenders are not able to appraise a borrower's ability to repay.

Financial disclosures made by banks and enterprises are often misleading -- if not outright fraudulent. The lack of reliable financial information inhibits foreign investment and the growth of the capital markets. In the absence of reliable financial information, investors are simply reluctant to place their funds at risk.

To deal with these problems, accounting standards and the auditing profession must be strengthened. Standards which should be established include guidelines for asset classification, definitions for past dues and non-performing assets, prohibitions against the capitalization or refinancing of interest which is due and unpaid, reversal of previously accrued but uncollected interest on non-performing assets, adequate provisions for actual or potential loan losses, and guidelines for recognition of foreign exchange and other losses.

One way to accomplish this is to establish minimum standards as part of the legal framework. Another way is for the local professional accounting body to enact standards having the force of law. In countries where a local accounting body does not exist or where the local professional body is very weak, actions will be necessary to establish or enhance the role of a professional body and strengthen the profession by providing training courses at both the university and professional levels, encouraging university students to enter the field of accounting as a career, providing library and research facilities, establishing a professional advisory service and peer review, and imposing sanctions against auditors who consistently perform below acceptable standards. In addition, public policy-makers must demonstrate a commitment to supporting the industry's efforts to strengthen its standards and performance.

#### UPGRADING BANKS AT THE INSTITUTIONAL LEVEL

The primary line of defense against banking insolvency and financial system distress is neither bank supervision nor prudential regulation. It is the quality and character of management within the banks themselves. Therefore, efforts to strengthen the financial system must also focus on strengthening management and management systems through a process of institutional development. To begin this process, the initial step in most cases is to evaluate the bank's existing condition, e.g., strengths, weaknesses, threats, and opportunities. Included in this step is the identification and quantification of problem assets and potential or unrecognized losses. Unfortunately, management information and other systems within many banks are relatively unsophisticated and the quality of information which is available may be inaccurate and incomplete. Further, management is frequently unwilling or incapable to deal with or recognize the bank's problems. It is simply more convenient to ignore problems than to face up to them. It may be necessary, therefore, to require the audit of the

institution by qualified external auditors or an examination by supervisory authorities with a major goal of determining asset quality, the single factor most likely to erode capital and cause insolvency.

Once the full extent of problems and their causes are diagnosed, solutions can be developed. With portfolio quality problems, the necessary actions often involve changes in management, a reappraisal of implicit lending policies and practices, and strong efforts to collect or strengthen problem credits. Legal action is often necessary to foreclose or repossess assets or to pursue legal claims against guarantors. In extreme cases, where portfolio problems have led to or threaten insolvency, financial restructuring and recapitalization of the institution will be necessary.<sup>18</sup> These will normally require the replacement of management, elimination of shareholders' interests, and carving out of the bad assets.

After an institution has been returned to health, appropriate measures must be taken to ensure that it remains healthy. The deterioration in portfolio quality is apt to repeat unless the policies and practices leading to the decline in portfolio quality are re-appraised and modified. Loan underwriting criteria must be reviewed. Repayment programs must be established at each loan's inception and enforced. Credit should be predicated upon the borrower's ability to repay. Current and satisfactory financial information on each borrower should be obtained and analyzed on a timely basis. Concentrations of credit should be avoided. Adequate provisions should be set aside for loan losses and loans should be written-off when they are determined to be non-bankable. The accrual of interest should cease on non-performing assets and previously accrued but uncollected interest should be reversed. Interest capitalization should normally be prohibited. Realistic past due and non-performing criteria should be established.

It would be short-sighted, however, to evaluate policies and practices only in the context of past problems. Importantly, policies and procedures must be capable of guiding the institution in an ongoing, ever-changing environment. Therefore, one approach to upgrading at the institutional level starts at the top, with the policies and objectives established by the board of directors, and works its way down through the organization. This top-down approach places emphasis on the board of directors and executive management. Unless their full commitment to the process is obtained, the process of upgrading over the long-term is likely to fall far short of success. The board of directors of any institution must be shown that it is in their own interests to prudently supervise the affairs of the institution.

#### THE ROLE OF DIRECTORS

The process of institution building should include a clear definition of the roles and responsibilities of the Board of Directors. They are placed in positions of trust and, though they may delegate the day-to-day routine of conducting the bank's business to their officers and directors, they should be

---

<sup>18</sup> For the steps necessary to restructure banks see Aristobulo De Juan's mimeo draft on bank restructuring.

#### BOX 6: DUTIES AND RESPONSIBILITIES OF DIRECTORS

*To select competent executive officers who are qualified to soundly administer the bank's affairs and to dispense with the services of officers who are unable to meet reasonable standards of executive ability.*

*To effectively supervise the institution's affairs by exercising reasonable business judgment and competence, and by devoting sufficient time to become informed about the bank's affairs.*

*To adopt and follow sound policies and objectives within which the chief executive must operate. These policies and objectives should include major functional areas such as investments, loans, asset and liability management, profit planning and budgeting, capital planning, and personnel.*

*To avoid self-serving practices. Unwarranted loans to a bank's director often have the effect of significantly weakening the bank's general credit standards. Directors who become financially dependent on their institution normally lose their usefulness as directors.*

*To be informed of the bank's condition and management policies. In this regard, directors should employ an external auditor on their behalf and take an active interest in understanding the procedures to be used by the auditor and in reviewing the audit report with the auditors.*

*To maintain reasonable capitalization. A board of directors has the responsibility of maintaining its institution on a well-capitalized basis.*

*To observe laws, rulings, and regulations. Directors must exercise care to see that laws, rulings, and regulations are not violated. The legal framework should establish financial responsibility for losses arising out of negligent or illegal actions.*

*To ensure the bank has a beneficial influence on the economy. Banks have a continuing responsibility to provide financial services which are conducive to well-balanced economic growth. Directors should ensure that the bank attempts to satisfy all legitimate credit needs.*

held accountable for the consequences of unsound or imprudent policies and practices. Since the directors are responsible for safeguarding the interests of depositors and shareholders, it is advisable that a majority of the board is independent of political interests, active management and the interests of major corporate shareholders.

#### EXECUTIVE MANAGEMENT AND MANAGEMENT SYSTEMS

A key responsibility of directors is to employ a competent chief executive officer. Thereafter, senior management assumes the responsibility to manage the day-to-day affairs of the bank, to implement and follow the framework of policies and objectives established by the board of directors, and to employ, maintain,

and educate a qualified staff. Senior management conducts the operation and administration of the institution through various management systems. These include written policies and procedures, internal controls, loan review, compliance, planning, budgeting, internal and external auditing, and management information systems. Their effective implementation strengthens the quality of management decision-making and control.

#### Written Policies and Procedures

To ensure that management executes business plans and controls risks appropriately, written policies should be formulated for each major business activity or function the bank is engaged in. The policies and procedures should be comprehensive and should provide a clear framework within which management and staff can be expected to operate. Policies should be reviewed annually, or more often as needed, and should provide an appropriate mechanism for exceptions when warranted.

#### Internal Controls

A strong system of accounting and administrative controls is necessary to safeguard assets, check the accuracy and reliability of accounting data, promote operational efficiency, and encourage adherence to established policies. Such internal controls should include a plan of organization, procedures, and records that generate an accurate reporting system and accountability for assets and liabilities within the organization.

#### Loan Review

Since loans generally comprise the major component of bank assets, there should be an effective program of internal loan or asset quality review. Ideally, this analysis should be performed by an independent loan review department staffed by credit analysts who report directly to the board of directors, a board committee, or a senior officer not involved in lending. Their responsibilities are to identify problem loans based not only on performance but on financial statement analysis, prepare summations to substantiate credit ratings, determine compliance with lending policies, and ensure that corrective action is forthcoming to strengthen or collect problem credits. The results of the internal loan review program are used as a basis for determining the adequacy of the loan loss reserve. Loan officers should be required to identify their own problem loans at early stages of deterioration to supplement the loan review process.

#### Compliance

Compliance systems are necessary to ensure that the institution is operating within the constraints of law. Compliance systems may operate parallel to or as part of an institution's internal control and auditing programs. However, the focus is on compliance with laws, rulings, and regulations rather than the safeguard of assets, reliability of information, operational efficiency, or adherence to policy.

#### Planning



Planning is fundamental for effective management. Changes in competitive conditions, volatility in the financial markets, technological advances, and deregulation increase the risks within the operating environment. Banks must continually reassess their activities and develop new ways of operating to adapt to those changes and control risk.

### Budgeting

Budgeting is important both as a planning device and as a means of control. Budgets are usually prepared for a period of one year. They translate operational activities into quantitative terms. The planning aspect involves the decision-making processes leading to the budget's preparation and/or subsequent revisions. The control aspect involves the comparison of budgeted expenditures and revenues versus actual results and the explanation of significant variations. As a planning and control device, a budget provides a benchmark to measure results and the adjustments necessary to meet performance objectives.

### Internal and External Auditing

Traditionally, the primary objectives of the internal audit function have been the detection of irregularities and the determination of adherence to the bank's policies and procedures. However, in recent years, the responsibilities of internal auditors have expanded to include the appraisal of accounting, operating, and administrative controls. This appraisal is intended to ensure that those controls provide for the prompt and accurate recording of transactions and the proper safeguarding of assets. In addition, internal auditors often have the responsibility of participating in the formulation of new or revised policies and procedures. Such participation ensures that adequate safeguards and controls are provided during the planning and implementation process. Additional responsibilities of internal auditors may include checking compliance with laws, evaluating the effectiveness of administrative controls and procedures, and evaluating the efficiency of operations, i.e., operational auditing.<sup>19</sup>

The primary objective of external audits is generally aimed at enabling the auditor to express an opinion on financial statements. However, external auditors can also assist management in establishing strong internal controls, internal audit programs, and management information systems; help banks develop operating policies and methods of operations; provide greater assurance that financial reports to shareholders and the public are accurate and include all necessary disclosures; aid board members in fulfilling their fiduciary responsibilities; and assist management in conducting special studies.<sup>20</sup>

Both internal and external auditors must demonstrate competence and independence. In this regard, internal auditors should report directly to the board of directors while external auditors should avoid any formal interest in

---

<sup>19</sup> Office of the Comptroller of the Currency, Comptroller's Handbook for National Bank Examiners, Washington, D.C.

<sup>21</sup> Office of the Comptroller of the Currency, Comptroller's Handbook for National Bank Examiners, Washington, D.C.

the bank being audited.

#### Management Information Systems.

To make informed decisions, management must have timely, accurate, and relevant information concerning the bank's loan portfolio, funding sources, foreign exchange risks, profit and loss position, off-balance sheet contingencies, interest rates, etc. Balance sheets and profit and loss statements should be prepared at least monthly, if not more often. However, in some countries, the problems involved in obtaining such information in banks having huge branch networks, a paper-based transaction process, manual posting, and inadequate communications can be enormous. Increasingly, automation can be part of the solution. With the advent and increasing sophistication of the microcomputer, financial institutions in the developing world have the opportunity to automate their applications at a relatively inexpensive cost. The productivity gains, increased efficiency, and timeliness of management information should more than compensate for the costs involved.

#### BOX 7: THE CASE OF NEPAL

To illustrate the problems of incomplete management information, one can look at the case of Nepal. Nepal, as a developing country, lacks adequate infrastructure, i.e., roads, transportation, communication, etc. Because of this, it may take as long as two weeks to physically reach certain branches. To consolidate financial information from all of a bank's branches, in the absence of automated systems and adequate communications, may take months and, as the result, profit and loss information and balance sheets may lag six or more months. In one bank, unreconciled differences in interbranch accounts, caused by communication and personnel problems, have existed for several years and approximate the bank's capital. In a such a situation, it is very difficult to produce timely and complete management information on such important items as past due credits, problem credits, new extensions of credit, and off-balance sheet risks. This places management in the position of not being able to effect corrective action in as timely a manner as is necessary. More often than not, however, management information systems are inadequate even in developing countries where infrastructure is good. In such cases, management is directly responsible and should be held accountable.

#### SOME CLOSING THOUGHTS

Well-informed investors, depositors, and creditors can be an efficient regulator in an age of technology, information, and free capital flows. However, financial disclosure and market discipline may not be good ideas for developing countries whose financial systems are in disarray until appropriate safeguards are built into the system. In addition to strong supervision, prudential regulation, accounting and auditing, and a lender of last resort, there must be a mechanism to deal with bank insolvency.

As the globalization of financial markets continues, integration of domestic financial markets with the larger international financial system will become more important if developing countries are to grow and prosper. Therefore, there is justification for harmonizing regulation, supervision, and accounting to the extent possible so that distortions can be minimized. In some instances, permitting foreign banks to compete in the domestic market may provide healthy benefits to domestic banks in terms of improved efficiency and transfer of technology and management skills.

Economic deregulation and financial liberalization are important for a country to develop a viable and robust financial system. However, deregulation will remove the protections previously afforded the banking system. Increased competition, a changing price structure, new market entrants, and other factors will increase the risks banks assume. Unless there is a strong system of supervision, regulation, accounting and auditing, there is a likelihood of increased bank failures and financial system distress.

The common threads running through each of these topics are strong supervision, prudential regulation, accounting and auditing. To establish an effective program of banking supervision and prudential regulation, the public policy role of bank supervision must be clearly defined and understood. At the same time, actions to strengthen the legal framework, the supervisory process, accounting and auditing, and the institutions themselves should commence on parallel tracks. In most countries, it will take years to develop a truly effective institutional framework. But it is a framework that must be established if success in financial sector reform is to be achieved and preserved.

PPR Working Paper Series

<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Contact for paper</u>
WPS323 The Old and the New in Heterodox Stabilization Programs: Lessons from the 1960s and the 1980s	Miguel A. Kiguel Nissan Liviatan	December 1989	R. Luz 61588
WPS 324 Ethical Approaches to Family Planning in Africa	F. T. Sai K. Newman	December 1989	S. Ainsworth 31091
WPS325 Manufacturers' Responses to Infrastructure Deficiencies in Nigeria	Kyu Sik Lee Alex Anas	December 1989	L. Victorio 31015
WPS326 Do Exporters Gain from VERs?	Jaime de Melo L. Alan Winters		
WPS327 Making Noisy Data Sing: A Micro Approach to Measuring Industrial Efficiency	James R. Tybout	January 1990	M. Ameal 61465
WPS328 Europe, Middle East, and North Africa (EMN) Region Population Projections, 1989-90 Edition	Rodolfo A. Bulatao Eduard Bos Patience W. Stephens My T. Vu	November 1989	S. Ainsworth 31091
WPS329 Latin America and the Caribbean (LAC) Region Population Projections, 1989-90 Edition	Rodolfo A. Bulatao Eduard Bos Patience W. Stephens My T. Vu	November 1989	S. Ainsworth 31091
WPS330 Africa Region Population Projections, 1989-90 Edition	Rodolfo A. Bulatao Eduard Bos Patience W. Stephens My T. Vu	November 1989	S. Ainsworth 31091
WPS331 Asia Region Population Projections, 1989-90 Edition	Rodolfo A. Bulatao Eduard Bos Patience W. Stephens My T. Vu	November 1989	S. Ainsworth 31091
WPS332 India: Effective Incentives in Agriculture: Cotton, Groundnuts, Wheat, and Rice	Ashok Gulhati		
WPS333 An Option-Pricing Approach to Secondary Market Debt (Applied to Mexico)	Stijn Claessens Sweder van Wijnbergen	January 1990	S. King-Watson 33730
WPS334 Built-in Tax Elasticity and the Revenue Impact of Discretionary Tax Measures: An Econometric Estimation Method with Application to Malawi and Mauritius	Jaber Ehdaie		

PPR Working Paper Series

	<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Contact for paper</u>
WPS335	Macroeconomic Adjustment and the Labor Market in Four Latin American Countries	Ramon E. Lopez Luis A. Riveros	December 1989	L. Riveros 61762
WPS336	Complementary Approaches to Financing Health Services in Africa	Germano Mwabu		
WPS337	Projecting Mortality for All Countries	Rodolfo A. Bulatao Eduard Bos Patience W. Stephens My T. Vu	December 1989	S. Ainsworth 31091
WPS338	Supply and Use of Essential Drugs in Sub-Saharan Africa: Issues and Possible Solutions	S. D. Foster		
WPS339	Private Investment and Macroeconomic Adjustment: An Overview	Luis Serven Andres Solimano	December 1989	E. Khine 61763
WPS340	Prudential Regulation and Banking Supervision: Building an Institutional Framework for Banks	Vincent P. Polizzato	January 1990	WDR Office 31393
WPS341	Cost-of-Living Differences between Urban and Rural Areas of Indonesia	Martin Ravallion Dominique van de Walle	December 1989	C. Spooner 30464
WPS342	Human Capital and Endogenous Growth in a Large Scale Life-Cycle Model	Patricio Arrau	December 1989	S. King-Watson 33730
WPS343	Policy Determinants of Growth: Survey of Theory and Evidence	William R. Easterly Deborah L. Wetzel	December 1989	R. Luz 61589
WPS344	Policy Distortions, Size of Government, and Growth	William Easterly	December 1989	R. Luz 61588
WPS345	Private Transfers and Public Policy in Developing Countries: A Case Study for Peru	Donald Cox Emmanuel Jimenez	December 1989	A. Bhalla 60359
WPS346	India. The Growing Conflict between Trade and Transport: Issues and Options	Hans Jurgen Peters		
WPS347	Housing Finance in Developing Countries: A Transaction Cost Approach	Robert M. Buckley	December 1989	WDR Office 31393