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Economic Development Institute  
of The World Bank

# Financial Systems and Development in Africa

*Edited by*  
Philippe Callier

EDI SEMINAR SERIES



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# Financial Systems and Development in Africa

Collected papers from an EDI Policy Seminar  
held in Nairobi, Kenya, from January 29 to February 1, 1990

Edited by

**Philippe Callier**

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The Economic Development Institute (EDI) was established by the World Bank in 1955 to train officials concerned with development planning, policymaking, investment analysis, and project implementation in member developing countries. At present the substance of the EDI's work emphasizes macroeconomic and sectoral economic policy analysis. Through a variety of courses, seminars, and workshops, most of which are given overseas in cooperation with local institutions, the EDI seeks to sharpen analytical skills used in policy analysis and to broaden understanding of the experience of individual countries with economic development. In addition to furthering the EDI's pedagogical objectives, Policy Seminars provide forums for policymakers, academics, and Bank staff to exchange views on current development issues, proposals, and practices. Although the EDI's publications are designed to support its training activities, many are of interest to a much broader audience. EDI materials, including any findings, interpretations, and conclusions, are entirely those of the authors and should not be attributed in any manner to the World Bank, to its affiliated organizations, or to members of its Board of Executive Directors or the countries they represent.

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## FOREWORD

The focus of the EDI's program on the financial sector is on the improvement of decisionmaking in seven important areas dealing with the structure, reform, and development of financial systems in developing countries. The areas covered are:

- Reform of the structure of financial systems
- Policies and regulations to prevent or deal with insolvency and illiquidity of financial intermediaries
- The development of markets for short- and long-term financial instruments
- The role of institutional elements in the development of financial systems
- The links between the financial sector and the real sectors, particularly in the case of restructuring financial and industrial institutions or enterprises
- The dynamics of financial systems management in terms of stabilization and adjustment
- Access to international financial markets.

The program is articulated around cycles of regional and worldwide roundtables and seminars. Policymakers and professionals are brought together to discuss agendas of specific issues and problems, often identified beforehand by the participants themselves. The papers circulated at these seminars are published in the EDI Working Papers series to make them available to a broader audience than is possible within the framework of the seminars.

This book assembles in a single volume the collection of documents circulated at the Senior Policy Seminar on Financial Systems and Development in Africa, held in Nairobi, Kenya, from January 29 to February 1, 1990. It also includes the report that synthesizes the presentations made at the seminar and the content of the discussions which followed them. The views presented in this volume are entirely those of the authors and do not necessarily reflect those of the World Bank or those of any of the other institutions with which the authors are affiliated.

Xavier L. Simon  
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# 1

## INTRODUCTION

*Philippe Callier*

The role of the financial sector in the process of development goes well beyond the traditional concerns about resource mobilization to finance investment. First, financial intermediaries produce financial services, which are consumed by consumers and used as input by producers in other sectors of the economy. As a producer of services, the financial sector is very much a genuine part of the "real sector": money and finance are not just a veil. Second, the financial system has an overwhelming influence on the allocation of the resources it mobilizes.

Immediate concerns about pressing, short-run problems, of course, tend to focus the attention of policymakers on the potential of the financial system as an instrument to handle the current budget constraint, and hence on the role of the financial system in resource mobilization. However, it does not follow that this role of the financial system is the most important in a development strategy. Thus, for example, the ability of domestic producers to compete on world markets (and therefore the responsiveness of the economy to appropriate exchange rate adjustments) may well depend crucially on the availability of flexible, competitive trade financing mechanisms or other financial services needed to conduct business abroad. In addition, improvements in the way the financial system allocates resource can generate bigger increases in the future standard of living of a country, at a lower cost in terms of foregone current consumption, than efforts geared mainly toward mobilizing more resources.

It is indeed important to keep in mind that, from the point of view of growth and development (as distinct from the point of view of short term stabilization policy), what matters is the income stream generated by the stock of capital, not savings and investments per se. In determining this flow of income, the rate of return of the investment is as important as the amount of resources available for investment. The existence of widespread financial distress in the financial system, reported in the World Bank's *World Development Report of 1989*, clearly suggests that at the present time, in many developing countries, there is more to be gained from reforms aimed at improving the way the financial system allocates resources to generate a higher rate of return, than from measures designed mainly to increase the quantity of resources channeled through the financial institutions.

There is now a growing awareness, among policymakers and scholars, of these multiple aspects of the place of financial systems in the development strategy. Indeed, many countries, independently or with the support of the World Bank, have undertaken reforms of their own financial system to bring about the full potential of this sector on the development process. Nevertheless, an academic understanding of the issues is not sufficient: Too often, individual managerial behavior, policies, and, particularly, operational procedures still reflect obsolete views. Therefore, translating the better understanding of the role and potential of the financial system in today's circumstances into tangible improvements in the way financial systems perform requires an educational effort at all levels.

The program of seminars on finance organized by the Economic Development Institute of the World Bank is a part of this needed educational effort. The basic philosophy of the program is that the required expertise is vested in finance sector practitioners and that, at least at the senior level for which the seminars are tailored, the best approach is mutual education of peers by peers through a structured exchange of views and experiences.

The first seminar of this program that was held in Africa was the Senior Policy Seminar on Financial Systems and Development in Africa, which was held in Nairobi, Kenya, from

January 29 to February 1, 1990. The seminar was originally organized for a group of Anglophone countries of Eastern and Southern Africa. However, in the process of reviewing the experience, the organizers reached the conclusion that the subjects discussed at the seminar had a broader relevance and would also be of interest to professionals other than the participants. We therefore decided to publish the seminar papers, in a single volume, to make them easily available.

This collection deals with several aspects of the financial system that are relevant to developing countries in general and to Africa in particular. All the papers were either circulated at the Nairobi seminar or prepared as a follow-up to the seminar.

The first paper in the collection was prepared at the end of the seminar by the Seminar Rapporteur, Alan Roe. The report synthesizes the formal presentations and the informal discussions. In the process, Roe identifies the main policy issues and highlights the areas of consensus or disagreement among the participants.

The other papers circulated at the seminar (and presented in this book in alphabetical order by author) address specific subjects of relevance to financial system policies. The emphasis is on action-oriented issues rather than academic concerns. Some of the papers could be regrouped into subsets dealing with interrelated topics.

The papers by Millard Long, Yasin S. Hamad El-Nil and Paul Popiel could be grouped together under the theme: "Developing the Domestic Financial System: Why, When, and How?" Long argues that, for the African continent as well as for many other countries, the massive inflow of capital from the rest of the world which characterized the period leading to the debt crisis of the 1980s, cannot be expected to remain available in the 1990s. Over-indebted countries have, in effect, lost access to world capital markets—hence the need to rely on an efficient domestic financial system, able not only to mobilize the required resources but also to allocate these very scarce resources to the most productive uses. El-Nil examines the difficult question of the prerequisites for a successful financial reform, and also makes the point that reform is likely to be a lengthy process requiring a sustained effort. Popiel reviews the principles that ought to guide policies aimed at developing financial markets and the options in terms of the menu of instruments and institutions that constitute these markets.

The paper by Manuel Hinds looks at the implications for the financial sector of the more fundamental choices concerning development strategies. His message is that inward-looking development strategies have failed and that financial policies must address this reality. The financial systems must be organized in a way that supports outward development strategies.

The papers by Andrew Sheng, Vincent Polizatto and Aristobulo de Juan deal, in effect, with the subject of financial distress. The paper by de Juan and one of Sheng's papers review the issues related to financial distress in banks, and survey the techniques used to deal with distressed banks. The paper by Polizatto and the other paper by Sheng deal with bank supervision and prudential regulation. The issue here is how to avoid the recurrence of financial distress in banks, or how to prevent its emergence in the first place. The clear message is that liberalizing a repressed financial system does not mean that the system is to be "deregulated" (freed from any and all regulations), but rather that it must be "re-regulated" (regulated in a different way); prudential regulation is part of the general infrastructure required for the financial system to function efficiently.

Two papers deal with various issues related to financial reform from the point of view of the authorities responsible for the conduct of monetary policy. The paper by Sergio Pereira Leite and V. Sundarajan concentrates on interest rates and asks a series of questions that have to be addressed in the context of any attempt to liberalize a financial system. The paper by R. Barry Johnston and Odd Per Brekk deals specifically with the reform of the instruments used to implement monetary policy and to control the monetary aggregates. Their paper includes a survey of the monetary control procedures followed in industrial countries as well as a review of the experience of nine developing countries using market-based instruments of monetary control.

The paper by Dale Adams proposes "A Fresh Look at Informal Finance." Puzzled by the fact that informal finance often succeeds where formal finance fails, Adams observes that informal finance persists and flourishes because it resolves important problems that are handled poorly

or not at all by most formal financial systems. Although he warns that informal mechanisms are not a panacea and will not overcome market fragmentation, he argues that some practices of informal finance could be adopted by banks and cooperatives when it is clear that these practices help provide certain financial services more efficiently.

None of the papers included in this collection claims to provide the definitive treatment of the subjects they deal with. Indeed, as the current waves of financial system reforms progress, experience is likely to provide, before long, new answers to old questions, and also to point to new issues that are now overlooked. These documents present the current views and thoughts of professionals active in the field of financial systems and policies. Such documents are usually not easily accessible, because they are typically produced in the form of reports or memoranda for limited circulation. By making this collection publicly available, the Economic Development Institute of the World Bank has achieved a broader circulation of the information and ideas contained herein. EDI hopes that the ideas in this book will stimulate the debate on current issues that policymakers and professionals grapple with in their efforts to harness the potential of the financial system for developing their economies and improving the standard of living in their countries.



## 2

# FINANCIAL SYSTEMS AND DEVELOPMENT IN AFRICA

*Alan Roe*

The seminar brought together central bank governors, other senior officials from national organizations, and private sector practitioners from six African countries: Botswana, Ethiopia, Kenya, Malawi, Tanzania, and Zimbabwe. In addition, two African multinational organizations were represented: the African Centre for Monetary Studies and the Central Bank of West African States (BCEAO), both based in Senegal. The seminar was directed by Philippe Callier and organized jointly by the Economic Development Institute of the World Bank, the College of Banking and Finance of Kenya, and the Commonwealth Secretariat. It was moderated by Dr. Jose da Silva Lopes, a former finance minister and governor of the Central Bank of Portugal.

In the formal opening session Philippe Callier noted that the seminar had been designed to achieve three main objectives, namely:

- provide a focus for a high-level exchange of experience among practitioners in the financial sectors of Africa
- advance the process of developing local expertise to solve financial sector problems both by augmenting available training programs and recognizing the role of local training organizations such as the College of Banking and Finance of Kenya
- provide an informal context for feedback to the World Bank about the nature of, and possible solutions to, the financial sector problems currently faced by the countries.

These points were reiterated in the addresses of both Peter Muthoka of the College of Banking and Finance and Peter Eigen, the World Bank's Resident Representative in Nairobi. It was noted that the traditional view that money is merely a veil had been superseded by a clear understanding that a poor financial system can dissipate the benefits of even those limited resources that are available to low-income countries. A good financial system, however, cannot create human and physical resources, nor can foreign technical assistance contribute in more than a small way in this respect. Thus, Africa has a strong need not only to build up its own human resource base to support financial-institutional development but also to build financial systems that can indeed manage scarce resources effectively. From both these points of view the seminar and related training activities have an important educational role to play.

Following the opening proceedings, seven keynote papers by, in order of presentation, Millard Long, Y. S. Hamad El-Nil, Andrew Sheng, Manuel Hinds, Dale Adams, Jeffrey Davis, and Paul Popiel were presented.<sup>1,2</sup> In addition to the discussion surrounding these papers, the seminar involved a panel discussion on the role of development banks and a series of working-group discussions on two main themes: (1) the avoidance of and management of financial distress, and (2) the institutional reforms required by financial sector developments such as the move to indirect methods of monetary management, the development of capital markets, and improved financial sector supervision.

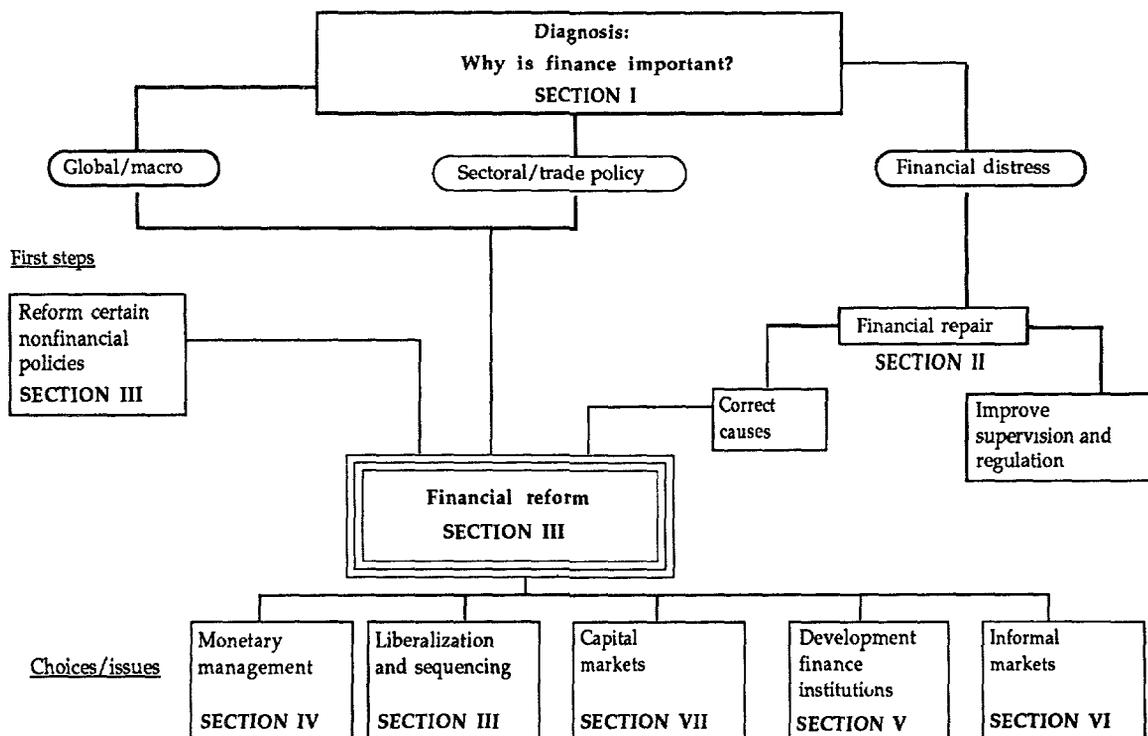
This report attempts to synthesize the formal presentations and the informal discussions, drawing attention, where appropriate, to areas of consensus as well as areas of continuing diversity and even disagreement. The discussion is organized into nine sections:

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1. The full titles of these various papers are presented in the table of contents of this volume.  
2. The paper read by Jeffrey Davis was written by Sergio Pereira Leite and V. Sundarajan.

- A diagnosis of the basic elements of recent and prospective future international developments that make it so important for African countries to try to attain improved efficiency in their financial sectors. This section corresponds broadly with the seminar discussion surrounding the papers by Long and Hinds.
- A continuation of the broad theme of diagnosis by looking at the special reform issues that also arise in the subset of African countries where the financial system is in a state of severe financial distress.
- Drawing on the paper by El-Nil, an identification of certain main prerequisites for, and components of, successful financial reform and, in the case of those systems in distress, the associated financial repair that is also called for.
- A more detailed discussion of the possible components of a successful reform program by examining the issues involved in moving from direct to indirect methods of monetary management. This corresponds broadly with the discussion surrounding the paper by Leite and Sundararajan and also the materials from working group discussions.
- The next three sections concentrate on the problems and possibilities associated with three particular institutional components of most African financial sectors: development banks, informal financial institutions, and money and capital markets. The first of these sections reflects the material from the panel discussion. The second relies mainly on the discussion prompted by the presentation by Dale Adams. The third reflects both the general propositions contained in the paper by Popiel as well as the more specific African context for these issues as they emerged from the working group discussions. Figure 1 provides some indication of the way in which these various topics link together in reality and also where they are treated in the remaining sections of this report.
- The final section summarizes the main issues.

Figure 2.1 The Relationship of Topics in this Report and Sections in which they Are Discussed



## Diagnosis: Why Do African Financial Sectors Need to Become More Efficient?

In introducing his paper, Millard Long noted the enormous changes in recent years in the perceptions about the role of the financial sector, both in the developing countries and in the work program of the World Bank. Twenty years ago, developing countries saw financial systems primarily as tools to tap finance for their governments or state enterprises or to use to direct credit for the use of priority sectors. Today, this approach is changing, and financial systems are increasingly viewed as important in their own right for the mobilization of resources; for the efficient allocation of credit; and for the pooling, pricing, and trading of risk. In the World Bank during the 10 years to 1980, detailed financial sector work other than on development finance institutions (DFIs) had been done on only three countries. In the 1980s, by contrast, the Bank undertook such work in almost all its member countries and has made at least 13 policy-based loans for financial sectors in the past three years. In Africa alone, studies and potential financial sector loans were now in prospect for some 27 countries.

In Long's judgment, there were three fundamental reasons why domestic financial sectors had already acquired, and would continue to acquire greater significance in the overall development efforts of the African countries. First, in several countries, the view that the government was the driving force of economic growth was giving way to an attitude that included a much-enlarged role for the private sector. This, in turn, elevated the importance of the financial system since the private sector, unlike the government, could raise finance neither from taxation nor from money creation. It had to either borrow or save.

Second, the net positive flow of resources from abroad that had underpinned investment in most developing countries in the late 1970s and the early 1980s had become a large negative flow, and this had placed far more responsibility for investment financing on domestic savings. Specifically, the net resource transfer from abroad to developing countries as a whole, which had peaked at US\$35.2 billion in 1981, had declined systematically since then to such an extent that the net transfer in 1988 had been minus US\$50.1 billion.<sup>3</sup> The indications are that the 1990s will be more like the 1980s in this respect than the 1970s. Finally, the failure of the resource transfer and various other difficult problems such as lower commodity prices, higher interest rates, and lower growth have resulted in a widespread inability of productive sector enterprises in many countries to service their debts with resultant liquidity and even solvency problems for the banks and the other financial institutions that are the creditors of these enterprises.

While the first two of these reasons establish a case for more efficient financial systems to ensure the most productive use of limited domestic and foreign savings, the third argues the need for shorter term repair and recapitalization to reestablish quickly the ability of banks to discharge their functions with reasonable efficiency. While Long used examples of countries to demonstrate the seriousness of this last problem, he did not provide any overall measure of the scale and scope of the problem in Africa. The discussion from the floor, however, drew attention to the diversity of experience in this regard. Most country representatives conceded that they faced various degrees of localized financial distress, but there was strong resistance to the idea that broadly based distress was a standard feature of African experience and that it required being elevated to a primary position in the agenda for reform in each and every country represented in the seminar. By contrast, although several participants bemoaned the declining trend in available external finance and emphasized the need to correct this, there was general agreement that the second of Long's points was indeed a major driving force for financial reform. Specifically, if the cushion of generous foreign finance is no longer available, financial systems need to operate to ensure the highest possible degree of domestic resource mobilization, and the most efficient allocation of all financial resources.

These global and largely macroeconomic aspects of the diagnosis were further extended to embrace technology, trade policy, and the sectoral aspects of Africa's need for efficient

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3. Throughout the text, billion is defined as thousand million.

financial systems in the discussion led by the paper by Manuel Hinds. The starting point was his argument that the inward-oriented trade policies widely adopted in Africa in the 1960s had proved inherently unstable in the long-run for two main reasons. First, although set up supposedly to reduce imports, the sheltered industrial sectors established under such regimes had been necessarily and permanently fueled by net imports from abroad. Second, insofar as the finance for these imports was earned, it had to come from the exports of primary commodities, thereby rendering the countries of concern more, rather than less, dependent on primary commodities. Furthermore, the inherent inability of the model to sustain rapid economic growth had been compounded in most recent years since 1978<sup>4</sup> by declining prices for non-oil primary commodities thereby requiring the countries concerned to sell greater volumes of commodities in order to purchase the same import quantities. These problems have been aggravated by the decline in the net foreign transfer already referred to, which has meant that the gap between commodity export earnings and the import needs of inward-looking industrial sectors have become increasingly less likely to be met by way of foreign capital transfers.

The already strong case that these arguments establish the need to look more seriously at an outward-oriented and export-based approach to development is intensified in Hinds' view by an analysis of international technological developments. Specifically, the nature of such developments is intensifying the competition from synthetic substitutes for primary commodities and further depressing commodity prices. (Indeed, as one participant pointed out, the recent developments in the biotechnology revolution threaten to undermine even a sunny climate as a source of comparative advantage for supposedly tropical products.) In addition, the greater marketing, packaging, and knowledge intensity of most modern products was reducing the share of primary commodities in the overall value of such products.

If, however, the decision is made to look more seriously at an outward approach to development, several very important implications emerge for the financial sector. First, given the frenetic pace of technological change in most internationally traded products, successful exporting increasingly requires an extremely flexible approach to the technologies, to the specific products put up for sale, and, above all, to the use of capital in an economy. Such flexibility and the continued refreshment of new ideas, which success on world markets also needs, are unlikely to be served by a system that tightly and centrally controls the allocation of resources. A flexibility in domestic prices allied to commercially motivated financial institutions is required to transmit signals quickly, to stimulate new entrepreneurs and activities adapted to new patterns of relative prices, and to encourage the early demise of institutions that fail to achieve an appropriate alignment of their products and prices with emerging international standards. A directed and inefficient financial sector cannot do this job.

Second, good and flexible financing is an essential element underpinning the international competitiveness needed to sell large volumes of exports. For example, an African country that persists in using a sluggish system of credit allocation will not be able to achieve the product flexibility and competitive prices achieved on the basis of the very flexible financing available to, for example, exporters from Malaysia and the Republic of Korea.

Third, controls on both inward and outward capital movements are inimical to successful export and export marketing. For example, countries inexperienced in industrial export marketing, as most African countries are, can overcome some of their problems, in the way the Republic of Korea has done, by investing in, or establishing joint ventures with, marketing companies in the main destination markets. This, however, is not possible if the export of capital to establish such links is prohibited. Similarly, the rapid upgrading of products and technologies as well as effective international marketing can be enhanced by appropriate inward direct foreign investment in technology transfer and other similar arrangements. This will be precluded by the tight systems of capital controls currently applied in many African countries. In short, a successful approach to open trade implies considerably more international

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4. The full detail from 1948 to 1988 is shown in figure 6.1 of the Hinds paper (Chapter 6 of this collection). The associated projection to the year 2000 indicates that the falls already experienced will not be reversed.

openness of financial systems, moving toward full currency convertibility, as well as a greater degree of freedom for financial institutions domestically.

Comments from the floor indicated little serious disagreement with Hinds' basic diagnosis but very considerable disquiet about what it might or could mean in practice in an African context. The discussion essentially rehearsed some well-tryed arguments about inward versus outward policies rather than financial sector issues specifically. Hence, they are reported on here only briefly. A major preoccupation mentioned by several participants was the very limited product basis available for African countries to launch a serious export offensive. It was noted that Africa is very well integrated internationally in relation to its primary commodities, such as tobacco and coffee, but price trends were such that any long-term benefits that might stem from this were undermined. Zimbabwe, in particular, faced an extremely difficult problem because of its high exposure to two extremely sensitive products, tobacco and asbestos.

A second line of argument was that in some unspecified way, Africa is quite different from the countries of Southeast Asia and is facing an environment for export promotion that is substantially more difficult than it was in the 1960s and 1970s, when many of the newly industrialized countries (NICs) achieved their export breakthroughs. In particular, there are now gluts of certain products of interest to Africa—for example, a near doubling of the number of coffee producers in the market in the past 20 years. A related argument was that intensified protectionism in Western Europe and the United States was also problematic, and it was asserted that currency convertibility was not a possibility for most African countries at the present.

These familiar and somewhat pessimistic views generated a lively debate, and a variety of international experiences were brought to bear on the matter. It was noted, for example, that notwithstanding some obvious difficulties, the gains from expanded trade were still enormous, and the first generation NICs now represented large export markets that were formerly not available to prospective new entrants into the export business. The example of Chile was advanced to demonstrate how rapidly an export explosion could emerge from formerly repressed and distorted circumstances and in the supposedly more difficult era of the 1980s.

On the matter of protectionism, it was noted that countries such as Malaysia and Korea had only needed "one eighth of one inch" of an open door to gain export access to the main industrial markets. Furthermore, the annual *expansion* of the industrial exports of many of these countries (for example, US\$6 billion in the case of Korea), had been many times greater for many years, in spite of protectionism, than even the total industrial exports of any African country. In relation to the product base to support an African export push, it was observed that many of the products now underpinning the economies of the NICs were not even conceived, let alone invented, when these countries embarked on their own industrialization, and it would also have been regarded as wholly implausible to anticipate, for example, that Korea could ever have become one of the world's leading shipbuilding nations. Although no consensus was achieved, there was a clear recognition of two things. It was recognized first that, in the absence of a successful African role model, the act of faith required for full implementation of the policy reforms implied by Hinds' analysis is a substantial one and not readily contemplated by even the more self-confident of African governments. Second, that the African attitude to international openness and competition is still somewhat hesitant and still strongly conditioned by the philosophies of Harambee and Arusha. Much more still needs to be done to emphasize the enormous opportunities of modern technologies and the international marketplace and to de-emphasize the evident difficulties of a closer association with the world market.

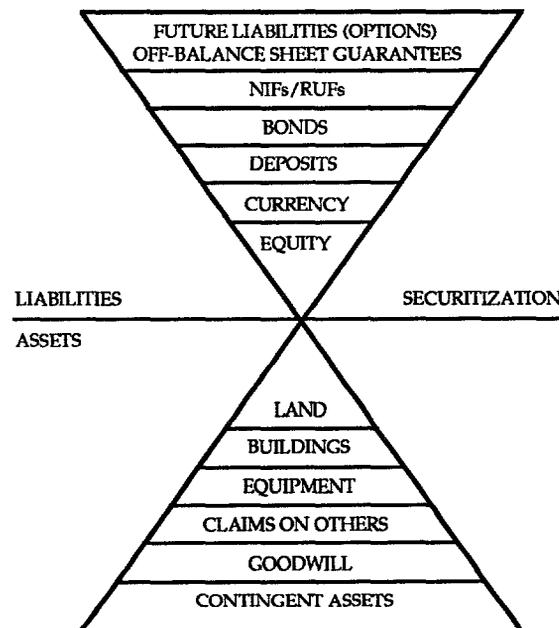
### The Causes and Consequences of Financial Distress

It was pointed out several times from the floor that widespread financial sector distress is neither a unique African phenomenon, nor is it universally present in African economies. Several of the countries represented at the seminar, especially Botswana, Zimbabwe, and, to a

lesser extent, Kenya, were able to report that financial distress afflicted only very small elements of their systems. For these countries, the theme of financial distress had rather too much prominence in the seminar, and the discussion about its consequences was of mainly hypothetical interest. For other countries such as Tanzania and some of the West African countries represented through the BCEAO, it was a more centrally important topic. For all countries, discussion that defined the steps to avert future financial distress were of great importance. The first part of this present section deals only narrowly and briefly with the causes and consequences of distress. The second part focuses on the results of the working-group discussion about how to avert and manage financial distress.

In his introductory remarks on this topic, Andrew Sheng noted, first of all, that any financial system is like two inverted pyramids corresponding to assets and liabilities (figure 2.2). In the early stages of financial development, the height of both pyramids is relatively low, with equity liabilities providing almost full cover for safe assets such as land and buildings. Hence, the pyramids balance quite easily, and the systems are stable; however, financial sector development over time will lead to the increased height of both pyramids, since this requires the expanding asset base to be supported by a progressive increase in, and diversification of, liabilities. Expansion and diversification on one side of the balance sheet into more risky instruments, especially options and futures, are likely to be accompanied by increasing risk on the other side of the account. The polar cases are those of complete security (all assets backed by equity) and full risk or infinite gearing (all assets backed only by liabilities). The intermediate case is of one-to-one leverage, where capital and liabilities provide equal cover for assets. Because of the inherent and historically demonstrated instabilities of the two pyramids of development financial systems (for example, the Great Crash), most countries have long seen the need to establish various degrees of central bank controls and other institutional and legal structures to shore up the financial system and deal with the worst manifestation of periodic difficulties.

Figure 2.2 Visualizing Financial Systems



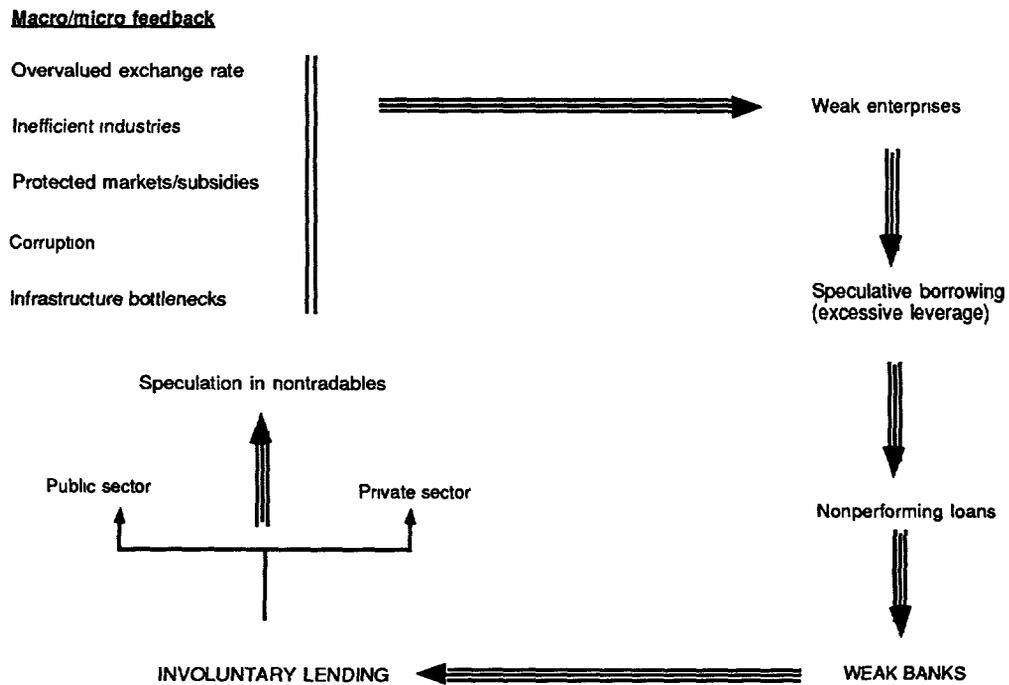
Source: Andrew Sheng, *Bank Supervision: Principles and Practices* (Chapter 13 of this collection).

What are the particular circumstances that can cause financial systems such as those in Africa to get into a distressed state? Sheng's answer is that most of the problems arise on the asset side of the account and derive from three basic elements. First, assets in financial institutions are normally covered to a large degree by liabilities implying a low cushion of capital. Second, asset values are prone to valuation changes. In particular, the cycles of economic activity that financial institutions as well as productive enterprises experience can give rise to significant percentage falls in asset values which, in some cases, can result in the remaining asset values being insufficient to meet liabilities. Third, asset values can also change by large percentage amounts because of bad management, such as weak loan appraisal in financial institutions, and also because of corruption.

These basic elements can conspire in a complex macro/micro feedback process (figure 2.3). Although there may be some common elements in this feedback process in different situations, the detailed pattern and direction of cause and effect will certainly differ on a country-by-country basis. The essential nature of this process, however, is that macro or sectoral policies such as overvalued exchange rates or protected markets that foster inefficient industries will also result in the establishment of enterprises that are financially weak. Thus, when one or more of the circumstances that protects these enterprises is removed, the enterprises will be unable to meet their financial obligations and the creditor banks will be saddled with bad debts. This situation will be worse in those cases where injudicious lending has provided excessive credit to certain enterprises and has resulted in excessive leverage.

In any event, the deterioration in bank portfolios, if at all widespread, will result in a substantial weakening of the finances of some or all the banks. This, in turn, may result in involuntary lending (evergreening) when banks lend further to bad debtors in order to maintain the banks' existence and, thus, safeguard their own limited capital. It may result in fraudulent or reckless lending if bank managements attempt to recoup their own failing situations by allowing highly speculative, but potentially high-risk, lending in a desperate attempt to forestall disaster. This is likely to result in very high interest rates as desperate borrowers

Figure 2.3 The Macro-Micro Feedback Process



come into contact with desperate banks and intensify competition for scarce credit. Depending on the macro-environment then prevailing, it may be that real estate and other speculation in nontradable goods will be one of the few activities, other than distress borrowing, able to contemplate the high lending rates.

The crucial issue here is that the financial weakening of the financial sector, for the reasons just described, will exacerbate the fundamental weaknesses of resource use in the economy associated with policies such as overvaluation and excessive industrial protection. The fundamental reason for this is that financial systems characterized by broadly, or even narrowly, based distress will not allocate credit resources efficiently (see the paper by de Juan and the paper by Sheng on bank supervision). The institutions are likely, instead, to focus on the preservation of their remaining equity even where this means further lending in ways, and to enterprises, that are patently inefficient and financially in trouble. If it is accepted, given the analysis in the previous section, that improved allocative efficiency of financial resources will be a priority for Africa in the 1990s, then this represents a powerful reason for removing situations of financial distress where they occur.

The discussion from the floor provided an African dimension to the Sheng structure and also suggested certain specific further elements to that structure. It was noted, for example, that high intermediation costs are often a feature of banks in the region. Where banks are owned by governments, these high costs can result partly from severe overstaffing, and one participant inquired whether there were any internationally accepted standards of, for example, staffing-to-assets ratios. This was generalized to the proposition that there was a need for a continentwide data base to provide a basis for comparison of banks' performances in several dimensions in different countries. Although some doubts were also expressed about whether this was feasible, there was a reasonably broad view that this might be an appropriate function for the African Centre for Monetary Studies.

A second proposition that generated considerable debate was the view that banks in developing countries in general, and development banks in particular, ought to be evaluated on some basis other than profitability. It was argued that they might be expected to have relatively high transaction costs, since they are essentially engaged in an investment activity to expand financial services. It was unclear whether the acceptance of this proposition necessarily meant that developing-country banks had to accept weak finances and eventual financial distress as an almost inevitable consequence of their activities. It was recognized by some, however, that this danger could be avoided, at least theoretically, if the broader social objectives often imposed by governments on banks were funded explicitly and transparently in government budgets. The reality was rather different with the many African governments that fail to recognize the damage potentially inflicted on banks by requiring them to take on social/developmental functions. A particular manifestation of this was the propensity of some governments to regard banks as an easy source of tax revenues and, thereby, to subject them to reserve requirements substantially in excess of prudential levels and to the compulsory purchase of low-yielding government securities. All this having been said, however, there was broad agreement that all banks had to find a sensible balance between the interests of their depositors, who argued for conservative approaches and asset portfolios, and the needs of development, which sometimes argued for more adventurous attitudes. Unfortunately, no guidelines to define this balance were suggested.

The discussion of the causes of financial distress was concluded by the following listing of elements that, in Sheng's view, are frequently associated with the condition.

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#### *Macroeconomic factors*

- fiscal deficits and balance of payments deficits both greater than 2 percent of GNP
- sudden changes in the terms of trade
  - the exchange rate
  - the inflation rate

interest rates

- double digit changes in stock market prices
- property prices
- commodity prices
- credit expansion

#### *Microeconomic factors*

- weak bank management (including lack of professional staff, poor reporting on income accrual and provisioning, inadequate internal controls, absence of arm's-length arrangements with borrowers, inadequate capital, and excessive political interference with credit allocation)
- inadequate bank supervision (including overreliance on external auditors, inadequate staffing and on-site surveillance capability, outdated laws and regulations, and inadequately punitive control powers)

In the light of this discussion, two working group topics were defined namely:

- What issues need to be considered in avoiding financial sector distress?
- What steps are required to deal with existing distress?

The group discussing the avoidance of the problem essentially came out with the same broad macro-/microclassification of possible causes of distress, as suggested by Sheng, but a number of important elements were added. First, it was noted that the broad environment of economic activity was a crucial element in underpinning or damaging financial sector stability. Evidently, political stability itself was important, but the ownership structure in the system may itself be important. There was some dispute as to whether state ownership of productive assets was of itself a recipe for weak financial sectors because of the privileged access to credit and the other favors that such enterprises could obtain from the political system. The extremely poor financial health of the state farms in Ethiopia and the broader set of state enterprise problems in Tanzania were adduced as arguments in favor of this proposition. It was also argued, however, that good management in other state enterprises in Africa, including certain industrial enterprises in Ethiopia, demonstrates that there is no inevitability about state ownership leading to financial distress. Good managers could do well without special help and, equally, could divert some of the worst aspects of attempted political interference.

Second, in relation to macroeconomic issues, it was noted that the poor management of numerous policies (including price control, foreign exchange allocation, interest rate policy, exchange rate policy, and fiscal policy) could contribute strongly to financial sector problems. Although there was widespread recognition of the inherent instability facing many African countries because of their external trading environments, it was also agreed that stable management of the main policy instruments previously listed was a key element in averting financial problems. Thus, the accumulation of serious overvaluation of the exchange rate, followed by a large devaluation, would be more likely to encourage ill-conceived loans/investment decisions and financial distress than would gradual exchange rate adjustment. Equally, a rapid adjustment of interest rates, even to achieve some desirable target level, might be problematic relative to a more gradual adjustment. More fundamentally, the reasonable stability of instruments such as the interest rate and the exchange rate that, in turn, will help ensure financial sector stability, is best assured by the achievement of reasonable stability in the price level. This, in effect, has major implications for fiscal and monetary policies.

Third, there was broadly based acceptance that certain common aspects of policy in Africa, such as administered exchange rate allocation and credit allocation, do contribute to financial weaknesses in productive sector enterprises and so to overall financial sector problems, but the discussion group saw little real prospect that such policies could be rapidly liberalized. In

particular, it was argued to be impractical to expect a rapid dismantling of foreign-exchange allocation processes given the extreme seriousness of the foreign exchange shortage in many African countries (although the countries of the Zone Franc do provide examples of countries enjoying convertible currencies). Thus, the avoidance of financial sector problems associated with such policies could be managed, at best, by a gradualist approach to their liberalization.

Turning to the possible *micro* causes of distress, the discussion group found it convenient to recognize the CAMEL framework (capital, asset quality, management, earnings, and liquidity) as the basis for defining good practice in relation to bank management and supervision.

On *capital adequacy*, it was noted that African legislation requiring a capital-to-asset ratio of, say, 7.5 percent is usually satisfactory. The problem is often the quality of information about, for example, the true losses on portfolios, which can easily undermine the validity of the actual ratios revealed on the basis of published accounts. The key to resolving this problem is for banks to be required to maintain better internal management information systems, and for central banks to establish much more effective supervision procedures.

On *asset quality*, there was some emphasis placed on the need to incorporate a proper risk-rating when assessing this and, for example, to take due account of the presence or absence of collateral. There was considerable disagreement here, however, with some participants arguing that the widespread use of collateral-based lending in Africa has allowed the banks to avoid their responsibilities for proper risk assessment.

On *management*, one important point that was made was that central bank staffs in Africa are often less experienced than the staffs of commercial banks. This makes it extremely difficult for the central banks to define and impose objective standards of good management practice on the commercial banks.

On *earnings*, considerable stress was laid on the need to keep a watchful eye on overhead costs. Again, there was a potential conflict, since the development pressures on banks might require them to open branches in sparsely populated areas and so raise their overall costs disproportionately to turnover.

On *liquidity*, emphasis was put on setting a liquidity requirement that was reasonable by prudential standards, but not so high as to undermine earnings. Again, it was noted that the imposition of liquidity ratios as back-door taxation devices was counterproductive from this point of view. Although legislation on liquidity ratios was generally reasonable, rules and practice regarding the matching of liquidities/maturities were often absent or inadequate.

In relation to bank supervision, it was agreed that too much stress was often laid on external auditors and accounting standards such as generally accepted practice (GAP) and that this could lead to the unnoticed build up of weak portfolios. In some countries, such as Zimbabwe, there was considerable ambiguity about who was responsible for supervising the banks, and in others, insufficient attention was given to restricting loan concentration ratios. There was a reasonably broad consensus that most countries could usefully take steps to strengthen their legal frameworks for bank supervision, to strengthen the staffing and professionalism of bank supervisors, to attempt to achieve more on-site supervision, and to update monitoring of evolving financial practices and approaches such as off-balance sheet lending.

The discussion group on managing existing financial distress noted the very considerable degree of diversity in experience among different countries. In Kenya, the relative ease of entry into the banking sector in the period 1982-86 had resulted in a rapid growth in the number of institutions, some of which were now in difficulty. The response to this type of problem seemed to lie in tighter criteria for licensing new financial institutions and for supervising their performance.

In Zimbabwe, which had one of the most broadly based financial systems in Africa, a high degree of conservatism in banking had largely resulted in avoiding the problems of distress, but this may have been at the expense of the speed of movement on social and developmental objectives. As one commentator in the plenary session noted, however, it was difficult to disentangle whether the avoidance of financial problems in Zimbabwe had resulted from the inherent conservatism of the local bankers or from a relatively tight system of regulation that had instilled conservative practices in the banks. The Ethiopian experience was again rather

different, since all financial institutions are owned by the government. Thus, the avoidance and correction of financial distress is largely a matter of looking initially at, and correcting, certain government policies.

As regards the specific steps required to manage and then remove financial distress where it has occurred, there was broad agreement that the first thing to do was to identify and then remove those factors in macro policy, sectoral policy, and elsewhere which have caused the problems in the first place. This largely involves some or all of the macro matters already discussed earlier in this section. To the extent that the problems arose from excessive political interference in finance and, especially, directed lending, one approach might be to provide government support to banks to enable them to shoulder this additional burden.

The Zimbabwean approach under which the banks are encouraged to support agricultural lending programs by the government, guaranteeing a part of each loan and, therefore, assuming some of the risk, is one possible way forward. Once the fundamental causative factors had been identified and removed, it was appropriate to define a recapitalization program for troubled banks, provided only that the management, regulation, and supervision practices were such as to avoid further losses because of problems in bank management and procedures. Finally, there was agreement with the first group that a vital step in all cases was to improve the quality of the information system, the legal framework for regulation and supervision, and the actual practices of bank supervision.

### **The Prerequisites for, and Content of, Successful Financial Sector Reform**

Financial reform can usefully be subdivided into two categories. The first is financial repair, which is essentially the process of eliminating states of distress in the banks as well as their main causative factors. The second is financial reform proper, which is the process of changing institutions, adding new ones, eliminating distorting financial policies and practices, and generally establishing the basis for greater efficiency in both the mobilization and the allocation of scarce resources. The first of these categories has already been discussed in the previous section and is assessed more extensively in the papers by Sheng (on bank supervision) and de Juan. As was noted several times during the seminar, the correction of financial distress when it is present is a first and vital prerequisite for financial reform in the broader sense. There is little real prospect of moving toward a more market-based system of allocating resources through the financial system or to a greater diversification of financial institutions and instruments while a major part of the established financial system is in distress.

Other prerequisites for, and some of the main components of, effective financial reform were elaborated in detail in the session of the seminar led by El-Nil. His first point was that financial reform will be most likely to succeed if there is a clear awareness of the need for reform. It is important that the limitations of the typical African systems, which have been "shackled with extensive imprudent regulations operated on inefficient grounds and dominated by a few institutions," become broadly understood. This can help ensure that the strong political commitment necessary for successful reform can indeed be achieved. Only if this unrelenting commitment is in place can the authorities really face up to their task of redressing the imbalances in the patterns of credit use in the economy between sectors, regions, industries, and so forth, and tackle distortions in relation to other matters, such as the costs at which credit is delivered and the probable retrenchment of jobs in some sectors. It is important, above all, that governments realize that they themselves may be a part of the problem to the extent that they prioritize for themselves direct credits from the banks or preempt available saving by forced sales of securities at unrealistically low interest rates. The key to putting these types of problem right is the avoidance or elimination of large budgetary deficits.

A second condition is a reasonably conducive overall macroeconomic environment that is free of destabilizing inflationary pressures and that provides some reasonable scope for formal financial sector activity. A particular problem here, in addition to that of high budgetary deficits, is the policy of many African countries of persisting with unrealistically low interest rates that are often highly negative in real terms. This can result in very inefficient linkages

between the supply of saving and the demand for investment, in a failure to signal the true scarcity of capital and capital funds, and, therefore, in unnecessarily low growth. A policy of unrealistically low interest rates is also inimical to a successful fight against inflation. This is not to say that increases in interest rates will be straightforward or unambiguously beneficial to the economy. It will be difficult to see in any particular situation how the costs of such hikes might be shared among banks, borrowers, and even depositors, but some burden undoubtedly will arise. In addition, the effectiveness of interest rate reforms designed to give a more accurate guide to the scarcity of capital may be diluted both by the predominance of informal financial transactions in some economies (see also the section on the role of internal markets) and by the difficulties of portfolio adjustment when the reforms are introduced during periods of restrictive credit. Hence, the precise manner in which reform is designed (for example, should there be maximum loan rates for a transitory period after deposit rates are freed?), is likely to be an important factor in its success. One point stressed in the discussion was that there is no point in raising interest rates to encourage more mobilization of resources if other distortions in the financial system are such that an inefficient allocation of these new resources will likely result.

A third condition for effective financial sector reform is the quality of the regulatory framework as well as the skills and integrity of those entrusted with applying it. Two points were stressed in this context. First, the reinforcement of the regulatory framework in terms of the quality of the information systems, improved rules regarding accounting and disclosure, enhanced credit supervision, lower taxation in the financial system, and a generally stronger legal framework, are normally requirements of successful reform. Second, notwithstanding the value of the technical support from the International Monetary Fund (IMF) and the World Bank, Africa is in dire need of an improved cadre of financial experts, analysts, and managers who can design and apply the regulatory and institutional structures to support reform. Hence, as many other participants repeatedly echoed during the seminar, high quality and extensive training is a critical ingredient of successful reform, as the experiences in Thailand, Indonesia, and Malaysia all seem to testify.

A fourth condition for successful reform is that a significant time horizon should be provided for it to reflect the current rudimentary and fragile condition of financial sectors in many African countries. It can take a considerable amount of time to convert narrow and repressed systems into the deep and efficient financial sectors that are conducive to the conduct of monetary policy and the mobilization and allocation of resources. Equally, a certain minimum financial capacity needs to be in place to receive and absorb reform programs effectively, even in a medium-term framework. In this regard, El-Nil argued that even the time frame of the IMF extended facilities may be insufficient to implement an extensive menu of reforms. This point was picked up in the discussion, with several participants arguing that the time frames required in the IMF and World Bank programs often were not long enough. It was noted, as well, that reform programs that are strongly "front-loaded" can be beneficial in the sense that they can limit the possibilities for the mobilization of resistance. Equally, delays in some aspects of reform can merely result in the accumulation of problems. Nonetheless, there was a clear sense that in some cases, and in some unspecified ways, the particular fragility of the African circumstances needed to be taken into account when reforms were being designed and sequenced.

Finally, attention was drawn to the need for significant external financial support in underpinning financial sector reform. This was argued in relation to the fact that most financial sector reforms currently constitute merely a part of a broader set of adjustment measures that can impose adjustment costs both on the government budget and on private agents; they can have serious social ramifications that need to be compensated; and they can imply new investment requirements that need to be financed. In the financial area alone, policies of higher interest rates will increase payments on the government's domestic debt, while the recapitalization of existing financial institutions and the creation of new ones will all involve substantial outlays. If the donor community is really convinced of the eventual benefits of reform, it ought to stand ready to assist with the financing of some of these short- and medium-term costs. In a nutshell, El-Nil argued, "external support is the centerpiece of an enabling

environment for effective financial sector reform, at least in the present difficult financial situation of most African countries."

Subsequent discussion was focused mainly on two issues. The first concerned the role of external finance, with one argument being that organizations such as the World Bank often wished to see substantial reform in place before they would provide the funding for banks and in the other ways advocated by El-Nil. This point was disputed later in the seminar when it was argued that generous external support had always been available where countries had indicated a serious commitment to reform, whether in the financial sector or more generally. Ghana was an excellent African example of this. Second, there was some resistance to El-Nil's suggestion that direct controls in the financial sector were invariably damaging and in need of removal. The case of Zimbabwe was cited as one financial system that relies extensively on direct controls but is nevertheless very strong. Others emphasized the inherent difficulties of getting enough funds to agricultural and other social priority sectors if the direct allocation of credits were to be ended. Similar points were made by the Ethiopian participants.

There was broad agreement overall with El-Nil's proposition about the need for strong political commitment, for generous external support, and for an early strengthening of legal and regulatory frameworks. Most participants also accepted the need for a stable macroeconomic environment for financial reform, although several noted that countries often needed to pursue macroeconomic stabilization and financial reform simultaneously rather than sequentially. Most residual disagreement focused on the timing, the sequencing, and, to some degree, the detailed content of reform programs, some of which were issues that came up later in the week.

### **The Reform of the Mechanisms of Monetary Control**

One of the standard arguments in favor of trying to achieve deeper and more liberal financial systems is that this may enable the monetary authorities to move toward indirect and market-based systems of monetary management and away from the direct methods of control based on credit controls more commonly found in Africa. The argument for indirect controls is, again, based on the efficiency of resource use. Direct credit controls by assigning some of the decisionmaking about how to use credit to bureaucratic authority will necessarily be crude and cumbersome relative to the flexible and market-influenced allocation that an effective indirect system of control can achieve.

In the introduction to the paper read by Jeffrey Davis and written by Sergio Pereira and V. Sundararajan, it was noted, however, that since the move to indirect monetary management requires financial liberalization, there is a question about whether one early result of that liberalization might actually be some loss of monetary control. The dangers faced in this context were several. As liberalization proceeds, there will be many pressures on the system to expand credit, for example, to bail out failing businesses, to finance borrowers now facing higher interest charges, and to accommodate the enlarged budgetary deficits possibly resulting from some aspects of liberalization. Above all, the abandonment of a known, albeit imperfect system, is bound to confront the authorities with an enhanced level of uncertainty about the connection between their own actions and the resulting changes in credit and monetary aggregates.

Against this, it was pointed out that the direct controls themselves rarely provide an accurate level of control. They are relatively easy to avoid, they encourage disintermediation, and they result in the emergence of substitute forms of lending outside of formal control. Overall, it is valid to argue that if sustained for any length of time, credit controls result in a greater and greater degree of control of a less and less relevant aggregate. Furthermore, many of the worst dangers associated with moving to indirect controls can be limited if the change is preceded by efforts to establish an appropriate environment. As in the case of reform measures more generally, this environment should include reasonably stable macroeconomic conditions, the avoidance of excessive monetary pressures from the budget, and an effective system for information and bank supervision.

The second point concerned the appropriate framework for indirect monetary control. In essence, this involves the need to specify and monitor the connections between those monetary variables (instruments) that are directly under central bank control and the ultimate objectives of that control such as inflation and levels of economic activity. The classic approach to this is to define one or more intermediate targets (indicators) such as a monetary or credit aggregate that could be reckoned to relate in a stable fashion to the ultimate objectives of monetary policy. The three categories of variables involved in the control process would then be as follows:

- an operating variable (or instrument)—normally a reserve base measure or some short-term interest rate
- an intermediate target variable (or indicator)—some concept of broad money or a credit aggregate
- ultimate objectives—normally inflation or economic activity levels

There are, of course numerous practical problems in giving effect to this framework, especially in the difficult and adjustment-driven circumstances currently facing many African countries. Several of these were brought out in the discussion. The most important concern is the questionable stability of money demand and supply relations, especially during periods of rapid liberalization when interest rates, inflation expectations, and cash flow balances may all be changing rapidly. A second problem is that of defining an appropriate intermediate target variable given the role of, and possible growth of, money substitutes.

The operational requirements for effective application of the framework are also substantial. For most practical purposes, these subdivide into three categories. The first is a sound information base that will include regular, probably daily, monitoring of the central bank's own balance sheet; a proper reconciliation of data in monetary, budgetary, and balance of payment accounts; regular, and, again probably daily, information from money market operators about short-term liquidity conditions; regular monitoring of the target economic variables such as inflation; and production levels that monetary policy seeks to influence. The second is a forecasting framework focusing particularly on those items in the central bank's own balance sheet that relate to the monetary control framework, those money-related items not within direct central bank control, such as the key variables in the external sector accounts, and particularly important, government sector flows and especially large prospective payments. The third is an institutional requirement for matters such as joint ministry of finance/ central bank monitoring and policy committees, working groups on particular technical matters, and appropriate training programs, especially in relation to the new functions and jobs implied by the control framework.

The third main issue in the presentation concerned the question of the appropriate instruments to use for indirect monetary control. It was stressed that there is no need for African governments to look for the emergence of complex secondary markets in money market instruments as in the United States and the United Kingdom. All that is required is some basic market oriented instrument that can be bought or sold by the central bank so as to provide some control over liquidity shortfalls or excesses in the system and allow the authorities to influence the demand for, and supply of, reserve money. There are, however, auxiliary conditions for any instrument to be used effectively, namely that (1) reserve requirements have to be set and strictly adhered to (implying that discount rates should be applied on a penal basis to discourage serious deviations from reserve requirements), and (2) central bank rediscounts and other credits have to be used consistently with monetary control objectives (implying that borrowing from refinancing windows should be kept consistent with the targeted track of reserve money expansions).

Treasury securities have some obvious advantages as the instrument of control in terms of their availability, homogeneity, and limited risk. Hence, one way forward for some countries might be to convert treasury overdrafts with the banks into tradable securities. Another possibility would be for the central bank to issue its own securities, which would also have the merit of introducing some separation between monetary and budgetary operation. A third

possibility alluded to in relation to Malaysia was central bank transactions in foreign exchange swaps. The main choice to be made in relation to the selling techniques for the securities chosen as the basis for control was a choice between "free auction" and "fixed price auction" approaches. The free auction is better attuned to the objective of monetary control, since it allows the authorities to control the quantity of securities issued and so the size of the injections/withdrawals of liquidity from the system. The fixed price auction, however, enables the retention of some control on the price of securities and, therefore, on the general level of interest rates. Again, there are several side issues that need to be kept in mind in defining and setting an appropriate security for monetary control purposes. Possibly the most important are the need for transparency in the chosen market to encourage its healthy development, the avoidance of too many ad hoc sales, the publication of accurate and timely information, and the identification and authorization of appropriately qualified dealers.

The discussion of these and related topics took place both on the floor of the seminar and in the context of one of the later working groups. The working group recorded a high degree of consensus about the merits of indirect methods of control but considerable doubt and skepticism about the capacity of most central banks in Africa to accept all the stringent operational and other requirements of such systems, as enumerated above. It was noted first of all that there is considerable diversity across Africa about where the responsibility for monetary control actually lies. In Kenya, that responsibility lies between the central bank and the treasury; in the Francophone countries under the BCEAO authority it lies between the treasury and the ministry of planning; in Zimbabwe and Malawi it mainly lies with the central bank. Thus, for some countries there would be a need for some changes in organizational structures to give effect to a classical system of control based in the central bank.

In relation to the question of how far African countries had gone toward indirect methods of control, the general view was that the movement had been very limited. In Ethiopia and Tanzania, for example, there had been scarcely any moves in this direction, whereas in Kenya, Malawi, and Zimbabwe, there had been some experimentation. The Ethiopian participants pointed out that for them a priority was to make direct controls work better and not to eliminate them. In the difficult circumstances associated with adjustment, direct controls, in their view, were essential to maintain a proper check on what is happening. A general point made was that few countries had a clear view of the precise steps and the timetable required to achieve improved systems of monetary control. From this point of view the clear schematic presented had certainly been most helpful. It was also noted that the prescriptions for reform in this area emanating from the IMF referred to timetables as short as nine months. It was doubted whether this was realistic in terms of the numerous institutional, legal, and informational reforms that are involved. It was also stressed by several participants that the process cannot even begin when there is very severe monetary instability, a high degree of price distortion in the system, or, as in the case of Ethiopia, a serious monetary overhang.<sup>5</sup>

Two further and related matters also briefly entered the discussion. Several participants repeated the familiar point that indirect methods of monetary control are difficult to adopt when elements of the exogenous environment, such as the terms of trade, are very unstable. This point was accepted, although it was also noted that the unstable environment, while it certainly complicates the task of monetary control, does not represent an unambiguous argument for direct rather than indirect methods. A related point was that in a monetary union such as that in West Africa and in the Common Monetary Area in southern Africa, there is no scope for an independent monetary policy and so possibly less urgency to adopt a liberalized approach. Certainly in economies having membership in such unions, the other arguments for liberalization had precedence over those based on the monetary control arguments.

There was some argument, too, over one proposition put forward to the effect that countries currently operating independent monetary policies could be better off by abandoning this independence and reverting to something like the colonial currency board systems. Although it

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5. Defined as a situation where monetary balances have built up on an involuntary basis because of the absence of commodities in the shops.

was fully accepted that this would impose conservatism on otherwise nonconservative governments, it was also pointed out that this stratagem would eliminate any scope which presently exists for compensating domestic activities for the effects of external shocks. It would also switch a great deal more responsibility onto the exchange as a policy instrument, which was probably not a good idea given the reticence that many African governments reveal about an active use of exchange rate policy.

Possibly the critical issue in this area is the one referred to when the moderator summed up the discussion: when a major economic stabilization is needed or a major reform of the financial sector is under way, the temporary retention of the well-known, albeit imperfect, methods of direct monetary control is advisable if only to limit the degree of uncertainty with which the authorities need to deal. This is not to dispute the eventual merits of indirect methods. Rather, it is a matter of practical policymaking that in the moderator's experience central bank governors and ministers of finance find to be a source of considerable comfort.

### **The Role of Development Finance Institutions**

In opening the panel discussion on this topic, Millard Long noted that the early World Bank anxiety to support development finance institutions (DFIs) arose from several related considerations. These included a perceived absence of term finance in most developing countries, the need for some institutions to combine financial and technical help to newly emerging industries, and the need for some conduit to move external and government funds into the private and parastatal sectors. A generally unstated view had been that, because of their development role, some of the DFIs' loans might be unprofitable and that the DFIs themselves might operate with weak finances.

The record had been disappointing. Although Africa offered some examples of success, such as the Botswana and Malawi Development Corporations, most DFIs had proved unsuccessful as financial institutions. Had they nonetheless helped development? Here, too, in Long's judgment, the performance was poor. Most DFIs had failed to mobilize funds other than those provided by donors and governments; most had demonstrated a poor resiliency of activity over the business cycle (for example, their lending had collapsed with the general recession of the early 1980s); they maintained excessively concentrated portfolios; and they generally had little role in stimulating more broadly based financial development. The World Bank would continue to support the better DFIs even if their operations required modest subsidy. If their past record in making loans and recovering them had been poor, however, the World Bank might be hesitant about providing further support and entrusting these institutions with the difficult task of resource allocation. It was noted in this context that some developing countries had had quite good investment records without having active DFIs. It could be inferred from this that the DFI route was not the only way to support long-term investment financing.

These remarks generated an energetic and largely critical discussion. It was noted early in the discussion that if the DFIs had failed, it was largely the fault of the designers and, more specifically, the World Bank in insisting that most DFIs be set up almost as clones of the Bank itself, without any real effort to integrate them closely into the financial systems of their own countries. In the case of the Zimbabwe Development Corporation, for example, certain policy approaches had gradually evolved from the basic design provided by the Bank. Now, that organization, as well as the Agricultural Finance Corporation of Zimbabwe, was able to treat donor finance as a last, rather than a first, resort. The main thing that had been learned over the years was that it is a mistake to accept the narrow charter for the operations of the DFIs apparently preferred by the Bank. Indeed, it was important for the Corporation to be able to diversify not only to manage risk better but also to compete with other financial institutions. Equally, it was important to allow local deposit-taking as one route to provide the DFI with access to domestic resources. That the Zimbabwean approach has been successful is evidenced by the fact that in a period of just eight years, investments in agriculture that the development banks have actively supported have enabled small African farmers to produce 65 percent of the food requirements formerly produced by white farmers.

The example of the Botswana Development Corporation (BDC) was adduced to suggest that setting up a DFI as a public company rather than a statutory corporation can provide it more readily with a strict commercial orientation. Unlike other DFIs, the BDC also operated a policy of normally requiring an equity position in its client companies. This had had the benefit of providing the companies with a better gearing ratio and therefore helping them to raise working capital and other complementary funding from the commercial banks. Some of BDC's earlier clients no longer needed its financial or technical assistance and hence a policy had been evolved of selling off the BDC stakes to other national owners and then recycling the money so realized into further investments in other companies. This was done first by placing stakes in nine BDC companies into an investment trust and then selling off parts of the diversified portfolio. In this and in other ways, BDC had been successful not only in narrow commercial terms but also in helping to support the emergence of an embryonic capital market.

By contrast with the successful record of the BDC, several participants were able to refer to examples of DFIs in Africa that had been differently motivated, organized, and managed and where serious failure in both financial and developmental terms had resulted. In the worst examples, many of the problems were a result of the statutory corporation status of the DFIs and the fact that the governments saw them as captive sources of funding for their own development and political objectives. As a consequence, management was largely by civil servants rather than bankers. No real supervision and scrutiny of activities by the central bank was allowed, they were not able to seriously pursue bad loans, and their Directors had no basis for standing up against government directives. In short, commercial criteria were largely thrown away and replaced by essentially political objectives.

The limited consensus that emerged from this discussion was to the effect that DFIs could succeed, but only if they were organized somewhat differently than in the past. Above all, there was some reasonable agreement that they should be allowed to operate at arm's length from government and be organized in a way that allowed them to make real commercial judgments. With some limited disagreement, it was also generally felt that their functions should be kept largely separate from the pursuit of social objectives, because the loss-making likely to be associated with such objectives would inevitably give them financial problems as well as excuses for not behaving in a sound commercial manner. They should also be allowed to offer a full suite of commercial services. If they cannot do this, then their more successful customers will be stolen by commercial banks, and they will lose credibility.

The discussion also touched on the relative merits of universal versus specialized banking in the African context, and several ideas were floated most of which seemed to command some limited but certainly not general support. One of these was that in relatively small economies, like most of those in Africa, it may not make too much sense to allow a proliferation of financial institutions. Although with a limited number of institutions and controlled entry into the sector, there is a danger of the monopolization and overpricing of services. This danger can be avoided. Specifically, it could be avoided by accepting the suggestion made earlier in the context of the DFI discussion, namely that different institutions should have overlapping functions. In short, the limited set of institutions should be allowed to take on some of the characteristics of universal banks, perhaps by operating as a specialized department of a commercial bank. A related argument was based on the U.S. experience, where some had argued that the fragmentation of financial functions had been one root cause of the large number of bank failures of recent years. One approach that might be considered was the formation of bank holding companies that can provide some of the strength and risk diversification of a large organization while retaining, in its subsidiary companies, many of the benefits of smaller and specialized financial institutions.

A variety of caveats and comments were made in response to these suggestions. It was pointed out, first of all, that there is no inconsistency involved in a DFI diversifying its activities to some extent while remaining essentially specialized in long-term financing. Second, it was noted that the task of supervising financial institutions is far easier when the institutions have a limited number rather than a diverse range of functions. Thus, an important corollary of any move toward universal banking in Africa would be a prior requirement to

greatly improve the quality of, and resources devoted to, bank supervision. Finally, by way of comment on the bank holding company idea, it was noted that the practical accounting and other problems in keeping the activities of the different subsidiaries truly separate were enormous. There was a considerable danger that this suggestion, if implemented, would result in a higher degree of concentration than was desirable.

### **The Role of Informal Financial Markets**

In the presentation on this topic by Dale Adams and in the subsequent discussion, it was noted that informal financial markets often develop and thrive in circumstances where formal financial institutions are severely hindered by distorted policies and are generally repressed. Although there are lessons to be learned from the successes of informal markets in some countries, the presence of such markets cannot be regarded as an alternative to the repair, reform, and proper functioning of the formal sector institutions. Indeed, the needs of an economy are best served when the formal and informal markets relate together in a complementary fashion with each efficiently discharging certain specialized functions.

Adams began by noting that in the past 20 to 30 years too many initiatives that sought to extend the formal financial frontier have generally been unsuccessful and, even where successful, had succeeded normally only on a transitory basis. In particular, most of the 160 or more agricultural credit programs of the World Bank in Africa had failed to achieve sustainable and financially viable credit operations. A similar picture emerged from other continents, and in the Philippines, for example, at least half the rural banks are in serious difficulty. At the same time, in many countries, there are numerous examples of thriving and financially viable informal financial institutions. Adams noted that "it surprised me to see informal lenders recovering most of their loans while nearby formal lenders were awash in defaults, and I marveled at the ability of informal finance to mobilize and allocate large amounts of voluntary savings, while banks attracted relatively few deposits."

Adams then proceeded to synthesize the findings about the nature and functioning of informal financial markets as developed from his own research and that of others in a wide range of countries in both Africa and elsewhere. This synthesis involved six main points. First, while the diversity of informal finance institutions is enormous, they can be classified into three main types.<sup>6</sup> One is "noncommercial" finance, where close friends and relatives lend to each other with one person probably appointed as the moneykeeper and little or no interest is being charged. A second is "commercial finance," where funds are lent and borrowed to finance the buying or selling of goods whether for consumption or investment purposes. The third is the "group" arrangement, such as rotating savings and credit associations (RoSCAs). In some countries, such as the Cameroon, the float in such groups is larger than all the deposits in the whole banking system. In East Asia, informal group arrangements have financed large industries.

Second, in many countries informal finance is extremely important both in mobilizing savings and in providing credit, often to those same target groups that have been the subject of abortive formal credit programs. While informal finance has often grown up in parallel with the formal markets, it has often demonstrated the ability, as noted earlier, to expand and thrive while the formal market has been in disarray.

Third, the participation in informal financial markets is normally quite broadly based. It is usually not characterized by a few richer people lending to the poor. On the contrary, the markets often involve poor people, women, operators of small businesses, small farmers, and even landless laborers who are completely cut off from access to formal financial services. This broad client base is associated above all with the fact that the services are normally delivered

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6. There are ten main types of informal financial institutions as defined in the paper supplied to the seminar. These are: sophisticated but unregulated institutions, moneylenders, merchants, pawnbrokers, loan brokers, landlords, friends and relatives, money guards, savings groups, and rotating savings and credit associations.

at the clients doorstep by contrast with formal financial transactions that mostly occur in remote and specialized buildings. In spite of this apparent transaction cost-intensive way of operating, informal finance generally does not appear to choke on its own expenses.

Fourth, informal financial sectors are frequently characterized by a tremendous dynamism and ability to innovate. The multiplicity of different arrangements found in these sectors, the low costs associated both with entry, and the switching of functions means that the services can change flexibly in response to emerging requirements. In contrast to formal markets where much of the innovative thinking and new technologies are geared to the avoidance of regulation, the fundamental absence of regulation in informal markets means that innovation can mostly be concentrated on the reduction of costs and the provision of better services.

Fifth, there are numerous detailed differences between the workings of the formal and the informal markets. In particular, the informal markets often involve very small loans and deposits, function commonly without collateral and rely instead on personal knowledge of borrowers or social group pressures to ensure repayment, typically deal with short-term transactions, and often operate in the legal shadows.

Sixth, the common perception that informal markets are exploitive both in terms of the interest rates charged and their supposed reliance on transactions with clients in distress is hard to sustain as a general proposition on the basis of available evidence and analysis. Evidence from India, the Sudan, and elsewhere has indicated that the opportunity cost of funds to lenders in terms of the business alternatives available to them is often extremely high. It is this rather than the deposit interest rate that should be used to assess the reasonableness, or otherwise, of the lending rates that are charged.

Also, exploitation is difficult to substantiate when entry to markets is relatively free. This seems to be generally the case in the countries that have been studied, and there is also an enormous range of possible substitutes for money, not the least of which is in the form of various barter transactions. Finally, while it is true that the linking of credit with product marketing transactions does open up the potential for the exploitation of borrowers, Adams' own evidence is to the effect that merchants invariably view the need to provide credit to support their merchant services as a nuisance rather than as a ripe opportunity for gain. They may nonetheless exploit that situation in some cases because of monopoly power in product or input markets.

The lessons for the design of formal financial institutions are numerous and extremely important. The informal markets clearly tailor their services closely and in an adaptive manner to the needs of clients rather than in a manner conditioned by the policymakers' perceptions of these needs. These markets are based on strong discipline—one needs to save, for example, in a RoSCAs before one qualifies to borrow—and the failure rate in those institutions lacking the necessary discipline is high. Many transactions are based on reciprocity within a relatively small group of people, and this, too, ensures high standards of repayment and general adherence to contract conditions. These markets have demonstrated the ability to mobilize an immense amount of savings from large numbers of people, most of whom are relatively poor. Finally, much of their success can be attributed to their ability to keep transaction costs low.

There was a brief discussion of the manner in which the presence of a large informal financial sector might compromise the effective operation of monetary policy. While this was acknowledged to be a potential danger, it would be seriously problematic only in the event of rapid shifts in the stock of assets in the informal sector relative to the formal. This, in turn, was thought to be unlikely in most cases.

Thereafter, the main part of the discussion focused on two matters: (1) the interlinking of formal and informal finance markets, and (2) the degree of exploitation present in the informal markets and the amount of regulation that this warranted. As regards the first issue, it was noted that, with care, it was probably possible to carry over the lessons from informal finance to create new formal financial institutions. There were, however, few tangible examples, with the Grameen Bank in Bangladesh being possibly the best known. Malawi was in the process of developing a similar operation, called the Mudzi fund. Rather more common was the situation

where informal financial institutions had evolved to become formal organizations. This had happened, for example, in both India and Japan, and even the gigantic Nomura Securities organization is an example. As regards the complementary nature of the two sectors, an interesting example from the Botswana Development Corporation (BDC) was noted. BDC staff had observed that where borrowers are required to put up their own funding to match BDC loans, they often prove able to obtain funds that seem large relative to their known net worth and in a very short period. The implication was that these funds are being obtained from informal financial markets which are thereby facilitating the effective delivery of the formal sector loans.

As regards the issue of exploitation, several participants disputed Adams' definition of the term and countered that interest rates above some maximum absolute level (40 percent was mentioned) were by definition exploitive. It was also agreed that free entry was not the guarantee of competition when the information flow among participants in the market was extremely poor. This lack of information could also tie individual borrowers into a relationship with a lender who had all the substantive characteristics of monopoly. In particular situations where the borrowers were in serious distress, this problem would obviously be compounded. In replying, Adams accepted some of these points but provided examples of cases where interest rates had been extremely high by any normal measure but were nonetheless not exploitive. One such example was from Bolivia, where occasional informal loans to street traders for short periods, such as 10 hours, were in the nature of a cash reserve which enabled the traders concerned to achieve a gross profit rate on the cost of a day's inventory of almost 100 percent in a day. In such circumstances as these, interest rates that are high but still substantially less than 100 percent per day, in his view, could not be thought of as exploitive. The definition implicit here is that a financial transaction is not exploitive if both parties derive a clear benefit.

Except for the dispute about exploitation, there was a reasonably broad consensus behind Adams' main conclusions, as outlined above and in the associated broad propositions for policymakers. First, do not try to impose tight regulation on the informal sector. If you attempt this, you will almost certainly destroy most of its basis merit. You may nonetheless succeed in guiding the market as the interesting example of the pawn-broking department in Portugal's largest savings bank indicates, but do this in a light-handed manner. Second, try and learn from the successes of the informal sector and use the lessons to put right some of the more obvious failings of the formal financial institutions. In particular, take note of the need for a closer understanding of the real financial needs of prospective clients. Third, do not regard a successful informal financial sector as a substitute for the reform of the formal institutions. The two operate together in a synergistic, albeit poorly understood, manner, and the needs of economic development are best served when they are both working well.

## **The Development of Money and Capital Markets**

The final substantive session of the seminar and a further discussion group were concerned with the conditions required for the more rapid development of money and capital markets. Introducing the topic, Paul Popiel noted that the development of these markets is a difficult and delicate process. Their existence and success depends upon an active private enterprise sector, and the role of the governmental authorities is largely to create the appropriate enabling environment. This needs to include a stable macroeconomic environment, the removal of any obvious legal, fiscal, and other obstacles to the success of the markets, and the provision of an adaptable regulatory and supervisory framework that provides a balance between market freedom and investor protection (Roe and Popiel 1990).

If the markets can be encouraged, a variety of benefits can result. First, for example, the emergence of capital and, more particularly, equity markets can greatly improve the management of risk in individual enterprises. This is something that is essential when the degree of uncertainty in economic activity is high, as is often the case in Africa, but it is not possible when financing is wholly based on borrowing. Second, the money and capital markets

can help to inject a higher degree of competition into financial markets; this will normally be welfare-enhancing. Third, the presence of appropriate security markets is, as noted earlier, an essential prerequisite for the move to more indirect and efficient mechanisms of monetary control.

The working-group discussions were interesting both in documenting the degree of progress in financial market development in specific countries and in detailing particular examples of the obstacles to that development as described in general terms by Popiel. A sharp contrast emerged between Ethiopia and Tanzania on the one hand, where financial market development is extremely limited, and countries such as Botswana, Zimbabwe, and Kenya, where many of the critical elements for such markets are already in place. In the former set of countries, treasury bill and government security sales are mostly to the central and commercial banks on a compulsory basis and at controlled interest rates. There are no secondary markets and only a limited rediscounting of bills and bonds. These arrangements reflect the extremely limited role of the private sector in these two economies, and they are hardly conducive to the early emergence of significant financial markets.

Zimbabwe, by contrast, has probably the most active set of financial markets of the countries represented at the seminar. The money market, including the secondary market, is particularly active, as is the market for government issues. The private bond market is less active, and in spite of a still high level of stock market capitalization, the conditions since independence have been such as to discourage more than a handful of new private issues. These conditions are largely connected with interest rate and taxation arrangements, which are discussed more generally below. In addition, moves currently under way to socialize the current private pension arrangements in the countries and also to nationalize certain productive sector enterprises can scarcely be regarded as conducive to further capital market development.

In Botswana, in spite of a relatively significant private sector, there is no real capital market, and only seven companies, including two banks, have listed shares. The one brokerage house, which started its operations last year, is effectively just one man, and trading is very limited in scale. It is interesting, however, to refer again to the role of the BDC in establishing an embryonic investment trust that holds shares in the better of the BDC client companies. This represents an interesting route to establishing the supply side of a more active capital market. On the demand side, Botswana urgently needs more investment opportunities for private wealth holding other than cattle and cash, and capital market instruments can be expected to meet a reasonable level of private demand. Given the small size of the domestic market, however, there is also a relatively low limit on the number of new issues that might be absorbed annually given the hesitancy about allowing significant foreign purchases of shares.

Kenya already has an active primary money market with treasury bill issues of 3-, 6-, and 12-month maturities. Bond issues of one-year maturity were first issued in 1988, and longer maturity issues are now planned. At present, there is no secondary trading in bills and bonds, but the authorities now wish to introduce this. The Capital Markets Authority, established formally in 1989, has been seeking information and guidance about the management and conduct of stock exchanges both in New York and in several Southeast Asian countries. The stock exchange in Nairobi has been in existence since 1954 but until very recently has been contracting in size. There have been several successful public offerings recently, however, mostly of banks, and there is obviously a clear commitment to make the stock exchange, and the capital markets generally, a more significant force in the economy.

There was general agreement in the discussions that the two major obstacles to more active capital markets in both Kenya and elsewhere are interest rates and tax policies. As regards interest rates, it was noted that in Zimbabwe, for example, many companies could still borrow at 6 percent, and it was wholly unrealistic to expect them to incur the very considerable issue costs of equities when funds were readily available on this very favorable basis. This was especially true for smaller companies because of the minimum size of issue that was economic in terms of the issue costs.

As regards taxation, the fundamental difficulty, as in many other countries, is the multiple taxation of dividend income prior to its receipt by the shareholder. Typically, corporate

profits are subject to corporation tax and then, if paid as dividends, to both withholding taxes and personal taxation at the rates applicable to individual shareholders. This means that pretax rates of corporate profit need to be absurdly high if equity shares are to compete seriously with deposit rates of interest on safe assets. This problem is compounded in Kenya and elsewhere by the availability of certain tax-free securities such as housing development bonds and various government securities. Because interest rates have risen during the 1980s, these factors have further undermined the attractions of investment in equity securities.

A final point on the taxation side concerns the general lack of fiscal incentives in Africa for the holding of equity securities. It was noted that these incentives on the demand side had been used to good effect in other countries such as Brazil and the Republic of Korea. Such incentives, it was argued, are unlikely to be able to mitigate the enormous distortions introduced by the multiple taxation of earnings, but they could certainly play a significant role if and when such distortions were to be rolled back.

In light of this background, what are some of the practical steps the African countries might take to expedite the development of their financial markets? The working-group discussion elicited a wide variety of suggestions in answer to this question, but the following actions were generally agreed to be necessary in those countries where the basic private enterprise culture was in place to support the development of financial markets.

First, it is important to establish the appropriate legal framework for share operations. This will involve the rewriting of companies acts, especially in relation to matters such as information disclosure, the establishment of rules of procedure for share trading to safeguard the rights of investors, especially the smaller ones, and possibly the rewriting of banking legislation to, for example, amend the asset concentration limits for conventional commercial bank lending.

Second, a variety of incentives are probably needed to encourage participation on the demand side of the markets. These can include straightforward fiscal incentives to hold and buy shares, but ought also to involve the setting aside of blocks of shares for the employees of issuing companies as well as the smaller investors. There also has to be active promotion of the merits of share-issue and shareholding in general.

Third, everything needs to be done to build confidence in the activity of financial markets. It is important, in particular, that the early issues in an embryonic market should avoid under-subscription or subsequent large price falls; therefore, it is vital that the quality of the first companies coming to the market should be absolutely first rate. It is also vital, as is the case with the management of financial distress, to upgrade the requirements imposed on, and the general quality of, the auditing profession in a country to ensure that its judgments on individual company accounts can command the highest possible respect.

Finally, to repeat a point made earlier, there is little purpose in taking any of the actions described above until such time as interest rate and taxation arrangements are reformed so as to remove the bias against private securities issues; a bias that currently in many African countries is enormous.

A further issue that came up for discussion but resulted in few conclusions concerned the role of foreign participants in financial market development. It was recognized that in Botswana and elsewhere prevailing political attitudes are unlikely to look favorably on financial market development if this is also allowed to result in a substantial foreign ownership of domestic productive assets. Foreign purchases may be necessary, however, to provide some of the smaller countries with access to sufficient funds on the demand side to justify the high set-up costs of the markets and the high issue costs for individual companies. One way through this difficulty might involve the country funds that had been used with success in several countries in the Far East. It was noted in this context that the idea of a Zimbabwe Fund had been mooted but that no firm decision had yet been reached about this. A Kenya Fund is also under consideration. Another aspect to this dilemma was that countries wishing to build financial markets needed to recognize the potential benefits of inward direct investment as one way to rapidly improve the stock of established companies that might be issuing paper in the market.

## Main Issues

It is apparent from the preceding pages that the discussion during the four days of the seminar was wide-ranging and raised significant questions. By way of conclusion, this last section focuses on four of the recurring themes of the meetings.

First, there was a broadly based acceptance of the fact that efforts to improve the efficiency of the African financial systems are now high on the priority list of most policymakers in the region in light of the external and domestic circumstances. Equally, there was no real disagreement that many of the interventionist policies pursued in the past had been ill-conceived in the sense that they had failed to take proper account of the considerable damage that they could do to financial institutions and to development prospects generally. This consensus, however, certainly did not extend to a broadly based endorsement of a private sector and market led approach to development. On the contrary, several participants repeatedly voiced their enthusiasm for the retention of direct controls—including direct controls on financial sector activities—and expressed skepticism about the ability of their countries to make progress in the absence of these. For them, a central issue was to avoid the worst inefficiencies of direct controls but not to eliminate them.

Second, there was a broad endorsement of the point that the two essential prerequisites for effective financial reforms are the establishment of a sound macroeconomic environment and the repair of any preexisting situation of financial sector distress. In relation to macroeconomics, it was accepted that the elimination/avoidance of large public sector deficits and high inflation was the pivotal element in the search for macro stability. It was also recognized, however, that many of the components of financial sector liberalization, such as freer interest rates, could seriously complicate the task of achieving this macroeconomic stability. Thus, a conclusion that emerged was of a need, if stabilization and liberalization were to be pursued simultaneously, for both a realistically long time frame for the adjustment and for generous external support during the transition. The preference for gradualism also arose in the context of the discussion of financial distress and repair. It was conceded that the controlled, discrete, and often hesitant adjustments of policy instruments, such as interest rates and exchange rates commonly experienced in Africa, are themselves a cause of uncertainty and so of possible financial distress. There was also considerable skepticism, however, about whether the circumstances likely to be encountered in the near future would permit serious liberalization of such policies. Similar sentiments were expressed about the reform of the mechanisms of monetary control to embrace more indirect methods.

Third, in relation to several subtopics at the seminar—financial repair, reform in monetary management, more rapid development of money, and capital markets—there was broadly based agreement that improved legal, institutional, and regulatory frameworks would be important ingredients of successful reform. There was no country represented at the seminar that argued that some improvements in these frameworks could not be beneficial. Particular importance was attached to information flows and, under that broad heading, to improved accounting standards, better auditing practices, and less reliance in, say bank supervision, on the mechanical standards such as generally accepted practice. Bank supervision practices and especially more effective on-site supervision, backed up with real powers of enforcement, were thought to be equally important and necessary in most cases. This was a key both to the early detection of possible situations of financial distress and to enabling the banks and other financial institutions to take on a broader range of functions.

Finally, and returning to the opening theme of the seminar, the very substantial burden placed upon training agencies by the major agenda of financial reform facing Africa was mentioned in almost every context. Right now, Africa is relatively poorly endowed with the financial experts, market analysts and practitioners, bank managers, and supervisors to design and operate the new regulatory and institutional structures to support reform. Although assistance from the World Bank, the International Monetary Fund, and other external agencies is appreciated and can help redress this shortage, the ultimate success of financial reform

ambitions will stand or fall by Africa itself setting up and expanding its capacity to generate the necessary human resources.

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# 3

## TAKING A FRESH LOOK AT INFORMAL FINANCE

*Dale W Adams*

During the past several years I have often been asked to name sustainable agricultural credit programs in low-income countries (LICs). Answering these requests causes me embarrassment, disappointment, surprise, amazement, and puzzlement. My embarrassment comes from being able to name so few sustainable programs, despite the tens of billions of dollars committed to hundreds of these efforts. At the same time, I painfully remember large numbers of transitory credit activities that have been plagued by loan recovery problems, chronic dependency on outside funds, and excessive transaction costs. My disappointment stems from seeing little improvement in the performance of these efforts since the mid-1960s when Ohio State University began working on problems of rural financial markets (RFMs).<sup>1</sup> While our understanding of how RFMs function and what causes them to misfire has expanded substantially in the past two decades, only in a handful of cases has this new knowledge been used to treat RFM ills.<sup>2</sup> I have grudgingly concluded that creating sustainable rural credit programs is far more difficult to do than most of us had heretofore thought.

My embarrassment and disappointment are tempered by surprise. In recent research in Bolivia and the Philippines—two countries suffering substantial economic stress—I encountered informal finance thriving amidst the rubble of formal financial markets.<sup>3</sup> It surprised me to see informal lenders recovering most of their loans while nearby formal lenders were awash in defaults, and I marveled at the ability of informal finance to mobilize and allocate large amounts of voluntary savings, while banks attracted relatively few deposits.<sup>4</sup>

My amazement arises from the contrast in the types of people served by formal and informal finance, along with the differences in types of services provided. Formal finance typically

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**Note:** Many of the ideas in this paper have been gleaned from others who have burrowed more deeply into informal finance than have I. Frits Bouman and Clifton Barton gave me lectures years ago about the importance of informal finance that I am only now beginning to appreciate fully. J. D. von Pischke, Robert Vogel, and colleagues at Ohio State University have done much of the research and original thinking on which I base my paper. Two anthropologists, Marie Canavesi and Virginia Sandoval, also exposed me to informal finance in Bolivia and the Philippines. I also learned a great deal about informal finance while attending an excellent seminar in the Philippines in early 1989 sponsored by the Asian Development Bank and organized by P. B. Ghate. The references at the end of the paper identify other individuals who have unwittingly influenced my thinking on this topic.

1. This work has been funded mostly by the Agency for International Development of the United States (USAID) and has involved research in more than three dozen low-income countries. The steady and generous support of our work by numerous USAID employees over the years is a proxy for the frustration many of them harbor about the results of rural credit projects.

2. Readers interested in further details on the problems in rural financial markets as well as in the new views on how to resolve some of these problems might refer to the volumes by Donald and by Adams, Graham, and Von Pischke cited at the end of the paper.

3. The various terms used in the literature to categorize financial markets include institutional and non-institutional, organized and unorganized, regulated and non-regulated, commercial and non-commercial, production and consumption, and formal and informal. I feel more comfortable with the latter two terms and use the term formal to mean all financial transactions that are supervised, regulated, and monitored by some central financial or monetary authority. The term informal finance encompasses all other financial activities in an economy.

4. Tuck (1987) reports similar conditions in Senegal in the early 1980s.

involves large loans and deposits, secure collateral, relatively long-term financial instruments, and legal backing. Formal finance also services mostly individuals who are the *creme de la creme* but who are required to come to the financial institution to transact their business. In contrast, informal finance frequently involves small loans and deposits, commonly functions without collateral, typically deals with short-term transactions, and often operates in the legal shadows. Many participants in the informal system are poor people, women, operators of small businesses, small farmers, and the landless—people who are often unable to obtain formal financial services. Unlike the formal financial system, transactions in informal finance usually occur at the doorstep of clients, at their place of work, or in popular markets. I am amazed that informal finance can provide these services to the people it does without choking on expenses and drowning in defaults. Like the aeronautical engineers who have analyzed bees and concluded they should not be able to fly, I am convinced that informal finance defies the laws of financial gravity.

Further, I am puzzled by the ability of informal finance to provide sustained financial services to large numbers of individuals who have been targets of temporary or sporadic formal credit programs. These formal credit efforts are usually staffed by educated people who receive extensive technical assistance from both donors and governments along with ample access to both subsidies and concessionary funds. Even with these advantages, formal rural credit efforts often founder, while informal finance, which enjoys none of these advantages, typically flourishes. Success in financial transactions appears to be inversely related to years of education of the participants, technical assistance received, access to concessionary funds, and extent of regulation! This raises two important questions: Why do formal agricultural credit programs so often fail? And, why do informal financial activities so often succeed? Space limitations oblige me to deal mainly with the latter question here.

### **Traditional Views About Informal Finance**

Informal forms of lending—particularly moneylenders—are stereotyped as being evil in many cultures. Poets, prophets, playwrights, and politicians have pointed accusing fingers at informal lenders and questioned the comfort of their afterlife since the beginning of recorded history. Individuals as diverse as Cicero, Shelley, Shakespeare, Marx, the Prophet Mohammed, and writers of the Old Testament have vented their spleens on the supposed evils of money lending. Pejorative and emotive terms such as “monopolist,” “usurer,” “shylock,” “loan shark,” and “exploiter” color discussions of this topic. I know of no other area in development where anecdotal horror stories are told and retold so often to nurture traditional views (Nelson 1942). For my tastes, too many discussions of informal lending include racial and ethnic undertones reflecting the dark side of human nature: for example, biases against Jews in Europe, overseas Chinese in East Asia, Indians in East Africa, Ibos in West Africa, and people from the Middle East in Latin America. These biases also stem from the natural tendency to fear and dislike an activity, such as financial intermediation, that is poorly understood and, to some observers, mysterious (Hayak 1989).

Until relatively recently, much of the research on informal finance was done in what was Colonial India or by sociologists and anthropologists. Studies by Darling and others in India in the early 1900s showed that informal lending provided most of the loans in rural areas and that the interest rates applied were often higher than those charged by banks in either India or the United Kingdom. Subsequent studies in India—especially the All-India Rural Credit Surveys carried out each decade since the early 1950s—set the agenda for much of the later research and policy dialogue on informal finance in other regions. This agenda was generally negative in tone and stressed documenting the relative importance of informal finance, the extent of monopoly profits in these transactions, how loans linked to other marketing activities boosted profits, and the extent to which informal lending was used to appropriate land pledged as collateral (see, for example, Ghose 1980 and Wai 1957–58).

I am uneasy with this stereotyping and with the associated research. Instead, I feel there are important lessons to be learned from a more objective study of informal finance—lessons that

will be overlooked as long as we insist on chasing bogeymen in research on informal finance. Taking a fresh look at informal finance should involve studying the services provided along with the associated techniques, practices, and technologies used. Careful analysis of informal finance may also provide clearer insights into the types of financial services individuals and firms find to be most useful.

## Types of Informal Finance

Finance exists because of heterogeneity among firms and individuals and because of the specialization and trade that ensues from these differences. This, in turn, results in a variety of financial needs that are partly met by a multiplicity of informal arrangements. While the stereotyped moneylender receives most of the publicity, a large variety of other arrangements handle most informal financial transactions in LICs. Some of these arrangements are centuries old, while other systems of informal finance are constantly evolving as the contours of the society and the economy change. The kaleidoscope of arrangements defies simple classification, and it is unusual to find a substantial number of these arrangements that are identical—a testimony to the flexibility and creativity involved in informal finance. For purposes of illustrating the variety found in these systems, I will briefly describe ten types of informal finance. Although I treat these ten types separately, it is common for them to overlap and also to be intertwined with other production or marketing activities (Sanderatne 1981).

### *Sophisticated but unregulated institutions*

In several countries, including the Dominican Republic, Guatemala, Pakistan, and India, sophisticated financial institutions exist that are informal only in the sense that they are not regulated. These institutions act like commercial banks and are often located in bank-like offices that appeal to middle- and upper-class clients. They exist primarily to avoid taxes or regulations. In some cases they may be affiliated with banks through joint ownership or holding companies. Several recent studies suggest that these unregulated organizations charge reasonable interest rates and operate with modest transaction costs (Nayar 1982, Vogel 1988, Zinzer and others 1986).

### *Moneylenders*

Individuals who spend most of their time lending money—moneylenders—are significant sources of loans mainly in Asia. Typically, their loans are granted for short periods, are unsecured by collateral, and are extended to long-term clients. Most moneylenders operate on a small scale, extend loans mainly out of their own funds, and restrict lending to less than a hundred or so individuals. Moneylenders typically charge interest rates that are high relative to other lenders but extend loans quickly and impose few transaction costs on borrowers. These lenders operate in localized markets and often have highly personalized relationships with borrowers.

The main advantage moneylenders have over formal lenders is the comprehensive information they accumulate about their clients through day-to-day contact. Timberg and Aiyar (1984) found an extreme example of this when they asked an Indian moneylender how he decided to take on additional clients; he responded that he had never had a new client. Understandably, the proprietary nature of this information causes moneylenders, as well as other informal lenders who rely heavily on inside information, to be leery about sharing candid information about their operations with researchers (Chandavarkar 1986).

### *Merchants*

A closely related and much more common form of informal credit is provided by individuals who are primarily merchants but who also extend loans linked to the sale or purchase of

commodities (Bardhan 1980, Floro 1987, Harriss 1983, McLeod 1984). Typically, lending is only a minor part of the merchant's activities; loans are repaid in relatively short periods of time, many of the loans carry no explicit interest charge, and the lender may adjust the price of the commodity involved in the transaction as compensation for the loan. Economies of scope are the main advantage that a merchant realizes in providing loans.

Merchants can generally sell more fertilizer or purchase more rice, for example, if they also offer loans to their customers. Like the moneylender, merchants have the advantage of possessing inexpensive information about the borrower that is accumulated through purchases and sales of commodities. Under normal conditions the volume of loans provided by merchants increases as commercialization expands.

Some itinerant peddlers also provide small short-term loans to customers. In the Philippines, peddlers—often called *Bombaies*—sell items as diverse as umbrellas, electric fans, cosmetics, and clothing door-to-door in rural areas. They often make their village rounds on a daily or weekly basis to sell goods, take orders, and collect installment payments on previous purchases. Fruin (1937) reported similar services provided in rural areas of Indonesia during the 1930s by "installment Chinamen."

### *Pawnbrokers*

Still another form of informal finance is pawning, one of the oldest forms of lending. Some pawnbrokers work full-time at this occupation, whereas others pursue it as a sideline to money lending or marketing. In several countries, Indonesia and Sri Lanka, for example, some pawnshops are affiliated with banks.

Distinctive features of pawnshops are that they typically make small loans for short periods and resolve the loan collateralization problem inexpensively by requiring borrowers to exchange collateral physically for loans (Lamberte 1988). Unlike banks, moneylenders, and traders, pawnbrokers need almost no information about their borrowers unless they are wary about receiving stolen goods. The pawnbroker realizes revenue from interest on loans and from the difference between loan amounts and sales receipts from items received as security on defaulted loans. Contrary to conventional wisdom, Bouman and Houtman (1988) argue that most pawnbrokers prefer to have individuals redeem the items they pawn, as this improves the chances of their continuing as clients.

Some individuals in the Philippines make their living primarily by conducting informal pawning operations combined with peddling items door-to-door that are not redeemed. These individuals may have loose working relationships with formal pawnshops or with relatively wealthy people who occasionally provide them operating capital. They may also combine their pawning activities with selling non-pawned goods door-to-door and offering installment arrangements on these sales (Adams and Sandoval 1989).

### *Loan brokers*

Another type of informal finance is carried out by loan brokers who facilitate contacts among people with money to lend and borrowers by trading on inside information about potential clients. Typically, loans handled by brokers are relatively large and for a longer term than are most informal loans. Virtually anyone can enter the business who is able to assemble information about potential clients. Because borrowers of these brokered loans often do not qualify for additional bank credit, interest rates applied to these loans may be relatively high. As Larson (1987) points out, some of the lenders in Bolivia insist on collateral such as real estate before making a brokered loan.

The broker is usually not a principal in the transaction but merely arranges contacts between lenders and borrowers. Some brokers may also provide collection or guarantee services and thus become more like principals than agents.

A different form of loan broker operates widely in rural areas of Bangladesh. These brokers obtain loan application forms from banks, help illiterate people fill them out, obtain necessary

signatures and guarantees, and also allocate bribes necessary to overcome barriers to borrowing (Maloney and Ahmed 1988). The broker is commonly rewarded through a share of the bribe or a share of the loan and acts as a legal buffer between the payer and the receiver of the bribe.

### *Landlords*

Although the practice is less common now than previously, some landowners still provide their tenants with loans. The main reason for this is scope economies. These loans facilitate access to labor and entrepreneurial skills that might otherwise be difficult to employ or manage. Typically, landlord lending declines in relative importance with land reform and with the expansion of other types of formal and informal finance (Sacay, Agabin, and Tonchoco 1985).

A variant of this occurs when landowners who borrow money transfer to a lender usufruct rights over land, orchards, or fishing facilities for a time until loans are repaid. This arrangement is common in the highlands of Ecuador and among cacao farmers in Ghana (Adejeboye 1969). It is also increasingly found in the Philippines, where farmers may pawn the title to some of their land and transfer use rights to the lender for a time to obtain relatively large loans to finance employment abroad by a family member.

### *Friends and relatives*

Perhaps the most common form of informal finance, both in terms of number and value of transactions, is loans from friends and relatives. In some countries these credits make up half or more of all informal loans. Many of these loans involve no interest or collateral, they may be large or small, and many have open-ended repayment arrangements. The most important feature of many of these loans is reciprocity: the expectation that the borrower is willing to provide a loan to the lender sometime in the future (Platteau and Abraham 1987). In cases where the individuals involved have scant access to other forms of finance, the reciprocity may be an important way of managing uncertainty and risk through establishing and strengthening interpersonal ties.

### *Money guards*

Another form of informal finance is the money guard, a responsible person who agrees to safeguard cash for individuals. Graham and others (1988) report finding money guards in Niger. Maloney and Ahmed (1988) also found them in Bangladesh, and Bouman and Houtman (1988) report similar arrangements in India. Almost the entire reason for money guards is that they offer a secure place to deposit funds. In most cases these deposits earn no interest, although money guards may give depositors token favors or gifts. There are no restrictions on the uses money guards may make of deposited funds. In some cases depositors feel guards are doing them a favor by holding their money, and the amount of money deposited by each individual is usually small.

### *Savings groups*

Another important form of informal finance is savings groups. These consist of individuals who either regularly or irregularly deposit funds with a group leader (see, for example, Begashaw 1978 and Maloney and Ahmed 1988). In most cases these groups are formed spontaneously, but in Thailand a government agency—the Community Development Department—plays a role in organizing such groups. The main problem these groups resolve is the pooling of savings, and it is not uncommon for these mobilized funds to be deposited in banks. While these groups may collect funds regularly, they do not distribute them among members through any systematic rotation. These groups are part of a larger class of informal groups that

pursue a variety of purposes, ranging from conducting financial intermediation to taxing group members to improve public facilities.

Some groups periodically collect funds from members and then return the amounts deposited to savers at the end of a given period; these are essentially contractual savings programs. Instead of returning contributions to members, other groups use money collected as emergency loan funds. Group members are essentially building reciprocal credit possibilities through their deposits. In other cases, the funds collected may be used to invest in enterprises that are administered by the group. Some groups are managed by commission agents, while others are run by volunteer leaders. Various forms of these groups can be found in most low-income nations, but they are especially important in Africa and in Islamic countries.

### *RoSCAs*

A more complicated form of group finance is called rotating savings and credit associations (RoSCAs). They are found in many LICs and have been extensively studied, especially by sociologists and anthropologists (Bouman 1977). In a number of areas more individuals participate in RoSCAs than have dealings with formal financial institutions, and large amounts of money may be involved (Adams and Canavesi 1988). Recent research by Schrieder (1989) in Cameroon suggested the volume of deposits moving through RoSCAs may be larger than the amounts held in banks. In some countries, especially among ethnic minorities, RoSCAs are a primary way of raising funds to make large business investments (Barton 1977, Wu 1974).

These associations are particularly interesting because they explicitly pool savings and tie loans to deposits. RoSCAs also resolve the loan collateral and borrower information problems by enrolling only members who have mutual confidence in each other or by having organizers who guarantee the performance of individuals they enroll. Loan recovery is seldom a problem in RoSCAs, because a defaulting member not only loses the opportunity to remain in the association but may also be shunned and experience the loss of social and business ties that accompany membership (Velez-Ibanez 1983).

It is surprising how often RoSCAs are found among employees of formal financial intermediaries. Many of the workers in the National Credit Union Federation in Chocabamba, Bolivia, for example, are members of RoSCAs (*pasanakus*). People working for the Development Finance Corporations in both Belize and St. Kitts/Nevis regularly participate in RoSCAs (*syndicates* and *partners*). Numerous employees of commercial banks and central banks in Belize, Papua New Guinea, and Bolivia are also RoSCA members. These associations likewise operate among employees of the Central Banks of the Dominican Republic (*sam*) and the Philippines (*paluwagam*). In 1987 there was even a RoSCA operating among employees of the International Monetary Fund in Washington, DC, all of whom had doctoral degrees in economics or finance!

### **The Case Against Exploitation**

Critics most often cite exorbitant interest rates as the main justification for condemning informal finance. Cases of lenders charging 10 percent per day on loans, for example, are cited and then generalized as being representative of exploitation and proof of monopoly power. Also cited and generalized are horror stories about diabolical moneylenders or merchants who, in order to capture the borrower's collateral, extend loans to individuals whom the lenders know will be unable to repay. Other stories tell of debts that are inherited by the borrower's children, landlords who tie their tenants to land through debt at the company store, and merchants who link loans to repayment in kind and force borrowers to repay with products that are grossly underpriced (Basu 1984, Bhaduri 1977). These horror stories illustrate situations that are only possible when the lender exercises a large measure of monopoly power. Also, they report one-time operations that normally do not make economic sense for lenders who benefit from sustained relationships with their clients.

These blanket indictments, moreover, ignore the large number of informal loans made at modest interest rates, the multitude of loans made and repaid without the lender foreclosing on collateral, and the complexities involved in loans tied to marketing and production. They also ignore the extensive deposit mobilization that occurs in these markets, the multitude of informal loans made with no collateral involved, and the large number of people who pay high interest rates on their loans but realize even higher rates of return on investments made with borrowed funds. Critics also fail to mention that moneylenders may make only a few loans at extremely high interest rates, that these credits are often unsecured, and that borrowers paying the highest rates have low credit ratings. Critics also ignore inflation. In the mid-1980s informal lenders in Bolivia would have lost purchasing power on their loans if they had only charged 10 percent per week, while inflation roared along at a rate of several thousand percent per year.

It is also important to remember that many of the loans with so called usurious interest rates are small and are for very short periods. It is common in Latin America, for example, for street vendors to occasionally borrow in the morning enough funds to cover their sales for the day and then to repay loans in the evening. A typical loan may be for only ten dollars and require repayment of eleven dollars, an annual interest rate of over 3,000 percent. At the same time, the loan may allow the vendor to realize daily earnings that are several times the value of the loan. It is unlikely that moralists would be upset with a merchant who each day sold the same kind of merchandise to a vendor but added a markup of 10 percent to the price of the good, a transaction that did not involve a loan.

At least three questions must be answered to establish whether lenders are taking undue advantage of borrowers: (1) What are a lender's opportunity costs of funds and the risks involved in lending? (2) Are most informal lenders in a position to extract monopoly profits? And (3) are credit transactions linked with marketing and production to enhance exploitation?

### *Opportunity costs and risks*

Much has been asserted about the ubiquitous monopoly power of moneylenders, but little proof has been presented to support this allegation. Studies by Singh (1989) and Harriss (1989) of moneylenders in India, along with a similar study by Wilmington (1983) in the Sudan, show that moneylenders' interest rates are high because the opportunity costs of funds, together with lending risks, are high. These researchers argue that it is unreasonable to expect moneylenders to charge borrowers less than the rate of return lenders could realize on alternative investments and that many moneylenders have business alternatives that yield high marginal returns. The high interest rates in informal markets may largely indicate that funds are scarce and that at least some people realize high rates of return from using borrowed funds.

Christen (1988) makes the same point from the perspective of borrowers in Latin America. He argues that many managers of micro-enterprises borrow from moneylenders at high rates of interest because of the low transaction costs involved and the high quality and dependability of the informal financial services and also because high rates of return result from the use of borrowed funds. Many of these high return activities are also available to lenders and are further indications of high opportunity costs of lending.

In addition, because of the seasonality of agricultural production, informal lenders may find it impossible to keep all their money lent during the entire year. This forces them to charge higher interest rates during the time their money is lent to make up for periods when some of their loanable funds are idle.

### *Monopoly profits*

Because of the lack of barriers to entry, the large number of forms of finance, and the large number of people who are willing to enter markets where high rates of return are realized, it is difficult to see how informal lenders can regularly extract substantial monopoly profits. All the many forms of informal finance, as well as formal lenders, partially compete with each

other. In addition, anyone with money or easily transferable resources can become a lender. Effectively, there are few barriers to entry into informal finance. Likewise, borrowers can compete with informal lenders through substitution of equity for debt, barter, and sale and repurchase of assets. For example, if farmers have been borrowing funds from moneylenders to pay cash rent on farmland, they can instead rent land on a share basis from landowners. Also, the reason people invented money is that it will substitute for so many other things, but the reverse is also true: many things are partial substitutes for money through barter. The conditions necessary to realize monopoly profits exist only with barriers to entry and a highly differentiated product, conditions seldom encountered in informal financial markets.

If traces of monopoly power exist in informal financial markets, they can be moderated by expanding formal lending. To be fully effective, however, the expansion in formal finance must compete with those elements of the informal system that have little competition. An expansion of cheap formal loans that go largely to well-to-do individuals does not compete with informal lenders who are largely serving the poor (Gonzalez-Vega 1984).

### *Loans linked with marketing*

It is often difficult to establish clearly the charges that are applied to loans when the loan or the repayment are in kind, as is often the case with loans linked to marketing. For example, a merchant in Sudan may agree to lend a farmer two sacks of millet and require the repayment of three sacks at harvest time in only two months. On a commodity basis, this amounts to a monthly interest rate of 25 percent or an annual rate of 300 percent. On a financial basis, however, the rate is much lower, even ignoring inflation. Usually, the market price of millet between harvests is significantly higher than the price during harvest. If the inter-harvest price ranged from 25 to 50 percent higher than harvest prices, the interest rate on the loan would range from 0 to 120 percent on an annual basis. When loan repayment is in kind, the merchant assumes all the price risk, something that is of additional value to the borrower. If a merchant in fact consistently realizes a monopoly profit on his millet-credit transactions, the cause may be imperfections in the millet market rather than monopoly power exercised in credit transactions. The merchant may own the only truck in town that is needed to haul millet to central markets, but it is less likely that the merchant will be the only person in the area who has funds or resources to lend. If monopoly power lies in other markets linked to informal finance, that power will not be directly affected by finance activities or their regulation.

While I have not systematically studied linked credit transactions, I have talked with a large number of merchants in various countries who provide loans to some of their customers to facilitate purchases or sales of goods. I have yet to find a merchant who would not prefer cash transactions over those involving credit. This suggests to me that most merchants view lending as a necessary nuisance rather than as a way to sweat additional profits out of their clients.

### *Moneylenders as hospitals*

Some so-called malignant informal lenders are mainly involved in providing small, short-term loans that are seldom backed by collateral and that are made to individuals who often suffer economic reverses. It is this part of informal finance that is a lightning rod for criticism of informal finance in general.

Instead of stereotyping as evil the informal lenders who serve this difficult set of clients, it may be more useful to think of them metaphorically as hospitals. Many of the patients who go there are physically (financially) stressed. They lack sufficient knowledge (funds) to heal themselves. As a result of their visit, some of these patients are cured and never return to the hospital. The health of others is improved by their visit, but some of them must return periodically for additional treatments (loans) to sustain their well-being. A few patients may perish (default) after coming to the hospital because their illnesses were too far advanced, they had afflictions that could not be treated by medicine (loans), or they refused to follow prudent health practices (were inefficient or unlucky managers).

Continuing the metaphor, hospitals are the most expensive form of medical treatment (charge the highest interest rates) because they mostly handle patients who are seriously ill (have the lowest credit ratings). In times of plague or natural disaster, a higher proportion of the patients (borrowers) coming to the hospitals may expire (default) because the hospital staff cannot give them sufficient attention (loans) or because they cannot extend the treatment over a long enough period of time (roll over the debt). More of the patients may also pass away (default) because they arrive at the hospital in worse shape than is true in normal times. In addition, doctors (informal lenders) will make more mistakes in their treatments (loans) because they are also stressed by the disaster. Since hospital employees are susceptible to many of the ills suffered by their patients, some of the employees (informal lenders) contract diseases from their patients and become seriously ill and even expire (go bankrupt).

Blaming moneylenders for the financial difficulties encountered by a few of their borrowers is as illogical as condemning hospitals because they treat people who are ill and because some of their patients pass away.

## Lessons from Informal Finance

Informal finance persists and often flourishes because it resolves important problems that are handled poorly or not at all by most formal financial systems. I see at least six important lessons in this.

### *Types of services provided*

The variety of informal financial arrangements is evidence of the broad range of financial services demanded by people in low-income countries. It is surprising how different these services are from those emphasized in traditional formal credit programs. Deposits, small loans, and short-term loans make up a majority of informal financial transactions—services that are almost always absent in traditional agricultural credit programs. I conclude that many traditional credit programs may be providing the wrong mix of financial services.

### *Process based on discipline*

Informal finance almost always involves participants in orderly processes that result in increasingly disciplined behavior. Informal lenders must discipline themselves to save to accumulate funds to lend. They must further discipline themselves to collect sufficient information about prospective borrowers so their loans can be made on the basis of credit-worthiness. Informal lenders typically learn to judge credit-worthiness and mobilize deposits over many years and only survive in the business if they are successful in developing these skills. Because most informal lenders have equity interest in their loans, they look at credit as a privilege, not an entitlement, and view lending as a serious transaction rather than as a game of passing out favors.<sup>5</sup>

Informal borrowers also learn discipline as they attempt to establish and expand their credit-worthiness in the eyes of informal lenders or group members. Borrowers of informal loans must earn the privilege of borrowing through disciplined steps that may include saving before borrowing, repaying small loans before receiving larger loans, and always repaying obligations to sustain access to informal finance. The products of increased discipline are strong and dependable working relationships between lenders and borrowers. These working relationships are the foundation of stable, reliable, and sustainable financial markets.

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5. An informal lender, for example, would never think of passing out hundreds of loans in a day on an ad hoc basis as has been done in India through highly politicized "loan melas" (loan fairs). Nor would an informal lender ever consider dropping off hundreds of loans in remote villages via helicopters as was done in Nicaragua a few years ago.

All too often, traditional agricultural lending is a hurried event that ignores this important process of learning, testing, and discipline building. I conclude that formal lenders ought to spend more time learning how to make loans on the basis of credit-worthiness and that more attention must be given to helping borrowers systematically build their credit-worthiness before showering them with loans.

### *Savings*

The large amounts of savings that surface in informal financial markets are an indication of substantial propensities to save voluntarily and also show the miserable failure of most formal financial systems to provide attractive deposit services. Rural banks and cooperatives that do not accept deposits, negative real rates of interest on many deposits, and cheap rediscounting facilities in most central banks have resulted in few formal deposits being mobilized. Although formal financial systems should have a natural comparative advantage in mobilizing voluntary deposits, they have been largely designed to dispense cheap funds provided by governments and donors. I conclude that informal finance works well because it depends on voluntary savings (inside money), while formal finance often fails because it relies heavily on governments or donors for funds (outside money).

### *Reciprocity*

Many forms of informal finance involve reciprocity: the direct tying of loans to deposits or one person lending to another with the understanding—ofttimes implied rather than explicitly stated—that the lender may someday need to reverse roles. These unutilized credit reserves are especially important for low-income people who face uncertain conditions. Seldom do traditional formal credit programs provide lines of credit or more than just a single loan during a given period—they do not provide emergency credit. I conclude that formal finance would be much more useful to many people in LICs if credit reserves were more readily available.

### *Financial innovations*

Informal finance is peppered with innovations that reduce transaction costs, especially for depositors and borrowers. It is surprising how quickly informal finance can innovate to accommodate changing conditions such as inflation, economic prosperity, or economic downturns. Flexibility and suppleness are hallmarks of informal finance. In contrast, much of the innovative energy in formal financial markets is directed at regulation avoidance, and formal finance is often too brittle and rigid to respond effectively when economic conditions change.

I conclude from this that managers of formal financial institutions ought to be more observant of innovations and changes in informal finance and try to emulate many of these innovations.

### *Transaction costs*

A major achievement of informal finance is keeping the transaction costs of borrowers and savers low by bringing financial services to places and at times that are convenient to clients. In contrast, formal finance focuses mainly on reducing the transaction costs of the financial intermediary with little concern given to how this affects depositors and borrowers. With rare exceptions, clients of formal financial intermediaries must make deposits and seek loans on the premises of the intermediary at times that may or may not be convenient to clients.

The sharp differences in the distribution of transaction costs among participants in formal and informal financial markets are excellent proxies for the basic orientation of principal actors in these two markets. Formal intermediaries are mainly concerned with cultivating their major sources of funds: government officials, central bank employees, and donor employees; borrowers or depositors of small amounts are often treated as if they were pests. Informal

intermediaries, in contrast, are almost entirely concerned about sustaining quality relationships with their borrowers or depositors.

I conclude from this that formal lenders must pay much more attention to reducing the transaction costs of borrowers and depositors and that they will likely not do this until large amounts of external funds are no longer available to them.

## Conclusion

Sustainable financial markets that operate efficiently and equitably are vital ingredients in rural development. The results of many formal agricultural credit programs in LICs over the past 30 years have been disappointing, and informal finance appears to be doing a better job of servicing the financial needs of many people in these countries than do these formal efforts. I do not want to be misinterpreted as arguing that formal financial arrangements are unnecessary and that informal finance is sufficient to support development; informal lenders are not the equivalent of the "noble savage." An efficient formal system is clearly necessary to intermediate over large distances, to efficiently manage large amounts of deposits, to make large loans, and to make long-term loans.

My main contention is that instead of trying to abolish informal financial arrangements, policymakers would be better advised to learn from them. Studying these markets will help to clarify the financial services that informal finance is providing more efficiently than formal intermediaries and may also uncover practices that could be adopted by banks and cooperatives that are providing financial services. Giving three cheers for the informal lender is far more in order than trying to drive them out of business.

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# 4

## DOES BANK INSOLVENCY MATTER? AND WHAT TO DO ABOUT IT?

*Aristobulo de Juan*

During a management meeting at the World Bank in Washington, D.C., the following questions were raised: Are there many exceptions to the rule that banking systems in developing countries are insolvent? Does bank insolvency really matter for development and growth? One of the participants mentioned the case of an Asian country where banks have lost about one-third of their portfolio, and argued that they were nevertheless fulfilling their function properly since they kept mobilizing resources "pretty successfully." Another participant replied immediately, "Yes, they certainly do, but they also misallocate them pretty successfully."

What is the name of the game? Is it deposit mobilization for the sake of mobilization or for the sake of proper allocation of resources to promote growth? Experience indicates that banks, when seriously insolvent, concentrate their loans on the largest and worst borrowers to prevent their bankruptcy, which triggers the banks' bankruptcy. Ultimate recovery becomes a secondary objective. Massive misallocation of resources may then take place. The general outcome of the process is the crowding out of productive lending and the increase of losses in the system.

### **Insolvency: Features, Causes and Implications**

According to conventional wisdom, all evils in a distressed financial system come only from the macroeconomic context. Therefore, if proper macroeconomic policies are applied, the economy will expand and banks will outgrow their problems. In case of recession, there is no point in doing anything about the health of banks, because anything you do will be useless. The macroeconomic context is obviously essential for the health of financial systems, but is the rest of the reasoning necessarily correct? Perhaps we are facing a vicious circle, derived from the impact of micro phenomena on the macro framework and the reciprocal interaction between macro and micro situations.

Distress in the macro context has a decisive bearing on the health of banks. The impact of mismanagement, ineffective supervision, and political influence is as important as the macro context in leading banks to insolvency. Also, insolvency leads to misallocation of resources and losses that will ultimately materialize as fiscal deficit. Such a situation makes it difficult for macro policies to be successful and achieve growth, unless the micro and institutional aspects are also addressed at the same time. Furthermore, conventional recipes for growth and competition that work in a context of reasonable economic health may even backfire.

#### *Bank insolvency as epidemics: the main features*

The situations characterized by widespread financial distress share certain features. In this section, we review the most significant of these common features associated with systemic financial distress.

*DEPTH AND EXTENT.* By way of reference, the existing epidemics of the 1980s are in countries where over 50 percent of the banks in a system are affected. Another measure of an epidemic is when more than 30 percent of the assets of a system are affected. Insolvency affects commercial

banks, as well as development banks. Development banks are frequently worse off, because the attempt to fulfill development and social objectives at any cost often leads to the dilution of the sense of risk, the relaxation of controls and the increase of losses. Similarly, insolvency affects private as well as publicly owned banks. The latter may have greater problems, if they are run as government agencies where political factors override economic considerations.

*NEGATIVE NET WORTH.* Insolvent banks have a negative net worth and incur current losses. Actually, while they may be showing a reasonable level of capital adequacy in the books, retained earnings may be derived from accruals on loans that are not being paid. Also, a considerable part of their formal equity may be formed by reserves derived from asset revaluations that go beyond their real market value. They are revalued in times of inflation according to tax criteria, but when prices go down they are seldom adjusted to their new market value. More significant is the high proportion of nonperforming and lost assets both in on- and off-balance sheet items. They involve losses that may amount to 20 to 50 percent of total assets, which is several times the equity capital. Those losses are found primarily in the loan and guarantees portfolio. Losses in the loan portfolio are not only found in term lending, but in financing working capital needs used to finance borrowers' losses. This practice also involves serious losses for the lender bank. The mass of nonperforming assets does not produce any yield. Neither do foreclosures, real estate, and reserve requirements. The flow of losses grows naturally, because those assets plus the stock of previous losses have to be financed with resources, which involve a service cost and are highly remunerated.

*NO DISCLOSURE.* The negative net worth and current losses do not show in the banks' books. As the president of a central bank of a major developing country once remarked, "Most of our banks incur big losses, but they all declare profits—and pay taxes and dividends." How can this happen? Poor accounting rules and practices, poor supervision by governments, unreliable external auditors, and the determination of many bankers to keep their problems hidden are blamed for lack of disclosure. When governments also wish to keep insolvency in the system hidden for the fear of losing public confidence or for lack of proper mechanisms and political will to deal with it, the effects of the previous elements are compounded. Governments, insolvent banks, and insolvent borrowers become accomplices in the art of noncompliance and hiding. A typical example is the present state of the savings and loans associations in the United States. The worst loans are not recognized as bad, but are labeled as "current loans" in the books. Interest, although unpaid, is capitalized and accounted for as income. Rolling over bad loans indefinitely to keep them evergreen and capitalizing interests may make these practices formally legal if regulations are loose. Any resemblance between the net worth and the results in the books and those in reality may become merely coincidental.

*DISPROPORTION IN OPERATIONAL COSTS.* Operational costs are out of proportion with the size of the business. An excess of branch offices, staff and paperwork, as well as extravagant spending are typical of banks in distress. In periods of abrupt deregulation or high inflation, banks tend to open more branches and hire more staff than necessary and (except with State banks) pay higher salaries than the market average. Also, inflation leads to short term operations, which involve a huge amount of paperwork and processing expenses. When inflation disappears, the real volume of the business shrinks, but the previous operational costs seldom decrease. Inertia operates. With few exceptions, banks' management is reluctant to close branches, because of fear that closing branches may trigger mistrust. Also, some governments limit the freedom of bankers to close branches to maintain a banking presence in remote or unprofitable areas. As for staff, bankers feel that the union's reaction and the image of instability that can be perceived by the market are serious constraints for redimensioning. Heavy paperwork and processing also remain in place because confidence in the system takes long to return, and short-term operations prevail for a long time. Proper computerization would help, but the bank management often thinks it has other priorities at that time.

*DEPOSIT RATES SOAR.* Having deposit interest rates beyond inflation rates are considered essential for deposit mobilization, but the problem described here is one of different proportions. If abrupt deregulation is introduced the fight for deposits will go beyond the limits of normal competition. Pursuit of the status and prestige associated with a big balance sheet, inexperience of banks in pricing and seeking growth for the sake of growth are frequent phenomena. The first behavior is a typical syndrome of banks in distress in order to show apparent signs of health. Although, when banks are in distress, high remuneration of deposits usually means that they need liquidity at any cost. The operational costs exceed the spread, and sometimes the spread is negative in terms of real flows. Hence, the banks take new deposits to cover payments of interests and operational expenses. Only a part of the new deposits are used for new lending. This kind of deposit taking often leads to increasing losses.

*LENDING RATES INCREASE.* Banks have little money to handle, because a sizable part of their resources have to be allocated to reserve requirements, forced investment, and privileged circuit. Another part is stuck in nonperforming loans. Deposit rates and operational costs are high. The results are high lending rates, high spreads in the books, and a perverse selection of borrowers. Those who accept high interest rates are probably speculators or high risk operations that will ultimately be unable to repay.

*DETERIORATION OF PORTFOLIO.* The loan portfolio grows worse, because of the perverse selection of borrowers induced by high lending rates. New lending tends to be concentrated on nonperforming borrowers, who are related to the banks or the bankers, or on borrowers holding large credits that cannot be repaid. A number of bankers consider they cannot afford to "stop the bicycle" by having a large client fall and go bankrupt. That would unveil the banks' insolvency and lead them to serious trouble or bankruptcy.

*UNSOUND CORPORATE CULTURE.* Corporate culture in banks is permeated by attitudes that have little to do with sound banking. Speculation in lending and related transactions becomes a rule. Hiding and creative accounting become a common practice. Worst of all, recovery goes to the bottom of the list of the bank's priorities. A factual convergence of attitudes takes place: the borrower is unable or unwilling to repay and the banker neglects recovery. In the case of lending to related parties, neglect is not coincidental. In state-owned banks, bureaucracy may add to the vices of corporate culture. And the fact that the state is the owner leads some bureaucrats to question their role in provisioning and recovering.

### *The causes of bank insolvency*

Macroeconomic problems have always been identified as a major cause of widespread bank insolvency. However, experience in supervision and in dealing with problem banks shows evidence that mismanagement plays a major role in bank insolvency (de Juan, 1991). A context of poor bank supervision, as well as political interference with banks in the areas of lending and recovery also play a significant role.

This paper will not elaborate on the macro causes of bank insolvency (Thorne 1988 and Hinds 1988). Therefore, the emphasis here will be on the microeconomic causes for insolvency: mismanagement, lack of supervision, and political pressure.

*MISMANAGEMENT.* It is an evil in itself that may cause serious damage to a bank or to a banking system as a whole. The most significant feature of mismanagement is the dynamics of deterioration that it introduces in banks, through a behavioral process that is difficult to reverse with external policies and measures. Mismanagement is more likely to occur if banking supervision is ineffective. Types of mismanagement can be grouped into four categories: technical mismanagement, cosmetic management, desperate management, and fraud. They do not have to occur in a sequential manner, but when technical mismanagement leads to losses or to the need for a dividend reduction, it frequently unleashes cosmetic and desperate management.

Fraud may be part of the dynamics that make good managers become bad managers. Illiquidity comes at the end of the process. In the meantime, the bank in question may have lost its capital several times.

Technical mismanagement may involve a whole variety of inadequate policies and practices. The most relevant ones are overextension, poor lending, lack of internal controls, and poor planning in the areas of business and management.

Cosmetic management consists of hiding past and current losses to buy time and remain in control, while looking and waiting for solutions. Typical procedures include evergreening loans or systematic rollover, capitalization of interest rates, and fictitious or unrealistic collateralization.

Desperate management refers to a situation where bankers see themselves in danger of having to declare a capital loss or having to pay for fewer or no dividends. At that stage, the banker, besides indulging in cosmetics, will look for businesses that may permit them to buy time and make up for the previous deterioration. The main practices followed under these attitudes are speculation, paying above market rates for deposits, and charging high interest rates to borrowers.

Fraud may have been one of the causes of losses for a bank at an earlier stage. When illiquidity approaches and the banker feels the end may be near, he may be tempted to divert money out of the bank. Typical channels are lending to companies and buying or selling companies that are owned by, or connected with, the bank. All these operations are properly materialized through fiduciaries, paper companies, and other similar methods to escape supervision.

*INADEQUATE SUPERVISION.* Poor supervision is also a decisive element in allowing for bank failure and insolvency. For the sake of simplicity, the general concept of supervision can be broken down into three components: regulatory framework, verification activities, and enforcement. In a situation of macroeconomic shock, particularly in periods of adjustment or economic deregulation, a strong prudential regulatory framework is indispensable for damage control. To have proper regulation implemented, the market and the government should be in a position to supervise the banks through proper disclosure of information and institutional verification mechanisms. If problems are unveiled, effective and prompt enforcement of remedial action is the necessary supplement. Otherwise, the problem will grow and both the regulatory framework and the supervisory mechanisms will be discredited.

Many developing countries show some major gaps in bank regulation. While exit from the market seldom happens, entry requirements are very loose or, if stringent, based on the wrong criteria. Capital adequacy requirements are set too low to cushion losses, allow for components of capital that hardly deserve that name, and are frequently measured as a proportion of deposits or assets, irrespective of the risks involved. Accounting systems are very poor, especially in the area of loan classification, which is not regulated at all or is only based on formal aspects of loans, rather than on actual riskiness of the borrower. Limits to large exposures or to loans to related parties do not exist or are very lax (one to three times the bank's equity in some cases).

As far as verification is concerned, all countries have an institution responsible for such an activity. They normally operate within the central bank, within the ministry of finance, or as a separate government institution. Their staffing is insufficient in quality, their remuneration is low, and no regular training is in place. Their work is based on poor accounting systems and sketchy or meaningless required prudential reports. The paperwork involved is often overwhelming for banks, but not enlightening for the supervisor. Little use of computer and analytical methods is applied for off-site surveillance. Also, on-site verification focuses on compliance of administrative regulations rather than on the banks' health problems. Inspections of banks take place after long time spans (three to eight years in some countries) and credit analysis is conspicuous by its absence. Therefore, risk assessments are hardly ever made, problems are unidentified, and the supervisory authority works in the dark.

As a supplement of the governments' role in verification, external audits of banks by independent public accountants is a mandatory or recommended practice in most countries. Those audits are usually of a statutory nature and focus on the compliance of generally accepted accounting principles by banks. Although most of them are supposed to establish whether the banks' accounts are a fair and true view of their financial situation, they seldom unveil existing solvency problems in the banks. One of the reasons for their failure is the adherence to domestic accounting principles that are loose on provisions for loan losses and interest accruals. Poor skills and lack of interaction with the government supervisors can also be blamed for the problem.

Sometimes, administrative and minor signs of health problems are detected. Insolvency problems are often detected, as a result of illiquidity (only when a bank is insolvent several times) or of fraud that becomes known to the public. Enforcement of remedial action is the key to solve problems at any stage, but especially if a bank proves to be insolvent. In some cases, the legal framework is such that regulators do not have the necessary powers to apply good remedies. Even when regulations are good enough, they are hardly enforced. For fear of macro dislocation, and for lack of political determination and institutional mechanisms, insolvent banks are kept alive as "zombie banks," without ever being restructured. Occasional fines or penalties, as well as minor harassment by the supervisor, are common remedial actions. The incentive for mismanagement is therefore succulent.

*RESERVE REQUIREMENTS.* Often, governments also decide to impose high reserve requirements on banks with remuneration, in an attempt to check inflation and regulate monetary flows. Furthermore, banks are frequently required to allocate a high proportion of their deposits to finance public deficit through forced investment in government securities. They are also required to allocate a part of their deposits to finance development projects or privileged circuits of credit. This is the case with government securities at below market rates. Also, in the case of privileged circuits, it is usually mandatory to allocate resources to borrowers that carry a favorable treatment in terms of interest rates and maturities. What is left for a bank to lend freely against a proper remuneration? Such policies involve a serious burden on banks' profitability and leads to high rates on free lending.

*POLITICAL INTERFERENCE.* In a number of countries, especially in state-owned banks, lending is strongly influenced by pressure to achieve social, political, or developmental objectives. Pressure for nonrecovery or tolerance for nonrepayment is not infrequent either. Appointment of management is also influenced by political factors. The existence of political pressure is a very good excuse for lax management and accounting practices. Such a context makes it difficult to find competent and independent professionals as board members or top bank managers.

*NOBODY PAYS—NOBODY RECOVERS.* Inadequate legal procedures for recovering loans is a common feature in insolvent systems. Foreclosing on collateral is a lengthy and complicated adventure that may take over five years in some cases. Borrowers as well as bankers are well aware of this and yet they rely on collateral or establish an open line of credit rather than considering the ultimate destination of the loan and the ability of the borrower to repay. There are also examples of lending to farmers, in which cattle is offered as collateral. As an African banker used to say, "Those collaterals have legs; they walk and disappear." There is also the process where the banker does not dare to request reimbursement or foreclosure for fear of unveiling its own failure.

### *The implications for the economy*

The insolvency of banks has consequences that are beyond the resulting losses for the shareholders and creditors of the banks. We now turn to a brief review of the broader implications of financial distress for the economy.

*DEMONETIZATION AND CAPITAL FLIGHT.* The role of banks as part of the payment system and as one of the basic pillars in resource mobilization/allocation makes stability of the financial system desirable. Publicly known insolvency, even if it only affects a large bank or a few banks, may trigger off a confidence crisis resulting in deposit runs. This may affect stability and contribute to demonetization and prompt capital flight. If insolvency is widespread, even if unknown to the public, the repercussions for the economy constitute a serious obstacle for economic growth and for the success of sound macro policies. Growing distortions in resource allocation, upward pressure on interest rates, a corporate culture with no sense of risk or disclosure, and growing losses in the system are the main areas to highlight.

*LOAN CONCENTRATION AND CROWDING OUT.* Concentration of lending on large borrowers is not only one of the main reasons for bank insolvency, but is also one of its main effects. An insolvent bank will tend to refinance indefinitely and increase lending to those borrowers that are in trouble in order not to precipitate their failure by stopping lending or by foreclosing on them. This situation becomes particularly serious when borrowers in trouble happen to be subsidiaries of the bank or related to it or to the bank's owner. The hope to have the situation reversed if the economy improves and also the need to buy time in order not to unveil the bank's own losses are the main reasons for such behavior. When insolvency is widespread, this behavior means allocation of a large part of the new deposits that are mobilized to corporations with no future that allocate their borrowing, not to productive activities, but to the covering of expenditures and losses. As a result, those activities with productive prospects that might have a stronger impact on the growth of the country are crowded out to a large extent. A typical case was the Rumasa holding in Spain, which was nationalized in 1983 and then re-privatized in 1984. Rumasa owned 20 banks, holding 5 percent of the banking system's assets and over 200 industrial and service companies. When the group failure was addressed, those 200 companies, through over 300 phantom companies, had accumulated 65 percent of the 20 banks' total loan portfolio. Only the loans to 15 of those companies were performing, but none were formally classified as overdue.

*HIGH INTEREST RATES.* Interest rates will increase and get out of hand if insolvency is widespread and remains untreated. The impact on the behavior of borrowers, on prices, and on growth is obvious. In Bolivia, fiscal deficit and inflation have been successfully checked since 1986, but interest rates have remained extremely high and do not show signs of improvement. Widespread instability in the banking system is perceived by depositors, who ask for a high remuneration to offset the risk. Insolvent banks pay the depositors any interest rate to attract deposits and remain liquid. Banks try to compensate for the lack of yield from their nonperforming assets. Both situations lead them to charge high rates for their new lending, which may seriously damage the development of the real economy, prompt disintermediation, and distort sound monetary policies.

*DISAPPEARANCE OF THE SENSE OF RISK.* The corporate culture in the banks deteriorates. Speculation, undisclosed, and the dichotomy of nonrecovery of loans and nonrepayment have a strong impact on banks, an impact that makes the sense of risk and incentives for improvement disappear. This is a phenomenon that takes a long time to reverse unless dramatic changes take place in the management of banks and in bank supervision. And worse, this culture permeates beyond the banks, in the corporate world and in the behavior of the whole society and government.

*FISCAL AND MONETARY DISTORTIONS.* Unaddressed bank insolvency also has a tangible economic implication in the fiscal and monetary areas. The losses in the system spiral through a dynamic process of deterioration. In cases of state ownership, losses are already within the state. In cases of private ownership, they are in the corporate borrowers and/or in the banks, but they are also in the system. In many cases, governments absorb them to keep the borrowers and/or the banks ongoing. Subsidies to banks, liquidity support through rediscount facilities,

special advances by the central banks, or special deposits by the treasury or other government institutions are very common. The cost is already being incurred, but the benefit of a solution to discontinue losses is not there. Furthermore, the losses that are being incurred by the government, within the state-owned banks or through subsidies to the banking system in general, remain undisclosed, often as advances on the balance of the central bank. Those advances will probably not be performing or be recovered. They are not recorded in the budget or even considered as quasi-fiscal deficit, although ultimately they are sheer fiscal deficit. In the end, the situation will become so dramatic that the government (that is, the taxpayers) will have to step in and foot the bill. If addressed promptly, the size of the problem could be much smaller and the cost easier to share with others.

*CONFLICT BETWEEN INSOLVENCY AND SOME MACRO POLICIES.* In the context of a healthy economy and a healthy banking system, deregulation of markets and tight monetary policies are the usual recipes for success. However, some of the measures involved in those two sets of policies may prove counterproductive and fuel up the problems policymakers are trying to solve. This paper is not at all against those policies, but is in favor of their gradual implementation, and advocates for treatment of insolvency simultaneously with them or even before. Following are a few examples.

Deregulation of interest rates is a sound policy to encourage competition, with a view to increasing deposit mobilization. However, problems may develop if deregulation is abrupt and takes place in a situation of distress. If a bank is insolvent, deregulation will lead to a sharp rise in deposit rates to attract new resources. The new resources will not be entirely used for sound lending, since a considerable proportion will be allocated to cover operational costs so that the bank can remain liquid. As a result, the insolvent bank will not be able to compete for good borrowers through low lending rates. The cost of deposits and operating costs are high and the new resources to allocate are scarce. This results in extremely high lending rates and worsened quality of the portfolio.

Deregulation of entry into the financial markets is a typical sound policy. However, when access to the market has been opened abruptly in a context of distress and no stringent requirements have been set for entry, the outcome has often been disaster within a few years. Many of the financial institutions that are set up or taken over under those policies are owned by speculators who want to make easy money, or by businessmen who want to ensure financing for their own business. In most cases, those institutions become insolvent. In some countries, like Argentina, many of them were liquidated: exit was used as the logical counterpart to entry. Exit affected some 200 institutions, and their liquidation brought about a widespread feeling of instability, which encouraged demonetization and capital flight. In other cases, like Spain, most of the 52 banks (out of 110) that went insolvent between 1977 and 1984 had been recently set up or taken over by new bankers.

Desegmentation of banking will obviously favor competition and a better operation of systems as a whole. But an example will show that desegmentation is not universally good in a context of insolvency. Some governments decided that, to increase competition, second-tier banks and finance companies should be licensed for deposit taking. In a situation of distress, a considerable part of the banks' previous loans are frozen with bad borrowers that can hardly repay their debts. So, the new deposits are likely to be obtained at a high cost, and will be allocated to the troubled borrowers. Having easy access to new resources, incentives for the banks to address recovery and discipline borrowers will have disappeared. The effects will have clearly been counterproductive.

Increasing reserve requirements is also a typical measure to check inflation by absorbing liquidity from the system and, sometimes, to finance a fiscal deficit. The cause-effect relationship is very clear in sound economies, but when the requirements go beyond reasonable limits and/or banks are in distress, the implications may be detrimental. In fact, reserve requirements are normally not remunerated. Therefore, high reserve requirements seriously reduce the profitability of banks. The obvious reaction of most bankers will be to protect their spread and profits by passing on the cost of the frozen funds as an increase of the lending rates of

the few resources they can still allocate freely. The effects of the measure will be a sharp rise in interest rates, deterioration of loan portfolios, increasing losses, and disintermediation.

## **A Strategy for Institutional Treatment**

This paper focuses on the micro treatment, not only as a need in itself, but as a necessary approach in order to make macro policies and economic deregulation successful. If the economy grows, the borrowers' distress and, hence, the banks' distress will be relieved. On the other hand, growth, unless spectacular and sustained for many years, is not likely to solve problems of insolvency when its depth is also spectacular. We are confronting a vicious circle, where widespread bank insolvency makes it difficult for an economy to grow on a sound basis. It may also make deregulation of financial markets ineffective or even counterproductive.

Micro and macro treatments should therefore go hand-in-hand. A proper sequencing should be established, but seeking a perfect one is not advisable. It may lead to no action at all. In fact, the political difficulties that are met in approaching any one of the key sets of measures makes it almost impossible to implement a complete package in a perfect sequence. Even in the midst of serious economic imbalances, a number of institutional measures can play a significant role for improvement in the banking systems and begin to unleash positive reactions in the real sector and at the macro level.

Therefore, what could be the strategy for institutional reform and the measures to consider? There are no fixed patterns of action or predetermined recipes for each particular country. Flexibility should be the rule. Measures taken may differ depending on the size of the systems and the problems, and on whether banks are privately or publicly owned. The process will also depend on the degree of information about the extent of the problem. Action will ultimately be determined by the strength of the government and its political will. However, while taking flexibility for granted, a given strategy will be suggested in this paper to group a series of priority measures in the areas of bank regulation, supervision, and restructuring.

Some bankers and many governments do not know the real nature and the scope and depth of the bank's problems: "getting out of the dark" through adequate information and verification should be a top priority. Educating bankers and making it possible for supervisors to impose discipline leads to the second priority: introducing prudential regulation focused on a preventive approach to financial problems and an effective remedial action. Actually addressing the problems of insolvency is the next step in a logical sequence. This leads to the third group of measures grouped under the concept of restructuring. But if insolvency is apparent, taking remedial action becomes the first priority, and a reversal of the logical order is recommended. Simultaneous action on the three areas can also be recommended, since some of the processes are slow. The cost should be the determining factor in establishing the right sequencing.

### *Getting out of the dark*

Without proper knowledge of the financial situation of a bank, board members and shareholders will be unable to control it and to press for changes in management when needed. Depositors will not be able to differentiate reliable banks from unreliable ones. Supervisors will not be able to introduce discipline and remedial action for lack of legal grounds. Political pressure on banks will not be limited by awareness of what its quantified implications are for the health of the system and the economy. Sad as this picture may sound, it describes the situation in many countries. This paper will focus on three main areas where action may bring all parties concerned, at least partly, out of the dark: accounting systems, disclosure, and verification.

*ACCOUNTING KEYS.* Accounting systems are considered by some as a minor technicality, but they are not. A proper accounting system will not only facilitate ex post control, but will also show the real net worth and profits, which may differ considerably from those in the books.

Also, it permits effective verification by supervisors or external auditors. Proper accounting lays an indispensable ground to educate the bankers and to give them incentives to develop sound lending policies and to implement consistent recovery action. Out of the many accounting rules, the basic area is that of assets classification, provisioning, and interest accruals.

*Assets Classification.* Proper regulation should make it mandatory for banks to properly classify all their risk assets according to quality, including loans, overdrafts, open lines of credit, and off-balance sheet items. The criteria for classifying loans as current or otherwise should not be limited to situations where a loan is formally overdue or its limit exceeded. Since rolling over and raising limits of bad loans and capitalizing interest is so common, the real quality of the portfolio can only be identified if classification criteria relate to the riskiness of each particular borrower or group of borrowers (that is, the probability of them servicing their debt and repaying the principal). This must be based on the borrowers' financial situation and prospects. Judgment should be used in this exercise. The borrowers' net worth and profitability, or their cash performance with the lender bank are good guidelines. Good borrowers can see their loans rolled over or their limits raised. Nobody should resist to classify a loan as doubtful if the borrower in question has a negative net worth and negative results. This all applies particularly to advances in the form of overdrafts and open lines of credit when improperly used to finance needs other than working capital.

*Provisions.* Once an asset is classified as "not current," whatever the label or grade of the situation (watching list, substandard, doubtful, uncreditworthy, loss and so on), provisions should be made to cushion the potential loss. Also, for assets beyond a certain degree of risk, interest accruals should be suspended. These two accounting rules are not only fundamental to surface the real equity and profits of insolvent banks, but are also effective tools to take preventive and gradual action when the original situation is still healthy enough. To this effect, the supervisory authority should establish formal instructions or guidelines, setting quantified provisions to be made for bad loans in each of the different categories. Bankers would then be able to follow sound and uniform policies. External auditors would be able to check on compliance. Supervisors would be in a position to discuss with bankers the proper provisions to be made. An additional benefit from this well-informed dialogue is that it will enable the supervisors to identify the sources of disagreement with bankers and, if appropriate, to formulate better guidelines, taking into account the bankers' legitimate concerns.

*Accruals.* Suspension of interest accruals of risky loans is at the core of bank supervision. The practice of interest capitalization and interest refinancing makes it very difficult to appraise the real quality of interest income, unless proper regulations are in place to suspend accruals promptly. When a bank's failure is unveiled and its situation is verified, the losses found by external auditors will be much higher than those declared by the banker. The main adjustment to be made to loan value in the books is the snowball formed by interest accrued. They have been accounted for as income in the past, even though they were not and would never be collected. The actual value of each bank's investments, fixed assets, and sundry accounts should also be appraised according to adequate rules and adjusted to their market value.

*DISCLOSURE OF FINANCIAL INFORMATION.* Disclosure is another key area to emphasize. The special nature of banks as deposit takers and their role in the payment system make it necessary for a supervisory authority and for the public to receive more detailed and prompt information than would be adequate in other sectors of the economy. Contents of prudential reporting to the supervisor is important in encouraging sound policies and making it possible for the supervisor to fulfill his or her role. Consolidation of the accounts of the banks with those of their holding companies and subsidiaries, a proper aggregation and classification of data, adequate periodicity, and prompt delivery of information to the supervisor are to be emphasized.

Disclosure to the public is recognized by all as a necessary tool for the market to exert its own discipline. Shareholders and depositors will give their preference to better banks at the expense of the worse ones, thus giving the latter an incentive for improvement by their own board of directors and management. However, in countries where accounting systems are poor and verification is ineffective, emphasizing public disclosure of the figures in the banks' books

or trying to achieve disclosure overnight may be counterproductive, as long as that information is inaccurate or misleading. Also, where insolvency is widespread, imposing public disclosure should be gradual. Governments should avoid publicizing insolvency before they have the remedies to solve it. Otherwise, two situations may occur: the depositors may make a general deposit run, or the supervisors may find an incentive to join the bad bankers in their wish to keep reality concealed through cosmetic procedures.

*VERIFICATION.* The concept of verification requires more thorough elaboration. Verification can be conducted through each bank's internal controls, by governments through their supervisory institutions, and by external auditors. The primary responsibility for verification lies with the bank's management itself, through its own internal controls. In mature societies and systems, internal controls can be trusted to a reasonable extent as producing reliable data. In some of those cases, governments limit their verification to the analysis of prudential reports from banks and discussions with bank management. They also use external auditors as a surrogate for an inspection corps, which they prefer to avoid to not incur the cost and to not interfere in the management area of banks. However, in countries where the system is not mature and banks are generally in trouble, strengthening of internal controls of banks should be encouraged. Their results must be verified on-site by the government examination procedures. Proper analysis of prudential reports and external audits are also necessary.

*Government Verification.* Most governments have a bank supervisory agency located within the central bank, within the ministry of finance or as an independent institution. Sometimes, several government departments are simultaneously responsible for different aspects of supervision. Different ministries supervise different parts of the financial system. Determining the right location for supervision and the right labor division is a very controversial topic. Bank supervision operating within the ministry of finance can result in a bias, where supervision is approached from a tax compliance point of view. If within the central bank, the bias may be overemphasis on monetary supervision and consideration of overall monetary balance rather than dealing with problem banks. Also, supervisors as a corps are considered less important if located within the central bank. The bias of supervision, if located within a deposit insurance institution may lead to duplications with the previous institutions. Independent institutions may lack the necessary coordination with monetary issues, lending of last resort function, and so on. All of these alternatives also have advantages. While it is difficult to present a priori a good case in favor of one of the different alternatives, a few rules of thumb can be mentioned for developing countries:

1. It is desirable to have one single institution primarily responsible for bank supervision to properly monitor stability and solvency of the system. Prudential regulation, access to the market, monitoring performance of the system as a whole, and of each bank, and ordinary enforcement of remedial action should be in the same hands. If there is more than one agency involved, one of them should have the lead, and very close coordination among them should be ensured.
2. The institution in charge should be placed as high as possible in the government structure to ensure the power in making independent decisions (with as little side interference as possible). This includes a high professional level and high remunerations for employees.
3. Dealing with problem banks, especially if liquidation, portfolio restructuring, and temporary management are involved, will be more efficient and independent if handled by an ad hoc agency run by bank professionals rather than by civil servants, lawyers, or simple administrators from the central bank or the ministry of finance.
4. The above considerations will generally be in favor of having primary responsibility for bank supervision located within the central bank or within a superintendency or independent agency, and with jurisdiction over all financial intermediaries.

Bank supervision, as far as government verification is concerned, has two main areas: off-site surveillance and on-site examination. Both of them should be carried out within the same institution, under a common command, and in close coordination with each other.

In off-site surveillance, the supervisor uses prudential reports from the banks and direct contacts with the bankers to review performance to issue individual recommendations or directives. Prudential reports should be designed by the supervisor as a uniform pattern for all banks, in such a way that they can be checked and lead to meaningful analysis and early warnings about the potential problems. Adequate periodicity and prompt returns are also necessary. The use of computers for proper analysis and comparison is an essential tool. Comparisons of each bank's performance should be made in respect to other banks. Each bank's performance should also be compared with its own performance in previous periods. Other than basic aggregated items from the balance sheets and income statements, a selective system of a few meaningful indicators should be established as a basis for an early warning. If they work and are actually used by both analysts and examiners, they can be enlarged gradually over time. A useful instrument is supplying the banks with comparative reports as education material for bankers. Such material will make them aware of their own problems at an early stage and of the way they are perceived by the supervisor.

Useful tools of bank supervision are credit clearinghouses or *centrale de risques*. Such a mechanism may be located within the government supervisory institution to centralize information received from each bank on every risk, beyond a certain sum incurred with each borrower. The *centrale* compiles the information received and returns it to those supplier banks that request it. No mention is made of other banks' data, but only the sums involved for each client is broken down by term maturity, on- or off-balance concepts, and domestic or foreign currency. This mechanism is useful for banks to make well-informed lending decisions and for supervisors to detect and check any undesirable loan concentration.

A basic pillar of a good off-site surveillance is a proper bank rating system. The supervisor checks periodically on the basic elements of each bank's health and gives it a rating for each aspect of its state as well as an overall rating. The type of rating for each bank determines the frequency of inspections, their nature, and the kind of follow-up or remedial action to be recommended or imposed on each bank by the supervisor. A typical pattern for rating can be provided by the rating system applied by the U.S. regulators, called the CAMEL system. Every initial stands for a basic concept to watch over: C for capital adequacy; A for assets quality; M for management; E for earnings or profitability; and L for liquidity. This system is no panacea, since prudential information is very poor, but it helps, particularly when the banks' returns are verified through on-site examinations.

On-site examination is a direct verification of the books and prudential returns through visits to banks. This activity proves indispensable when prudential reports conceal the real situation of banks. In a number of developing and other countries, inspection visits have traditionally focused on formal compliance with regulations; typically on reserve requirements, formal capital adequacy, sectoral allocation of credit, stamp tax compliance, and proper processing of applications for branch openings. In case of noncompliance, an administrative procedure is started that often takes long and leads to minor penalties.

Rather than the system described above, on-site examination should be focused on verification of the quality and real value of assets, since accuracy of reporting is seldom the rule. This should be done through physical inspection of the files of the bank, mainly the portfolio, the investments and the fixed assets files. While a sampling system should be used, with larger samples for strata including larger loans, a file-by-file examination should be conducted of all on- and off-balance sheets, and on risk assets beyond a certain sum and those involving all borrowers related to the banks or the bankers. It is only in this manner that the riskiness of each asset and its real market value can be determined. The implications of assets classification of the necessary write-offs, provisions for loan losses, suspension of interests, and other adjustments will provide the supervisor with an indispensable tool for adequate diagnosis and enforcement action. The results of the inspections should be written and discussed

with the bankers who should be given the right to appeal. In case of basic disagreement, the supervisor must be given the final say by law or regulation.

*External Auditors.* To have external auditors play a useful role as a supplement to the examination function, an ad hoc system could be temporarily put in place while waiting for the government mechanisms to gain strength in terms of manning, skills, and procedures. This system could be conducted for one to three years as follows:

1. Banks would be required to have their accounts checked along the lines of a long-form pattern, according to specific terms of reference. The auditors would be lead to primarily focus on credit reviews and establishing all adjustments to be introduced on the balance sheets and income statements to identify the real net worth and profitability of each bank. Auditors in some countries are not equipped to do this, but should be trained to that effect.
2. The audit may be commissioned directly by the supervisory authority, as an extension of its inspection function. This will facilitate communication and independence.
3. The cost may be paid by the audited bank or by the central bank. In the latter case, the central bank may incur the cost or recover it from the banking industry as an overall contribution to supervisory costs.
4. Banking legislation should allow for regular communication between auditors and supervisors, together with the audited bank. In cases where information is hidden from external auditors or where serious problems are detected by them but disclosure to the supervisor is omitted or hindered by the banker, the auditor could be obliged to report the situation to the Supervisor.

#### *The rules of the game: prudential regulation*

Along with the set of measures aimed at getting out of the dark, governments should revise their prudential regulation to establish sound, clear, and easily monitored rules. Bankers will thus be encouraged to run their banks better, and supervisors will be given better tools to perform their function. The array of measures that good prudential regulation should cover is wide, but this paper will address some key topics. Some of them are so fundamental in nature that they require changes in the existing laws. This has a political cost and takes political determination to achieve. New regimes, new governments, and stable systems are found to be more favorable to such approaches. When that is the case, the best laws are those that deal with the fundamental issues as a basic framework but leave details to be developed in regulation at a later stage. This kind of flexibility should not conflict with the strictness of measures to be included in laws to support effective enforcement powers for remedial action.

*ACCESS TO MARKETS.* Entry requirements should be very strict, because of the distortions caused by insolvent banks that remain open and the actual cost of deposit protection if they are closed or restructured. They should apply both to entry proper (setting up a bank) and to takeover operations when a majority package changes owner. Initial capital requirements should be set at a high level, and the identity and solvency of the promoters and the management team should be checked by the supervisor. A clear and consistent business plan, including lending policies, should also be required as a condition for authorization. The typical case of businessmen who set up a bank or take control of a previously existing one, sometimes through borrowed financing linked to their businesses or to the acquired bank, and with a view to ultimately use the bank to support those businesses, should be prevented. Experience in many countries shows that a majority of the banks that fail were set up in or changed owners in the wake of an overliberal deregulation of entry.

*CAPITAL ADEQUACY.* Most systems in developing countries that establish how much equity capital is prudent set a limit as a proportion of deposits. The debate is generally whether a leverage between one to ten or one to twenty-five is adequate and if the same criteria should

apply to all banks. In systems like those described in this paper, a simple and realistic pattern of action could be recommended along the following lines:

1. Similar capital adequacy criteria should be required for all kinds of banks for safety reasons and to ensure fair competition. Development banks, because of the higher risk generally involved in long-term operations, could be required to have a higher level.
2. Following the current initiative of the G-10 countries and the Bank for International Settlements, through the Basle Committee, the level of minimum equity required could be referred to the risk assets of each bank rather than to the deposits, if equity is to serve as a cushion for potential losses. If we take the example of banks whose lending is partly funded by the central bank or by international institutions, this funding is not called deposits, but it is obvious that the counterpart lending operations do involve risk and should be cushioned by capital. The document issued by the Basle Committee to this effect contains detailed guidelines for the G-10 and other countries to adhere to. It focuses both on the constituents of capital and the different kinds of risks and their respective weight. The document is a suggested reference for governments in developing countries, but it may prove too complex for many of them. A scaled-down, simpler set of guidelines would be more effective.
3. A weighing system for each kind of risk is recommended. However, at a first stage, this approach may be reduced to a minimum set of weights waived in order to simplify change in a nonsophisticated context. In any case, secured loans may be given the same treatment as unsecured loans in countries where security is formally overvalued and very difficult to foreclose on. Also, off-balance sheet items may be given the same weight as on-balance sheet items, because, while less risky in theory, insolvent banks often show a high proportion of losses derived from contingencies.
4. Assets revaluation reserves should be excluded from capital, whenever their book value is high above their real marketable price. This could also be done with general provisions, when made in a context of poor supervision, where specific provisions are always insufficient to cover potential losses derived from specific borrowers.
5. Capital adequacy should work alongside proper asset classifications and provisioning regulations, such as the ones described under getting out of the dark. Otherwise the level of formal equity may prove meaningless and lead supervisors to self-complacency in the midst of insolvency problems.

*LARGE EXPOSURES.* Limits to large exposures and to connected lending is a basic pillar of a sound set of rules, since most bank failures are closely related to loan concentration, lending to related parties, or a combination of both. The two basic questions are how to typify the concept of borrower in order to limit the financing he or she can receive, and what limits should be set. The concept of a group of borrowers, compared to one individual borrower, is a key element for adequate control. Otherwise, a borrower willing to turn around the limits will use subsidiaries—real or phantom companies—as recipients of new loans that will ultimately be used by the initial borrower. As for the limits, a proportion of total equity should be the maximum limit for exposures to each group of borrowers; 10 to 20 percent of total equity could be considered a reasonable range to operate, depending on the circumstances prevailing in each country. A distinction could be made in favor of secured loans, but only in countries where securities are properly valued and readily foreclosable. Some legislation may be written that allows for exceptions to those limits authorized by the discretionary powers of the supervisory authorities. Another school of thought advocates no exceptions at all, to avoid political pressure that may place the supervisor in a vulnerable position. This is a more effective approach. When the initial situation in a country is one where, legally or de facto, some large exposures amount to a high proportion of capital (sometimes over 100 percent of the equity capital), a phase-in period of one to three years could be established for banks to gradually reduce their concentration. Encouraging cofinancing between banks or with a government fund

could be an alternative to consider. If inflation prevails, a partial or total freezing of the lending nominal volume is an effective way to reduce concentration in real terms.

*LEGAL RECOVERY PROCEDURES.* Inadequate legal procedures to recover loans are a serious obstacle to sound banking as well as an incentive for a general attitude of nonrepayment on the part of the borrowers. A general overhaul of foreclosure and bankruptcy procedures should be considered to achieve a major reversal in the following situations: courts that are overloaded with work, slow foreclosing procedures and frequent loopholes that are used by borrowers to block or delay foreclosure, complex auction procedures to dispose of foreclosable assets, and bureaucratic and legal obstacles to effective liquidation in case of bankruptcy that make many assets lose considerable value.

*ENFORCEMENT POWERS.* Political will at all levels is indispensable to have remedial action implemented, particularly when serious problems are at stake. But political will requires a proper legal framework that gives the government the powers it may require. In this respect, legalizations in a number of countries have serious loopholes that should be bridged. Some areas to emphasize are: authority to decide on assets classification, provisions and accruals if the supervisor disagrees with the bankers, removal of directors or management, suspension of the capacity of bankers involved in previous failures to become bankers again, and suspension of dividends. Others are the authority to order recapitalization, to close banks, to eliminate or freeze the interests of shareholders, and to rehabilitate banks through proper mechanisms, including recapitalization, purchase and liquidation of bad assets, and organization of mergers with or without special financial assistance.

### *Bank restructuring*

In a context of widespread insolvency, restructuring is a necessary medication to restore health to individual banks and financial systems. It is one of the foundations for deposit mobilization, effective allocation of resources, and, therefore, sound economic growth. Restructuring is also necessary to avoid the fiscal and monetary cost of permanent subsidization of ailing systems without the benefits of sound banking. Waiting for the recovery of the economy for banks to outgrow their problems is not recommended here, unless problems are shallow. If problems are very deep, experience shows an overwhelming majority of cases where problems grow deeper. First, economic recovery may or may not come about. If it does, it may not be as strong or as sustained as expected. Even if recovery is consistent, recapitalization and change of management policies is necessary most of the time. Also, restructuring of insolvent banks is a must for the banking regulatory framework and supervisory system to be respected as a source of discipline and sound banking. This is true both in countries where market economy prevails and in those where state ownership is the rule. The eventual support of the state to prevent bankruptcy does not allow for an exception to the rule. It is the effective functioning of the system and not legal situations that count.

### *Types of restructuring*

In the context of this paper, restructuring is not going to be dealt with as an equivalent of simple reorganization of an institution or conventional upgrading of management systems. It is not going to refer to restructuring of markets either, which requires a whole paper on its own. Restructuring here refers only to the treatment of deeply insolvent banks or banking systems through liquidation or rehabilitation. The concepts of mergers and privatization of publicly owned banks will also be dealt with in connection with rehabilitation.

Restructuring does not have fixed rules. The right formula to adopt may depend on the circumstances prevailing in each particular country and historical situation. This raises the question of how nations should develop their institutional arrangements so that they have alternative ways to effectively respond to financial instability. The right formula may depend

on several factors, including the importance of the banking system for the economy and the extent and depth of insolvency, the maturity of the society and the political system, ownership of the banking system, that is, state-owned or otherwise; the ownership and management alternatives in each country; and especially, the political will to address the problem. If political will is weak, all problems derived from restructuring will seem insurmountable. If there is political determination, the obstacles to restructuring can be overcome or turned around. This may happen through an adequate formula that may work well from the beginning or through successive formulas identified as a result of experience over time.

The modalities of restructuring may vary. Restructuring may be addressed case-by-case, as problems are unveiled, or across-the-board when insolvency is deep and generalized. Restructuring operations may be run from the supervisory institution or by a specialized institution. It can be financed by the government, by the depositors and creditors, by the banking system, or by a combination of the above. The procedure may be addressed jointly with deposit insurance or separately. Restructuring may be simultaneous with change of ownership and management, through mergers or acquisitions, or otherwise. In some cases it may require interim management by a specialized institution. Modalities can be varied, but experience has shown that some work better than others. A series of sound principles for effective restructuring have been identified and are described below.

In theory, the obvious alternative to bank insolvency in a market economy is to close the insolvent bank according to common bankruptcy law and liquidate the assets. Then depositors lose their deposits to the extent that assets do not allow for full recovery, and shareholders lose the value of their shares if insolvency eats up their whole capital. The system is automatically redimensioned, those who run risks take the loss, and the message transcends to the market that shareholders should better control or exercise management and depositors should learn to differentiate good banks from bad banks. Concerns about asymmetry of information, cost of information, and panic prevention may lead to a limited deposit insurance scheme to bail out small depositors, as an exception to sheer application of bankruptcy law.

However, in practice, things do not work quite like that. Actually, few governments opt for pure bank closure, especially when the whole system or a considerable part of it is in trouble and when the insolvent banks are large or critical elements in the system. Exceptionally, only some small and marginal banks are closed. This is the trend because of the nature of banks and their importance for the economy and the payment systems that lead governments to considerations that override market principles. Externalities are important: the closing of individual banks frequently triggers deposit runs in other banks. Confidence in the banking system suffers. Capital flights and demonetization occur. Capital markets may also suffer as a result. Even in terms of direct costs, previous experience shows that closing a bank is often more expensive than rehabilitation and does not necessarily achieve redimensioning of the system. For example, to avoid panic, all deposits have to be paid off, irrespective of whether partial deposit insurance is in place or not. Liquidations, especially when carried out through court procedures, make bank assets lose a considerable part of their value. Also, redimensioning of branch offices and staff in the system does not necessarily take place when the pressure of labor unions lead liquidators to sell branch offices, with their staff, to other banks.

The result of the above facts is that insolvent banks are seldom closed by governments. Instead, governments choose other alternatives. Some are common, but lead to undesirable situations, such as letting things be and buying time. Others deal with insolvency with conventional organization, systems enhancement, and staff training, without addressing radical recapitalization and management restructure. Subsidizing banks, permanently and automatically supporting their liquidity needs, is common, but this removes the incentives for good management and perpetuates deterioration in resource allocation. Also, cleaning up banks with government funds without a significant change in ownership and management is unfair, to the extent that shareholders and bankers are bailed out. It is also ineffective, since recurrence of the previous problems is most likely to happen shortly if the same people are left at the helm of the ailing banks.

*Rehabilitation: some principles*

The restructuring approach that has worked best in several countries is rehabilitation. It has been effective when it has dealt in depth with the reconstruction of equity and profits as a one-shot operation: the change of ownership and the change of management of the insolvent institutions. From successful cases, a series of principles can be drawn.

*RECONSTRUCTION OF EQUITY AND PROFITS.* An insolvent bank, by definition, has lost all or a sizable part of its equity capital. In the case of countries with widespread insolvency, and also in some developed countries, insolvency is not identified until a bank becomes illiquid. Then insolvency has eaten up the equity capital several times. Three to ten times the capital in the books is a frequent ratio.

When equity capital is lost only partly, reconstruction of capital may be easy through conventional procedures: the bank will retain earnings to accumulate reserves and/or will call for capital injections from the market, through conventional capital increase or surrogate capital instruments. If the management of a bank fails to take these measures on its own initiative, the supervisory authority will order it to do so and things will normally work. The necessary new capital may also be supplied through unassisted mergers or acquisitions, since the capital erosion is not yet dramatic and can be easily diluted in the equity of a larger acquirer.

When equity capital is lost several times, the main stockholders and management are aware from an early stage that the process of erosion is taking place, but no remedial action is taken. When the situation reaches a limit that leads the government to order recapitalization, the stockholders are unlikely to recapitalize. Placing good money after bad money may have been a common practice in an insolvent bank, but in this situation they will certainly avoid it. Candidates for a potential merger or acquisition are unlikely to be found, unless special assistance by the government is supplied to make up for the stock of losses and the nonperformance of assets. This leads to the topic of capital reconstruction through external mechanisms, which will be covered below.

*Recapitalization.* Injecting new capital in a bank in the case of deep insolvency should be preceded by writing off the previously existing capital against the existing bad assets. Then, a capital increase should normally take place, but losses to be written off are much higher than the capital. Therefore, the reconstruction should not just aim at replacing the lost capital in the books with new capital of an equivalent amount. The remaining losses and nonperforming assets have to either be compensated for with an equivalent sum of free resources, such as new capital, or removed from the balance sheet and replaced by performing assets. Otherwise, the bank will continue to incur operating losses and the net worth will continue to deteriorate. Increasing the capital by an amount equivalent to the whole of the remaining losses could be considered as an alternative for recapitalization, but the new capital would be out of proportion with the size of the bank. This would make future return on investments low and discourage later acquisition by a third party.

*Purchase of Assets.* Purchase of bad assets by a government institution is a good alternative to supplement the capital increase and complete recapitalization and reconstruct profitability. The key measure is to replace bad assets with good performing assets, normally cash or government securities. Assets to be replaced may be loans and advances, but also fixed assets or investments if they have latent losses and are nonperforming. If bad assets are replaced with performing ones, provisions or write-offs that were necessary before to offset the expected losses do not need to be made. Besides, the yield of the new assets become real interest income rather than fictitious, as was the case through interest capitalization in the previous stage. Bad assets may be removed through purchase in cash or in government securities. Selling bad assets against cash permits the bank to freely lend again and return to normal commercial operations, but injection of money into the market may be contrary to sound monetary policy. Selling assets against government securities limits the monetary distortions to the payment of interest by the

government to the bank, instead of the principals. A combination of the above is advised. Gradual conversion of those securities into cash over time may prove a practical formula to reconcile both objectives: little monetary distortions and return to normal functioning.

*Who Could Do It?* Bad assets will normally have to be bought by the government from the central bank or from a special institution. The central bank is the immediate option for lack of other mechanisms, but has serious drawbacks when it comes to recovery. Mainly, the central bank is a bad liquidator and a bad recoverer. A consultant in a Latin American country used to say, "When a borrower learns that his debt with a problem bank has been bought by our central bank, he jumps with joy, he kind of won a lottery prize." The alternative is to have the central bank own the assets but commission their recovery to the problem bank under new management. Experience shows that recovery by the bank that made the bad loans is not effective either. In fact, delegation of recovery keeps the bad assets physically within the bank, where the previous links with the bad borrowers favor pressure for new lending, delayed solutions, and creative accounting. An alternative is to purchase assets with a repurchase obligation by the bank. Auction of bad assets to the market is a better option, but completion of documentation and ineffective legal procedures are often obstacles to a successful operation.

Setting up an ad hoc institution to purchase and liquidate or recover bad assets may be a better alternative. Physical removal of assets has the advantage of cutting off the umbilical cord between the problem bank and the bad borrowers. It also facilitates the new management of the problem bank to focus on the future. This kind of institution may be set up by the government with its own funding, with funding from the banking sector, or through joint funding and government control. If the debt recovery agency is established to be independent, run by private law, and able to attract good professionals from the market, recovery is likely to be more effective.

*NEW MANAGEMENT.* Recapitalization and clean-up of bad assets, such as reconstruction of equity and profits, is indispensable for rehabilitation of a bank, but it is not enough. The boards and managers who have led the bank to insolvency through wrong policies and serious mistakes are not the best candidates to reverse the situation. Even if competent and honest, it will be very difficult for the previous managers to implement the policies rehabilitation requires. They will be faithful to their past and may even be an obstacle to proper disclosure in the new stage. In this respect, supervisors in a southeastern Asian country warn against the dangers of "leaving monkeys to look after bananas." Of course, there are rare exceptions where a bank's problems are solely caused by external factors, beyond the control of management. There may be countries where there are few good alternative managers to bring in. Although, if no changes are introduced in management, the problems that caused the bank to go bust will repeat themselves and no practical solution will have been achieved. Besides, the principle of equity would suffer, and other managers in the system would be given the wrong incentives if the bad managers were left to run banks that have been recapitalized. Furthermore, the culture that permeates a bank that has remained insolvent over a long period needs to be changed. Unless the bank in question is small in size, this cannot be achieved without a change of several layers of management. This advocates for merger with well-managed institutions as the final goal of restructuring. The board and senior management should therefore be replaced by new professionals.

The management of a bank in rehabilitation must be new, but it must also be unconventional to apply surgery techniques. A conventional new management will tend to think that the problems remaining in the bank can be solved or diluted with simple growth. Experience shows that besides restructuring the balance sheet, there are many areas in an insolvent bank that have to be treated. Otherwise growth will not take place on a sound basis, or at all. More often than not, those areas require surgery and shock treatment: surface the reality behind any previous accounting cosmetics, achieve effective recovery of the loan portfolio, liquidate non-performing assets (loans, foreclosures, real estate, subsidiaries, and so on), lay off personnel, reduce overhead, discontinue loss-making branch offices or products, establish sound interest

rates (even at the risk of seeing the bank shrink in size), and so on. These are good examples of policies that will not make new management very popular but are badly needed.

*NEW OWNERSHIP.* Removing former shareholders is one of the three key elements for a successful restructuring. No government should recapitalize a bank in favor of the private owners of an insolvent bank. Bailing them out would be unfair and would give the wrong incentives to other institutions on the market. The dangers of leaving monkeys to look after bananas may very well be applied to shareholders, especially in banks where ownership is highly concentrated. Besides, keeping them in place would make it very difficult to properly install new management. The shareholders ran a risk and lost, and must share the cost of restructuring by seeing their capital loss materialize and by being replaced by new shareholders. Only if they are prepared to recapitalize the bank entirely so as to offset all the existing losses, could they be left in place. This is a most unlikely hypothesis in cases of deep insolvency. Even if they did recapitalize, a change in management should be considered.

Then, how to operate this change? The topic of who will become the new owner and subscribe the new capital will be covered later in this paper. As for the loss materialization, and disappearance of former owners, some effective modalities are applied in different countries. In the United States, for instance, insolvent banks are taken to court by the government, and courts appoint the FDIC receiver of both assets and liabilities for liquidation purposes. Former shareholders remain the owners of the stock, but its remaining value is subject to the final result of liquidation and is frequently negative.

In the accordion system, applied in Spain and Colombia, the government imposes a complete write-off of equity through a capital reduction, as per the common commercial law in Spain and based on a special law in Colombia. The former share's value becomes zero and new capital is issued for subscription, where the previous owners will have limited or no access at all. Sizable capital increases organized by the government, and subscribed by it or by the private sector with no access for the previous shareholders, will dilute the existing shareholders' share in the new total capital very significantly. In banks where capital was very concentrated in a few shareholders, purchase of their stock at a nominal price may be arranged by the government that becomes the new majority owner and runs the bank according to ordinary corporate law until a new owner is found. Having the former owners sell their stock for a nominal value is no easy or quick task. Though imminence of illiquidity and moral suasion by the supervisor may help to achieve this objective. This procedure was also applied in Spain and, in some cases, in Turkey.

*Objectives and Procedures.* Finding new owners is a difficult exercise. The ideal objective to achieve successful exit is finding candidates for mergers or acquisitions to make the necessary layers of good management emerge and be implanted in the problem bank. Unassisted merger is the best exit if capital erosion in a bank is not deep or if the size of the acquiring bank dilutes the loss with no damaging impact on the latter. To this effect, enforcement of capital standards must be tough. Moreover, no candidates will show up if the bank is deeply insolvent, and is not recapitalized prior or simultaneously to the purchase. A potential buyer will not be prepared to assume the burden of the existing losses. Even if they were, government should be careful and avoid authorization of dubious operations that might lead to more serious problems. If an arrangement by the government is in place to recapitalize the bank through special financial assistance, merger or acquisition could be the best formula to find a final solution. Ideal candidates are other financial institutions, preferably banks. The government should make sure that the acquirer is solvent, well managed, and large enough to digest the acquired bank.

Three previous procedures will have to be applied: verification of the real loss of the insolvent bank, identification of the subsequent financial needs for rehabilitation (including a financial assistance package to achieve a sound sale), and exploration of potential interest on the market through informal contacts and/or formal bidding procedures. If the market of institutional buyers is abundant or sufficient, an expeditious sale could be achieved in a period ranging between a few days and one year. If the market of potential buyers is narrow, interim ownership and management may have to be arranged.

*In Large Markets.* Introduction of new ownership should be organized as quickly as possible. In the United States, operations are organized through the FDIC so that the assets and liabilities of the problem bank are purchased over the weekend next to its closure and the bank reopens the following Monday under a new name. Business as usual is the motto. However, two exceptional circumstances occur in the United States. In this area: the court procedures are expeditious and have a long tradition, and the market of potential acquirers is large and candidates for purchase are not very difficult to find.

*In Narrow Markets.* When the market is narrow, organizing sales may take time. Solvent domestic banks of the appropriate size may be rare or unwilling to engage in such operation. Foreign banks may not be willing to settle or to expand their activities in a given country. Sometimes, foreign bank entry is subject to serious legal limitations or constraints. If the market suffers from difficulties to find good institutional acquirers, hope should not be given up. A selective case-by-case approach with both domestic and foreign buyers may bring solutions to the first few cases. Once a good prototype operation is put in place and works, other acquirers may follow. In this connection, it is always helpful for governments to revise their legislation regarding foreign banks to introduce the necessary flexibility to allow them to participate through acquisitions in the rehabilitation of the domestic financial system overall. Exceptional situations, like those derived from widespread insolvency, require exceptional measures. Banks are preferred as potential buyers, but other institutions, such as insurance companies or serious investors, may also be given a chance.

*Placement of the Stock with the Market.* Placing the new stock of the bank with the public may be another alternative, but this requires previous capitalization of the bank and implantation of solid and stable management. This formula was applied in Chile to restore normal ownership of the largest insolvent banks in the financial crisis of 1982. Placement was achieved in a widespread public offering through a system of large credit and tax advantages. Low limits were set for maximum ownership. A key element for this formula was appointing, first, a team of new top managers and waiting until they proved stable and successful as a team over a period of one to two years. Selling stock to the employees of the ailing bank has also been considered an alternative for new ownership by some governments. However, purchase by employees is often financed by the bank itself with loans that are seldom repaid--no real capital is injected. Besides, employee ownership is often a serious hindrance to adopting some of the necessary surgical measures. In all cases, introduction of new ownership has to be accompanied by reconstruction of equity and profits. Otherwise, one is creating a much bigger problem that would explode at a later stage.

*NEED FOR INTERIM ACTION.* A situation with the above constraints to find demand should not lead to inaction, because the bank's situation will deteriorate quickly. If the public perceives the bank is in trouble and the bankers realize their bank is a candidate for closure or government intervention, deposit runs are a serious danger. The alternative to inaction while looking for new owners is government intervention. There are two main kinds of action: intervention proper and interim management.

Interim intervention proper is a mere safety mechanism, which may have two modalities. First, it sends government officials to the bank with powers to fully inspect the accounts and veto any decision by management that might be detrimental to the bank. This measure may prove indispensable, especially if there is imminent danger of fraud. Although it is not necessarily effective in preventing detrimental measures and, if perceived by the public, may lead to deposit runs. The second safety mechanism consists of changing board management and replacing them by one or more intervenors with full powers to run the bank. This formula may be effective, but most of the time officials appointed as intervenors are frequently mere administrators, conservative or legalistic caretakers with no managerial background. They frequently freeze normal commercial activities. The public perceives the situation and withdraws large amounts of deposits. The logical outcome is liquidation, since there is no bank left for rehabilitation. Hence, this formula may be counterproductive as an interim measure, making later rehabilitation impossible or very expensive.

Instead of legal intervention, interim management is put in place while waiting for new owners for the bank to be found. The new managers run the problem bank as an ongoing operation. This formula has worked satisfactorily in countries such as Spain, Colombia, and in the case of Continental Illinois in the United States. A precondition for implanting new management is changing or freezing ownership rights to run the company. Otherwise, the shareholders meeting may challenge or override the new management's decisions, and they can even be sued as the cause of insolvency rather than being considered one of the remedies. Interim ownership is therefore advised to go along with interim management. Once this kind of management is appointed, deposit runs may be successfully stemmed, verification of the losses may be achieved, and the whole range of surgical measures required can be adopted head-on. This is good preparation for later sale and final rehabilitation.

*INSTITUTIONAL ARRANGEMENTS.* Appointing new management may be done by the supervisory authority, either the central bank, the bank superintendency, or an equivalent institution. The new management must be monitored, and monitoring is not necessarily one of the government officials' strengths. On the other hand, if freezing the owners' rights is not allowed by existing legislation, someone has to assume temporary ownership. Central banks and supervisory authorities seldom have the legal powers to do so themselves.

Therefore, governments may set up a specialized institution that can assume temporary ownership and also appoint and supervise new management according to similar policies in the different banks. Such an institution could be given adequate powers to recapitalize insolvent banks, to purchase and liquidate bad assets, and to organize sale of those banks through financially assisted mergers, acquisitions, and placement of capital on the market. As in the case of institutions solely devoted to assets recovery, this kind of institution may be set up by the government with its own funding and government control. Chances for success are greater if this institution has an independent status and by-laws, is run by private law, and is in a position to attract good professionals. The combination of the functions described above and those of deposit insurance in a single institution may have several advantages. It better justifies funding from private banks and provides an efficient cost-sharing of banks' rehabilitation. Funds supplied may serve two alternative objectives: paying off small depositors if a bank is closed or rehabilitating banks if a decision is made not to close them. Also, the unity of decision on which action to take (closure or rehabilitation) facilitates assessment of comparative costs and good decision making.

Setting-up an institution along the above lines would normally require a new law. This may have a political cost and prove difficult or untimely in certain circumstances. The potential results may deserve the legislative efforts.

#### *Special issues: state-owned banks*

This paper makes a case that state-owned banks should also be restructured along similar lines to those described above. The need for capital reconstruction does not require further elaboration, other than to suggest that the state is an obvious candidate to fund recapitalization. State banks must be capitalized as private banks to absorb shocks and also to play on a level playing field. The topics of management and ownership need further elaboration.

*MANAGEMENT.* Management of state-owned banks faces several handicaps in becoming entirely efficient. Board members represent or belong to other government institutions and tend to see business from the perspective of their institutions. Appointment of top management is frequently based on political considerations. By-laws often confine operations of state-owned banks to social objectives that involve high risks. They may become a good excuse for the bank to follow nonprofessional policies overall. Informal exercise of influence by politicians is more likely to happen than with private banks. In this context, change in management is also necessary, but is not enough. A change in the regulations and by-laws could also be considered. Statutory objectives should be set in a manner that does not conflict with professional and

independent management. Board members and managers should be appointed strictly according to criteria of competence and professional qualifications. In this connection, remunerations should be delinked from civil service pay rules to make it possible to attract good managers. Stringent accounting criteria and disclosure of financial statements would enhance knowledge of the damage from political influence and make politicians refrain from interfering in lending and recovery policies.

*OWNERSHIP.* Change of ownership in state-owned banks is not always a corollary of restructuring, since the general policy of a given government establishes total or majority ownership by the state for most banks. However, governments could consider privatization as a means to regenerate the sense of risk and to generate proper management. Reducing political interference and facilitating control by the supervisory authorities also advocate for privatization. If restructuring takes place so the whole regulation and supervisory framework is strengthened, proper control of the banks' health is easier with private banks than with state-owned ones. State-owned banks take advantage of their exceptional status to escape effective supervision. Often, different or no prudential regulations apply to them. Sometimes introducing limited private ownership (20 to 30 percent) by other banks, together with a management contract, allows for the new co-owner to become responsible for management and restore order.

#### *Measures across the board*

When insolvency affects the whole system, restructuring a few banks may not be the only policy to consider. Other measures should be contemplated as a supplement. If aftermeasures are adopted instead of case-by-case restructuring, they may be insufficient to solve the deepest insolvency. Also, they may lead to the bailout of bankers. However, as a supplement to case-by-case treatment, the aftermeasures may help restore the health of the system in general and even create circumstances where healthier banks may take advantage of opportunities to acquire less healthy ones.

*RESERVE REQUIREMENTS.* The reduction and/or remuneration of reserve requirements should not be considered as a subsidy to banks, but as a reduction of a tax that is imposed on banks for monetary and fiscal considerations. Sometimes, governments pay high interest rates to banks as a way to subsidize them. It removes the incentive for the banks to look for borrowers on the market. However, most of the time, governments impose high reserve requirements on banks. Non-remunerated mandatory reserve requirements impose the cost of the equivalent amount of deposits on the bank and do not permit it to lend it freely and obtain a yield. Profitability is therefore penalized. Reduction of reserve requirements may not have negative monetary implications if compensated properly with a good open market operation. If those implications cannot be prevented and lowering the reserve requirement is not deemed advisable, remunerating the reserves by paying an interest on the deposits with the central banks or through earmarked purchase of government securities is a way of reducing the tax. As a by-product, purchase and trading of those securities could help develop a secondary market as part of an open market scheme.

*MANDATORY INVESTMENT OR CREDIT ALLOCATION.* Forced investment to finance fiscal deficit and direct credit allocation to privileged segments of the economy also reduces mandatory freedom of lending by banks and damages their profitability. Mandatory allocation of a high proportion of total deposits to those two areas are sometimes set at such high levels that, together with the impact of reserve requirements, they lead to higher losses, to disintermediation (because of higher spreads on free loans and loss of good clients), and sometimes to bank insolvency. It is a vicious circle. With insolvency, interest rates will be pushed upwards overall in the system. In this context, reducing the mandatory proportions of forced allocation of resources, reconsidering the remuneration of government securities and freeing interest of direct credit to the privileged segment are measures to consider.

*Other problems and questions*

Bank restructuring faces serious problems and raises serious questions. If undertaken as part of a general package to overhaul the financial system, and if one is to compare the implications of no action at all with the costs involved in restructuring, the choice to restructure is rather clear. If the package of measures described is taken as a whole, the evils identified in some of the elements in the package can be considered as the lesser of two evils, the other evil being perpetuation of insolvency.

*FISCAL IMPLICATIONS.* There are two ways to view the fiscal implications: the cash flow and the long-term effect. All restructuring operations have fiscal implications, and that is bad if considered in isolation. Are there no fiscal costs in the form of subsidies and liquidity support to banks when restructuring is not undertaken? The losses are there but, if cleaned up with bonds, the interest on bonds is less expensive than the increase in the losses. What is likely to be higher: the cost of restructuring today or the cost of addressing the problem tomorrow? What is more serious: the fiscal cost of addressing the problem or the damage caused by lasting insolvency in deposit mobilization and resource allocation? Can the cost not be shared with others, such as the banking sector? Can the fiscal cost of restructuring not be spread over a period of years? Can the cost not be compensated for through other fiscal measures, such as an increase in taxes, improved tax collection, or just through reassignment of priorities in budget expenditure or investment?

*MONETARY IMPLICATIONS.* There are monetary distortions as a result of restructuring operations, which is bad in theory. One could raise several questions. Are there no monetary implications if banks become illiquid and the government has to attend to all depositors to avoid panic? Is that not a serious contingency already? Can government purchase of a bad portfolio not limit the monetary impact by using government securities as payment and only releasing interest over time? Can the monetary impact of restructuring not be compensated for with a reduction of the fiscal deficit through action in other areas of income and/or expenditure? Can it not be compensated for with an efficient and active open-market operation?<sup>1</sup>

*BAILING OUT.* Many insolvent banks are not liquidated but rehabilitated. In view of the externalities involved in liquidation, rehabilitation is perceived by governments as the lesser of two evils. Banks may be bailed out for the sake of the system's stability. When restructuring involves change in ownership and management, is there any bailout of bankers? Their exit is a condition of good restructuring.

*DEPOSIT INSURANCE AND MORAL HAZARD.* According to many, deposit insurance enhances moral hazard: bankers' behavior becomes more hazardous because they know their depositors will not lose their money. Is this really so? Does limited insurance enhance moral hazard more than the de facto 100 percent insurance that works when no formal protection system is in place? Do bankers really care about the depositors or do they rather care about keeping control of banks as a source of profits? This paper recommends deposit insurance mechanisms as an effective formula to deal not just with deposit protection, but also with a double function: to cover small deposits if a bank is liquidated and to fund restructuring operations if a bank is rehabilitated. Also, such an institution should be partly or wholly funded by the banking system and be given powers to assume temporary ownership and management, and to buy bad assets and liquidate them. If the suggested mechanism can remove bankers automatically in case of insolvency, and thus achieve maximum enforcement, will discipline be relaxed? Has moral hazard increased in the United Kingdom since deposit insurance was incepted in 1979? When was there better discipline in Spain, before the Deposit Guarantee Fund was created in 1980 or afterward?

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1. The banking crisis in Spain (1977-1984) required the injection of over 10 billion dollars in the market. Over the same period, inflation went down from 24 percent to 9 percent.

What system is better disciplined in the United States today: the banking sector, where the Federal Deposit Insurance Corporation operates fluently, or the savings and loan sector, where the Federal Savings and Loan Insurance Corporation, for lack of funds, is not operational either as a deposit insurance mechanism or as a restructuring institution?

Restructuring of markets and sound management policies and procedures are what count. To choose proper priorities or sequencing, what should be given true priority, restructuring itself or restructuring markets and enhancing management techniques? Could markets be effectively restructured and operated if the main component (banks) is utterly distorted? Will conventional improvement of management offset the huge stock and flow of losses? Will it eliminate the corporate culture created in a bank through lasting insolvency? Or, rather, should restructuring be given priority in time and restructuring of markets and streamlining management come after? If restructuring involves sale of the insolvent bank to a new institution, will this not automatically take care of future improvement in management policies and techniques?

*RESTRUCTURING BANKS OR BORROWERS FIRST?* There may be a logical case in favor of addressing the real sector problems first, to see if it permits banks to grow out of their problems. However, the depth of insolvency that is observed in many countries is unlikely to be totally solved through economic recovery or restructuring of borrowers. Besides, insolvent banks require urgent action. Both problems should be tackled simultaneously. In practice, if political reasons make it difficult to do so, starting in whichever of the two areas is politically feasible is a simple rule of thumb.

Governments may engage in restructuring operations both in their own subsidiaries and in given economic sectors. Subsidiary restructuring may include liquidation, recapitalization, and privatization. In restructuring economic sectors, governments often play an indirect role as catalyzer and financier of general improvements. In any case, addressing restructuring of the financial sector, before, during, or after restructuring of the real sector, will automatically bring about positive reactions in the real sector. New management of a restructured bank will induce discipline and better management of the borrowers and of the banks' subsidiaries. Restructuring, liquidation, or sale of subsidiaries and borrowers that have been removed from the bank by a specialized mechanism will also introduce discipline and better management. Most important of all, restructured banks with proper new management, especially if bad debts and subsidiaries have been removed from their balance sheets, will discontinue loan concentration on nonproductive activities. Instead, they will favor lending and servicing good borrowers and productive sectors. As opposed to the vicious circle derived from insolvency, restructuring of banks may induce a virtuous circle in the real economy.

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# 5

## THE PREREQUISITES FOR A SUCCESSFUL FINANCIAL REFORM

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In recent years a number of African countries have taken the first needed steps in what could be optimistically regarded as the beginning of yet more serious and wider financial reforms. Financial systems in Africa have for long been shackled with extensive, imprudent regulations operated on inefficient grounds and dominated by few institutions, mainly commercial banks. Common under most of these systems are statutory interest rate ceilings, accommodation of government borrowing, and the existence of informal financing. The generally restrictive financial systems were known to have hindered efficient mobilization and allocation of financial resources and impeded monetary control and policy. Logically, the recently introduced modest financial reform measures strive to establish gradually more open credit markets, achieve flexible and, eventually, liberal interest rates, and enhance financial intermediation, among other things. Success in the achievement of these intermediate goals is expected to improve the conduct of monetary policy and the mobilization and allocation of financial resources. In turn, the success of a financial sector reform (FSR) construed along these lines is imperative, along with other allied reforms and adjustment measures, for creating the necessary conditions for orderly, inflation-free, economic growth.

At the individual country level or within a monetary zone of operation, structural policies in the financial sector varied in their emphasis regarding objectives or the necessary measures for achieving them. For example, Villanueva (1988) classified countries with FSRs, including African countries, into three groups for which the International Monetary Fund's (IMF) direct technical assistance in engineering the reforms or advice within the context of the use of fund resources and consultation missions was instrumental. The first group of countries included Algeria, Egypt, Botswana, and Mauritius, where the objective of the FSR was the improvement of the monetary control system. The measures undertaken to achieve the goal included, for Algeria and Egypt, improvements in the financial programming framework, and for Botswana and Mauritius, adequacy of monetary policy instruments and a switch from direct to indirect controls. The second group, comprising Zaire and Kenya, underscored the goal of improving the mobilization and allocation of domestic savings. In the case of Zaire, this was done by implementing measures to develop money and government securities markets; for Kenya, it was the introduction of new financial institutions and instruments and measures concerning the adequacy of bank regulation and legislation. The third group, composed of Mauritania, Senegal, Burundi, the Gambia, and Sierra Leone, pursued the objective of improving the level and structure of interest rates through reduction of interest rate subsidies and of bad debts (Mauritania and Senegal) or through the liberalization of interest rates and the introduction of prime rate or a base lending rate system (Burundi, Gambia, and Sierra Leone). It is noteworthy that the Central Bank of West African States (BCEAO), in a bid to stem capital flight mainly to Europe, raised in late December 1988 its basic discount rate and its preferential rate for priority projects. This measure put the level of the new rates well above that in France at the time. Another important objective behind the interest rate adjustment, according to the then

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BCEAO Governor, Mr. Alassane Ouattara, was to indicate the seriousness of the monetary authorities in carrying out reform measures that could assist member countries in dealing with their economic problems. In the same spirit the BCEAO, late in 1989, unified both the basic discount rate and the preferential rate.<sup>2</sup>

However, in order for an FSR to be effective in realizing the broad objective of creating a sound and capable financial system, some necessary conditions, mostly related to formulation and implementation, must prevail. Essentially, these preconditions include political commitment by the reform-implementing country, prevalence of a stable economic environment, a reasonable level of logistics, the involvement of human and institutional capacity building, an appropriate scope and time frame for implementation, and an adequate external support. In the remainder of this brief paper, the policy implications of these issues will be highlighted and assessed in the light of the recent experience of some African countries with financial reforms in the context of adjustment programs.

### **Commitment to Reforms**

To start with the obvious, no FSR will have the least chance of being carried out successfully if political commitment is relenting or vague. Courage and determination, however, may be significantly undermined if it is not accompanied by sincere and active efforts by the political leadership to sell reforms to the affected segments of the population at large and economic operators in particular. Not only should the public be made aware of the benefits of reforms, but by making its plans regarding the alleviation of the adverse impact of reforms explicit, the authorities are more likely to obtain broad public support, thereby succeeding in reducing the political risks and social unrest generally associated with adjustment. Political commitment is important, because FSRs will involve difficult decisions regarding distortions in the direction and costs of credit and inefficiency of some financial institutions. Strictly, FSRs have to redress any existing imbalances in the distribution of credit between sectors, regions, industries, and so on, and tackle distortions in the costs at which credit is delivered. In addition, closure or rehabilitation of troubled financial institutions will also result in retrenchment of jobs. Certainly, pressure groups that may lose during a reform will lobby for obstructing or, at least, delaying the needed changes.

More importantly, tenacity and commitment may prove simply rhetorical or turn harmful if the government pursues imprudent financial policies. This occurs, for example, when governments prioritize for themselves the use of direct credit from the banking sector through their sheer administrative or legislative powers or, indirectly, when they issue debt instruments at patently low interest rates when adjustment for inflation often reveals that several governments were able to finance their fiscal operations at negative real or subsidized interest rates. Eventually, a successful FSR must lead to a healthy competition between the public sector and the private sector for acquiring scarce financial resources.

However, it is likely that the budget deficit will be aggravated because of the liberalization of the financial sector, which will entail extra costs, in the form of higher interest rate payments on domestic public debt, or possibly a reduced share of domestic credit to the public sector. In these circumstances, as will be discussed shortly, additional external support may be indispensable in order to enable the government to seek other more efficient and viable alternatives for meeting its obligations, whether they are social in nature, such as the provision of cheap housing credit for low-income groups, or developmental in character, such as the extension of subsidized loans or larger volumes of credit for priority sectors conventionally regarded as spearheads of development.

The increasing number of African countries recently adopting adjustment programs, and therefore FSRs, is a clear indication of their durable commitment to restructure and invigorate their economies. Between 1980 and 1988, 33 African countries introduced adjustment measures

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2. The remarks were made by Governor Alassane Ouattara to the Abidjan daily, *Fraternite Matin*, as reported by the *African Economic Digest*, 6 January 1989.

under standby arrangements of the IMF; 12 under IMF's extended arrangements; and 15 under the World Bank's structural adjustment lending (SAL). In 1986, when the IMF established its structural adjustment facility (SAF), which emphasizes financial reforms, 5 African countries qualified for the SAF, but by March 1988 their number jumped to 19. The enhanced structural adjustment facility (ESAF), which was introduced by the IMF in August 1988, also came to embrace a gradually increasing number of African countries.

## **The Economic Environment**

In addition to perseverance with reforms, it is very crucial that an enabling macroeconomic environment exists. Such an environment must be free of destabilizing inflationary pressures and other adverse aspects of macroeconomic policies, and in which formal financial transactions must also prevail. This tends to encourage greater mobilization of domestic savings and their efficient allocation and to assist in the integration of fragmented informal credit markets into the formal financial sector. In reality, however, statutory regulations in many African countries still impose low, frequently negative, real interest rates on bank deposits which, together with policies that breed inflationary tendencies, deflect financial savings away from the banking system. These policies, as Polak (1989) observed, "make for highly inefficient linkages between the supply of savings and the demand for investment and, consequently, for low growth." Polak further argued that "...interest rates set 5 percentage points below equilibrium levels may cost as much in terms of growth as a savings increase of 5 percent of GNP would contribute to it." In spite of the difficulty to determine a priori the precise direction of the relationship between savings and the interest rate, because of the working of the income effect and the substitution effect in opposite directions, it is still empirically feasible to gauge the magnitude of the association. In general, however, the stage of development and the nature of money and capital markets, thrift habits, income level and distribution, degree of government financial regulation and control, and stability of the macroeconomic environment play an important role in accounting for the differences in the savings function among various countries, developing and developed alike. In the African context, it was found (El-Nil 1986) that the correlation between savings and the interest rate was mixed. Empirical tests are, however, severely distorted in most African countries where administered and infrequently adjusted interest rate structures do exist on a wide scale. The resulting disequilibrium interest rates more often than not yield negative real interest rates due to the existence of high inflation rates in these countries. The persistence of negative returns on financial assets not only fails to conduce effective savings mobilization but also indicates the weakness of anti-inflationary policies in African countries.

To date, the very low levels, or negativity, of real interest rates in many African countries have in no way assisted in reflecting the scarcity of capital. Indeed, the resulting state of financial repression has perpetuated allocative inefficiency and encouraged unproductive spending. Subsidized or negative real interest rates have also enabled governments in a number of African countries to continue refinancing their domestic public debt at lower or even negative real costs, thereby contributing indirectly to lack of fiscal discipline. In spite of the fact that taxpayers will end up paying lower charges on public funds borrowed under conditions of relatively low interest rates, and that lower interest payments are expected to provide the cushioning for budget deficits, much depends still on the way these funds will be deployed by governments. To the extent that proceeds from domestic public borrowing are not efficiently allocated, the private sector would have been crowded out. This situation entails an overall loss to the economy. Although the line of demarcation between current spending and development spending remains in practice very blurred and probably shifting, one is strongly inclined to believe that a considerable part of subsidized public borrowing in most African countries is not supportive to production- or development-related activities. Had governments in these countries competed earnestly, that is, without abuse of their administrative leverages or privileges with the private sector for obtaining funds, interest rate levels would have been pushed to far more realistic levels.

Where very high and unstable inflation exists, a policy of frequently adjusting interest rates to inflation to maintain positive real rates, may not be affordable at least in the present circumstances of some African countries. It will be unrealistic and also expensive in these countries, for example, to hike interest rates to a prevailing inflation level of, say 100 percent, to satisfy the condition of positivity of real rates. Similarly, it may appear naive, after a period of successful anti-inflation policies, which brings down inflation to near zero or reverses the trend of price increase completely, to think of a zero nominal interest rate. In any case, a prudent financial policy in these circumstances should aim at gradually reducing the level of inflation while, simultaneously, adjusting the structure of interest rates. Therefore, appropriate management of financial liberalization policies could better hedge inflationary expectations and create stable macroeconomic conditions necessary for orderly economic growth.

However, there are also some other attendant problems that might weaken the efficacy of financial reform policies as far as they relate to interest rate adjustments in African countries. Chief among these are the incidence of interest rate increases and the presence of an imposing informal financial sector.

The first problem is concerned, primarily, with how high deposit rates will ultimately be financed. Important considerations, such as the speed and extent of interest rate reforms, the gearing of enterprises or dominance of internal finance, and rates of return on real assets, usually influence the final bearing of the burden arising from deposit rate increases. Whether these costs will be borne partly or wholly by banks, borrowers, or even depositors, under certain circumstances, remains an ambiguous issue according to Snowden (1987). If lending rates are not permitted to go up, banks may end up paying the extra costs by cutting from their profit margins. Under easy monetary policy conditions, the expected expansion in the volume of bank credit in support of overall economic activity tends to spill over globally, and the benefits to the economy may outweigh the temporary costs to banks. However, the imposition of taxes on deposit rates in some African countries, which reduces the effective deposit rates, may make depositors also end up financing, along with the banks, part of the costs associated with the increase in deposit rates. On the other hand, if lending rates are allowed considerable flexibility during an interest rate reform, enterprises depending extensively on borrowed finance will pay the extra loan charges, which will be used to offset the rise in deposit rates. Only if these businesses could meet the extra costs by investing in other highly profitable real avenues would they, then, be in a position to maintain their net profitability. Yet the adoption of restrictive credit policies, a salient feature of stabilization programs in many African countries, may deny borrowers and banks alike the needed flexibility to adjust their portfolios and shore up their finances in the short run. It has been observed (IMF 1983) that in the short-run and in the wake of an interest rate reform, interest rates rise above their long-run equilibrium. This occurs when banks fix lending rates on freshly borrowed funds far above deposit rates to avert a reduction in their profits due to "the lag between the higher rates paid on deposits and the low yield on existing assets." Remedial action in this situation, it was suggested, could be in the form of minimum deposit rates and maximum loan rates applied on a temporary basis.

Other adverse aspects of macroeconomic policies have also encumbered the financial systems. The 1989 World Bank Development Report observed that in 24 developing countries, including 9 African countries, deficit financing has provided the primary impetus to inflationary pressures; high reserve requirements and forced investments in low-interest government securities crowded out private sector borrowing and discouraged financial intermediation; and, overvalued exchange rates and controlled interest rates combined to stimulate capital outflows (particularly for member countries of the West African Monetary Union, which have few restrictions on capital transfers).

The effectiveness of interest rate reform is also prone to be significantly diluted by the predominance of informal transactions in many African countries. In spite of the scanty and imprecise information on the informal sector, some valid general observations could still be made that qualitatively indicate the nature of its operations and the levels of interest rates therein. On the one hand, interest rates in the informal markets are generally higher than

their counterparts in the formal markets. Evidently, the scarcity of loanable funds, the highly risky borrowers who do not have adequate collaterals, and the oligopolistic position of moneylenders are among the important factors accounting for high interest rates in the informal markets. On the other hand, the secrecy that cloaks the informal operations of moneylenders makes them unamenable to control through the conventional instruments of monetary policy, including interest rate adjustment. Moreover, the preference attached to financing economic activities from internal sources, mostly household savings in most cases where family enterprising has predominated for long, sharply reduces the potential impact of interest rate changes. An indication of the efficacy of monetary policy in these situations is the extent to which it has been successful in reducing the wide discrepancy between informal and formal interest rates. Deliberate measures to enhance monetization by augmenting the supply of credit to the rural areas through the extension of more credit delivery systems, the reform of interest rates so as to be more reflective of market conditions, and appropriate arrangements to alleviate rural indebtedness could be judiciously implemented over the long run to facilitate the transmission mechanism of monetary policy and achieve integration of interest rates in the formal and informal markets. The resulting interest rate level may be well above that prevailing in the formal financial sector, but certainly less than the one in the informal market.

### **The Logistical Framework**

The capacity for carrying out an effective FSR also rests, to a large extent, on the underlying regulatory framework and the quality of those entrusted with its implementation. The regulatory framework consists of the central bank and the banks' and nonbanks' financial intermediaries. In a study on FSBs in adjustment programs, Gelb and Honohan (1989) observed that the reforms seek to establish, possibly among other things, some necessary conditions whereby a central bank can efficiently discharge its supervisory and regulatory functions through the reinforcement of information systems, improved and articulated regulations, and enhanced supervision of credit. At the level of the bank and nonbank financial institutions' upgraded procedures in relation to credit policies, loan reviews and management systems must go in tandem with the improved changes undertaken by the central bank. Gelb and Honohan also observed that reforms emphasized other prerequisites such as less government regulation of the volume and cost of credit and a reduced burden of taxation of the financial system.

But no matter how well-designed a regulatory framework is, it may go astray at the operation level if those who are supposed to implement it are not thoroughly trained and conscious of the goals that propel it. Successful FSRs need, and must be predicated on the backstopping of, capable and versatile financial administrators who can consistently follow up and evaluate the reforms. In spite of the valuable technical advice in this respect from the IMF and the World Bank, African countries are in dire need of financial experts, analysts, and economists who can be entrusted with the task of building local data banks and other information systems vital for studying the impact of FSRs, for example, on the informal sector, on employment, or on savings and investment efficiency. These types of fine logistics, among other factors, are imperative for the sustainability of reforms.

African financial systems, however, have not been sufficiently conducive for reforms on account of the existence of some financial infrastructure obstacles—including fledgling and fragile financial institutions that have often been publicly or semi-publicly owned—waning under extensive regulation or enjoying protection. More importantly, in many African countries monetization is still at a low level, and preference is given to financing enterprises from family sources and clandestine transactions with moneylenders. High and unstable inflation in most of these countries, on the other hand, has added to the economic uncertainty and risks and has made the acquisition of financial instruments costly if not starkly prohibitive. The way that some governments accumulate debt from the central bank and prioritize credit for themselves from commercial banks gives the uneasy sense that these institutions were established in the first place to provide an unrestricted source of credit. As banks' capacities to perform effective

financial intermediation were curtailed as a result of unsound financial policies and some other obstacles and as the latitude for undertaking viable market operations narrowed, financial rehabilitation of banks became an integral part of FSRs. In many African countries, the process of reforming the financial sector also involved some drastic but inevitable measures such as the closure or merger of loss-making financial institutions and their partial or total privatization, particularly banks. The trend to allow banks to market their services more competitively and prudently should be encouraged. Similarly, measures to assist banks to recover some of their bad debts, reduce the tax burden on the financial sector, and build up a sound capital base should be cautiously implemented and in consonance with developments in the macroeconomy. Reforming rural credit systems, by establishing appropriate rural banks and alleviating rural indebtedness, among other things, is essential for integrating the rural sector into the modern sector. Some of the foregoing measures, however, require more time and additional funds to bear fruit. Expectedly, the introduction of cost-effective measures necessary for the viability and competitiveness of some institutions has resulted in job losses and, concomitantly, in additional social costs.

### **Speed and Extent of Reforms**

In view of the rudimentary and repressed state of African financial systems in general, a sufficient time horizon is required before FSRs can fully work themselves out and succeed in establishing a deep, liberal, and efficient financial sector conducive to the conduct of monetary policy and mobilization and allocation of financial resources. Similarly, the narrow financial infrastructure in most African countries is incapacitated to sustain comprehensive reforms over a relatively short period. It may thus be more appropriate to carry out a limited number of reforms in each case under the current policy framework of the IMF's SAF or ESAF or, alternately, to implement wider reforms plausibly under an extended time horizon beyond the present 10-year repayment period, including 5-1/2 years grace, of the ESAF.

Aid donors have so far argued that delay and procrastination in making the necessary reforms will eventually overload the costs of adjustment. According to this view, a speedy space of adjustment or reform is inevitable if the transition costs are to be reduced. While this line seems perfectly sound, at least in principle, it does not take sufficient cognizance of the reality of the African situation in which the institutional and human logistical capacity is weak, as was discussed earlier. Other notable considerations, which are more apt to considerably influence the pace and scope of reforms, and which need to be duly reckoned, relate to internal and external macroeconomic developments. In the context of stabilization and structural adjustment programs, several African countries have been making strenuous efforts to clear the backlog of past erroneous policies in order to mitigate the substantial adverse impact of their own previously unrestrained actions on inflation, exchange rates, and incentives. A number of African countries, however, have encountered numerous difficulties in the form of deficient capital inflows, low export revenues arising from low prices of main export commodities on world markets, and a weakened ability to service external debt. Many of these countries were also obliged to accumulate payments arrears on both trade and debt, and as a result ceased to qualify for further credit, particularly from the IMF. The last group of countries includes Sudan, Liberia, Zambia, Sierra Leone, and Somalia. Efforts at the international level to make these countries technically eligible for new IMF credit hinge on the setting up of an economic support group of major creditor countries willing to clear the arrears of the former countries. However, without the implementation of credible shadow adjustment programs by the defaulting countries—some of which, such as Sudan and Zambia, owe substantial amounts of deferred payments to the IMF and other creditors—the problem of arrears is expected to persist for some time. Therefore, the external shocks of the 1980s that confronted African countries have interacted with an already long trail of past policy failures arising from the adoption of wrong development strategies during the 1960s and 1980s. In the late 1980s African countries were still grappling with the legacy of the past three decades by instituting some overdue reforms.

From the foregoing account it is clear that any progress achieved in addressing other adjustment or reform problems will have a beneficial impact on FSRs, and vice versa. Although the sequencing of economic liberalization is largely a country-specific issue, there is nonetheless a broad consensus that trade reforms ought to precede FSRs, while opening of the capital account should await development of domestic capital markets (Edwards 1987). For example, while a policy of trade liberalization is expected to increase the demand for imports and, consequently, for bank credit, a successful financial reform should lead to a more rational use of credit as a result of high interest rates accompanying the reform. Similarly, a policy of positive real interest rates is essential for the undertaking of efficient investment projects and the establishment of a stable financial environment pivotal for capital accumulation and orderly growth-oriented adjustment.

Although restraint of aggregate demand, through curbing domestic credit, could be more efficacious in subduing inflationary pressures, the role of structural factors in raising the general price level in African countries could not be disposed of altogether. The presence of persistent rigidities, therefore, tends to accentuate and perpetuate inflation to the extent that the typical countermeasures in FSRs may need to be administered over a relatively prolonged period. Assiduity and patience are more called for, particularly while implementing interest rate reforms, opening the banking sector for competition from foreign banks and expanding the credit base in rural areas. Regarding interest rate reforms, for example, the length of transition from flexibly administered interest rates to liberal rates is difficult to gauge in practice, as it will be influenced by a host of factors, important among which are progress in parallel reforms, macroeconomic developments and approach to macroeconomic management, and existing monetary and financial arrangements with other countries.

Evidently, the existence of comprehensive exchange restrictions and overvalued currencies, in itself a reflection of unripe market conditions, tends to discourage inflows of savings of nationals working abroad and encourage capital flight, thereby diluting or possibly negating the beneficial effects on domestic savings that may arise from raising interest rates. Similarly, failure to contain disruptive bouts of inflation is also prone to erode incentives, increase distortions, and quickly dissipate gains from higher interest rates. For African countries bound by special monetary and fiscal agreements (for example, countries in the BCEAO zone of operation, countries in the BEAC zone of operation, and member countries of the Rand Monetary Area)<sup>3</sup> the pace of interest rate adjustments has been influenced mainly by the priorities of collective financial policies but also by interest rates and capital movements in the economies of their foreign partners. In spite of relatively more coordinated financial policies in countries composing BEAC and BCEAO zones of operation, real interest rates have remained divergent among them on account, primarily, of differences in the success achieved by national anti-inflation policies. In countries where informal financial transactions are reckoned to exist on a large scale, it may take some time to integrate the informal sector into the formal sector. This indicates that there is a long way to be covered before interest rates in the two markets can be integrated.

Expansion of the credit base in rural areas through deliberate measures to increase the supply of loanable funds and alleviate the burden of rural indebtedness has been a primary objective of FSRs in many African countries. To date, the experience of some African countries in this regard had been burdened with difficulties and costs that slowed efforts directed toward reforming this sector. In a questionnaire directed to African central banks about the size and nature of informal credit markets (El-Nil 1986), the reporting banks attributed inadequacy in the knowledge about this sector to several factors, including the illegality of the existence of the market itself and, accordingly, the prohibition of all illicit transactions therein. Such neglect is demonstrated in the inability of most African central banks to extend their

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3. Such agreements currently bind Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO—or Central Bank of West African States) with France ; Banque des Etats de l'Afrique Centrale (BEAC—or Bank of Central African States) with France; and, the Rand Monetary Area comprising Lesotho, Swaziland, and the Republic of South Africa.

instruments of monetary control to the informal market, as its transactions have remained virtually clandestine in nature. Even when the authorities were willing to provide the legal framework for regulating interest rates in the informal market, they were unable to enforce them in practice. For example, in his study of the informal market in Sierra Leone during the period 1966-71, Taylor (1980) confirmed that interest rates charged in the informal sector—between 20 and 25 percent per month, or almost 300 percent per annum—were much higher than those charged in the formal sector or those regulated by the Moneylenders' Act.

Apparently, there has been no conclusive evidence that high interest rates have reduced rural indebtedness. Judging from the revolving nature of credits extended by moneylenders, on the one hand, and the unproductive uses to which a significant part of total borrowed funds is directed (Wai 1977, Osungtogun 1980); on the other hand, one is inclined, indeed, to argue that these high interest rates have, to a large extent, enabled moneylenders to prolong their control over borrowers, and in the process to perpetuate overall indebtedness, particularly in the rural areas.

The foregoing discussion makes it clear that planned measures to improve the volume and quality of credit to the rural areas are expected to involve costs on the central bank while performing its promotional and developmental role for establishing a sound financial system. Low interest rates, special collaterals, and specially trained rural bankers, all necessary for confidence and capacity-building, have to be provided at the initial stage of a financial reform.

For the banking system to play an effective financial intermediation role and render efficient services, it must be exposed to the forces of competition and market operations. As the financial sector is waning under the shackles of extensive regulations in most African countries it is not expected to play its role fully in the development process. In the past, some of the restrictions placed on entry of foreign banks in many African countries drew much of their lure from the argument of the infant industry protection. But as experience has demonstrated, only weak and financially troubled financial institutions profited from that protection. Both total and back-door nationalization of banks proved to be costly and inefficient methods to revitalize the financial sector and involved it in accelerating growth and development. To minimize costs and reduce distortions, the gradual opening of the financial sector to more competition seems appropriate in the current state of African financial systems. For the specialized financial institutions, which continue to perform development functions, it is pertinent to re-assess their long-run objectives and roles more carefully. However, there is a need that they, too, must employ cost-effective measures in their operations if they are to remain viable over time. Governments may wish to give these institutions special tax incentives and other feasible forms of assistance so that they can afford to deliver some of their services on noneconomic criteria. Yet, a considerable and protracted effort is needed to equip these institutions with the required human and capital resources. Probably this remains as a long-run possibility only.

In view of the importance of the foregoing considerations, it becomes necessary for the progress and efficacy of a reform to be carried out in a flexible way. This flexibility becomes all the more important as the onset of some exogenous factors disrupts the normal pace of a reform and makes the duration to complete the slated changes difficult to gauge. For example, before an interest rate increase can produce its full impact, personal incomes may suddenly decline, or financial failures in the banking sector may become widespread. Such disturbances tend to dampen or even negate the initial impact of the reform to the extent that a longer period or further adjustment may be required for it to bear fruits.

It is encouraging to note that the IMF and the World Bank have started to adopt positive attitudes in recent years. Besides enhancing the quality and quantity of support made available under the ESAF, the IMF is now giving more weight to country-specific considerations. But further flexibility may be called for, considering the virtual lack of resiliency of most African financial systems. Such flexibility, moreover, is expected to provide the implementing authorities with encouragement to commit themselves for more needed reforms.

## **External Support**

External support in the short to medium term is indispensable not only for carrying out meaningful FSRs but also for other adjustment policies, simply because the various elements in an adjustment program are dependent upon and complementary to each other. The partial freeing, that is, flexible management, of interest rates, rehabilitation of banks, extension of banking services to rural areas, and other capacity-building measures entail some costs in the transition. Some of these costs fall on the budget while others will have adverse social ramifications. Part of the costs are transitory, while others emanate from structural factors. The partial freeing of interest rates, for example, will increase interest payments on government domestic debt, thus aggravating the fiscal position. Since higher interest rates are expected to lead ultimately to a more efficient use of credit, external support is necessary for cushioning deterioration in the budget deficit. Although the slashing of the government's share in domestic credit is a required measure in an FSR, the adoption of revenue-enhancing and expenditure-curbing measures to prop up the budget has been a slow process in most African countries. External underwriting is also essential for governments that have shown unflinching commitment to adopt and persevere with difficult reforms, because any shortfalls or untimely disbursement of external support may disrupt reforms and shake commitment.

External support is also needed to alleviate the impact of reforms on unemployment. With already high unemployment rates in many African countries, some time may pass before those who have been made redundant as a result of restructuring some financial institutions can pick up new jobs. Rehabilitation programs for those who lost their jobs must be quickly set up to fend off impending social and political instability.

To sustain the modest progress achieved by some countries attempting to reinvigorate their financial systems, a stable external environment is crucial. Adequate and orderly external resource flows are required, in addition, to regain building the momentum of adjustment in the face of external disturbances such as the risks posed by high real interest rates and volatile exchange rates in the major industrial countries or by the sharp declines or fluctuations in the prices of major African export commodities on world markets. While a rigorous adjustment will require less financing, it is also expected to be costly particularly for African governments that may not be able to carry on with expensive short-term measures. In a nutshell, external support is the centerpiece of an enabling environment for effective FSRs, at least in the present difficult financial situation of most African countries. Negative financial flows from Africa to its creditors, particularly to the IMF during 1986-88, has in no way been helpful to the implementation of FSRs in particular and to other reforms in general.

## **Conclusions**

African governments have slowly accepted and assimilated the need for freeing their economies from inimical restrictions and make them more susceptible to change. Prudent financial policies are part and parcel of any credible adjustment program. Having them demonstrates to external supporters the seriousness in taking the necessary measures and eligibility for more support. The fresh winds of economic change blowing hard in other parts of the world should strengthen the resolve of African countries not to give up to any adjustment fatigue. Indeed, they should provide additional impetus. The international community at large should also extend further assistance to Africa to enable it to carry out the difficult tasks ahead. Flexible policy conditions on external assistance are also needed to suit the peculiar African conditions.

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# 6

## OUTWARD VERSUS INWARD DEVELOPMENT STRATEGY: IMPLICATIONS FOR THE FINANCIAL SECTOR

*Manuel Hinds*

In the last two decades, the world has become more competitive. These years have brought an explosion of technological innovation that is rapidly changing global economic relationships in ways that make it more difficult for firms and countries to maintain their income without a daily struggle to increase their efficiency. New technologies are increasing the technological options available for production, widening the alternatives available to meet consumer needs, and reducing the costs of moving goods and services across boundaries. As a result, these new technologies are shifting comparative advantages across countries and, after decades of relatively stable global relationships, the pattern of world production and trade is changing at an increasing pace.

A parallel shift has been taking place in recent years in the overall approach to economic development. After several decades of emphasis on the role of government intervention in promoting growth, developing countries are devoting increasing efforts to have market signals guide the allocation of economic resources. This trend is evident in most countries, including several of the most important socialist economies. The role of prices in the allocation of resources is being increased, profits are becoming a measure of economic success for enterprises, and financial systems are being created and developed to allocate resources to profitable activities within a competitive environment.

As a result of these trends, many governments are trying to increase the role of both the private sector and the financial system in economic development. Throughout the world, public enterprises are being privatized and economic activities that for long were considered as suitable for state ownership are being opened to competition from private entrepreneurs. Also, following a movement that started in the member countries of the Organization for Economic Cooperation and Development (OECD), financial markets are being liberalized and competition between financial institutions and instruments is being encouraged. Even in socialist countries, this trend has materialized in the increased reliance on private agents in small scale agriculture and, lately, in the relaxation of restrictions in the operation of private undertakings in all sectors and in the creation of financial systems.

While there is little doubt that the market cannot function without a substantial private sector, the existence of a private sector is not sufficient evidence of the predominance of market forces. If the environment is highly distorted, all economic agents, including the private sector, will develop in a distorted way and will waste the economy's resources in unsustainable activities. The promotion of private sector development should be carried out within the context of an increased role of market forces in the allocation of resources in the economy. That is, when open competition is allowed and encouraged.

In countries where state intervention has been substantial, there are groups of influential corporations that communicate frequently with the government and negotiate economic measures with it as the representatives of the private sector. However, these groups tend to use their closeness to the government to obtain advantages—such as protective barriers and subsidized credit—that conspire against the development of other parts of the private sector and against consumers. In such cases, the private sector is split into a well established formal portion, which enjoys access to most of the services of a modern economy at frequently subsidized

prices, and an informal portion, which either cannot enjoy such services or has to pay extremely high prices for them. Such a split negatively affects the overall performance of the economy because competition and the creativity of nascent entrepreneurs, which typically are not part of the establishment, are repressed. In such countries, developing competition entails expanding the concept of the private sector to encompass all the existing and potential entrepreneurs in the economy, both in the formal and informal parts of it.

Thus, developing a healthy private sector entails encouraging open competition, which, in many cases, involves not only privatization but the elimination of privileges granted to particular enterprises and sectors, which may include private as well as government-owned firms. This competition should exist not only among productive firms but also among the financial institutions mobilizing resources from the public and allocating them to activities promising the highest returns.

The interactions between the financial and the real sector go both ways. Certainly, if the financial sector is not competitive, even competitive firms will find it hard to develop their potential. Symmetrically, if the financial system is competitive but the real sectors are not, the financial system will tend to allocate resources in inefficient ways.

Because of these relationships, the introduction of competition in the financial system cannot be discussed in isolation from the degree of competitiveness existing in the real sectors. In most developing countries, substantial changes are needed in the overall model of economic development in order to make financial reform possible and fruitful. This paper briefly reviews some of the most important issues faced when trying to change that model, focusing on the financial market.

### **The Exhaustion of the Inward-Oriented Development Model**

In the post-war years, most developing countries adopted a model of economic development that identified industrial growth with economic development. It was inward-oriented, relied on government intervention to set pricing signals, and promoted a strong participation of the state in the production of goods and services. The rationale for inward-oriented industrialization was that commodity international prices were too volatile to provide the basis for a stable economic development. The rationale for government intervention, both as price regulator and as entrepreneur, was that private agents were not likely to take the risks associated with large industrial investments unless pushed and protected by the state.

#### *The model's inherent instability*

This model of development resulted in industrial sectors that were net users of foreign exchange. External balance was provided by commodity exports, which generated a surplus of foreign exchange that was used to pay for the net imports of the industrial sector. The model was inherently unstable in the long run, because, as the industrial sector grew, the surplus available from commodity exports declined. As a result, the dependency on commodity exports that these countries wanted to avoid was accentuated rather than reduced.

Furthermore, the set of relative prices resulting from protection effectively taxed commodity exporters, reducing incentives to produce them. Thus, the surplus of foreign exchange available to finance increases in production was being reduced from both ends. As a result of these dynamics, the model was exhausted in the 1970s and early 1980s for many developing countries.

#### *The change in global economic relationships*

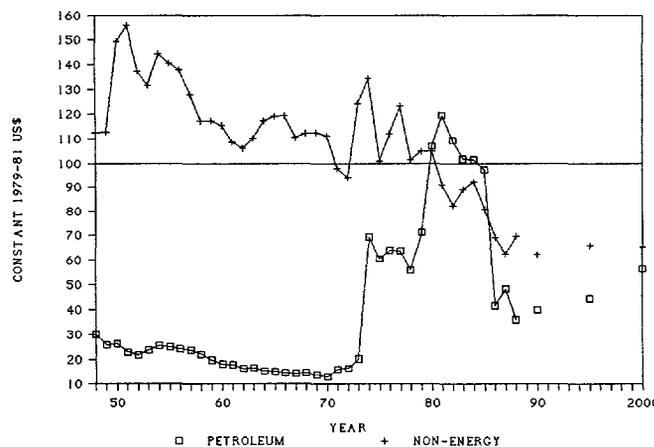
In the last two decades, rapid technological innovation combined with international monetary instability to produce rapidly shifting international prices. Initially, commodities benefited from those changes, and commodity exporters experienced booms in the mid- and late-1970s. Eventually, however, the relative price of commodities collapsed and stayed low for

most of the 1980s. This further reduced the inward-oriented countries' ability to finance their imports of industrial inputs.

An eventual stabilization of the international economy will, most probably, bring about some recovery of commodity prices. It is clear, however, that the international environment has changed permanently in a way that is making it increasingly difficult to finance an inward-oriented model of economic development.

The share of raw materials in total costs of production and marketing is falling in the global markets, thereby worsening the terms of trade of countries that export them in exchange for more elaborate final and intermediate goods. Also, as new technologies allow the use of synthetic products in processes that require natural raw materials, and as transportation and communications technologies remove geographical comparative advantages, the competition between developing countries for the international markets of several commodities has stiffened while demand for these commodities has been falling. Also, demand for goods with strong commodities contents is falling behind demand for more knowledge-intensive goods and services in the world's major markets while technology is reducing the need for raw materials per unit produced. Both trends tend to reduce the price of commodities (figure 6.1) and spell disaster for countries that do not widen the scope of their economies to take advantage of the new international conditions.

Figure 6.1 Commodity Prices, 1948-1988 and Projections to 2000



Source: Price Prospects for Major Primary Commodities, Report No. 814/88. Washington, DC: The World Bank, 1988.

As the ability of inward-oriented countries to generate foreign exchange declines, their only option for continuing to import needed inputs is to borrow abroad. This possibility, however, has disappeared for many countries and cannot be counted on in the future for other countries if these do not improve their capacity to generate foreign exchange.

### *The debt crisis*

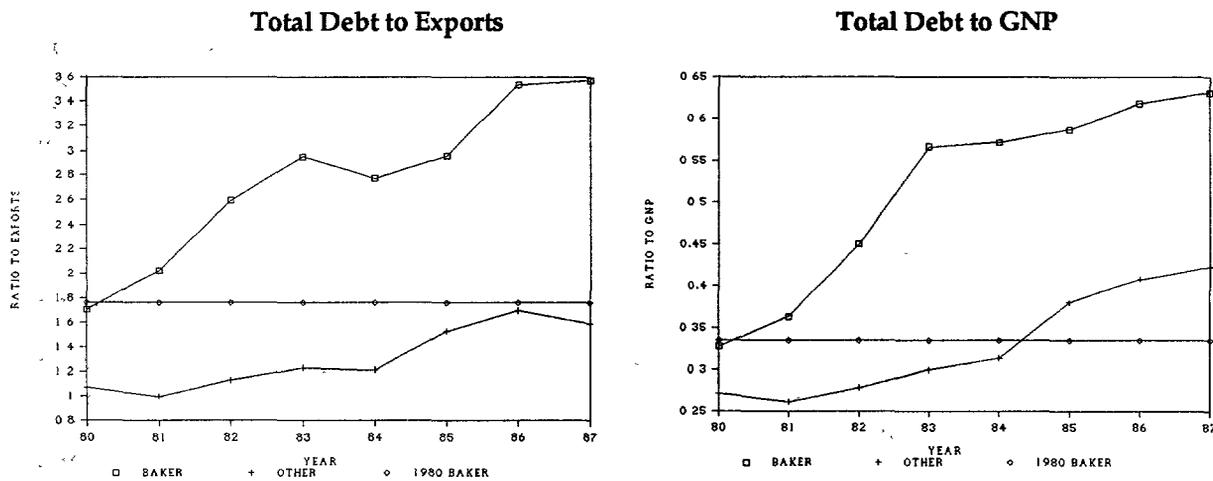
The growing debt of developing countries is one of the symptoms of the failure of domestic inward-oriented policies to adapt to the changing international conditions. When drastic changes in relative prices started in the 1970s, they prompted two basic reactions from countries. Some of them allowed the shifts of international prices to be reflected in their domestic markets and undertook the restructuring of sectors suffering from technical

obsolescence, lack of demand, or both, scrapping excess capacity and investing in new technologies. Other countries, mainly those reliant on commodity exports, shielded their domestic markets from the external shocks and borrowed heavily to finance the balance-of-payments problems derived from the inconsistency between domestic and international relative prices.

In the early 1980s, the different results of these two approaches became evident. While those countries that adjusted their economies to the external shocks had been able to continue growing, countries that pursued the other strategy stagnated as a result of severe external and domestic debt problems and are being forced to adjust while lacking adequate access to international capital markets.

However, events since 1982 suggest that although there is a group of countries that can be clearly identified as overindebted, there is no clear distinction at the fringes, and a continuum of external debt positions exist. Countries not currently classified as overindebted could easily slip into serious financial problems if they do not pursue a strategy to adapt to the new international circumstances by increasing their ability to generate foreign exchange. Actually, the ratios of debt to exports and to the gross national product of the non-overindebted countries have been increasing fast in the current decade, and in 1986 they were very close to those that the now overindebted countries had in 1980 (the ratio of debt to the gross national product is about the same that the Baker countries had in 1982, when the crisis started [figure 6.2]).

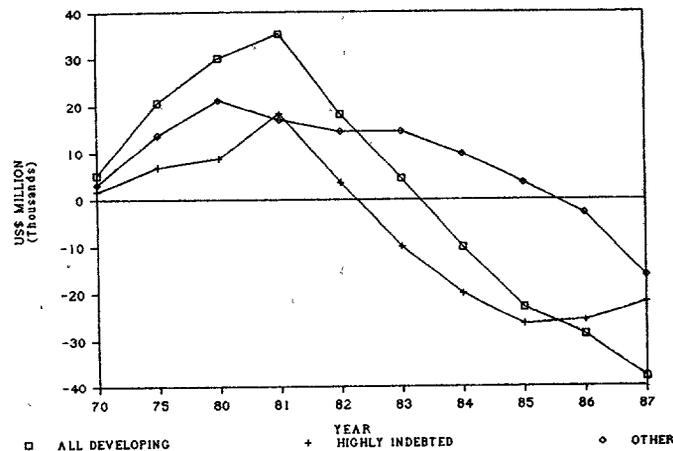
Figure 6.2 External Debt of Developing Countries



Furthermore, while external debt is increasing by any measure for all developing countries, net transfers to these countries are declining. They became negative in 1986 even for the non-overindebted countries (figure 6.3). This is a clear indication that international banks are turning their backs to the developing world, probably as a result of their perception—not necessarily true—that financial business is more profitable and less risky in developed than in developing countries.

If these trends continue, the average developing country will experience increasing difficulty in obtaining external financing. This has two implications. First, they will have to generate more of the foreign exchange that they need, which requires reforms in their real economies. Second, they will have to improve their ability to mobilize domestic resources, which requires reforms in their financial systems. If they fail to carry out these reforms, they

Figure 6.3 Net Transfers and Debt Growth of Distressed Countries (in billions of US\$)



*Note:* The distressed countries comprise the 17 Baker countries.  
*Source:* World Debt Tables.

will be forced to slow down their rates of growth. Also, their macroeconomic situation will tend to deteriorate, as happened in the Baker countries. Losses accruing from inefficient enterprises will become increasingly difficult to afford. Large balance-of-payments deficits will become more difficult to finance. More and more countries will discover that inward-looking strategies are no longer sustainable in a rapidly changing world.

### *The need for flexibility*

Two main conclusions can be drawn from the facts described above. The first is that countries should abandon the inward-oriented model of development, moving fast to integrate their economies into the international markets, increasing both their exports and imports. The second conclusion is that for this integration to take place, the countries have to get rid of inefficient activities to be able to finance investment in more productive ones. Since international relative prices are changing so fast, this requires not only a deep restructuring to make their capital base consistent with the current relative prices, but also a flexibilization of their economies. Countries that allow productive sectors to be locked into existing assets or production arrangements are likely to suffer rapid obsolescence.

The essence of flexibility is the speed and easiness in creating and discarding activities in response to shifting signals. Therefore, signals have to be transmitted rapidly, which makes the case for freeing domestic prices and for allowing international prices to be reflected in them. Flexibility also requires the easy creation of new activities and enterprises adapted to the new relative prices. Therefore, economies in which it is easy for new entrepreneurs, both large and small, to create new activities are likely to provide faster and more efficient supply responses than those in which the cost of entry is high.

The demise of inefficient enterprises, however, is also essential for the survival of the efficient ones, because they compete with each other for scarce resources in such a way that policies that protect inefficient enterprises effectively crowd out the efficient ones. Economies largely based on market-oriented, private activities have a comparative advantage in adapting to changing circumstances, both because of their ability to create new enterprises and because they have an automatic mechanism--bankruptcy--that forces existing enterprises to either adjust or disappear.

## The Inward-Oriented Model for Financial Development

The inward-oriented model of development has important implications for the way the financial system is able to perform its functions.

### *The role of the financial system*

The financial sector is key in the allocation of resources in a market economy. It is also key in the transition from the current economic structure of most developing countries to a more open and liberal model of development. The deep restructuring that is needed to make those economies more efficient requires the efficient mobilization and allocation of huge amounts of financial resources. As the experience of so many countries in the 1970s shows, it is not enough just to invest; it is necessary to do it right.

Currently, financial systems are unable to help in the transition toward a more open and liberal economic structure, mainly for two reasons. First, the financial systems have a vested interest in maintaining the status quo; they have financed the protected economic activities that will become unprofitable as a result of liberalization. Second, the fragmentation of financial markets has rendered financial systems extremely rigid, unable to allocate resources to the most profitable activities at the margin. Their freedom to shift resources from one sector to another, and to apply homogeneous criteria to lend and set lending conditions, is severely constrained by regulations that force financial institutions to lend to specific sectors and to do so under prescribed terms and conditions. Furthermore, it is becoming increasingly clear that the environment created to solve the two problems traditionally addressed in the inward-model of economic development—funding long-term credit and providing access to credit to certain sectors—has contributed substantially to the fragmentation of financial markets and to the grave financial difficulties of the present.

Although widespread fragmentation is certainly not part of the intentions of the creators of each new credit line, experience shows that, through time, this is the likely outcome of an approach based on directed credit. In many countries the markets have become so fragmented that market forces cannot adequately meet even simple financial functions. This reinforces the argument to introduce new distortions in a vicious circle that results in a crippled financial market. This is precisely the opposite to what developing countries need to catch up with the developed ones in a world of rapidly changing technology.

### *The wedge between economic and financial profitability*

In the distorted economies that the inward-oriented model brings about, activities that make sense in the context of world's markets are not profitable for local agents, and vice versa. Thus, economically profitable activities are discouraged and unprofitable ones are encouraged. This gravely affects the functioning of the financial system, which is supposed to allocate resources efficiently.

When dealing with the problem of how to promote efficient investment in the reversed reality of the inward-oriented model, there are three possible approaches. The first is to equate the economic and financial rates of return, reducing the distortions. The second is to create compensatory ad hoc distortions that, contradicting the overall signals existing in the market place, ensure that resources flow toward the desired investments. The third is to try to find investments that are profitable in both economical and financial terms. Although there are substantial efforts devoted to implement the first solution, it is fair to say that, in day-to-day financial decisions, it has been the other two that have prevailed in the past several decades. A whole new industry, the economic analysis of projects, rose and grew under their shadow.

The advantages of the two approaches that do not require the removal of distortions are immediately obvious. They are apparently more expeditious. Their disadvantages seem to be

minor, controllable through the use of economic analysis of projects, which provides the basis for designing counterbalancing distortions at the sector level (mainly the justification of interest rate subsidies) and to choose efficient projects. Experience, however, has proved that economic analysis of projects gives a false sense of security for several reasons. First, economic analysis of projects ignores the fact that the nature of a project will change with the years, as management adjusts to changing realities. Those realities will be distorted. Thus, even if a project is originally designed in such a way that it is economically feasible, it is highly likely that it will change toward infeasibility as management strives to maximize financial profitability. Partially reflecting this, the economic rate of return has been a poor predictor of project performance, poorer than the rate of financial return.

Thus, if economic analysis of projects is of no help to financial institutions, these institutions have to live with the negative effects of the wedge between economic and financial profitability. The consequence of living with those effects is not merely a reduction of the financial system's efficiency as an allocator of resources. Actually, the financial system becomes dangerous. It will tend to allocate resources to the economically inefficient activities that are profitable financially. This should come as no surprise. The wedge also plants the seed of the financial crisis that will explode when liberalization becomes unavoidable as a result of the unsustainable nature of the banking system's investments.

One of the worst consequences of following the compensating approaches became obvious only in the long run. They gave respectability to irrational economic behavior, providing an alibi, economic efficiency, for financial losses. The rationale that most inefficient financial intermediaries put forward for having losses and doing nothing about them is that losses stem from their developmental role. Under that view, making profits is for low-minded merchants who contribute nothing to development. Development, on the other hand, requires sacrifice; that is, losses. This view has undoubtedly been a major factor in bringing about some of the major disappointments in the economic growth of developing countries and is at the root of some of the gravest current financial problems.

#### *The dynamics of government intervention*

The wedge between economic and financial profitability is the result of the notion that the government is in a better position than the market to allocate resources. Such a notion has had other negative effects on the financial system, among them the fast growth of fiscal deficits and the increasing domination of the market for credit and capital by government borrowing.

The government's control of financial markets sets in motion a chain of events that weakens the financial system. To supply cheap resources to itself or to preferred activities, the government intervenes to depress the remuneration to financial savings. As a result, savers take their resources away from the financial system. To prevent savers from sending their resources abroad where interest rates are higher, the government resorts to imposing controls on international capital movements, closing the domestic financial markets. Savers react by investing their funds in assets that are either nonproductive or have yields lower than those that could be achieved by efficient entrepreneurs. Thus, the current model leads to neglecting the mobilization of resources and to the inefficient allocation of the meager ones that are mobilized.

#### *The negative impact of artificially low lending rates*

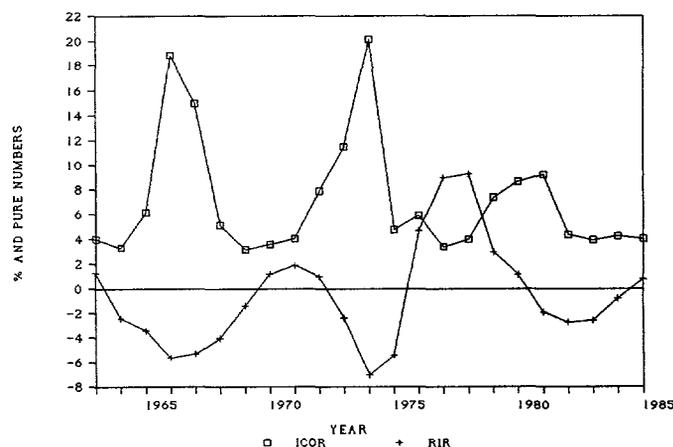
Artificially low lending rates have several consequences that reduce the efficiency of the economy and of the financial system.

**THE IMPACT ON THE USE OF SCARCE CAPITAL.** Subsidized interest rates discourage the efficient allocation of investment by introducing rationing, thus creating two markets with opposite signals, both of them distorted. In the formal market, subsidized lending interest rates

artificially reduce the cost of capital and lead to the adoption of unduly capital-intensive techniques, excessive inventory levels, low rates of capacity utilization, and waste.

As a result of this inefficiency, capital intensity becomes excessive in the formal market, and the volume of investment required to obtain an expansion in production is increased. In the informal market, excessively high real interest rates discourage the formation of capital and the adoption of techniques inappropriate for the country's factor endowment. As a result, the choice of techniques is distorted, in opposite directions, in both the formal and informal markets. Overall, subsidized credit increases the volume of financial savings required for growth while reducing the availability of those savings. Figure 6.4 shows how, during the last 21 years in India, the incremental capital output ratio (ICOR) has increased when the real interest rate in the formal markets has declined, and vice versa (three-year averages of both variables, as shown in figure 6.4).

Figure 6.4 ICORs and Real Interest Rates in India (3-year averages of both variables)



Source: IFS.

The efficiency of investment is also reduced by quantitative restrictions to credit. Some of the negative effects of these restrictions are closely tied to their associated interest rate controls. Quantitative restrictions, however, also have some adverse effects of their own. For example, because of complementarities, restrictions applied on credit to activities considered of low priority lower the profitability of capital in activities that the government wants to promote. For instance, industrialists in many countries claim that the exclusion of consumer loans from the banking system is a major factor hindering the expansion of the durable goods industry.

*THE SUBSIDIZED CREDIT CULTURE.* Also damaging is the casual attitude toward investments that credit subsidization generates in investors. Granting subsidized credits has reinforced the investor's idea that it is the responsibility of the government to ensure that investments are successful. This idea is frequently extended to include the notion that there is no obligation to repay loans by government-owned institutions or financed with public money, even if they are intermediated by private institutions. In many countries, private bankers refuse to intermediate such funds because of this effect.

*EXCESSIVELY LEVERAGED INVESTMENTS.* Risk capital is the initiator of any sound investment, and banking systems can become economically efficient only to the extent that capital markets are

efficient in ensuring that entrepreneurs are able to shift their risk capital from inefficient to efficient activities. The inward-oriented model of development not only lacks an efficient mechanism to provide equity investment but also precludes the existence of such mechanisms by financing firms with insufficient equity. Highly leveraged investment is not only financially risky but also does not give entrepreneurs enough incentive to work through difficulties. This is quite a damaging effect because experience shows that access to credit is secondary to the existence of entrepreneurs willing and able to make equity investments.

*AN OBSTACLE TO PRIVATE SOLUTIONS.* Credit subsidization also precludes the emergence of creative solutions to financial problems because no private agent can compete with the cheap resources provided by the government. For example, most countries have not taken advantage of the emergence of market instruments suitable for the mobilization of private resources for investment financing, such as floating rate loans, that would reduce the dependence of long-term credit on government resources.

### *The negative impact of artificially low deposit rates*

Artificially low deposit interest rates also create severe problems. The pressures that credit demands from the public and private sectors exert on the meager financial savings often result in macroeconomic instability. To finance credit expansion in excess of increased financial savings, governments and central banks have resorted to inflation and heavy external borrowing in the recent past.

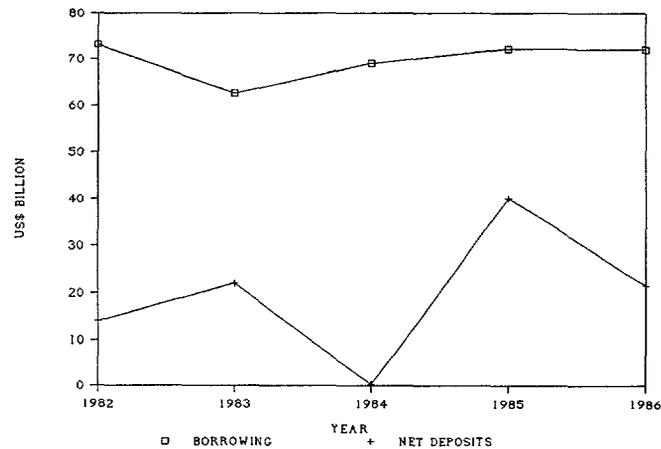
When the external borrowing has become excessive and foreign lenders have refused to increase their country's exposure, central banks have financed excessive credit with declines in international reserves. When reserves have been exhausted, excessive credit has resulted in a rapid escalation of inflation rates. Thus, the economy is always imbalanced, sometimes in the form of large current account deficits, sometimes in the form of high rates of inflation, sometimes in a combination of the two.

### *Currency debasement and its consequences*

Currency debasement triggers changes in the behavior of the public which have far-reaching consequences for the economy.

*REDUCED INTERMEDIATION.* The use of inflation and their associated interest rate controls to generate resources to finance fiscal deficits has attained respectability in the last several decades as one of the results of the emphasis on the priority of the public sector in the current model of development. However, the use of these policies has quite destructive effects in the allocation of resources. They effectively debase the country's currency because they reduce its attraction as a way to hold savings. As a result, such policies put a premium on speculation, encouraging savers to invest in some real assets whose only advantage is that they keep their value in real terms. This leads to smaller financial intermediation and reduced capital mobility.

*CAPITAL FLIGHT.* Currency debasement also encourages the establishment of negative links with other countries, the most common of which is capital flight. The magnitude of capital flight from developing countries is not known, but indicators suggest that it is substantial. One of these indicators is the amount of cross-border deposits of nonbanks. In mid-1987, agents from developing countries held deposits in foreign banks amounting to US\$291 billion, equivalent to 28 percent of the developing countries' total external debt. The increase in such deposits in 1982 through 1986 amounted to US\$98.3 billion, or 28 percent of the flow of new credits to developing countries during the same period (figure 6.5). The increase in registered deposits abroad is likely to underestimate the extent of capital flight because there are several ways to obscure the origin of the funds. Also, they do not include direct investment in the recipient countries, which may be important, especially in real estate.

**Figure 6.5 Capital Flight and External Borrowing of Developing Countries**

Source: World Debt Tables and IFS.

*THE EFFECTS OF CAPITAL CONTROLS.* Attempts to contain capital flight by rigorous enforcement of exchange controls may be partially successful. But if the incentive is large enough and the foreign contacts sufficient, people find ways around such controls after a while. The best insulation against capital flight is to have competitive financial institutions bidding for the resources of the savers. In practice, exchange controls are usually ineffective in avoiding capital flight. They, however, are quite effective in crippling the ability of exporters to compete in the most sophisticated markets, the ones with more potential for growth. Producers competitive from the point of view of their own costs can be rendered uncompetitive by an inefficient financial system and by its lack of adequate links with the international financial markets. Domestic producers aiming at exporting can hardly benefit from the expanded menu of services available internationally to its competitors if every transaction has to be cleared with the government and if there is always uncertainty of compliance with contracts that entail the delivery of foreign exchange. Such limitations impinge both on the ability of exporters to deal with their customers abroad, who cannot afford not to use the sophisticated international financial network in their transactions, and on their ability to react quickly to international demand.

*HOLDING SAVINGS IN FOREIGN EXCHANGE.* To compensate for the lack of appeal of the domestic currency, some countries have allowed domestic banks to receive deposits denominated in foreign currency. While helping to keep savings from fleeing the country, however, such deposits can become a source of serious problems of monetary management because they introduce currencies in the financial markets that are not under the control of the central bank. In some countries (Uruguay, Yugoslavia, and Bolivia, for example), deposits in foreign exchange represent over 50 percent of total deposits. The ability of the central bank to reduce domestic purchasing power through devaluations is severely diminished in these countries because a large portion of financial holdings is impervious to devaluation. Also, banks lending the proceeds of these deposits in the local market have faced serious portfolio problems when, after large real devaluations, borrowers cannot repay their obligations.

In some countries where mistrust in the currency has reached an extreme, savers hold foreign currency notes in their homes and use them for domestic transactions. As a result, the local

central bank loses a good portion of the income that accrues to it when it creates money in response to the increased demand for monetary balances. Monetary management becomes even more difficult and financial intermediation collapses. As in the case of capital flight, the only effective way to recapture the savings embodied in the foreign currency notes is to strengthen the local currency and provide interest rates attractive enough to entice savers to exchange their foreign exchange for local currency.

*THE DEBT TRAP.* For many countries, the long buildup of instability culminated in the early 1980s, when, as a result of the accumulation of an excessive stock of external debt, international banks stopped lending. This decision prompted a series of real devaluations, triggering several mechanisms that led to severe crises. First, the real equivalent in domestic currency of the debts denominated in foreign exchange increased substantially, reducing the net worth of debtors and/or their financiers. Second, the reversal of foreign exchange cash flows forced a reduction in the country's real expenditures in order to compensate for the reduced inflow of resources and to mobilize those needed to finance the net outflow. Third, the profitability of a substantial portion of the country's enterprises declined as a result of the shift in domestic relative prices that accompanied the real devaluations. Fourth, the high nominal interest rates that resulted from the rising inflation rates have caused liquidity problems for enterprises, contributing to the financial distress generated by the abovementioned factors. These mechanisms reinforced each other. Resources had to be transferred abroad while economic agents were experiencing a reduction in their current profitability, liquidity problems, and a substantial capital loss.

### **The Features of an Outward-oriented Financial Development**

The ultimate aim of development strategy should be to develop the country's comparative advantages. The goal of the financial sector strategy should be to help in this process, mobilizing the necessary resources and allocating them in the most efficient way. Therefore, the choice of a strategy to develop the financial sector is a function of the overall model chosen to integrate the economy into the international markets.

#### *The overall model: intervention versus free market*

Countries aiming at integrating their economies into the international markets can take two rather different approaches. One of them is to create a level field for economic agents to interact, allowing market forces to identify and develop the country's comparative advantages. Chile's ability to increase and diversify its exports in the last several years, achieved against the background of a serious external debt problem and right after a severe domestic financial crisis, is an example of the success of such strategy. The other approach is to intervene in the market, creating conditions for the development of comparative advantages that, even if not yet present, can be obtained with the existing factor endowment. Japan and some of the most successful newly industrialized countries (NICs) have intervened to develop dynamic comparative advantages.

The optimal choice between the level playing field and state intervention to develop dynamic comparative advantages is a function of several factors. While efficient intervention may help to maximize the rate of growth of the economy, the difficulties involved in making efficient interventions are quite substantial. The success of government intervention in Japan and the Asian NICs shines in stark contrast with the experience in many other countries, where government intervention has become a source of loss rather than an engine for growth. The issues at stake are the objectives of the intervention and the ability to achieve those through efficient means. The following paragraphs sketch some of the problems encountered when trying to design and implement an efficient intervention.

*The difficulties of carrying out efficient intervention*

The objectives of the intervention of successful NICs should be sharply distinguished from those of intervention in inward-oriented economies. The former aims at integrating the domestic economy with the international markets, while the latter aims at separating them. However, the means used in both cases is the introduction of price distortions in the domestic market, which result in a wedge between international and local incentives.

*CONTRADICTION BETWEEN OBJECTIVES AND MEANS OF INTERVENTION.* Regardless of their original intention, policies aimed at protecting domestic companies from foreign competition will always result in the provision of rents to local firms in the domestic market. If intervention stops here, its end result will be the appropriation of those rents to increase the income of shareholders, workers, providers of nontradable inputs, or all of them. Through the market of factors and other inputs of production, protection will tend to increase the price of nontradables relative to tradables, thus causing an overvaluation of the currency.

Therefore, outward-oriented intervention requires the introduction of additional measures aimed at counteracting the perverse set of incentives created by protection. These measures should aim at avoiding the appropriation of rents by suppliers of nontradables and workers. That is, they should maintain low real wages, so that excess profits accrue to capital. Furthermore, once this is achieved, other measures should force firms to use those rents to further invest in developing their dynamic comparative advantage, going through the learning curve of their trade at a fast rate and acquiring the capital goods necessary for this. Carrying out such a sophisticated intervention is a very difficult feat, both economically and politically. No wonder only a few countries have been able to accomplish it.

*THE DYNAMIC NATURE OF SUCCESSFUL INTERVENTION.* Moreover, the contradiction between the means and objectives of outward-oriented intervention needs to be solved dynamically, so that rents disappear when protected companies reach a stage where they are already competitive. This process, however, is not simple, because as the country develops the real wage tends to increase naturally, pushing up the achievable target of low real wages. Comparative advantages shift toward more capital and knowledge-intensive activities. Intervention should shift accordingly, promoting a new set of activities while killing the previous ones. This is the process followed by Japan and copied by the Asian NICs. The coordination of this process through time is quite risky and difficult.

*CHOOSING WINNERS, NOT LOSERS.* In carrying out all these activities, a close alliance between government and private agents must be developed. This forces the government to pick winners and discard losers, a very difficult task to accomplish. Economically it is difficult because of the uncertainties involved. First, a potentially winning activity should be chosen, without still knowing if market conditions will change, making it a loser by the time investment is completed. Second, agents to be protected should be chosen based on their ability to succeed. The political risks of doing this are very high.

*THE LEVEL PLAYING FIELD.* In summary, efficient intervention can take place only in environments where several factors coincide. Among the most important of those are the government's sophistication, the clarity of its objective to develop true comparative advantages, and the existence of a critical mass of human capital in both the public and the private sectors. Failure to understand the process of development, the basic trends in international markets, and the ways in which the government can influence business decisions without killing initiative will rapidly lead to disastrous investments, large external debts and policy reversals. For each successful case of government intervention, there are several examples of failure.

Therefore, aiming at something close to the level playing field may be the best approach for countries where the conditions hinted at in the previous paragraph are not present. Within

this approach, mistakes are likely to be smaller than in the intervention approach because investment decisions would be taken by many agents with differing perceptions, rather than by the government alone. Also, mistakes will be compensated by successes of businessmen with perceptions different from those of the failed ones. Moreover, failures will tend to be normally distributed over time, while in the intervention approach they will tend to be concentrated in moments when relative prices and market trends move in ways different from those envisioned by the government.

The absolutely level playing field, however, may not exist and may not be the optimal path in countries where, because of the smallness and lack of sophistication of their markets, entrepreneurs and laborers are unable to compete abroad. In such cases, which comprise in different degrees most of the developing countries, there are certain interventions that are unequivocally positive. Those are in the area of developing human capital—the necessary infrastructure to ensure communications—and a flow of timely information about international developments. Also, building up institutions to bridge the financial and nonfinancial domestic markets with the international ones is likely to be a safe and sound investment.

### *The financial system in a level playing field*

This section reviews the issues related to the financial sector when the government aims at establishing a level playing field for local producers and consumers in an outward-oriented development strategy.

*HELPING IN THE INTEGRATION WITH INTERNATIONAL MARKETS.* If the financial system is going to help in the process of integrating the economy to the international markets, the ultimate aim of reform should be to achieve currency convertibility, or something very close to it. As it was discussed before, exporters can hardly compete in the dynamic international markets if they are not able to easily make international financing arrangements. Those arrangements entail fast movements of financial assets and obligations across borders, which cannot be achieved if the local currency is subject to exchange controls.

Because convertibility is impossible to attain in a highly distorted environment, removing exchange controls sounds like an unrealistic possibility. There is a widespread assumption that, if free, capital will move out of developing countries in any circumstance. However, several developing countries once enjoyed free currency convertibility in their domestic markets in a sustainable way. Actually, what is unrealistic is not trying to attain convertibility, but the notion that highly distorted environments are sustainable in the long run. If the monetary environment is stable and holding assets denominated in domestic currency is attractive, savers will tend to hold domestic assets because it is easier to conduct domestic transactions in local currency rather than in foreign currency.

Moving to convertibility is, of course, no quick or easy task. But it should be clear that integration into world markets is not possible without it, and if such integration is desired, a long process aimed at attaining convertibility must be started. This should be done in a way that destabilizing capital flows are not generated. To prepare for convertibility, countries should remove distortions that create wedges between domestic and foreign financial assets and pursue stable macroeconomic policies.

*UNIFYING AND LIBERALIZING THE FINANCIAL MARKETS.* A basic requisite for establishing efficient competition is to have an appropriate and flexible set of prices in place. This set of prices has to be determined by the market rather than by decree. The most important financial prices are the exchange rate and the interest rate. There are two aspects to problems involving those prices in most developing countries. The first is that the market is fragmented, so that economic agents face different marginal prices depending on their identity, size, geographical location, and the activity they carry out. The second problem is that the weighted average of the marginal prices they face does not clear the market, therefore, macroeconomic instability

develops. Competition requires that all agents face the same price and that such price should clear the market.

There are two basic strategies to approach a unified marginal pricing that clears the market. One is to liberalize market segments in sequence. The other is to unify the market first, and then liberalize. Although there are exceptions, in most cases the second strategy is superior for both the exchange rate and the interest rate. As a reflection of this, the International Monetary Fund (IMF) has a strong mandate to suppress multiple exchange rate practices. In case of conflict, such a mandate overrides that of equilibrating the economy. That is, the IMF does not accept a program that achieves macroeconomic balance through the weighted average of multiple exchange rates.

In most cases, however, financial market liberalization has been attempted following the other approach, liberalizing segments sequentially. The results of this strategy have not been encouraging. In many countries, liberalization has led to extremely high real interest rates in the liberalized segment, while borrowers of preferential credits keep paying negative real rates. This is the natural result of the logic of weighted averages. If the weighted-average interest rate that is required to clear the market is, for instance, 65 percent and 70 percent of the borrowers pay 20 percent, the remaining 30 percent of the borrowers must pay 170 percent.

In addition to distorting competition, unrealistically high interest rates on the freer segment of the market leads to distress borrowing among those forced to pay them, and adjustment fails to take place because credit demand does not decline. Rather, it increases because once such high rates are present, avoiding bankruptcy becomes the primary purpose of borrowing and, with higher interest rates, borrowers need more credit to service their previous obligations.

The other strategy, going first for unification and then for liberalization, avoids such problems. Similar to the first strategy, it accomplishes the objective of stabilizing the economy through raising the weighted average of the marginal interest rates faced by economic agents. However, it does so by reducing the dispersion between the different marginal rates rather than concentrating on increasing the marginal rates for a certain segment. Thus, in each of the stages of a phased program, two objectives are obtained. One is that the weighted-average interest rate increases. The other one is that dispersion is reduced both in terms of sectors and in terms of differences in interest rates.

Since changes in the interest rates paid by different sectors before and after unification would be smaller, distress would be less than in the first strategy and the appeal of moving toward more subsidized sectors would be smaller. Once a reasonable degree of unification is achieved, the now general interest rate can be increased to a market clearing level. The shock created by the needed increase would be smaller than in the first strategy.

The unifying first strategy would keep in place, until the very end of the process, a weighted average interest rate that would be too low to clear the market. Controlling the excess credit demand that this would generate, the government would have to either secure financing from abroad or impose temporary overall credit ceilings. This seems to be a disadvantage vis-à-vis the other alternative. However, credit ceilings are likely to be needed in the other alternative as well because, as it was argued earlier, excessively high interest rates fuel demand for credit instead of reducing it. The difference is then which of the two situations is more sustainable. Clearly, the dynamics of extremely high interest rates, distress borrowing and associated speculation and capital flight is extremely difficult to control. Since financial distress will appear anyway in any true structural adjustment, it is better to minimize the reasons leading to it.

*PROMOTING COMPETITION.* In addition to price reform, the promotion of competition requires institutional measures. The existence of barriers to entry precludes competition and is a major factor in creating oligopolies in financial markets. Unrestricted opening of the financial system is not advisable because of the large externalities involved in managing public savings. Experience shows that the macroeconomic problems caused by large banks defaulting on their obligations to depositors are too grave to leave the prudential control of bank operations to the depositors, who lack the reliable information to perform such a function. Thus, most

governments guarantee explicitly or implicitly the integrity of all or a portion of bank deposits, so that if banks become insolvent, their deposits become a fiscal liability. If the government is ultimately liable for the banks' depository obligations, it has the right to impose regulations ensuring a prudent handling of the banks. These regulations should include minimum requisites needed to establish a bank.

Nevertheless, it is important that qualified applicants be able to establish new financial institutions (both inside and outside the banking sector) as a way to promote innovation and price competition in financial markets. Norms regulating entry to, and presence in, the financial system must include a clear definition of what is a bank and what are each of the different kinds of financial institutions, with explicit reference to what features distinguish depository from nondepository instruments and what kind of institution can issue and invest in each of them. Also, they should include a minimum equity capital, preferably in line with the new international regulations, including leverage requirements set in accordance with risk. Also important, they should include certain standards regarding the professional competence of managers.

Some financial markets are organized around universal banks, which engage in a wide range of financial activities, while others have specialized institutions dealing with specific operations. Furthermore, in some countries with specialized institutions, financial conglomerates are integrating financial services in a way similar to that of universal banking. The desirability of either type of organization depends on the particular circumstances of each country. However, the following considerations are important, regardless of the institutional setting: (1) each type of financial activity must be carried out on a sound and transparent basis in a competitive market; and (2) regulation must aim to limit the damage that operations in riskier instruments can cause allied institutions receiving government-insured deposits from the public. Also, in countries with specialized systems, it is important that the regulatory framework should not introduce artificial profitability differences between different classes of institutions.

The institutional setting of the financial sector can also differ with regard to the ownership linkages that are allowed between financial institutions and their borrowers. Although these linkages have not caused problems in some developed countries, a substantial portion of the recent portfolio problems in several developing countries has been caused by excessive concentration of credit in related enterprises. The key element to protect financial institutions against imprudent credit concentration is to ensure that credit and collection decisions are taken at arm's length in the financial system. Experience with developing countries overwhelmingly suggests that, although strong regulation and supervision are necessary, they do not counteract the incentives that borrowers have to transfer resources and profits from their banks to their enterprises. The best way to avoid these problems is by not allowing major borrowers to own banks coupled with strong regulation and supervision.

The incentives to credit concentration are stronger in countries where subsidized credit is important, because the ownership of financial institutions becomes a way for firms in the real sector to ensure their access to the subsidy. The incentives to concentrate credit should be reduced through the elimination of subsidies and credit controls, the strengthening of the profitability of the banking business itself (so that the benefits of the intermediation business are reaped in the banks themselves and not in borrowing companies), ownership reform, and regulation of the percent of their equity that financial institutions can lend to their own staff and directors and to single firms and groups.

*MATCHING OF ASSETS AND LIABILITIES.* The risks of intermediation are also increased by other imprudent financial practices, such as mismatched assets and liabilities in terms of currencies, interest rates, and maturities, without hedging. Assumption of the foreign exchange risk by financial institutions is extremely risky and must be carefully monitored both in terms of net exposure relative to the institutions' equity capital and to the length of the period of currency mismatching. While term transformation can be effected safely through the use of instruments with variable interest rates tied to the cost of short-term resources, in some developing countries

financial institutions grant long-term credit at fixed interest rates financed by short-term deposits. This practice exposes financial institutions to unduly high risks and should be minimized.

*INFORMATION AND DISCLOSURE.* Information is a key element in the efficient performance of financial systems. The ultimate providers of financial resources—depositors, bondholders, and shareholder—should know the way in which their funds are managed by the intermediaries or direct users. Financial information is very limited in most developing countries. Savers do not know the quality of the portfolio of the financial institutions in which they deposit their funds and, therefore, cannot exert discipline on these institutions by moving their funds to more prudently managed institutions. Similarly, limited disclosure of information by bond and share issuers is a major factor restraining the development of capital markets.

*REGULATION AND SUPERVISION.* Regulation is a key financial policy instrument to promote both competition and prudent practices in the financial system. Aspects of regulation dealing with competition have been covered under most of the headings in this chapter. Prudential regulation is also important to avoid solvency problems and to solve them quickly when they occur. Banking regulation and supervision are particularly inadequate in several developing countries regarding (1) the control of imprudent practices such as credit concentration, or maturity, interest rate and currency mismatches between assets and liabilities; and (2) regulations concerning bad debts and write-offs, which are either too permissive or are not properly enforced. Improvements can be obtained by establishing transparent accountancy practices, clear standards of prudence, strict rules forcing the rapid solution of solvency problems, and legal punishment for transgressors.

Training of supervisors should cover all aspects of financial operations. In the case of banking supervisors, training should emphasize the upgrading of their ability to assess the risks of losses stemming from the quality of portfolios and the mismatching of currencies, interest rates, and maturities. Supervisory institutions must also develop the ability to cope with bank failures, sharing responsibilities, where applicable, with deposit insurance institutions. Supervisory functions are located with the central bank in many developing countries, while they are carried out by an independent authority in some industrial countries. Whether banks' supervision should be located in the central bank or an independent agency will have to be determined through an analysis of institutional framework and the quality of the institutions in a country.

Prudential regulation is also essential for the development of strong capital markets. Stock market crises are common in the early stages of development of capital markets and can be quite damaging for their continued growth. Lack of transparency and inadequate control of price manipulation are the weaknesses more commonly found in this respect in developing countries.

Emphasis should be placed in ensuring the development of (1) an information system that would permit brokers and investors to assess the performance of individual stocks and the market in general; (2) simple but secure settlement systems; (3) minimum professional and financial solvency requirements to engage in the brokerage business; (4) accurate financial disclosure requirements for listing; and (5) independent audit rating agencies. A government institution should also be created to closely supervise the compliance with regulations.

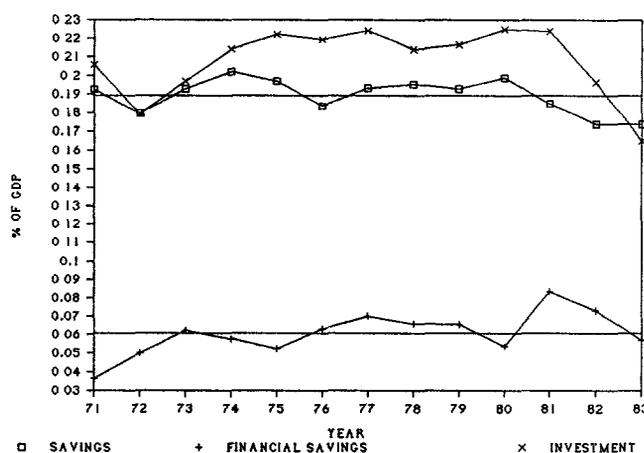
*DEPOSIT INSURANCE.* The major objective of deposit insurance is to prevent runs on banks and demonetization of the economy. This objective, however, should not be extended to protect the shareholders and managers of financial institutions, who should be accountable for their actions in order to discourage imprudent financial practices. In establishing deposit insurance institutions, it is better to limit protection to smaller depositors in order to maintain the discipline that larger, better informed, depositors impose upon financial institutions. Also, insured institutions must follow reasonably prudent lending policies, which must be enforced by the insuring agency through periodic supervision. If feasible, deposit insurance costs should be related to the risks of the portfolio.

Deposit insurance corporations are also helpful in maintaining the soundness of the financial system by inspecting the institutions they insure. The deposit insurance agency may also be given responsibility for restructuring troubled financial institutions. Deposit insurance corporations are often well suited to assist troubled banks because they tend to face fewer bureaucratic problems and their takeover of ailing banks is not interpreted as nationalization. In all their undertakings, deposit insurance corporations should have the defense of the taxpayers' interests as their primary objective.

In establishing deposit insurance schemes, the government should clearly differentiate the institutions it wants to protect in order to ensure the functioning of a monetary economy from those that, though being useful for the financial development of the country, do not play a key monetary role. In exchange for the privileges of issuing insured deposits and having access to the central bank's lending of last resort, the protected financial institutions should be subject to strict prudential regulation, while institutions not willing to work under those regulations should not be insured. In several countries, the difference between these two kinds of institutions is not clearly established and there is a danger that the failure of high-risk intermediaries could lead to runs in private banks. To avoid these problems, the Government should make sure that the dividing line between these two kinds of institutions is clearly delineated.

*THE PROVISION OF CAPITAL AND LONG-TERM LENDING.* It is usually assumed that market forces in developing economies cannot provide long-term financing because there is no supply of long-term financial savings. It is true that long-term instruments are not popular in many developing countries. However, this is mostly the result of high and variable rates of inflation and interest rate controls, which render those instruments too risky to bear, especially when they carry fixed rates of interest. A very large portion of savings are long-term in nature and are invested in long-term real assets. Figure 6.6 shows that, in a sample of 34 developing countries, financial savings (increase in M2) averaged 6 percent of GDP while total savings averaged 19 percent in 1971-83. The difference was saved directly into real assets. There is no reason to expect that, given a fair yield, people who are now investing in real assets would not be willing to invest in financial instruments that have much more liquidity and more convenient to hold (figure 6.6).

Figure 6.6 Savings and Financial Savings (Sample of 34 developing countries)



Source: IFS.

Therefore, the problem is how to mobilize financial resources out of the flow of savings. In addition to allowing interest rates to reflect the opportunity cost of savings, the government could promote such mobilization by reducing the government's demand for financing and by creating new instruments that make term transformation safe. Very importantly, governments should carry out reforms aimed at releasing the huge potential of pension, insurance, and social security funds.

*REMOVING DISTORTIONS AND CREATING NEW INSTRUMENTS.* In many developing countries, credit to the private sector is scarce because of two main reasons: (1) resource mobilization is low as a result of inadequate interest rate policies; and (2) an excessive amount of resources is allocated to finance the fiscal deficit. However, even in countries where these conditions are not present, term loans tend to be in short supply. The main causes of this scarcity are the following: (1) macroeconomic instability, which increases the risks of long-term financial operations; (2) lack of adequate instruments, like floating interest rate loans, which protect depositors and intermediaries against interest rate fluctuation; (3) subsidization of long-term loans, which eliminates the incentives for mobilization and allocation of long-term funds; and (4) lack of institutional investors.

The lack of institutional investors is largely a result of the inadequate development of institutions mobilizing contractual savings. Pension funds are frequently controlled by the state and the funds used to support Government expenditures rather than private investment. Furthermore, many pension schemes are funded out of current contributions instead of reserves previously accumulated, which means there are no funds to invest. Insurance companies are also often forced to invest most of their reserves in low-yielding government paper. The World Bank supports the introduction of competition in these activities and the establishment of regulations allowing insurance and pension funds to be used to finance term investments in the private sector.

The institutional framework of developing countries frequently discriminates against the use of equity financing and against the holding of non-depository financial instruments. Such discrimination is often found in asymmetric tax treatment of debt and equity (see below); inadequate protection of minority shareholders in corporate legislation; and deposit insurance, which, although necessary for other reasons (as explained above), encourages holdings of deposits over equity investments by reducing the risk of deposits. These measures create incentives for firms to increase their debt-to-equity ratios, in many cases beyond prudent limits.

Rather than subsidizing credits, governments aiming at promoting the mobilization of resources to finance long-term investments should focus on providing liquidity to equity and long-term lending instruments. There is no institution in the whole world that can mobilize deposits matching the maturity of 15- to 20-year loans. However, such loans are common throughout the developed world, financing all kinds of investments, including housing. This is done through the use of instruments that allow for low-risk term intermediation, mainly floating rate bonds and deposits. While those instruments perform better in stable monetary environments, they can also be attractive in inflationary environments, provided, of course, that interest rates are set in the market and that inflation rates are within controllable limits.

One of the main obstacles to developing a long-term credit market is the government subsidization of such credits, which discourages the mobilization of market resources to fund term lending. Subsidization of other credits also has a negative impact because they increase the cost of non-subsidized credits, in many cases to levels that are too high relative to the profitability of real capital. The higher the share of subsidized interest rates in total credit, the higher will be the interest rate in the free portion of the market.

Interest rate liberalization and unification of financial markets are the most important measures that governments can take to provide liquidity to long-term instruments. However, there are other measures that they can take to promote such liquidity, mainly establishing the right environment for the growth of contractual savings (see next subsection) as well as enacting and enforcing regulations geared at giving transparency to the capital markets and punishing

bad practices. Governments can also contribute to the creation of a critical mass of capital market transactions.

Governments should eliminate the discrimination against the use of equity financing and against the holding of non-depository financial instruments that usually exists in developing countries. Such discrimination is often found in asymmetric tax treatment of debt and equity; inadequate protection of minority shareholders in corporate legislation; and deposit insurance, which, although necessary for other reasons, encourages holdings of deposits over equity investments by reducing the risk of deposits. These measures create incentives for firms to increase their debt-to-equity ratios, in many cases beyond prudent limits. The elimination of such distortions would increase the appeal of equity financing and encourage the development of stock exchanges. This development can also be promoted by releasing the potential of institutional investors.

*TAXATION.* Tax structures that discriminate against equity financing are common, as are those that give preferential tax treatment to income from government obligations. In some countries, taxes also raise the effective cost of borrowing, either directly or through increasing the gross spread of financial institutions. Both types of taxes are detrimental to the efficient allocation of resources in the economy. In isolation, each set of taxes discriminates against other types of financing, debt or equity, as the case may be. Used in combination, they discriminate against the investment of savings in financial assets, reducing financial intermediation and thus the ability of the economy to channel resources to their most efficient use. These distortions are made worse by inflation when tax systems are based on nominal rather than real flows. Since the elimination of taxation on financial assets and their yields would also distort the incentives between direct and intermediated investment, tax reforms require a balanced approach aimed at minimizing distortions in the economy as a whole.

*THE DEVELOPMENT OF CONTRACTUAL SAVINGS.* Contractual savings institutions—such as pension funds, social security schemes, and life insurance companies—are natural providers of long-term funds. Such institutions can provide term financing in the shape of equity and loans, and of all the intermediate instruments that combine some features of each of these. Contractual savings institutions in most developing countries, however, suffer from several problems that constrain their growth as the main actors in a nascent capital market:

- Several of the pension funds are based on the pay-as-you-go principle, which eliminates their role as mobilizers of funds.
- Frequently, when pension funds have reserves, they and life insurance companies are forced to invest all or a substantial portion of them in low-yielding government paper that is used to finance the government or preferred DFI borrowers.
- As a result of their low-yielding investment portfolios, they cannot offer attractive savings plans to their potential customers, and then experience low, or zero, growth in real terms. This is a problem especially in countries with high rates of inflation, where the yields of contractual savings plans are frequently negative in real terms.

Solving the problems of contractual savings institutions, enabling them to mobilize resources in free competition, and investing the proceeds judiciously would have a stronger developmental impact than providing direct financing to enterprises. As in the case of floating rate deposits and bonds, contractual savings instruments work better in stable environments than they do in inflationary monetary environments, but they can develop instruments ensuring that the returns on their saving plans are competitive with other market instruments.

*PROVIDING A CRITICAL MASS FOR THE DEVELOPMENT OF CAPITAL MARKETS.* An efficient capital market needs to have a critical mass of sellers and buyers to give liquidity to instruments. The critical mass of savers can be provided by contractual savings institutions, which would be joined in time by increasing numbers of individual savers. Pension funds can grow at a very fast pace when the right conditions for their growth are set. The critical mass of borrowers is more of a problem

because industrial companies are not used to raise resources from capital markets, and savers may initially be wary of investing in such firms.

This problem was solved a century ago in many developed countries by financing large infrastructure projects and housing through the capital markets. In most developing countries, utilities and other infrastructure projects are being financed largely with budgetary funds, complemented with foreign borrowing. The large amounts required to finance infrastructure and the quality of the collateral would provide the initial critical mass to the new capital markets. If the terms offered to domestic investors for this financing match the terms of foreign financing, bonds issued for these purposes would be very attractive and would attract substantial amounts of savings.

#### *Special treatment for special sectors*

Two main arguments support the introduction of distortions in the financial system in connection with this issue. One is that the market does not provide adequate access to credit to certain sectors. The other argument is that interest rate subsidies are the most practical way to compensate for real distortions affecting certain sectors (mainly agriculture). The two arguments are flawed. More often than not, the market fails to provide access to credit to some sectors because of the existence of distortions, not because of market failure. Regarding the second argument, it has been proven again and again that subsidized interest rates are not an efficient way to compensate for real distortions, both because the cost of the distortion is much higher than that of direct transfers and because the benefits of interest rate subsidies only rarely reach the group targeted for subsidies. These points are so well understood and documented that it is not worth pursuing them here.

#### *What to do with government-owned financial institutions*

There are two key principles to force competitiveness in both the assets and liabilities sides of financial institutions. First, all financial institutions should try to maximize their profits, which means that they should either be private or mimic private behavior. Second, they should mobilize resources from the market, in free competition with other financial institutions. The costs of doing so would prevent them from subsidizing credit and subvert competition in the lending market. In such an environment, interest rates for similar operations and similar risks would tend to become equalized throughout the financial markets, thus becoming an effective instrument to screen potential uses for credit in accordance with their profitability. In many cases, however, forcing government-owned institutions to behave as private companies will prove to be impossible. In such cases, they should be allowed to disappear.

As stated at the beginning of this paper, the hallmark of the outward-oriented development strategy is its flexibility. To succeed, it requires that the economy create and discard activities quickly and easily in response to changing signals.

# MONETARY CONTROL PROCEDURES AND FINANCIAL REFORM: APPROACHES, ISSUES, AND RECENT EXPERIENCES IN DEVELOPING COUNTRIES

*R. Barry Johnston  
Odd Per Brekk*

In recent years a number of developing countries have reformed their monetary control systems and placed a greater emphasis on market-based instruments rather than direct controls. The changed approach is often viewed as not only desirable but also inevitable when countries begin to reform their financial systems. The new system increases the scope of monetary policy for stabilization purposes while facilitating a deregulation of interest rates and a removal of direct credit controls. The introduction of these more flexible arrangements for setting interest rates and allocating credit are important elements in improving resource allocation, the efficiency of investment, and savings mobilization, which can help attain adequate rates of economic growth.

In regulated financial systems involving extensive interest rate and credit controls and subsidies, markets are typically underdeveloped and uncompetitive, with a financial structure dominated by a few large banks or a bankers' cartel. Financial reform generally aims at developing institutions and competitive markets. However, usually the development of monetary control instruments cannot wait for this to occur, and new instruments have to be introduced against the background of underdeveloped financial markets. In the absence of secondary markets in securities and interbank markets, the main market-oriented instrument used has been primary issues of government or central bank papers, repurchase transactions using these papers, and discount window policy. These instruments are sometimes referred to as open-market-type operations to distinguish them from traditional open market operations in developed secondary markets. As well as providing a framework for effective monetary control, open-market-type instruments can help foster the development of money and interbank markets and act as a catalyst to bring about institutional reform and a change in attitude toward interest rate determination, credit control, and competition in the financial system.

The paper examines the background to the development of market-based instruments of monetary control and reviews recent experiences with these instruments in a selection of developing countries. The paper covers, section by section, the following: reasons for the reform of monetary control instruments; the framework for financial reform; instruments of monetary control in industrial countries; procedures for developing market-based systems of monetary control in financial systems that are initially underdeveloped; specific market-based monetary control techniques that are used or are being developed in a sample of nine developing countries; and experiences in these countries with their techniques. The final section provides some conclusions.

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## The Case for Reforming Monetary Control Instruments

The system of monetary control in most developing countries has typically involved some, if not all, of the following elements: direct controls on interest rates, including preferential rates for certain loan categories; aggregate and individual bank credit ceilings; selective credit controls and preferential central bank refinance facilities to direct credit to priority sectors; and high reserve and liquid asset requirements, designed both to absorb liquidity and to provide government deficit finance.<sup>1</sup>

When properly implemented and monitored, direct instruments of monetary control can be useful in achieving narrowly defined targets, such as maintaining a particular interest rate at a certain level or keeping a bank's overall credit expansion below a certain ceiling. However, the macroeconomic impact of the controls may be unpredictable because of the scope for evasion and avoidance, while the controls also distort the allocation of resources. In addition, direct controls are difficult and costly to design and implement efficiently and effectively over a prolonged time and are administratively cumbersome.

Credit ceilings and other direct controls operate by forcing banks into portfolio positions that they would not otherwise voluntarily accept. Hence, banks have incentives to avoid the direct controls. For example, effective credit ceilings normally involve a buildup of excess liquidity, which discourages deposit taking by regulated institutions, and in turn either inhibits savings mobilization or causes disintermediation. Either outcome diminishes the effectiveness of monetary control. In the former case, that is, when savings mobilization is inhibited, a given level of bank credit is associated with higher consumption. In the latter case, when disintermediation occurs, recorded bank credit underestimates the total credit available in the economy through both regulated and unregulated financial institutions.

Under binding credit ceilings, savings mobilization may not be promoted simply by mandating positive real deposit rates at regulated institutions. When subject to credit ceilings, regulated institutions may either turn away depositors or find ways of paying lower effective deposit rates, for example, by increasing fees or tightening conditions on withdrawal of funds. It is generally not possible to control both the cost and the quantity of credit, although in practice this is often attempted using direct controls. When credit is restricted by ceilings, the effective returns on loans may be raised by imposing fees or commissions, or requiring borrowers to hold non-remunerative compensating balances. The real cost of credit may rise and the returns on deposits fall through the use of various noninterest rate factors. This defeats the purpose of direct interest rate controls, and at the same time, may involve a number of inefficiencies. Selective credit controls are often circumvented, as it may be very difficult to ensure that credit is used for the purposes intended.<sup>2</sup>

With the emergence of various fees and charges, the opportunity costs of financial instruments may not be fully transparent to either the banks or their customers. Banks may maintain profits through various cross subsidies, such as widening commissions on foreign exchange transactions or raising the high interest rates on nonpriority loans not subject to interest rate ceilings. This leads to distortions between prices, services, and risks. Interest rates will fail to give an accurate reflection risks and expected returns or to adjust to the portfolio preferences of borrowers and investors. As a result, there may be a misallocation of resources. Financial resources may not be directed into those activities expected to yield the highest returns, and less productive activities may be supported to the detriment of economic growth.

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1. Such systems are usually associated, to a greater or lesser extent, with substantial direct government intervention in other aspects of the economy through, for example, state ownership, price controls, or subsidies. The monetary control framework is usually part of a broader interlocking system of economic controls, the extreme case being that practiced in centrally planned economies where credit is allocated to support production plans, with no role for market processes.

2. An example is where corporate entities purchase farms simply to avail themselves of access to preferential agricultural credits.

Quite often the direct controls inhibit competition and encourage collusive behavior among the banks in setting commissions.

The allocation of individual banks' overall credit ceilings may become a political matter, and it is difficult to design procedures that do not penalize more efficient institutions. The support of inefficient institutions may lead to higher average transaction margins and lending spreads. A concern about the quality of banks' portfolios is often lacking when interest rates and credit are subject to direct regulation, resulting in underprovisioning for bad debts. High liquid asset ratios also usually create captive markets for government securities and an inappropriate pricing of credit. The implicit tax imposed on commercial banks, and thus their borrowers and depositors, by credit ceilings, interest rate controls and high non-interest-bearing reserve ratio requirements, encourages the emergence of other, unregulated financial intermediaries and instruments that compete with the regulated ones. This weakens monetary control by eroding the effectiveness of the direct controls and may require the authorities to bear down even harder on regulated financial institutions to achieve a given restrictive policy stance. Unregulated institutions are by their nature less supervised and more prone to insolvency and liquidity problems than regulated institutions and may therefore pose a threat to the financial system's stability. This can also complicate financial management, since the authorities may have to intervene to support these institutions to avoid a loss of confidence in the financial system.

The dependence on direct controls to regulate interest rates and credit often means that little attention is paid to developing money and capital markets that are central to the efficient allocation of resources. Within a regulated system, the existence of such markets could undermine the credit and interest rate controls by providing alternative outlets and sources of funds outside the administered system. The lack of official securities markets usually has meant that commercial banks have been the primary source of private credit in the official sector while parallel credit markets develop. Commercial bank credit has normally been of a short-term revolving nature and not suited for financing longer term investment projects. Also, it usually involves floating rate debt rather than fixed interest bonds or equity finance, which may increase the vulnerability of enterprises to changes in financial conditions. On the other hand, credit from the parallel market usually carries high and variable interest rates. Commercial bank credit has often been supplemented with loans from development finance institutions (DFIs), but DFIs have frequently failed to fill the financing gap and have not replaced the need for capital markets. The lack of an effective investment channel outside the banking system means that only those investment projects that satisfy the criteria set by bankers, or the authorities through their preferential lending policies, may be able to obtain finance at reasonable interest rates. The lack of a range of financial instruments differentiated by maturity, risk, and so on, reduces private savings or results in higher average lending rates, which discourage investment.

To sum up, direct instruments of monetary control often inhibit efficiency in the financial system, as well as in credit allocation, and they tend to be eroded over time, hence becoming less effective in achieving their targets.

## **Framework for Financial Reform**

Financial reform involves questions about the desirable structure of the financial system, the appropriate framework for monetary control, and the process—or phasing—of reform.

### *General considerations*

The main objectives of financial reform are usually to develop a financial system that promotes savings and a more efficient allocation of resources while also providing a framework that allows for the implementation of effective monetary control. These characteristics are normally associated with well-functioning markets and a competitive financial structure. However, if the underlying structure of prices is distorted or if enterprises face "soft" budget

constraints and do not respond to price signals, well-functioning markets may not provide an optimum allocation of resources.<sup>3</sup> Hence, financial sector reform has to be seen as part of a broader economic restructuring.<sup>4</sup>

There is no guarantee that a market-based system would be competitive. Lack of competition among financial institutions could result in wide transaction margins and inhibit the development of new instruments and markets. There is a risk that the inefficiencies associated with direct controls would be replaced by the inefficiencies of a monopolistic structure. While a monopolistic structure may not necessarily interfere with monetary control, it could result in a sluggish response of deposit and lending rates to monetary policy initiatives.<sup>5</sup> Where banking cartels exist that include state-owned banks, these state-owned banks may have to be instructed to compete to weaken the cartels. Monopolistic agreements on interest rates and transaction margins may have to be challenged by the central bank if they run contrary to the law. The removal of direct controls can itself reduce incentives for monopolistic pricing arrangements by increasing the areas where competition is possible.

For interest rates to have the appropriate impact on resource allocation, borrowers have to be responsive to market prices. A high incidence of credit indiscipline and loan delinquency, or arrangements where borrowers or banks expect to have their loans covered by the government, may render interest rates meaningless in the allocation of credit. In some countries, direct credit controls have encouraged loan delinquency and a lack of attention to the quality of bank balance sheets. Strengthening the bankruptcy laws, the legal procedures for loan recovery, and policies to promote the profit motivation of managers may have to accompany the financial reforms.

In a liberal and competitive system, interest rates would be differentiated to reflect the riskiness of borrowers and the maturities of instruments, and credit would flow into those activities that yield the highest expected rates of return. When the system is competitive, transaction margins in the financial sector usually fall, and new financial instruments are created to reflect the preferences of investors and borrowers, including active secondary markets, which provide increased liquidity to financial instruments.

### *Monetary control framework*

The framework for monetary control in a liberal financial system varies among countries. The distinction between operational variables, intermediate targets, and ultimate objectives is one that is in common use. The intermediate targets are variables, such as monetary or credit aggregates, which are related in a stable manner to ultimate policy objectives—real GDP, inflation, the balance of payments. Variables, such as money market interest rates or the level of money market liquidity, which are directly under the control of the monetary authorities, and which are related to the path of the intermediate target variables in a predictable manner, are the operational variables for monetary policy.<sup>6</sup> The authorities manage the operational variables and leave the market mechanisms to determine the detailed structure of deposit and lending rates and the allocation of credit. In a liberal system, the main instrument of monetary control would be the central bank's control over interest rates in the money market through its ability to manage the stock of reserve money (cash and balances with the central bank). Money market rates, in turn, affect other lending and deposit rates. Such a system does not rely on high or even compulsory reserve or liquid asset requirements, but only on the central bank's ability to manage its own balance sheet and to control the terms at which it is willing to provide assistance to cover reserve shortages.

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3. See, for example, Kornai (1986) for a discussion of soft budget constraints.

4. For a discussion of the phasing of economic reform, see Edwards (1984).

5. For a discussion of the implications of financial structure on the effectiveness of different monetary control instruments, see Johnston (1986).

6. It is not necessary for all countries to have intermediate targets; the distinction between operational and intermediate targets may be blurred, for example, when the target is interest rates or the monetary base.

Financial reform may raise basic questions about the selection of appropriate target variables. Relationships between money and credit and final objectives that existed during the pre-reform phase are likely to be less reliable following financial reform. The introduction of new instruments may shift the interest sensitivity of money demand. For example, a liberalization of interest rates on bank deposits may result in broad money becoming less sensitive to changes in the general level of interest rates. The removal of credit ceilings that constrain portfolio allocation can result in portfolio shifts, including a demand to hold larger money balances at any given level of interest rates and income.<sup>7</sup> Money multipliers may also change with reform, for example, when there is re-intermediation to the banking system leading to reduced cash holdings by the nonbank public. Not to allow for the portfolio adjustments in policy formulation could lead to serious policy errors and loss of monetary control.

Not only can the relationships shift, but the controllability of different aggregates may change following financial reform. As higher interest rates may lead initially to distressed borrowing, credit growth may thus be difficult to control in the short run through changes in interest rates. Once credit ceilings are removed, the impact of a change in interest rates on broad money and credit may become uncertain, since in a liberal environment it will depend on the response of financial institutions in adjusting their rates to a change in indicative market rates. This may suggest reformulating target variables in terms of non-interest-bearing monetary aggregates, which have a more predictable response to changes in the general level of interest rates.

Following financial reform, a good deal of judgment may be needed for a time in formulating and implementing monetary policy. Judgment could be based on the examination of a range of indicators of financial conditions, including the exchange rate, inflation, asset prices, and various monetary and credit aggregates. Obviously it becomes more difficult to formulate precise monetary and credit targets that can act as benchmarks in macroeconomic adjustment programs when structural changes are occurring in the financial system. Nevertheless, quantitative monetary or credit targets often remain a central element in macroeconomic policy formulation.<sup>8</sup>

### *Phasing of the reform*

Important questions for financial reform are raised by the appropriate phasing of the reform process.<sup>9</sup> The move to more flexible interest rate arrangements based on indirect management of interest rates and money and credit aggregates usually requires the adaptation or development of the instruments for monetary control; the promotion of financial markets and competition in the financial sector; the buildup of expertise with regard to operating in a market environment; and a change in attitude toward the market determination of interest rates and their use for macroeconomic policy. This process of market orientation takes time, as experience with, and confidence in, the new system must be gained by the central bank and the private sector, and new institutional arrangements may have to be established to ensure effective monetary control and competitive market mechanisms. A phased approach to reform is therefore often necessary. However, if the initial financial system is highly regulated, with each regulation

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7. See, for example, Johnston (1985) for an examination of the impact of the liberalization of credit availability on the demand for financial assets in the United Kingdom.

8. It is worth recalling that the stability of money demand has never been the sole reason for the selection of a particular target variable. Questions of controllability, interest sensitivity, the link of the monetary aggregates to other policy variables, and the ease with which the targets can be explained to the general public have also been important in this choice. There was, for example, much debate about the stability of the M1 aggregate in the United States long before its deemphasis in 1982; and the lack of evidence on the stability of the M3 aggregate did not prevent the U.K. authorities from using this as the only announced monetary target until 1982.

9. For a discussion of issues in phasing, see the volume edited by Choksi and Papageorgiou (1986).

supporting the other, it may be difficult to implement a gradual, effective reform. In such cases, a major one-step change in the operational system may be unavoidable.

Some of the distortions due to direct controls could be minimized by freeing up commercial bank lending and deposit rates from official interference, by promoting competition, and by removing credit subceilings. However, overall credit ceilings on individual banks could still inhibit competition in the financial system and would still impose an implicit tax on regulated financial institutions, and thus create incentives for avoidance. Hence, partial liberalizations may not be possible or desirable. Still, during the early phases of reform, the maintenance of credit ceilings is often essential as a temporary measure.

Under a phased approach, interest rates could be set free in stages, for example, by gradually widening the permissible ranges for deposit and lending rates, or by steadily adjusting minimum deposit rates and maximum lending rates. The traditional instruments—reserve requirements and rediscount windows—could be deployed initially to manage bank reserves and thereby the credit-creating capacity of the banking system, while phasing out credit ceilings on banks.

The eventual elimination of credit ceilings on banks requires that macromonetary management would be exercised through the indirect management of the aggregate supply of money and credit, which calls for adaptation in the instruments of monetary policy. Thus, market-based instruments of monetary policy have to be introduced as the reforms proceed to manage interest rates and credit. The objectives of efficient resource mobilization and allocation would also be helped by promoting flexibility in the determination of interest rates and the allocation of credit.

The next phase would involve the development of money markets and the promotion of a more competitive financial system in order to strengthen the monetary control and interest rate mechanisms. The development of market-based instruments of monetary control can be regarded as the initial step in this process. This phase of the reform may require institution and market building.

The particular phasing of reforms would depend on the institutional circumstances. For example, the use of uniform reserve requirements to constrain credit expansion in the early phases of reform may be difficult when the distribution of excess bank reserves is uneven, reflecting the structure of the banking markets. Moreover, it would be undesirable to raise reserve requirements if they are already at high levels and are non-remunerative since this may encourage disintermediation. Therefore, it may be necessary to develop market-based instruments of greater flexibility at an early stage in the reform process.

## **Monetary Control Procedures in Industrial Countries<sup>10</sup>**

It is interesting to consider the evolving procedures for market-based instruments of monetary control in developing countries against the background of monetary control instruments in the industrial countries. The following provides an overview of techniques in the (G-10) Group of Ten countries, plus Switzerland.<sup>11</sup>

The regulation of bank reserves and short-term interest rates have for several years been the main instruments for conducting monetary policy in industrial countries with developed money markets. However, money market policy has assumed a larger role in recent years. In some countries this has reflected reduced reliance on direct controls on interest rates and credit; in other countries, money market policy has aimed at increasing the flexibility with which monetary policy can be implemented. Generally, the reforms have involved the redesign of central bank lending facilities, market operations, and reserve requirements. Table 7.1 provides an overview of the main features of the monetary control instruments in G-10 countries.

10. A detailed description of recent developments in monetary control procedures in G-10 countries can be found in Bank for International Settlements (1989).

11. The Group of Ten countries are Belgium-Luxembourg, Canada, France, Italy, Japan, the Netherlands, Sweden, the United Kingdom, the United States, and West Germany.

**Table 7.1: Summary Characteristics of Monetary Policy Instruments in G-10 Countries**

	BE	CA	FR	DE	IT	JP	NL	SE	CH	GB	US
<b>Central bank lending facilities</b>											
Ordinary discount facility available	X			X	X	X	X		X		X
Loan or advance facility available	X	X	X	X	X	X	X	X	X	X	X
Access subject to quotas or ceilings	X	X		X	X	X	X	X			X
Penalty for frequent recourse	X	X			X	X	X				
Key official rate above market rates	X	X	X	X	X				X	X	
Official rate set in relation to treasury bill rate	X	X									
<b>Market operations</b>											
<b>Outright market transactions</b>											
Purchases of government securities		X		X	X	X	X		X	X	X
Sales of government securities		X			X		X			X	X
Purchases of treasury bills		X	X		X			X		X	X
Sales of treasury bills	X	X	X	X	X	X		X		X	X
Purchases of private bills						X				X	
Sales of bills issued by the central bank				X		X			X		
<b>Reversed transactions</b>											
Purchase/resale operations in government securities		X	X	X	X	X		X		X	X
Sale/repurchase operations in government securities		X	X		X						X
Purchase/resale operations in private bills			X	X						X	
Sale/repurchase operations in private bills			X								
<b>Foreign currency operations</b>											
Transfer of government deposits		X		X			X		X	X	
<b>Reserve requirements</b>											
Cash reserve requirements in force		X	X	X	X	X	X	X	X	X	X
Averaging provisions for reserve holding		X	X	X		X			X		X
Carryover allowed for reserve surplus/deficits			X								X
Contemporaneous (C), lagged (L) or semi-lagged (SL)		L	SL	SL	L	SL	L	L	L	L	SL
Length of reserve holding period (in days)		15	30	30	30	30	30	30	30	180	14
Highest reserve ratio for demand deposits		10	5	12.1	22.5	2.5	...	4	2.5	0.5	12
Highest reserve ratio for term and saving deposits		1	1	4.95	22.5	1.75	...	4	2.5	0.5	3
Penalty for reserve deficiencies (percent above discount rate)			3	3		3.75	4				

*Note:* BE = Belgium, CA = Canada, FR = France, DE = Germany, IT = Italy, JP = Japan, NL = the Netherlands, SE = Sweden, CH = Switzerland, GB = the United Kingdom, US = the United States. ( ... ) is used to indicate that the data are not available.

*Source:* Bank for International Settlements (1989).

Central bank lending facilities have often been used to provide extended credit, including specialized lending facilities intended to promote lending to priority sectors, to meet technical reserve needs such as clearing short-term payments imbalances, and to provide lender-of-last-resort credit. The supply of bank reserves through central bank lending has tended to be demand determined at the discretion of commercial banks (or other eligible institutions) with central bank loans extended at a posted interest rate. These procedures have been viewed as cumbersome as the alteration in rates could be subject to political difficulties, which could prevent a prompt adjustment in interest rates. Hence, the trend has been toward curbing automatic access to central bank lending through the introduction of bank-specific ceilings or by introducing penalty rates on extended credit. Also, the range of special credit facilities has been reduced in favor of a generalized, lender-of-last-resort window based on secured loans. In some countries the loan window has been replaced by market-based operations undertaken at the discretion of the central bank.

Market operations have come to play an increasingly important role in the conduct of monetary policy in G-10 countries. These include outright transactions in bills and other securities, various types of reversed transactions such as repurchase agreements, and transfers of government deposits between the central bank and commercial banks. Such operations have been used both to supply the financial system with its longer-term liquidity needs and to undertake shorter term, fine-tuning operations. Outright transactions in securities in secondary markets, often seen as the standard type of open market operation, have until recently played a limited role in countries other than the United States. More important have been different types of reversed transactions in securities and in foreign exchange. Such transactions consist of a purchase or sale of a security (or foreign exchange) combined with an agreement for its repurchase or resale at a specified price and at a given date in the future.

A main attraction of this instrument is its flexibility in supplying or absorbing reserves at the central bank's initiative, giving the central bank substantial scope for setting the price, amount, and maturity. In the United States, the Federal Reserve has been able to use an already existing private market in repurchase agreements; in other countries, special arrangements have been set up by the central bank. Generally, reversed security transactions are made through tenders or auction procedures. Transfers of government deposits between the central bank and commercial banks are conceptually one of the simplest procedures for managing bank reserves. However, it also raises practical questions—such as the distribution among banks, remuneration, and collateral requirements. It has long been the major instrument for shorter term monetary management in Canada, and has recently gained importance in other industrial countries, including Germany.

In recent years, variations in reserve requirements have lost importance in the conduct of monetary policy, being replaced to a large extent by the instruments described above. However, the need to meet legal reserve requirements has remained the fulcrum of monetary policy. There has been a general tendency toward lower reserve requirements, reflecting concern that high non-interest-bearing reserve requirements can encourage disintermediation, and evidence that high reserve ratios are not necessary for effective monetary control. To smooth the functioning of the reserve requirement system, several countries have adopted averaging procedures for meeting reserve requirements, which are designed to give banks more flexibility in their reserve management and to avoid unintended short-term swings in interest rates.<sup>12</sup> All G-10 countries have a lagged or semi-lagged system, where the reserve requirement is based fully or partly on the level of the reserve base (usually some concept of bank liabilities) in a previous period, reflecting the operational advantages such a system has over a system with contemporaneous reserve accounting.

In summary, G-10 countries have adopted a more market-based approach to monetary control in recent years. Different types of money market operations, especially reversed transactions, have emerged as the main instruments of monetary control, supported by changes in central bank

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12. One or two countries also have carry-over provisions for reserve surplus or deficiencies from one reserve holding period to another.

lending facilities and with less dependence on reserve requirements. The particular choice of instruments has been influenced by the institutional characteristics of each country's financial system.

### Procedures for a Market-Based System of Monetary Control with Underdeveloped Financial Markets

The starting point for developing market-based monetary control in developing countries is the existing institutional structure. Because commercial banks are often already required to hold treasury bills to meet liquid asset requirements or have built up excess reserves with the central bank, a first step in developing market-based instruments has often been primary issues of treasury bills and/or central bank bills, supported by a restructuring of central bank rediscount windows to allow for a greater role for market forces. There is no necessary reason why treasury or central bank bill issues have to be the first step, and in some countries the catalyst has been markets in longer term government securities.<sup>13</sup> Issues of central bank paper have been considered useful because of the potentially greater freedom for the central bank to tailor issues of its own papers to achieve monetary objectives without direct interference from government budgetary considerations. However, the net budgetary and monetary impact from using central bank rather than treasury paper would be similar—for example, government budget finance would be affected at an equal rate with the net cost of issues of central bank bills through reduced central bank profits available for appropriation by the government. Hence, the difference may be largely presentational.

#### *The role of primary bill markets as monetary control instruments*

The role of security issues as instruments of monetary control can be illustrated using basic financial flow and balance sheet equations. This section illustrates the relationship between the treasury bill issue and control of the reserves of the banking system; a similar relationship can be derived for central bank bill issues or other debt issues by the government. The derivation is based on sectoral financial flows and institutional balance sheets during a planning period.

The basic financial flow and balance sheet equations are:

the government's current financing requirement,  $dG$ :

$$dG = E_G - R_G - dT + dS - dF_G \quad (1)$$

the external current account surplus,  $CA$ :

$$CA = dF_G + dF_{CB} + dF_{NB} + dF_B \quad (2)$$

the flow balance sheet of the central bank:

$$dC_B + dC_{NB} = dL_B + dL_{NB} + dT_{CB} + dS_{CB} + dF_{CB} \quad (3)$$

the flow balance sheet of commercial banks:

$$dD + dL_B = dC_B + dT_B + dS_B + dA + dF_B \quad (4)$$

and the change in net financial wealth of the non-bank private sector,  $dW$ :

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13. The bond repurchase market in Thailand, discussed in subsequent sections, is a case in point.

$$dW = dD + dT_{NB} + dS_{NB} + dF_{NB} + dC_{NB} - dA - dL_{NB} \quad (5)$$

where the subscripts G, CB, NB, and S refer, respectively, to the government, central bank, nonbank private sector, and commercial banks; dT is the treasury bill issue; dS is other government domestic borrowing; dF is the change in net holdings of foreign assets; dC is the change in holdings of cash and reserves with the central bank; dL is the change in net loans by the central bank; dA is the change in loans by commercial banks to the nonbank private sector; and dD are deposits of the nonbank private sector with commercial banks. In addition, the total issues of treasury bills and other government domestic debt are purchased by nonbanks, banks, and the central bank:

$$dT = dT_{NB} + dT_B + dT_{CB} \quad (6)$$

and

$$dS = dS_{NB} + dS_B + dS_{CB} \quad (7)$$

Furthermore, the financial flows identity requires that private sector net wealth changes through surpluses with other sectors: the government and the foreign sector. That is:

$$dW = dG + CA \quad (8)$$

Equation (3) shows that the private sector's (bank and nonbank) holding of reserves is influenced by the central bank's net lending to the private sector, plus its uptake of government debt (treasury bills and other debt) plus its net purchase of foreign assets through intervention in the foreign exchange market. The change in reserve holdings of commercial banks,  $dC_B$ , can be derived in terms of the domestic financing of the government's current deficit, central bank net intervention in the foreign exchange market, sales of treasury bills and other government debt outside the central bank, central bank net lending to banks and nonbanks, and the change in cash holdings of the nonbank private sector:

$$dC_B = [E_G - R_G + dF_G] + dF_{CB} - dT_B - dT_{NB} \\ - dS_B - dS_{NB} + dL_{NB} + dL_B - dC_{NB} \quad (9)$$

This equation can be derived either by substituting equations (1) and (2) into (8) and using equations (4) and (5), or by substituting equations (6) and (7) into (3).

Equation (9) provides the framework for using the treasury bill issue (or other central bank or government security issues) to control the reserves of the banking system. The procedure would be to develop forecasts for the relevant reserve holding period of the government's net domestic financing requirement ( $E_G - R_G + dF_G$ ), net foreign exchange market intervention by the central bank ( $dF_{CB}$ ), other domestic borrowing by the government from banks and nonbanks ( $dS_{NB} + dS_B$ ), net lending by the central bank to the banks and nonbanks ( $dL_{NB} + dL_B$ ), and the change in currency holdings by the nonbank private sector ( $dC_{NB}$ ). Using equation (9) a forecast can be made of the change in the supply of bank reserves before a new net issue/net redemption of treasury bills to the private sector ( $dT_B + dT_{NB} = 0$ ):

$$dC_B^S = [E_G - R_G + dF_G]^* + dF_{CB}^* - dS_B^* \\ - dS_{NB}^* + dL_{NB}^* + dL_B^* - dC_{NB}^* \quad (10)$$

where \* indicates a forecast and  $dC_B^S$  is the forecast supply of new bank reserves before a new net issue of treasury bills.

The change in the desired demand for reserves by the banking system is given by:

$$dC_B^D = (\alpha + \beta) dD^* \quad (11)$$

where  $\alpha$  is the compulsory cash reserve ratio on bank deposits,  $\beta$  is the estimated precautionary reserve holding ratio of banks, and  $dD^*$  is the change in deposits for the relevant reserve holding period.<sup>14</sup> With lagged reserve accounting, required reserves would be based on deposits in a previous time period and may be known before deciding on the amount of treasury bills to be issued. With contemporaneous or leading reserve accounting  $dD^*$  would be a forecast.

The demand for precautionary reserves may depend on the rules and procedures for reserve holding and interbank clearing, the efficiency of the interbank market, and the volatility in the reserves of banks due to seasonal and other factors, such as the extent to which the central bank stands ready to smooth the reserves of the banking system. For example, automated access by banks to a loan or rediscount window could reduce precautionary reserve holdings to a low level. However, even if it is known that the central bank will always remove reserve shortages, uncertainty may remain about the level of interest rates charged by the central bank, which might still lead to precautionary reserve holdings by banks.

Equations (10) and (11) combined provide a forecast of the banking system's reserve deficiency (if  $dC_B^D > dC_B^S$ ) or excess (if  $dC_B^D < dC_B^S$ ) compared with desired holdings before net new issue of treasury bills.

Given these forecasts, the net new issue of treasury bills can be set to achieve monetary objectives.<sup>15</sup> The transmission mechanism for monetary policy could be described by the following relationships:

$$dr_m = F_1(dC_B^D - dC_B^S + dT_B + dT_{NB}) \quad F'_1(.) > 0, F_1(0) = 0 \quad (12)$$

$$r_d = F_2(r_m, \dots) \quad F'_2 r_m > 0 \quad (13)$$

$$r = F_3(r_m, r_d, \dots) \quad F'_3 r_m, F'_3 r_d > 0 \quad (14)$$

$$M = g(r_m, r_d, r_L, \dots) \quad g'_r r_m, g'_r r_L, g'_r r_d > 0 \quad (15)$$

where  $r_m$  is the money market interest rate,  $r_d$  and  $r_L$  are average deposit and loan rates, and  $M$  is the intermediate target variable (for example, the stock of money or credit), which is responsive to interest rates.

A neutral monetary policy stance, that is, one that would leave money market rates unchanged, would involve removing the excess reserves of the banking system by selling a volume of treasury bills to the private sector equal to the difference between the forecast of the supply of reserves to the banking system and the estimate of the banking system's demand for reserves (or relieving a forecast reserve shortage by not rolling over maturing bills). A restrictive policy stance designed to raise interest rates would involve the creation of a reserve shortage by selling a volume of bills in excess of the forecast reserve surplus. In this case, and

14. This assumes that a uniform reserve ratio is applicable to all bank deposits.

15. The following analysis is in terms of the deficiency in desired holdings, rather than required holdings. Since desired holdings include a precautionary reserve, the implications for interest rates and so on are likely to be different when  $dC_B^D > dC_B^S > \alpha dD^*$  and  $dC_B^D < \alpha dD^*$ . We have not distinguished

these circumstances in the text, which is intended only as a stylistic treatment.

assuming the forecasts are accurate, banks would find themselves short of reserves, and interbank rates would tend to rise. If the sale of treasury bills reduced the aggregate supply of reserves below reserve requirements, banks would have to seek marginal accommodation from the central bank, and the interest rate at which the central bank provides the assistance would become the key determinant of the overall level of interest rates.<sup>16</sup> An expansionary stance would involve selling fewer bills than the forecast cash surplus. In this case banks would have excess cash reserves that would push interest rates down.

Interbank rates would fall, and there would be repayments of the central bank credit. In this framework, the design of rediscount windows is an integral element of reserve and interest rate management (see subsection on intra-bill issue operations below).<sup>17</sup>

### *Implications of liquid asset requirements*

The preceding analysis assumes that banks have to meet only reserve ratios. However, in practice many developing countries also impose statutory liquid asset requirements and treasury/central bank bills and reserves are generally the main instruments available to satisfy such requirements.<sup>18</sup> Liquid asset requirements are generally used to allocate a proportion of bank credit to the government in the form of purchases of treasury bills, and can also support the introduction of more market-oriented control techniques. However, under a system of bank reserve management as described above, liquid asset requirements can also complicate monetary management during periods of reserve shortages.

The liquid asset requirement could be written as

$$T_B + C_B - \alpha D = \delta D \quad (16)$$

where it is assumed that excess reserves are counted as liquid assets and  $\delta$  is the liquid asset ratio. If banks are initially meeting their liquid asset requirements, that is, equation (16) is satisfied, then the requirement will continue to be satisfied when there is a reserve surplus and the central bank sells treasury bills to meet targets for reserves of the banking system. Such sales alter the composition of liquid assets but not the overall total. However, during periods of reserve shortages, when commercial banks hold limited liquid assets in excess of the requirement, a purchase of treasury bills by the central bank to relieve the reserve shortage could create a shortage of liquid assets: the liquid asset requirement could become a binding constraint.

To avoid this potential complication, the monetary authorities could reduce the liquid asset requirement. As liquid assets held to meet requirements are by definition not liquid, there are advantages for liquidity management from replacing the ratio with a more flexible procedure such as a "liquidity norm," determined by prudential considerations, that should be met on average over a sufficiently long time period, but that should not form a binding constraint at any given time.<sup>19</sup> In general, a reduction in the ratio is also often desirable as part of the policy toward liberalizing interest rates and removing the captive market for treasury bills. However, monetary authorities are often reluctant to reduce liquid asset ratios during the early phases of financial reform since they may view the ratios as a way of ensuring the demand for

16. The need to resort to the central bank for marginal accommodation may occur before aggregate shortages emerge in reserves if the interbank system is weak.

17. Sometimes a distinction is made between "defensive" central bank operations, which are designed to offset the impact of autonomous influences on the supply of reserves, and "dynamic" operations, which are designed to bring about changes in the supply of reserves.

18. Many countries also include net or gross interbank positions, but these can have serious disadvantages. The use of gross interbank positions allows for considerable slippage in the liquid asset ratio, since such positions can be easily created; while the use of net positions can inhibit interbank borrowing and development of the interbank market.

19. For a discussion of the use of liquidity norms, see Bank of England (1982). Also see OECD (1987) for a more general description of the use of liquid assets among OECD countries.

bills. In this case, the complications could be avoided by creating sufficient new liquid assets through the conversion of outstanding credit lines to government into treasury bills or by allowing short-term prime commercial bills to be created and counted as liquid assets. An alternative procedure could be to relieve reserve shortages through reversed transactions in treasury bills rather than outright purchases, and allow the treasury bills to continue to be counted toward meeting liquid asset requirements.<sup>20</sup> The latter approach would not, however, solve the problem of a fundamental shortage of discountable paper, which has occurred in some countries.

### *Selling techniques for bills*

Selling techniques for primary bill issues range from free auctions to fixed price tenders. Under free auctions, the central bank announces the volume of bills to be sold and asks for competitive bids. Bills are allocated starting with the highest bid price and moving to the next highest, and so on, until the tender is fully sold. The auction produces a range of interest rates, with the highest rate determined by the marginal bid that exhausts the tender. This marginal rate is sometimes known as the cut-off or striking rate. Under a fixed price tender, the central bank sets the interest rate on bills and accepts the volume demanded at that rate. With a free auction, interest rates fully adjust to achieve the quantitative objectives for the sale of bills and hence for the targeted stock of reserves, but this may risk volatility in interest rates from auction to auction. On the other hand, with a fixed price tender, the interest rate is determined in the short run and quantities are allowed to vary. The tender price can be varied from one tender to the next to exercise the desired quantitative control, but this procedure may risk a bias to delay in adjusting interest rates.

Central banks have operated a number of selling procedures between these two extremes to avoid possible excessive interest rate volatility, while allowing for flexibility in interest rate adjustment. In some cases, bills are auctioned, but no tender volume is announced in advance. The central bank exercises its discretion in accepting or rejecting bids, depending on its quantitative or interest rate objectives. The decision not to announce the tender amount can thus give the central bank added flexibility, although at the cost of reducing information to market participants. In the initial stages, the benefits of increased flexibility to the central bank can help overcome concerns about implementing new monetary control procedures. In some cases, bills are auctioned and tender volumes are announced in advance, and a permissible range is also announced for bids that would be accepted. The range is usually based on the interest rate set at the previous auction. In some countries the central bank, or other financial institutions, underwrites the bill issue at interest rates indicated/agreed with the central bank. This limits the potential upward adjustment in rates. Another procedure is for the central bank to preannounce an initiative auction amount but to vary it once bids are received in order to achieve interest rate objectives.

### *Intra-bill issue operations*

Issues of primary bills could in principle be held frequently.<sup>21</sup> However, sales of bills to the general public involve administrative costs and delays associated with advertising the sale, receiving and filling bids, and so on. Primary bill issues have, as a result, tended to occur no more frequently than once a week. Between the issues, there may therefore be a need for supplementary central bank operations to manage money market liquidity. For example, the actual outcome for reserves may deviate significantly from the outcome projected by the authorities, or the issue of bills may be such as to create a reserve shortage and force

20. However, this may require a change in banking regulations, since eligibility to be counted toward meeting liquid asset requirements may require assets to be unencumbered.

21. In one of the countries surveyed later in this paper, Indonesia, primary bill auctions have in fact been operated daily but have been restricted to money market participants.

commercial banks to borrow from the central bank. If not offset by the central bank, the resulting reserve shortages or surpluses could result in excessive volatility in interest rates and could complicate the banks' compliance with legal reserve requirements. Concerns about day-to-day reserve shortages and the potential volatility of money market interest rates can be reduced by requiring that reserve requirements are met on a period-average basis rather than continuously or at a specific time.<sup>22</sup> Hence, the adaptation of reserve averaging procedures is usually recommended.

It is conceivable that under a strict monetary base control regime, behavioral changes, such as increased precautionary bank reserve holdings, would remove the need for frequent money market intervention by the central bank. In some countries where the central bank has been inactive in the money markets, commercial banks have built up large precautionary reserve balances, apparently to meet short-term fluctuations in their liquidity, although this buildup has also often been accompanied by official concerns about excess liquidity and the underutilization of commercial bank resources.<sup>23</sup>

Even if banks could be assured of meeting their legal reserve ratios, a high degree of money market interest rate volatility may be undesirable because of implications for exchange rates, or because it may obscure the underlying trend in interest rates. Also, interest rate volatility may threaten the solvency of financial intermediaries that have traditionally operated in an environment of stable interest rates. Nevertheless, some day-to-day flexibility in money market rates is necessary to provide profitable speculative and arbitrage opportunities that encourage secondary markets and market makers.

The aim of achieving interest rate flexibility while avoiding excessive volatility often calls for day-to-day intervention by the central bank. This can take a number of forms, with different implications for financial market development. A common technique is for the central bank to preannounce its willingness to buy or sell bills at interest rates close to those determined on the last primary issue. However, providing banks with unlimited and automatic access to central bank facilities at market rates, be they sales and purchases of treasury bills, repurchase agreements, foreign currency swaps or rediscounts, may have drawbacks for financial market development. As such facilities allow banks to employ (relieve) temporary surpluses (shortages) of funds at little cost, there are limited incentives for the development of secondary bill or interbank markets.

To encourage secondary market activity, some central banks have widened the margins between their buy and sell rates for bills, and/or set penal interest rates (discount or bank rate) at which they are willing to lend to commercial banks, usually against collateral.<sup>24</sup> The wide margins/penal loan rate provide incentives for banks that are short of funds to seek them initially from other banks, and banks with surplus funds to seek outlets for these funds in the interbank market, and therefore encourage interbank market development.

A loan window has the drawback that it operates asymmetrically, providing a facility only to eliminate reserve shortages, and could thus still permit substantial interest rate volatility, although there is also a risk that the loan window rate would be viewed as the indicative rate for all interest rates, inhibiting their market determination.<sup>25</sup> These concerns can be mitigated by providing graduated access to the loan window at progressively higher penal rates, by providing special interest-bearing accounts with the central bank for excess

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22. The use of averaging also reduces the scope for window dressing operations that can weaken the impact of the reserve ratios and monetary control procedures.

23. For a theoretical treatment of the optimal holding of precautionary balances in the face of uncertainty, see Sprenkle and Miller (1980), and for an application to banks' holdings of excess reserves, see Johnston (1984).

24. This loan rate could be determined as the latest rate at the primary issue plus a margin. Penalties associated with borrowing from the central bank may reflect quotas that restrict access, rather than specifically posted penal rates.

25. Whenever there is a persistent cash shortage, interbank rates would rise to the penal loan window rate, and when there is a persistent cash surplus, interbank rates would fall toward zero.

reserves, or by paying interest on all cash reserves deposited with the central bank.<sup>26</sup> Graduated access could be provided in a number of ways, including the use of quotas and credit tranches for accommodation from the central bank.

The above procedures are based on preannounced interest rates and leave the initiative to obtain or dispose of bank reserves entirely to the commercial banks. The alternative is for the central bank to take the initiative as regards the quantity of intervention and leave the interest rates to be market determined. For example, the central bank could conduct auctions of its money market intervention instruments, including outright sales and purchases of specified securities, repurchase agreements, foreign exchange swaps, and rediscounts.<sup>27</sup> When shortages are indicated, the central bank would announce its willingness to buy bills up to a certain amount and ask for competitive offers; when surpluses are indicated the central bank could announce its willingness to sell a certain volume of bills and ask for competitive bids. By restricting these auctions to a few key money market participants, they could be more flexibly implemented than the general auctions of primary bills.

The identification of the need for such auctions and the daily shortages or surpluses in the money market could be based on (1) a monitoring of interbank rates throughout the day; (2) the amount of assistance provided through the loan window (if such a facility existed); (3) the ex post monitoring of developments in the central bank balance sheet components, relative to the forecast used to determine the size of the primary bill issue; and (4) a daily monitoring of the commercial banks' progress in meeting their cash reserve requirements.

#### *Supporting policy and institutional reform*

The development of market-based instruments of monetary control needs to be supported by changes in the overall policy and institutional framework.

The extent to which the interest rates determined through primary bill issues lead to an appropriate interest rate structure depends on institutional circumstances. As noted, the liberalization of interest rates on government securities could be inhibited by the captive markets created by high liquid asset requirements or other portfolio restrictions that may therefore need to be relaxed. When substantial resources are mobilized through public sector financial institutions (savings banks and provident funds) that traditionally buy government securities, these institutions may need to have their securities allotted outside the auctions so that auction rates can reflect the preferences of noncaptive investors. Institutional reforms may be necessary to ensure that auction rates are reflected in the banks' deposit and lending rates. For example, differential cash requirements influence the competitiveness of financial institutions in raising deposits and granting loans, and may have to be unified.<sup>28</sup>

As a result of interest rate liberalization, interest rates on government debt may rise, with budgetary implications. Similarly, parastatals and other borrowers, which had access to bank loans at preferential rates, may experience an increase in borrowing costs. As a result, certain activities may no longer be viable, and productive sector restructuring has to take place.

For the central bank to implement the changes in the monetary control system described, it may be necessary to establish a new monetary policy operating framework. A monetary programming procedure would have to be established to carry out projections of the main elements in equations (10) and (11), and thus determine the volume of bills to be sold to achieve the monetary objectives. The operational framework that may need to be developed for the purposes of determining the regular auction amounts, and the volume of money market intervention to be undertaken by the central bank between auctions, are illustrated in table 7.2.

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26. This would, anyway, be a step toward removing the tax imposed by non-interest-bearing reserve requirements, which widen interest margins and cause disintermediation.

27. In principle, direct intervention in the unsecured interbank market, auctioning of deposit placements, or other similar devices are possible for day-to-day control. The choice would depend on the institutional circumstances.

28. See Leite and Sundararajan (1990) or Chapter 8 of this collection.

Table 7.2: Framework for Regular Forecasting and Daily Monitoring of Cash Positions

	<i>Regular forecast for auction</i>	<i>Daily monitoring for money-market intervention</i>	<i>Action necessary</i>
1. Commercial banks required cash balances	Based on projected growth of monetary aggregates developed by central bank as part of macroeconomic policy framework and analysis of seasonal pattern in deposits of commercial banks.	Based on projected monitoring progress under the cash ratio requirements.	Central bank to prepare quarterly forecast of monetary aggregates and analysis of seasonal pattern in deposit data. Monitoring unit to prepare assessment of progress under the cash reserve ratios and discuss with banks the level of their desired precautionary cash balances.
2. Foreign exchange	Based on quarterly projections of the balance of payments developed by the central bank and analysis of seasonal pattern in payment flows and intervention by the central bank.	Actual intervention by the central bank to be communicated daily to the monitoring unit. Forecast based on 2-day delay in valuing international transactions.	Central bank to prepare quarterly projection of the balance of payments and analysis of the seasonal pattern of payment flows.
3. Currency outside banks	As in 1, with reference to currency holdings.	The currency issue to be notified daily to the monitoring unit.	Central bank to prepare quarterly forecast of currency holdings and an analysis of the seasonal pattern in data.
4. Government accounts	Forecasts of regular receipts and payments (for example, customs duties, wage and social security payments, etc.) to be prepared by the relevant government departments. Accountant General to notify large irregular payments expected during forecast period. List of securities outstanding with amounts and maturity dates and notification of new issues with dates and amounts to be sold to the public.	Actual receipts and payments through government accounts to be notified to the monitoring unit.	Request forecasts and information from government departments.

(continued on next page)

**Table 7.2: Framework for Regular Forecasting and Daily Monitoring of Cash Positions (continued)**

	<i>Regular forecast for auction</i>	<i>Daily monitoring for money-market intervention</i>	<i>Action necessary</i>
5. Maturing central bank bonds and assistance	Lists of bonds and assistance outstanding with amounts and maturity dates.	Actual payments to be notified to the monitoring unit.	--
6. Central bank current transactions	Central bank staff to prepare weekly forecasts.	Actual payments and receipts to be communicated to the monitoring unit.	--
7. Other central bank current accounts	--	Actual balances in accounts to be communicated to the monitoring unit.	--

The greater freedom given to banks as part of financial reforms can bring to the fore weaknesses in bank solvency and in the supervisory arrangements. A policy of allocating resources through directed credit often limits consideration of the quality of banks' portfolios. When direct controls on interest rates and credit are relaxed, some borrowers that previously had access to directed credit may no longer be viable, and loans will have to be provisioned and written off. Moreover, a policy of interest rate regulation has in some countries led to excessive interest rate mismatching that is only revealed when interest rates are freed. Broad structural reforms can also bring about large changes in relative prices, which can have widespread effects on the viability of borrowers. Hence, in a liberal framework, greater emphasis may have to be placed on prudential controls to safeguard the stability of the financial system.

In addition to reforming the central banks' money market intervention facilities, the development of secondary markets may need to be encouraged through promoting market makers. The initial turnover in the markets may not make market making profitable, and transactions margins could as a result be excessively wide. Incentives for market makers would include restricting bidders at the auctions to the market makers and commercial banks, requiring purchases of treasury bills by other entities to be directed through the market makers; and by providing market makers temporary access to the central bank's lender-of-last-resort facility. In return, the market makers could be required to provide buy and sell quotations for bills in the secondary market for various maturities, and to underwrite the primary bill issues.

### **The Use of Market-based Instruments of Monetary Control in Nine Developing Countries**

This section reviews the uses of market-based instruments of monetary control in a sample of developing countries: Argentina, Brazil, Indonesia, Kenya, Malaysia, Mexico, the Philippines, Sri Lanka, and Thailand.

#### *Overview*

The financial markets in these countries are at varying stages of development, and the countries have faced different macroeconomic challenges in recent years. Nevertheless, all have reduced or abolished the use of direct controls in monetary policy, particularly controls on interest rates and credit, and have moved toward more market-based systems of monetary control. Some countries (Argentina, Brazil) have for a number of years operated market-based instruments of monetary control, although direct regulations on interest rates and credit have to a certain degree been retained or reintroduced. Other countries have undertaken quite determined reductions in direct controls in the last few years (notably, Indonesia, the Philippines and, to a lesser extent, Malaysia, Sri Lanka, and Thailand).

All the countries surveyed—except for the Philippines—have operated some form of exchange rate peg in recent years (table 7.3). However, all countries have allowed a certain amount of exchange rate flexibility, and in most countries exchange controls have limited capital movements. Thus, some scope for independent monetary policy has remained, at least in the short run. Reflecting this, most countries have used monetary aggregates as intermediate targets and have also sought to achieve interest rate objectives for certain periods. Countries that have taken the most determined steps from a regulated toward a market-based monetary control system have adapted their intermediate targets. Following its financial reform, Indonesia changed from targeting domestic credit of the banking system to targeting base money and broad money. In Malaysia and Sri Lanka, the focus shifted from interest rates to broader monetary aggregates. Also, the Philippines shifted from targeting net domestic assets to targeting base money following the move to a floating exchange rate in late 1984.

**Table 7.3: The Policy Framework for Monetary Control in a Sample of Nine Developing Countries**

Country	Exchange rate arrangement	Intermediate targets	Operating targets
Argentina	Austral. Introduced in June 1985, has in some periods been fixed vis-à-vis the U.S. dollar, in other periods adjusted on a continuous basis.	Monetary aggregates	Interest rates on central bank bank bills, debt sales
Brazil	Cruzado. Frequent adjustments vis-a-vis the U.S. dollar, in line with relative inflation. Temporarily fixed against the U.S. dollar under the Cruzado Plan (Feb.-Oct.,1986).	Monetary aggregates, real interest rates	Base money, overnight interest rates
Indonesia	Rupiah. Managed float, basket of currencies used as indicator.	Monetary aggregates and monetary base; domestic credit before October 1984	Exchange rate, interest rates
Kenya	Shilling. Adjustable peg to a basket of currencies. Managed flexibly with the aim of obtaining a suitable real effective exchange rate.	Money plus quasi-money (M2), real interest rates	Bank credit, interest rates
Malaysia	Ringgit. Determined on the basis of a basket of currencies.	Broad monetary aggregates	Exchange rate; long-term interbank rates, recently overnight interbank rates
Mexico	Peso. Two-tier system, with a free and uncontrolled foreign exchange market. The rate in the controlled market depreciated daily, by predetermined amounts.	Monetary aggregates	Interest rates, debt sales
Philippines	Peso. Floating. (Linked to U.S. dollar until October 1984)	Base money (until October 1984, net domestic assets of central bank)	Sales and interest rates on treasury bills
Sri Lanka	Rupee. Crawling peg, nominal rate adjusted for inflation differential with major trading partners.	Broad and narrow money	Net domestic assets of central bank (interest rates until early 1988)
Thailand	Baht. Determined on the basis of a basket of currencies.	Multiple monetary targets are used as a guide for policy	Reserve money, but loosely implemented

Nearly all the countries surveyed have made use of regular auctions—either for central bank or treasury bills—for monetary control purposes (Table 4).<sup>29</sup> Under these auctions, the public submits bids containing the volume demanded and a bid price to the central bank for treasury/central bank bills on auction, and the central bank accepts or rejects bids on the basis of a cut-off yield determined to be consistent with its desired operating target for monetary policy. The most widely used operating target has been short-term interest rates; other operating targets have included various liquidity measures (Argentina, Brazil, Mexico) and net domestic assets of the central bank (Sri Lanka). Some countries (Mexico, the Philippines) have instituted formal limitations on the cut-off yield in the auctions in order to promote orderly bidding and avoid large, short-run fluctuations in interest rates.

The type of instrument used and the frequency of the auction have varied between the countries. Typically, the papers used for monetary control through auctions have been short-term, with maturities from 7 days to 12 months. In some cases, an inflationary environment has put downward pressure on maturities (Argentina, Mexico, the Philippines). Most countries have made use of some form of central bank securities, but the use of government papers has also been quite widespread. Auctions have normally been held weekly, although the frequency has varied, and even daily auctions have been held in one country (Indonesia). Mexico has also held weekly auctions of central bank offers to place or accept deposits to supplement the auctions of treasury bills.

In some countries, participation in the auctions has been formally restricted to financial institutions (Indonesia) or appointed dealers in the papers in question (Mexico, the Philippines). Appointed dealers have sometimes been obliged to make secondary markets in these papers (the Philippines).

The day-to-day operating procedures and the design of other supporting instruments have varied among countries. Some countries (such as Sri Lanka) have operated a secondary window for the purchase and sale of treasury bills at the latest auction rate with small margins between buy and sell rates; several countries operate a loan or rediscount window carrying varying degrees of penalty (for example, Kenya); and some countries have used foreign exchange swaps (Argentina, the Philippines), and repurchase/reverse repurchase schemes for public sector papers (Argentina, Indonesia, Sri Lanka, Malaysia, Thailand) to manage money market conditions from day to day. Interest rates on most of these facilities are determined by the central bank. Some countries (most notably Indonesia and the Philippines) have also reformed the central bank's refinance facilities for priority sector borrowing, among other things, in order to restrict the financial institutions' access to central bank credit and to rationalize rediscount facilities. Despite the reforms, however, substantial elements of credit subsidization have remained in several countries. Moreover, reserve requirements have continued to be used, although less actively, in most of the countries; liquid asset ratios tend to be relatively high, and banking competition is in general still weak.<sup>30</sup>

### *Countries' detailed operating procedures*

*ARGENTINA.* Before July 1985, government paper was sold by the central bank of Argentina through public offering at predetermined interest rates. The central bank also operated a repurchase facility for government paper for commercial banks at a preannounced interest rate set by the central bank. Repurchases were available for 7 to 28 days for minimum amounts of 25 million pesos. In July 1985 as part of the anti-inflation austral plan, the central bank began auctioning central bank bills issued against the central bank's holdings of government paper; these bills have been coined "participations" in the bank's holdings of government papers. Bid-

29. The exceptions are Malaysia and Thailand. These countries have auctioned treasury bills but have not varied the auction amount to influence monetary conditions.

30. Indonesia has reduced its reserve ratios substantially, and Malaysia has reduced and unified reserve and liquid asset ratios.

**Table 7.4: Instruments for Monetary Control in a Sample of Nine Developing Countries**

<i>Country</i>	<i>Primary issues of securities</i>	<i>Instruments of daily money market management</i>	<i>Other market-based instruments</i>	<i>Refinance facilities</i>	<i>Direct controls</i>	<i>Reserve requirements</i>
Argentina	Weekly auctions of participations in government papers in the form of central bank bills.	Repurchases/reverse repurchases, foreign exchange swaps.	--	Several, including subsidized facilities.	Interest rate regulations. Quotas on nonregulated rate deposits, acceptances and swaps.	Actively varied.
Brazil	Weekly auctions of central bank bills (and treasury bills, but mainly for budgetary finance).	Repurchases/reverse repurchases, and outright sales.	--	Several, including subsidized facilities.	Selective credit controls.	Not actively varied.
Indonesia	Auctions of central bank bills. The frequency of auctions has varied between daily and weekly.	Repurchase agreements and daily auctions of central bank bills.	--	Several, including subsidized facilities.	Interest rate and credit controls lifted as part of financial reform.	Not actively varied.
Kenya	Weekly auctions of treasury bills.	Discount window.	--	Several, including discount window.	Maximum lending rates, minimum deposit rates, credit ceilings actively used.	Not actively varied for monetary control purposes.
Malaysia	Weekly auctions of treasury bills solely for government finance purposes.	Discount window, outright sales and purchases of government securities, repurchases/ reverse repurchases, foreign exchange swaps, recycling of government deposits.	--	Several, including subsidized facilities.	Interest rates liberalized, selective credit controls remain in effect.	Not actively varied.

(continued next page)

**Table 7.4:** Instruments for Monetary Control in a Sample of Nine Developing Countries (continued)

<i>Country</i>	<i>Primary issues of securities</i>	<i>Instruments of daily money market management</i>	<i>Other market-based instruments</i>	<i>Refinance facilities</i>	<i>Direct controls</i>	<i>Reserve requirements</i>
Mexico	Weekly auctions of treasury certificates.	Outright sales and purchases and repurchases/ reverse repurchases.	Weekly auctions of fixed deposits and placements from the central bank.	--	Credit ceilings.	Actively varied.
Philippines	Weekly auctions of treasury bills.	Repurchases/ reverse repurchases, foreign exchange swaps.	--	Single facility covering an array of purposes. Interest rate charged is linked to market interest rates.	Interest rates have been liberalized.	Actively varied.
Sri Lanka	Weekly or more frequent auctions of treasury bills.	Repurchases/ reverse repurchases, foreign exchange swaps. Secondary window for sale/purchase of T-bills.	--	Several including subsidized facilities.	Interest rates liberalized. Some credit controls remain but are not strictly enforced.	Actively varied.
Thailand	Weekly auctions of treasury bills (mainly to satisfy demands for liquid assets; of limited importance for monetary management).	Repurchases/ reverse repurchases; discount window.	Central bank bond issue.	Several, including subsidized facilities.	Interest rate ceilings, direct controls on credit last used in 1984.	Not actively varied.

-- indicates the absence of any significant instrument of the relevant type.

ders at the auction had to bid both a price and a quantity, and the central bank decided the cut-off volume so as to achieve its monetary objectives. These objectives involved a target for the volume of sales, but it appears that when the achievement of the quantity objective would have resulted in an excessive movement in interest rates, the authorities would override the volume target so as to stabilize interest rates. The central bank provided a repurchase facility for the participations at interest rates set by the central bank. The repurchase facility was used to manage short-term fluctuations in liquidity between auctions.

*BRAZIL.* In Brazil, details of instruments and operating procedures have undergone a number of changes in recent years, although the basic framework has remained broadly unchanged, including primary auctions of treasury or central bank bills and intervention by the central bank to determine interest rates in the interbank market. Up to 1986, the central bank intervened in the auctions when the treasury bill rate determined by the bids would have been unacceptable. Its intervention in the money market included outright sales and purchases of assets from its portfolio, and overnight repurchases at interest rates set by the central bank.

Following the introduction of the anti-inflation *cruzado* plan in February 1986, the authorities changed their monetary instruments to make them consistent with an anticipated low inflationary environment. Between May 1986 and December 1987, a central bank bill (Letra do Banco Central, or LBC) was issued in maturities of up to one year, at weekly auctions. This bill paid a coupon equal to the average interest rate in the overnight money market in the holding period of the bill, and was sold at a discount determined by competitive bidding at the auction. The amount of bills to be auctioned was preannounced; the major objective was to control the trend in the volume of money market liquidity. The overnight rate in the interbank market reflected, among other things, the daily repurchase operations of the central bank. The central bank set its repurchase rate to keep real interest rates in the money market close to zero on average over a month, with the interest rate adjusted to the rate of consumer price inflation recorded in the previous month. The central bank's repurchase operations were thus the key influence on overnight rates and, except for the initial discount on new issues at the auctions (which was normally small), also on the yield on LBCs.

In January 1988, a new instrument, the Letra Financeira do Tesouro, or LFT, a treasury liability with the same maturity and yield characteristics as the LBC, was introduced to replace the LBC. LFTs have also been auctioned weekly, but unlike the LBCs, primary issues of the LFT have been largely based on budgetary rather than monetary considerations. The central bank has, however, continued to set interest rates and to exercise monetary control through its repurchases and also through outright sales of LFTs from its own portfolio and purchases of new issues of LFTs at the auction. LFTs and LCBs are traded in secondary markets organized around about 20 money brokers. Repurchases are normally confined to transactions between the commercial banks and the central bank. There are no restrictions on access to the auctions of securities.

*INDONESIA.* In 1983, as part of a broader adjustment effort, Indonesia initiated a comprehensive reform of its monetary control system.<sup>31</sup> The first stage of the reform included a removal of the remaining direct controls on interest rates and credit and a curtailment of the central bank's funding of state banks.<sup>32</sup> In the second stage, new money market instruments—central bank (Sertifikate Bank Indonesia: SBI) and private (Surat Berharge Passar Uang: SBPU) papers—and an auction system for the SBIs were introduced, and the central bank's refinancing facilities were further restructured. With the initiation of the reform, a shift was made from using domestic credit to using interest rates as the target.<sup>33</sup> Reflecting a high degree of capital mobility, interest rates on monetary control instruments were, however, adjusted occasionally in line with exchange rate considerations. In mid-1987, following a deterioration

31. Discussions of financial reform in Indonesia are given in Binhadi and Meek (1988) and Sundararajan and Molho (1988).

32. These banks had accounted for the bulk of commercial banks' assets and deposits.

33. Intermediate targets for monetary aggregates and for base money have also been employed.

in the external sector, policy shifted to protecting the exchange rate, and interest rates became more flexible.

Auctions of SBIs were introduced in March 1984. Initially, SBI maturities were for 30 and 90 days, but bills with seven-day maturity were introduced later.<sup>34</sup> The frequency of auctions has varied, and auctions have been held on a daily basis, three times a week, and weekly. Only banks and nonbank financial institutions are allowed to participate, but other entities may acquire SBIs in the secondary market. The cut-off yield in the auctions has been set by the central bank.

A state-run securities house (FICORINVEST) was named to facilitate trading in SBIs and SBPUs. Initially, FICORINVEST stood ready to buy and sell SBPUs at posted bid and offer prices, and could automatically rediscount them with the central bank at a profit. Also, it would discount SBIs at the interest rate of the original SBI issue without regard to its remaining maturity, and could automatically rediscount them at the central bank, also at the original issue price. The cut-off rate in the auctions and the posted interest rates through FICORINVEST were initially changed infrequently. The increased flexibility of interest rates, adopted to protect the exchange rate in 1987, was supported by a change in the central bank's money market operating procedures. In July 1987, the central bank phased out the automatic rediscounting of SBIs and SBPUs, hence discontinuing its passive accommodation at posted interest rates. The main instruments have since been daily auctions of seven-day SBIs, and of seven-day repurchase agreements in SBPUs carried out daily at interest rates set by the central bank, based on bids or offers received.<sup>35</sup>

*KENYA.* The Kenyan authorities have begun to move toward a market-oriented system of monetary control, to be based on open market operations. Controls remain over the maximum lending rates of banks and nonbank financial institutions, and over the minimum savings deposit rates of banks. However, interest rates have generally been significantly positive in real terms since 1984, and the controls are being progressively relaxed. The authorities also relaxed their direct credit controls in 1986 and 1987; however, concern about the risk of an excessive credit expansion led them to reimpose ceilings on the growth of bank lending to the nongovernment sector in late 1987.

The tendering of treasury bills began in 1985 and of treasury bonds in 1986. The authorities have determined the cut-off interest rate for issues of bills and bonds at the tender. The authorities are committed to strengthening the auction system, which has not been fully competitive. The central bank has recently reopened its discount window, which is available to any holder of eligible securities. Initially, access to this window was at a nonpenal rate, with the rediscount rate set at only one eighth of one percent above the treasury bill rate. However, the discount rate has since been raised to the treasury bill rate plus 1.5 percent. There is also a lending facility through which advances secured over government papers bear the same rate as the discount window. A monetary policy committee has been established to assist coordination between the central bank and the Treasury on various aspects of monetary policy.

*MALAYSIA.*<sup>36</sup> Deficits on the balance of payments in Malaysia made the maintenance of an appropriate exchange rate (a managed float) a main target for monetary policy in recent years. The turnaround in the external sector in 1987 prompted a shift toward interbank interest rates as the main operational target.<sup>37</sup> Concurrently, broad money aggregates (M2 and M3) have been used as intermediate targets.

34. Bills of 15-day maturity were also issued for a brief period in 1984-85.

35. These auctions—telephone go-arounds—are conducted through FICORINVEST.

36. Bank Negara Malaysia (1984) describes the financial system and monetary policy in Malaysia.

37. Traditionally, long-term interbank rates were used as the operating target; more recently, overnight interbank rates have also been taken into account.

The central bank of Malaysia operates auctions of treasury bills but solely for government finance purposes.<sup>38</sup> In contrast to most of the other countries surveyed, Malaysia has not made specific use of the auction system for monetary control. Instead, control of intermediate targets over longer periods has been exercised by way of changes in liquidity and reserve requirements. A number of instruments have been used for shorter-term monetary correction: a discount window<sup>39</sup>; outright sales and purchases of government paper from the central bank's portfolio; foreign exchange swaps; recycling of government deposits (that is, transfers of such deposits between the central bank and commercial banks, combined with guidelines for the banks' use of these funds); repurchase and reverse repurchase operations in government papers; and occasional issues of central bank securities. Until 1987, the main instruments were foreign exchange swaps and recycling of government deposits. During 1987, these instruments were gradually phased out, and sales and purchases of government securities, including repurchase agreements, and of central bank securities became increasingly important. Previously, the central bank issued, on a regular basis, a price list (or yield curve) indicating the rates at which it would sell and buy government papers or bankers' acceptances of different maturities, in effect exerting a direct influence on the entire maturity structure of interest rates. In 1987 this practice was discontinued, and the central bank has since been accepting bids and offers with more discretion, and with a view toward market yields.

The central bank of Malaysia has traditionally made use of several forms of direct regulations and preferential refinance facilities, but these have been adapted in support of a more market-oriented monetary policy. General credit ceilings for individual banks and financial companies have not been used, but guidelines on the distribution of credit have remained in place. While control on bank deposit and loan rates had been fully removed by the early 1980s, moral suasion by the central bank on the interest rate structure has been exercised from time to time.

*MEXICO.* Since 1978, the central bank of Mexico has operated weekly auctions of treasury certificates (Certificados del Tesoro: CETES); from 1982 to 1985 auction amounts were predetermined and interest rates were determined without official interference at the auction, and hence allowed to reflect market conditions. This system was temporarily suspended and replaced with a fixed price tender system in late 1985, because of concern about a high level of interest rates; the market-based auction system was reintroduced in July 1986.<sup>40</sup>

CETES have been issued in fixed denominations, with maturities between 7 and 182 days. Participation in the auctions has been restricted to a group of licensed CETES dealers, but others may acquire CETES by purchasing them from these dealers. The interest rate on CETES is freely determined, although the central bank has bought CETES in the auction for subsequent use in its money market operations, aimed at moderating transitory swings in interest rates and in money market liquidity. These operations have included outright sales and repurchase/reverse repurchase agreements.

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38. The auctions, which were introduced in 1973, have been conducted on a weekly basis, with 91-day bills offered every week, 182-day bills every second week, and 364-day bills every four weeks. The amounts and maturities to be offered are announced in advance of the auction; results regarding, among other things, amounts tendered, accepted and rejected, and yields are announced after the auction. Given the captive holding requirements, the treasury bill yields do not properly reflect money market conditions.

39. Commercial banks, finance companies, and some other financial institutions have access to the regular discount window and may rediscount treasury bills and other eligible short-term papers—such as 3-month commercial papers and 6-month promissory notes issued to finance agriculture—at the discount rate. Under the export refinance facility, to which only commercial banks have access, credit is extended for periods of up to three months at preferential interest rates. In addition, an automatic overnight discount window is established to facilitate the day-1 clearing introduced in February 1987, and funds are lent against the collateral of government securities at the average of overnight interbank rates during the day.

40. An overview of open market-type operations in Mexico is found in Leite (1985).

The amount of CETES to be auctioned each week was, in principle, to be determined by the financing needs of the treasury and monetary policy considerations. However, because of concerns about the budgetary impact of interest costs, the weekly auctions of treasury bills have been supplemented by offers from the central bank to place or accept fixed deposits with the commercial banks (*subastas de depósitos*). The deposits have typical maturities of 14 and 91 days, and are also auctioned weekly. Only banks are allowed access to these auctions.

Mexico has continued to make active use of direct controls on credit and on longer-term interest rates, and reserve requirements have also been used actively for monetary control purposes; marginal requirements were increased in mid-1987.

*THE PHILIPPINES.* In October 1984, the Philippines authorities reformed their monetary policy framework. The peso was floated, and the domestic monetary target was changed from the net domestic assets of the monetary authorities to base money.<sup>41</sup> Interest rates had been gradually deregulated in the 1980-83 period, and have since been freely determined.

The main instrument of short-term monetary control in the Philippines has been a weekly auction, initially of central bank bills (with maturities ranging from 30 to 90 days) and beginning in late 1986, of treasury bills (issued at maturities of 91, 182, and 364 days).<sup>42</sup> By the end of 1987, treasury bill issues had virtually replaced the issues of central bank bills. A proportion of the proceeds from the sales of treasury bills is held by the government in special fixed deposits with the central bank for the explicit purpose of sterilizing liquidity. The regular auctions of short-term paper have been supplemented by auctions of three-year treasury bills. Participation in the auctions has been limited to a group of commercial banks, which have been given status as primary dealers based on their financial soundness; bills are to a large extent sold on to nonbanks. The primary dealers are obliged to participate in the auctions, to have bids regularly accepted, to undertake secondary trading in government securities, to post reasonable two-way prices for these securities, and to submit certain market information to the central bank. An auction committee, which includes the top-ranking officials of the Ministry of Finance and the central bank, conducts the auction; an open market committee decides the tender amounts, based on the treasury's financing needs and the monetary policy stance adopted. The cut-off price in the auction has been linked to the price range accepted in the previous auction, normally so that it deviates by less than 20 to 30 basis points from that auction. At times, this constraint has led to the rejection of all bids. There is also some noncompetitive bidding, limited to 20 percent of the total tender.

For shorter term monetary control, the auctions have been supplemented by repurchase and reverse repurchase agreements using the bills held in the central banks' own portfolio. The central bank had made extensive use of foreign exchange swaps until late 1984, when it ceased providing new swap agreements, although existing agreements have been rolled over. As a result of the depreciating peso, the central bank has suffered substantial operating losses on its foreign exchange swaps.

The central bank has restructured its refinance facilities, with the aim of reducing their use and rationalizing their function. By late 1985, the number of refinance facilities had been reduced from five to one single facility covering a range of purposes.<sup>43</sup> The interest rate charged under the single facility has been market based and is adjusted in line with market rates. The Philippines has continued to use reserve requirements as a monetary control instrument.

*SRI LANKA.* Since 1985, the nominal exchange rate for the Sri Lankan rupee has been adjusted regularly to counteract inflation differentials between Sri Lanka and its main trading partners. Within the constraint set by the exchange rate arrangement, the interest rate previously played a major role as the operational target. Since early 1988, the main operational target

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41. Base money is defined as reserve money plus banks' holdings of reserve eligible securities and reserve deficiencies.

42. See Ealdama (1986) for a description of the auction system.

43. Most outstanding credits have been for export refinancing.

has been the net domestic assets of the central bank, derived from intermediate targets for monetary and credit aggregates.

Sri Lanka has undertaken several changes in its monetary control system in recent years. Interest rates were liberalized in 1977, and a weekly auction system for treasury bills was introduced in early 1987. Beginning in 1986, a number of direct credit controls were removed, and the central bank refrained from strict enforcement of the remaining ceilings. Reserve requirements have continued to be used for monetary control; an important simplification was introduced with the unification of reserve requirements in 1987. The central bank has continued to operate several preferential refinance facilities. The operation of a general discount facility was discontinued in 1984.

The central bank began auctioning its own securities in 1984, and such issues were a main instrument used to manage money market liquidity during 1985 and 1986. Auctions of central bank securities were held about once a month until 1987. Recently, efforts have been on developing the treasury bill market, and the weekly auction of treasury bills has become the main monetary control instrument. The auctions have in principle been open to all. Since late 1987, the amount to be auctioned has been determined by a forecasting committee, consisting of central bank and treasury officials, but has been largely based on the amount of bills maturing. The cut-off yield has been determined by a tendering committee, chaired by the Senior Deputy Governor of the central bank. Since early 1988 the yield has been set with a view toward the central bank's net domestic assets, which has consequently become the main operating target for short-term monetary control. The central bank has been operating a secondary window for the purchase and sale of treasury bills. The prices at this secondary window are linked to those in the most recent auction of treasury bills with a penalty element that has been varied over time.

*THAILAND.* The central bank has used multiple monetary targets as a guide for the conduct of monetary policy, including a monthly monetary base (or reserve money) target as an operational target. Money market liquidity is influenced by the central bank's lending through its loan window, its refinancing of credits to priority sectors, its operations in the government bond repurchase market, its sales of central bank bonds, and its intervention in the foreign exchange market. However, in practice the central bank has not attempted short-term management of the monetary base, and the central bank has also been relatively passive in its day-to-day management of money market interest rates.

The authorities have been concerned that interest rates should be high enough to induce saving, but not so high as to depress investment and production activity, and that they should be in line with foreign interest rates, given the open nature of the Thai economy.

The central bank has set maximum interest rates on bank deposits and has used moral suasion to encourage commercial banks to adjust their interest rates, but it has increasingly left interest rates to be determined by market forces. From time to time the central bank has resorted to direct credit controls, most recently in 1984. The authorities have sought to influence the direction of credit through preferential rediscounting, by imposing lending quotas and by exempting lending to priority sectors from risk/asset ratios.<sup>44</sup>

A government bond repurchase market was established in April 1979. Government bonds (which are issued for maturities of 5, 10, or 15 years on fixed interest rates) are otherwise illiquid. The central bank acts as a principal of the repurchase transactions; however, until about May 1986, the central bank's activity largely involved matching the demand and supply of repurchases with limited intervention on its own account. With the emergence of a high level of liquidity in the banking system in 1986, central bank intervention became more active, and in May 1987, the central bank introduced a longer-term repurchase contract, with maturities up to six months. Also in May 1987, the central bank made the first issue of its own bonds (six-month maturity with the interest rate fixed at 6 percent) to increase its flexibility in managing liquidity since there was a potential shortage of government bonds in the central

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44. The major priority sectors are exports, agriculture, crop financing and price support, and agribusiness.

bank's portfolio for repurchase transactions. The treasury bill market is limited and has not been used for active monetary management.<sup>45</sup>

## Experiences

In this section we review the role of monetary policy, and of the operational instruments used to implement monetary policy, in the context of macroeconomic policy in a number of countries.

### *Approach and limitations*

Our ability to assess experiences with the market-based instruments is constrained by a number of factors. First, while certain effects on interest rates and monetary aggregates might be expected a priori following financial reforms (for example, the use of interest rates rather than direct credit controls for macro monetary management could require an increase in the average level of real interest rates), there were many influences on financial markets and the broader economy that were, in some countries, more important than the particular reform measures under consideration here. Indeed, a major problem is to distinguish the impact of the new procedures per se from larger influences operating on the economy. This difficulty is particularly acute given the relatively short period of time since the new procedures were implemented in several countries.<sup>46</sup>

Second, the position prior to the introduction of the new procedures and the targets of monetary policy varied greatly between countries; therefore, similar experiences are not to be expected. In some countries, market interest rates were already free to vary, and the active management of money market liquidity was aimed at a stabilization of money market rates; in other countries, the liberalization of rates meant increased interest rate volatility. In some countries the operational target was the money market interest rate, which, as a result, followed a smoother path than in the countries that used the volume of debt sales or reserve money as the operational target.

Third, many aspects of financial reform, such as the authorities' willingness to accept an adequate degree of interest rate flexibility, the development of active markets with wide participation, and, related to this, the building of institutions, technical infrastructure, and human skills in the area of financial intermediation, are very difficult to assess. The experiences, therefore, have to be analyzed from a somewhat narrower perspective.

The majority of the countries surveyed have faced adverse external conditions in the 1980s, linked both to cyclical developments in the world economy and to weak terms of trade, as well as problems in the conduct of economic policies domestically. These conditions have required changes in economic policies in order to contain domestic demand and, at the same time, to provide for sustainable economic growth. Several of the countries have implemented adjustment programs supported by resources from the International Monetary Fund, involving a tightening of monetary and fiscal policies aimed at improving their balance of payments and reducing inflation. Related to these adjustment programs, and the subsequent improvements in external positions in some countries, there have been marked shifts in nominal and real interest rates. Short-term interest rates increased abruptly in Brazil in late 1984 and again in 1986, in the Philippines in 1984 and 1985, and in Indonesia in 1984. In some cases (Indonesia, the Philippines) this coincided with the implementation of new monetary control techniques. On

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45. Bills are auctioned on a weekly basis and are purchased mainly by financial institutions, to satisfy statutory requirements. Between auctions, the central bank usually stands ready to sell bills from its portfolio and has occasionally purchased bills before maturity.

46. The time elapsed may have been too short for market participants to have fully adjusted to the new environment; moreover, markets may have been buffeted by changing inflationary expectations, fiscal uncertainties, and external conditions during this time.

the other hand, interest rates have fallen in Thailand and Malaysia in response to improved external positions.

In the following subsection, the role of monetary policy and the operational role of market-oriented instruments in achieving monetary policy objectives are examined within a more general macroeconomic policy context. This section presents tables showing the counterparts to the change in reserve money along the lines of the reserve money identity developed in the previous section on monetary control procedures in industrial countries. The main counterparts are the governments' domestic financing requirements, less sales of government debt outside the central bank, including auctions of treasury bills where appropriate; the increase (on a transactions basis) of the central bank's net holdings of foreign assets; autonomous net lending by the central bank related to preferential rediscount and special liquidity support measures; and the central bank's discretionary use of money market instruments such as repurchases, foreign exchange swaps, central bank bills, and so on, for money management purposes. Market-oriented instruments of monetary control would be represented both by the central bank's use of these discretionary instruments and the line for treasury bill sales, where appropriate. Given this information on the quantitative use of market-oriented instruments, the results for short-term interest rates and monetary aggregates following the introduction of new operating procedures is discussed.

#### *Reserve money developments and counterparts*

In Argentina and Brazil, monetary instruments have been developed against the background of large government domestic financing needs (Tables 7.5 and 7.6). Despite the change in monetary instruments in Argentina in 1985 and Brazil in 1986, the authorities did not use the new instruments to exert additional control over the growth of reserve money. In Brazil the central bank increased its uptake of government debt at the same time as it began issuing central bank bills. It appears that the austral and cruzado plans, which relied to a large extent on de-indexation of financial assets and wages, lacked sustained or substantive support from fiscal and monetary policies. Real interest rates in Argentina and Brazil remained generally negative on average in the period after the plans were introduced. In Brazil, reserve money growth continued at a rapid pace.

In Indonesia nominal and real interest rates increased significantly following the financial liberalization in 1983 and as part of their concerted adjustment efforts (chart 1). The major monetary disturbances have been associated with instability in the balance of payments and domestic financing of the government budget deficit (table 7.7). Until 1987, the reserve money effects of the changes in foreign exchange reserves were largely offset by the central bank's net purchases of government debt; however, increasing use was also made of open market type operations, especially in 1986 and 1987. As the liquidity situation tightened in late 1986 and early 1987, the central bank supplied liquidity through central bank bills. Subsequently, the central bank allowed interest rates to increase, and in the year to March 1988, capital reflows contributed to an increase in reserve money, which was partly offset by central bank operations.

In Kenya, the impact of the domestic financing needs of the government on reserve money has been moderated through the domestic sale of treasury bills and bonds outside the central bank (Table 7.8). However, monetary policy has not been active. Nominal interest rates have been maintained at a stable level while real interest rates have fluctuated. In 1984, the authorities did not sterilize the external surpluses, and reserve money growth increased sharply. In 1987, a substantially greater proportion of the larger government domestic financing requirement was financed by the central bank, and, as a result, reserve money grew very rapidly.

Market-oriented monetary instruments have been increasingly utilized in Malaysia. In 1986 and 1987 such instruments were used largely to offset the accumulation of foreign exchange by the central bank and to moderate downward pressure on interest rates (chart 2). The central bank has also been able to maintain a fairly stable reserve money growth (table 7.9). The main instruments of money market management have been foreign exchange swaps, recycling of government deposits, secondary transactions in government securities, *(text continues on p. 133)*

**Table 7. 5: Factors Affecting Reserve Money: Argentina (in millions of australes)**

<i>The year to December</i>	1983	1984	1985	1986	1987
Domestic financing of the government deficit	89	356	2,857	169	1,039
Treasury bills	--	--	--	--	...
Other securities	-3	-1	-38	-200	...
Other <sup>a</sup>	92	357	3,895		...
Uptake of government debt by central bank	104	294	2,046	2,592	12,263
Change in net foreign assets of central bank	-66	-338	-423	-2,270	-17,582
Change in autonomous net domestic assets of central bank <sup>b</sup>	117	888	2,428	1,413	11,877
Change in the use of money market policy instruments by central bank <sup>c</sup> (percent of reserve money at beginning of period)	--	16	45	54	18
	(--)	(8.1)	(4.3)	(1.0)	(--)
Change in reserve money (percent)	155 (360.5)	860 (434.3)	4,096 (387.1)	1,789 (34.7)	6,576 (94.7)
<b>Memorandum:</b>					
<b>Money market interest rates (percent)</b>					
Nominal	407.8	558.0	520.3	61.2	...
Real	63.9	-68.7	-151.8	-28.9	...

a Residual.

b Includes refinance and rediscount facilities, loans to private and public enterprises, and other items.

c Participations in central bank's holdings of government papers, issued in the form of central bank bills.

... is used to indicate that data were not available at the time of writing.

-- is used to indicate that the figure is zero or less than half the final digit shown, or that the item does not exist.

Sources: *IFS*, data provided by the authorities, and staff estimates.

Table 7.6: Factors Affecting Reserve Money: Brazil (in billions of cruzados)

<i>The year to December</i>	1983	1984	1985	1986	1987
Domestic financing of the government deficit <sup>a</sup>	26.1	89.6	390.9	442.7	4,035.7
Treasury bills	-0.2	0.2	-0.3	0.9	-0.9
Other securities	3.6	29.0	142.7	68.2	949.7
Other <sup>b</sup>	22.7	60.4	248.5	373.6	3,086.9
Uptake of government debt by monetary authorities <sup>c</sup>	12.9	21.3	107.0	401.6	1,177.8
Change in net foreign assets of the monetary authorities <sup>d</sup>	-1.9	-13.5	-18.0	-72.4	70.0
Change in autonomous net domestic assets of central bank <sup>e</sup>	-9.5	1.4	-56.3	6.7	...
Change in the use of money market instruments by central bank (percent of reserve money at beginning of period)	--	--	--	-202.5	...
	(--)	(--)	(--)	(-387.9)	(...)
Memorandum:					
Money market interest rates (percent) <sup>f</sup>					
Nominal	58.0	190.2	231.7	150.6	195.4
Real	-79.1	-4.8	6.8	-19.0	-27.1

a Nonfinancial public sector.

b Residual.

c Includes operations in treasury bills for monetary control purposes.

d On a transaction basis; that is, excluding valuation changes.

e Includes refinance and rediscount facilities, loans to private enterprises, and other items.

f Bank rate.

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Sources: IFS, data provided by the authorities, and staff estimates.

Chart 7.1: Developments in Interest Rates and Monetary Aggregates—Indonesia (in percent)

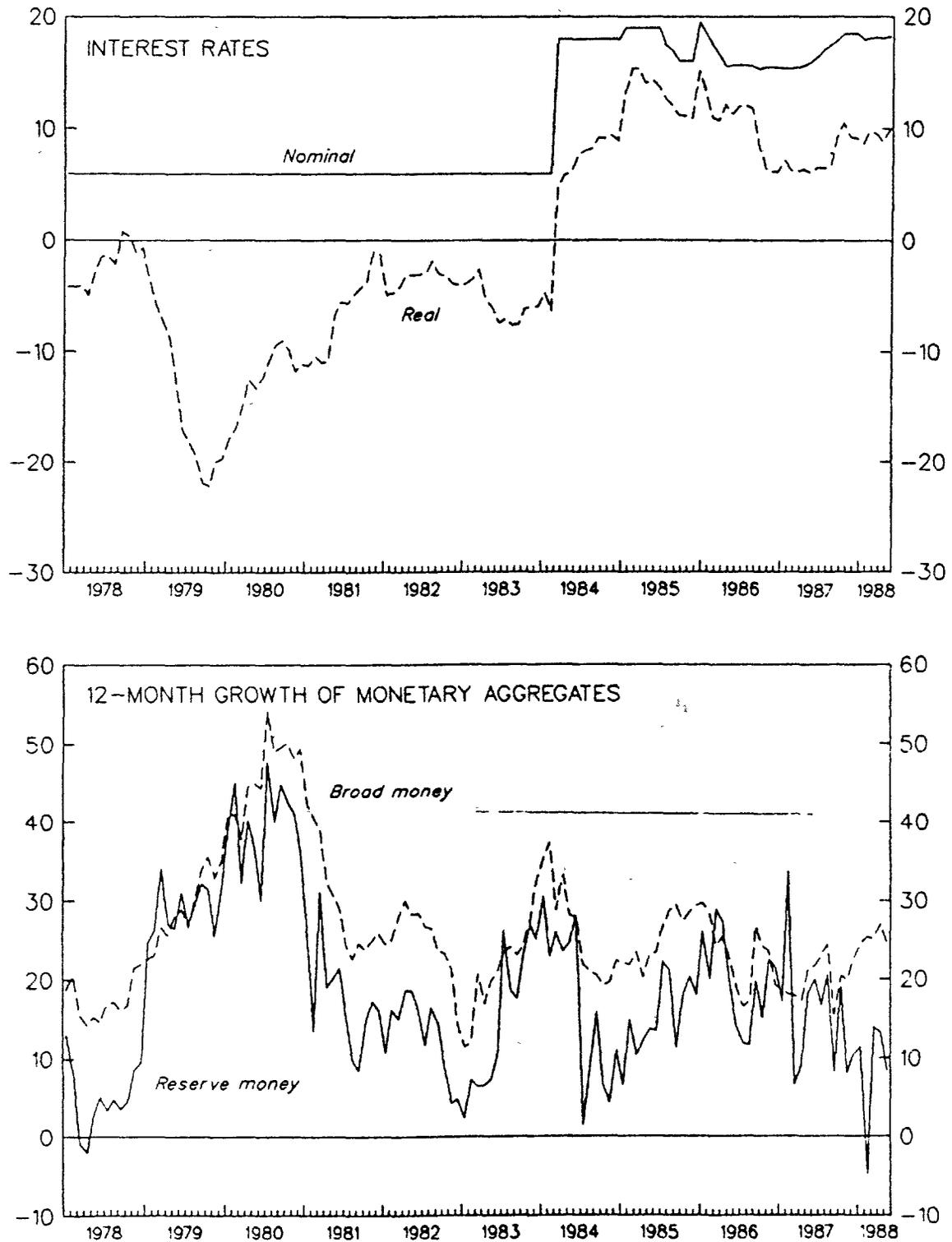


Table 7.7: Factors Affecting Reserve Money: Indonesia (in billions of rupiahs)

<i>The year to March</i>	1984	1985	1986	1987	1987
Domestic financing of the government deficit	-1,775	-3,004	909	298	100
Uptake of government debt by central bank	-1,475	-2,703	-1,051	-102	...
Change in net foreign assets of central bank <sup>a</sup>	2,113	1,513	-1,266	-2,006	1,242
Change in autonomous net domestic assets of central bank <sup>b</sup>	670	1,680	1,724	1,906	...
(of which: liquidity credits)	(157)	(2,502)	(954)	(1,175)	(...)
Change in the use of money market instruments by central bank	-45	7	212	641	48
(percent of reserve money at beginning of period)	(-1.1)	(0.1)	(3.6)	(8.5)	(0.6)
SBI <sup>c</sup> outstanding	-45	-198	-1,151	1,233	-649
SBI <sup>c</sup> rediscounted	--	--	946	-905	...
SBFU <sup>d</sup> rediscounted	--	205	417	313	...
Change in reserve money (percent)	1,263 (31.0)	497 (9.3)	1,721 (29.5)	439 (5.8)	1,115 (14.0)
<b>Memorandum:</b>					
Money market interest rates (percent)					
Nominal	6.0	16.0	18.0	16.0	16.8
Real	-5.8	5.5	13.3	10.2	7.5

a. On a transactions basis; that is, excluding valuation changes.

b. Includes refinance and rediscount facilities, loans to private and public enterprises, and other items.

c. Central bank certificates.

d. Private sector money market papers.

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Sources: Data provided by the authorities and staff estimates.

**Table 7.8: Factors Affecting Reserve Money: Kenya (in billions of shillings)**

<i>The year to June</i>	1983	1984	1985	1986	1987
Domestic financing of the government deficit	1,577	3,035	3,625	6,783	8,883
Treasury bills	...	1,922	2,544	6,310	2,471
Other securities	...	151	269	724	2,902
Other <sup>a</sup>	...	962	812	-251	3,510
Uptake of government debt by central bank <sup>b</sup>	-784	699	943	955	4,122
Change in net foreign assets of central bank <sup>c</sup>	864	753	-721	-125	-176
Change in autonomous net domestic assets of central bank <sup>d</sup>	204	-234	-44	246	-721
Change in the use of money market instruments by central bank (percent of reserve money at beginning of period)	--	--	--	--	--
Change in reserve money (percent)	284 (6.6)	1,218 (26.4)	178 (3.1)	1,076 (17.9)	3,225 (45.6)
Memorandum:					
Money market interest rates (percent) <sup>e</sup>					
Nominal	15.8	14.4	14.0	14.0	14.0
Real	4.3	4.2	0.9	10.0	8.8

a Residual.

b Including treasury certificates used for monetary control purposes.

c Including valuation changes.

d Includes refinance and discount facilities, loans to private and public enterprises, and other items.

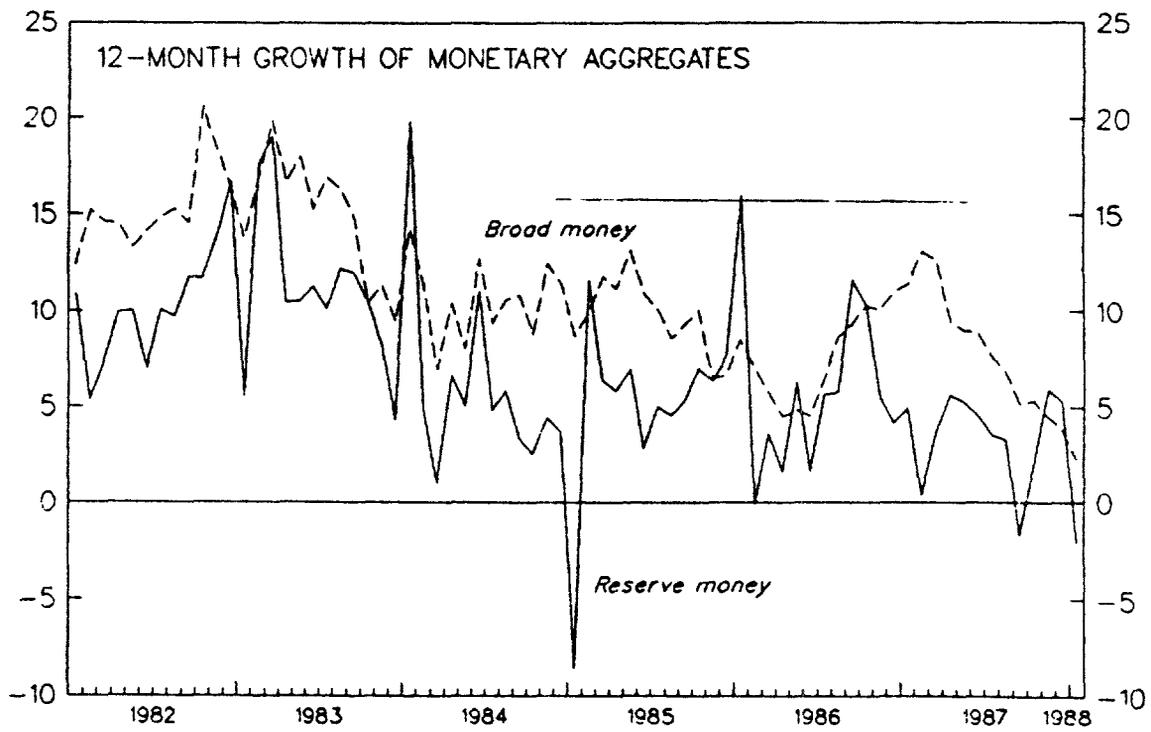
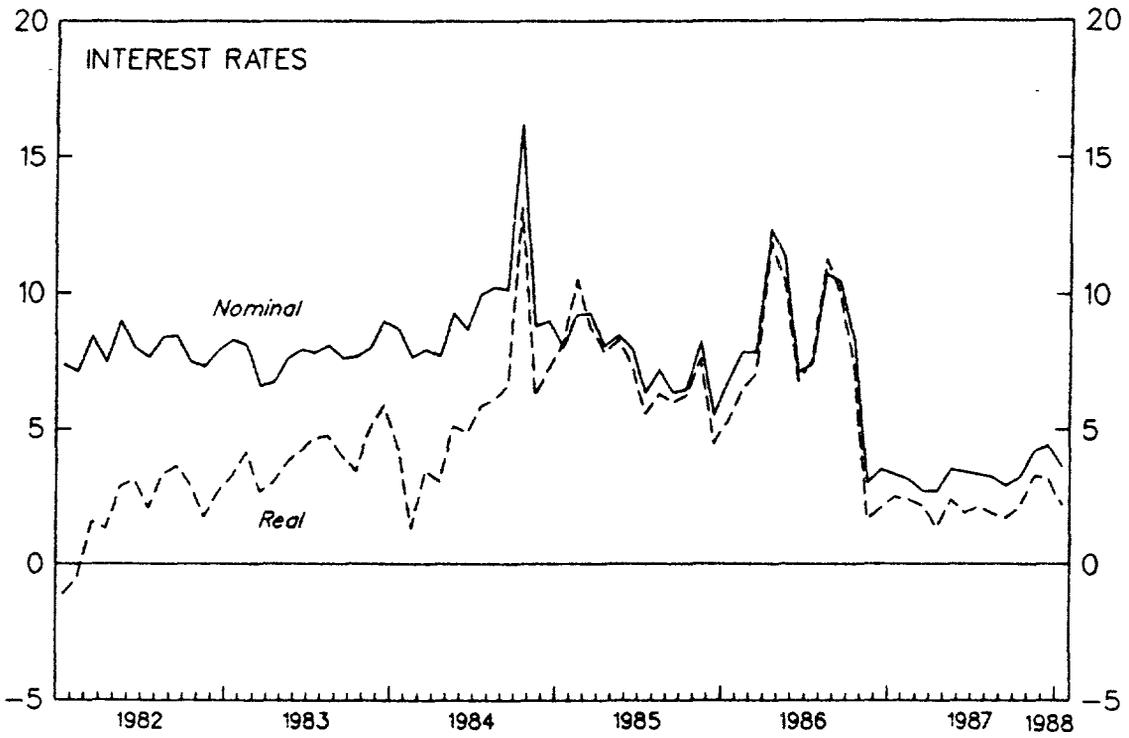
e Treasury bill rate.

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Sources: *IFS*, data provided by the authorities, and staff estimates.

Chart 7.2: Developments in Interest Rates and Monetary Aggregates—Malaysia (in percent)



**Table 7.9: Factors Affecting Reserve Money: Malaysia (in billions of ringgit)**

<i>The year to December</i>	1984	1985	1986	1987
Domestic financing of the government deficit	1.8	3.3	5.9	9.2
Treasury bills	--	--	0.2	1.0
Other securities	3.1	3.6	4.6	7.5
Other <sup>a</sup>	-1.3	-0.3	1.1	0.7
Uptake of government debt by central bank <sup>b</sup>	0.9	-0.8	-0.3	-0.3
Change in net foreign assets of central bank <sup>c</sup>	0.3	-3.3	4.3	2.9
Change in autonomous net domestic assets of central bank <sup>d</sup> (of which: refinance and rediscount facilities)	(...)	(0.1)	(-0.1)	(1.3)
Change in the use of money market instruments by central bank (percent of reserve money at beginning of period)	(...)	1.5	-1.2	-4.7
Foreign exchange swaps	(...)	0.6	0.7	-2.2
Recycled government deposits	(...)	1.0	-2.6	-1.6
Government securities	(...)	-0.1	0.7	-0.1
Central bank certificates	(...)	--	--	-0.8
Change in reserve money (percent)	0.4 (3.7)	0.1 (7.6)	0.5 (4.2)	0.5 (5.2)
<b>Memorandum:</b>				
Money market interest rates (percent)				
Nominal	9.5	7.6	8.0	3.3
Real	5.6	7.2	7.3	2.2

a Residual.

b Includes recycled government deposits and government securities used for monetary control purposes.

c On a transaction basis, that is, excluding valuation changes.

d Includes refinance and discount facilities, loans to private and public enterprises, and other items.

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*Sources:* Data provided by the authorities and staff estimates.

(continued from p. 125) and, beginning in 1987, issues of central bank bills. The central bank has been able to restrict its domestic financing of the government, although these financing needs have been increasing; the government has met its domestic financing requirement largely through sales of securities.

As in Argentina and Brazil, monetary policy in Mexico has been implemented against the background of large government domestic financing needs and instability in the external position. The auctions of CETES have financed only a small percentage of the government's domestic financing needs, and a substantial percentage of government domestic borrowing has been provided through the central bank (table 7.10). Auctions of deposits with the central bank have reduced financial sector liquidity but have been insufficient to prevent increases in the growth rate of reserve money.

In the Philippines, market-oriented monetary instruments have been used actively in macroeconomic management. In 1984, nominal interest rates were increased sharply (see chart 3), influenced by sales of central bank bills aimed at moderating the expansion of reserve money (table 7.11). Slippages occurred in 1986 and there was a substantial loss of foreign exchange reserves; however, in 1987 monetary instruments, especially the weekly auctioning of treasury bills and the associated increase of government deposits at the central bank in special sterilized accounts were used actively to constrain the growth of reserve money. The treasury bill sales and the sterilization of proceeds more than offset the maturing of central bank bills, which were being phased out as a monetary instrument.

There has been a deterioration in economic conditions in Sri Lanka since 1984, with a loss of foreign exchange reserves and widening government domestic financing needs (table 7.12). Sales of central bank bills were used during 1984-86 to offset the increase in financial sector liquidity associated with the accumulation of foreign assets in 1984 and the uptake of domestic debt by the central bank in 1985 and 1986. In 1987, the maturing of central bank bills offset the impact of the loss of foreign exchange reserves on the growth of reserve money; thus, monetary policy was geared toward lowering interest rates, and real interest rates became negative. The adoption of the net domestic assets target required increased interest rate flexibility and a less accommodating stance for monetary policy. In early 1988 interest rates in the treasury bill auction were allowed to increase.

Until 1986, the monetary authorities in Thailand did not pursue an active policy with regard to managing money market liquidity. However, following the substantial improvement in the external balance beginning in 1986 and an associated buildup in financial sector liquidity, the authorities actively drained liquidity through government bond repurchases and issues of central bank bonds (table 7.13). These operations have not been sufficient, however, to prevent a sharp increase in the growth of reserve money in 1987 and a fall in interest rates (chart 4).

#### *Implications for interest rates and monetary aggregates*

To examine the impact of the new operating procedures on interest rates and monetary aggregates, we first specified for each country a date for the introduction of the new operating procedures (see table 7.14, note on methodology). These dates were selected on the basis of our judgment about when a substantive shift occurred in operating procedures, rather than necessarily the date on which reforms were initiated. For the pre- and post-reform periods, we conducted simple statistical tests, comparing monthly data on nominal and real interest rates, and on twelve-month growth rates of reserve money and broad money. The tests include a comparison of means and variances of the data series and the residuals from auto-regressive regressions for nominal and real interest rates in the sample subperiods.<sup>47</sup> (text continues on p. 141)

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47. These latter regressions are motivated by the efficient markets hypothesis of interest rates, which suggests that short-term interest rates would tend to follow random walks; see, for example, Fama (1970).

**Table 7.10: Factors Affecting Reserve Money: Mexico (in billions of Mexican pesos)**

<i>The year to December</i>	1983	1984	1985	1986	1987
Domestic financing of the government deficit <sup>a</sup>	824	1,508	4,097	11,120	...
Treasury certificates (CETES)	...	137	1,530	5,749	...
Other securities	...	1,199	-595	-1,635	...
Other <sup>b</sup>	...	172	3,162	7,006	...
Uptake of government debt by central bank <sup>c</sup>	755	757	1,900	4,176	...
Change in net foreign assets of central bank <sup>d</sup>	661	503	-874	-673	...
Change in autonomous net domestic assets of central bank <sup>e</sup>	-259	394	-199	-765	...
Change in the use of money market instruments by central bank <sup>f</sup>	-951	-1,158	-135	-1,100	-1,173
(percent of reserve money at beginning of period)	(-156.4)	(-142.3)	(-10.3)	(-54.9)	(32.2)
Change in reserve money	206	496	692	1,638	4,785
(percent)	(33.9)	(60.9)	(52.8)	(81.8)	(131.5)
Memorandum:					
Money market interest rates (percent)					
Nominal	...	49.9	62.4	88.4	95.6
Real	...	-16.4	4.8	4.0	-33.3

<sup>a</sup> Public sector.

<sup>b</sup> Residual.

<sup>c</sup> Includes CETES used for monetary control purposes.

<sup>d</sup> On a transaction basis, that is, excluding valuation changes.

<sup>e</sup> Includes refinance and discount facilities, loans to private enterprises, and other items.

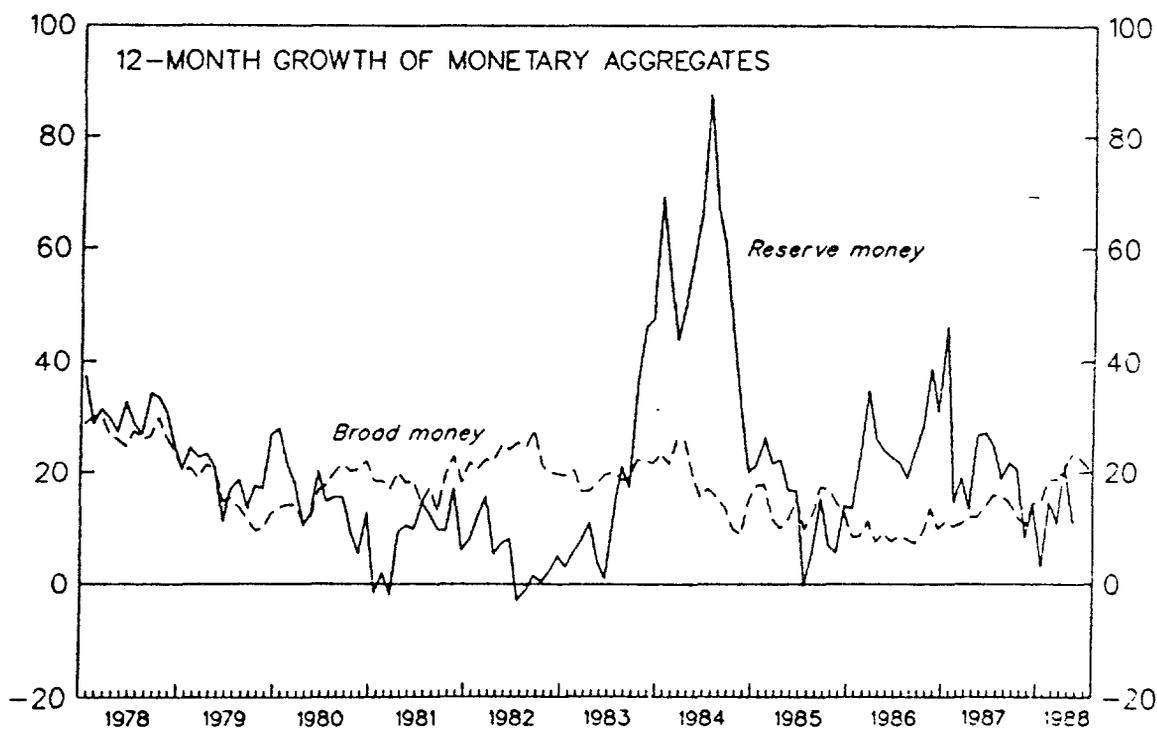
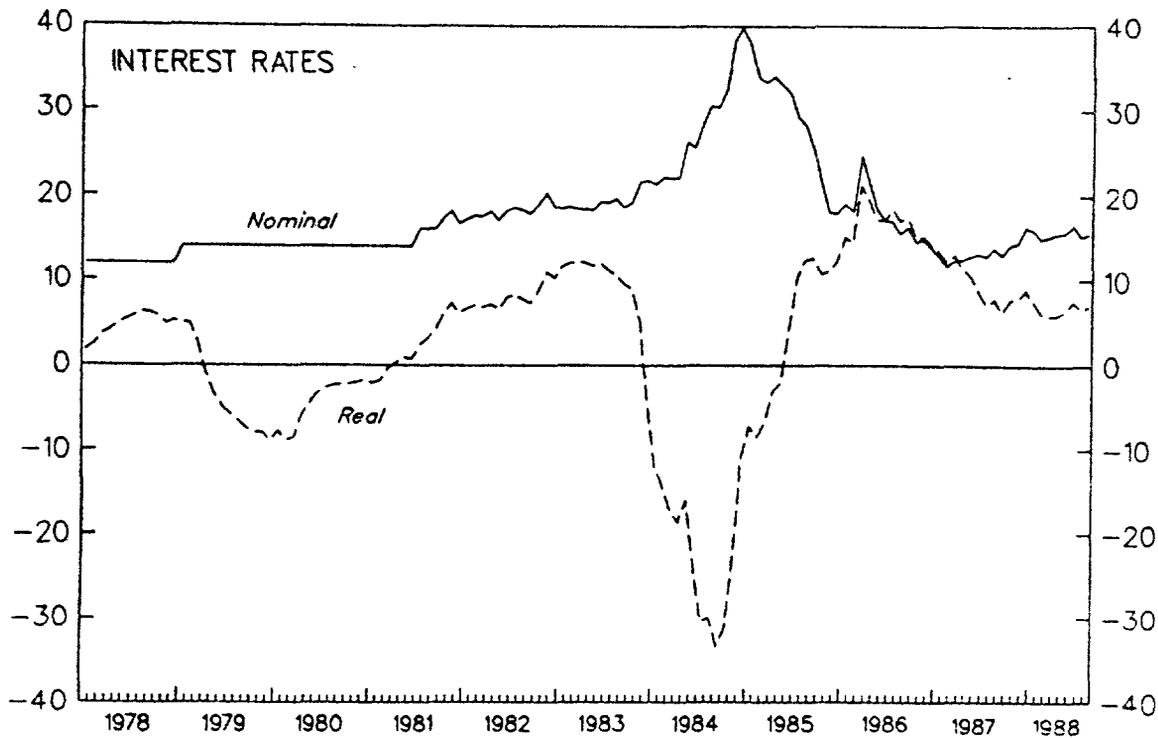
<sup>f</sup> Fixed deposits with or placements by central bank.

... is used to indicate that data were not available at the time of writing.

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Sources: *IFS*, data provided by the authorities, and staff estimates.

Chart 7.3: Developments in Interest Rates and Monetary Aggregates—The Philippines (in percent)



**Table 7.11: Factors Affecting Reserve Money: the Philippines (in billions of pesos)**

<i>The year to December</i>	1983	1984	1985	1986	1987
Domestic financing of the government deficit (PSBR)	2.0	8.1	11.5	27.7	13.5
Treasury bills	...	...	...	...	50.5
Other securities	...	...	...	...	3.6
Other <sup>a</sup>	...	...	...	...	-41.3
Uptake of government debt by central bank <sup>b</sup>	...	-1.1	5.4	0.3	-9.4
Change in net foreign assets of central bank <sup>c</sup>	4.7	-0.3	0.5	-18.8	-3.9
Change in autonomous net domestic assets of central bank <sup>d</sup>	...	16.6	17.0	34.7	24.6
(of which: lending to financial institutions and rediscounting)	(...)	(1.6)	(2.7)	(-1.4)	(2.4)
Change in the use of money market instruments by central bank <sup>e</sup>	...	-9.5	-18.3	-4.2	-4.7
(percent of reserve money at beginning of period)	(...)	(-34.3)	(-54.8)	(-11.1)	(-8.8)
Change in reserve money (percent)	9.4 (47.6)	5.7 (20.5)	4.6 (13.8)	12.0 (31.6)	6.9 (13.8)
Memorandum:					
Money market interest rates (percent) <sup>f</sup>					
Nominal	19.2	28.2	28.6	17.5	13.3
Real	9.3	-21.7	3.8	16.8	9.5

a Residual.

b Including the government's fixed deposits with central bank, associated with the issuance of treasury bills.

c On a transaction basis, that is, excluding valuation changes.

d Includes refinance and discount facilities, loans to private and public enterprises, and other items.

e Repurchases/reverse repurchases, operations in central bank papers and treasury securities.

f Treasury bill rate.

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Sources: Data provided by the authorities and staff estimates.

Table 7.12: Factors Affecting Reserve Money: Sri Lanka (in billions of rupiahs)

<i>The year to December</i>	1983	1984	1985	1986	1987
Domestic financing of the government deficit	6,534	3,991	8,569	9,143	11,355
Treasury bills	80	-2,540	7,420	3,893	3,677
Other securities <sup>a</sup>	3,121	3,053	6,369	3,693	6,673
Other <sup>b</sup>	3,333	3,478	-5,220	1,557	1,005
Uptake of government debt by central bank <sup>c</sup>	577	-3,730	6,735	2,495	785
Change in net foreign assets of central bank <sup>d</sup>	367	7,228	-1,549	-1,067	-2,047
Change in autonomous net domestic assets of central bank <sup>e</sup>	1,579	-1,013	-1,252	1,148	-81
Change in the use of money market instruments by central bank <sup>f</sup> (percent of reserve money at beginning of period)	--	-415	-750	-1,439	2,584
	(--)	(-1.2)	(-5.5)	(-8.5)	(14.3)
Change in reserve money (percent)	2,523 (27.7)	2,070 (17.8)	3,184 (23.3)	1,137 (6.7)	1,242 (6.9)
Memorandum:					
Money market interest rates <sup>g</sup>					
Nominal	12.4	13.1	13.4	10.5	7.3
Real	-1.5	-3.8	11.9	2.5	-0.4

<sup>a</sup> Net of debt sinking fund.

<sup>b</sup> Residual.

<sup>c</sup> Includes operations in treasury bills for monetary control purposes.

<sup>d</sup> On a transaction basis, that is, excluding valuation changes.

<sup>e</sup> Includes refinance and discount facilities, loans to private and public enterprises, and other items.

<sup>f</sup> Central bank securities.

<sup>g</sup> Treasury bill rate.

... is used to indicate that data were not available at the time of writing.

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Sources: Data provided by the authorities and staff estimates.

**Table 7.13: Factors Affecting Reserve Money: Thailand (in billions of baht)**

<i>The year to December</i>	1984	1985	1986	1987
Domestic financing of the government deficit <sup>a</sup>	26.0	39.2	40.0	29.0
Treasury bills	--	--	--	--
Central bank	(-4.3)	(-0.3)	(-0.3)	(-2.6)
Other	(4.3)	(0.3)	(0.3)	(2.6)
Other	26.0	39.2	40.0	29.0
Uptake of government debt by central bank	-4.5	8.6	-9.3	-6.1
Change in net foreign assets of central bank <sup>b</sup>	10.2	-7.0	24.9	31.6
Change in autonomous net domestic assets of central bank <sup>c</sup>	-1.5	5.2	-3.9	4.9
Change in the use of money market instruments by central bank (percent of reserve money at beginning of period)	--	--	-1.9	-10.1
Bank of Thailand bonds	(--)	(--)	(-2.2)	(-10.5)
Repurchase agreements in government bonds	--	--	-1.9	-10.1
Change in reserve money (percent)	4.2	6.8	9.8	20.3
	(5.6)	(8.5)	(11.3)	(21.1)
Money market interest rates (percent)				
Nominal	13.6	13.5	8.1	5.9
Real	12.7	11.1	6.2	1.5

a On a fiscal year basis, that is, the year ending in September.

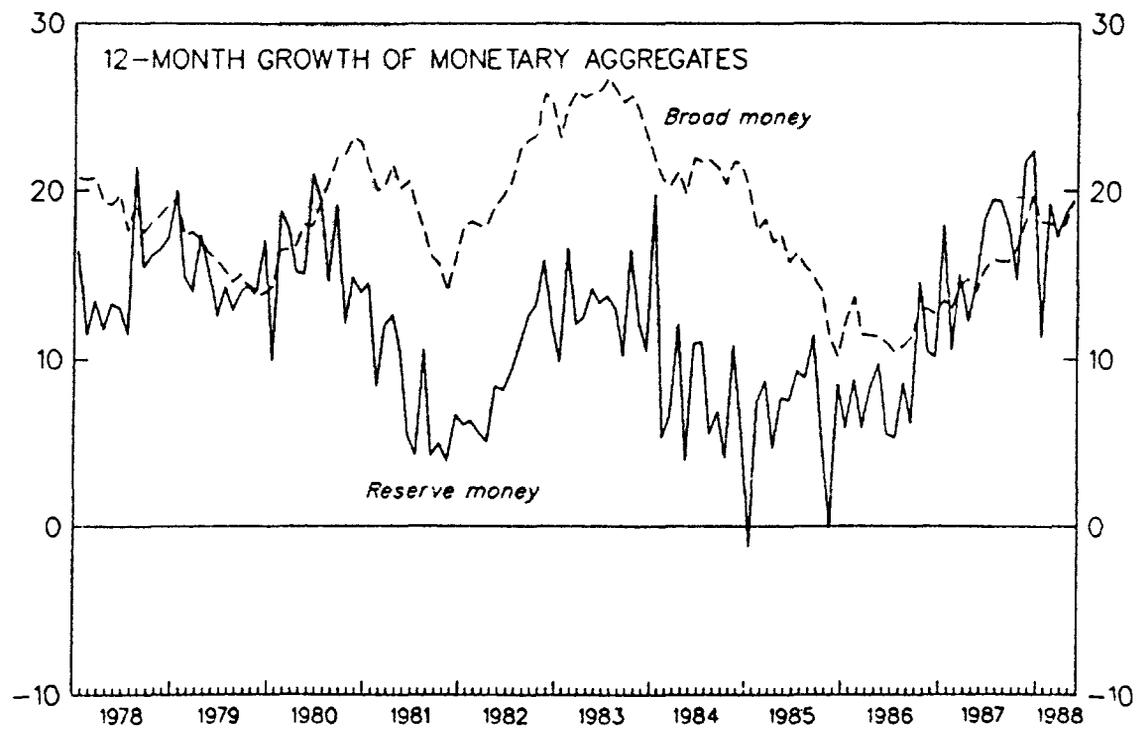
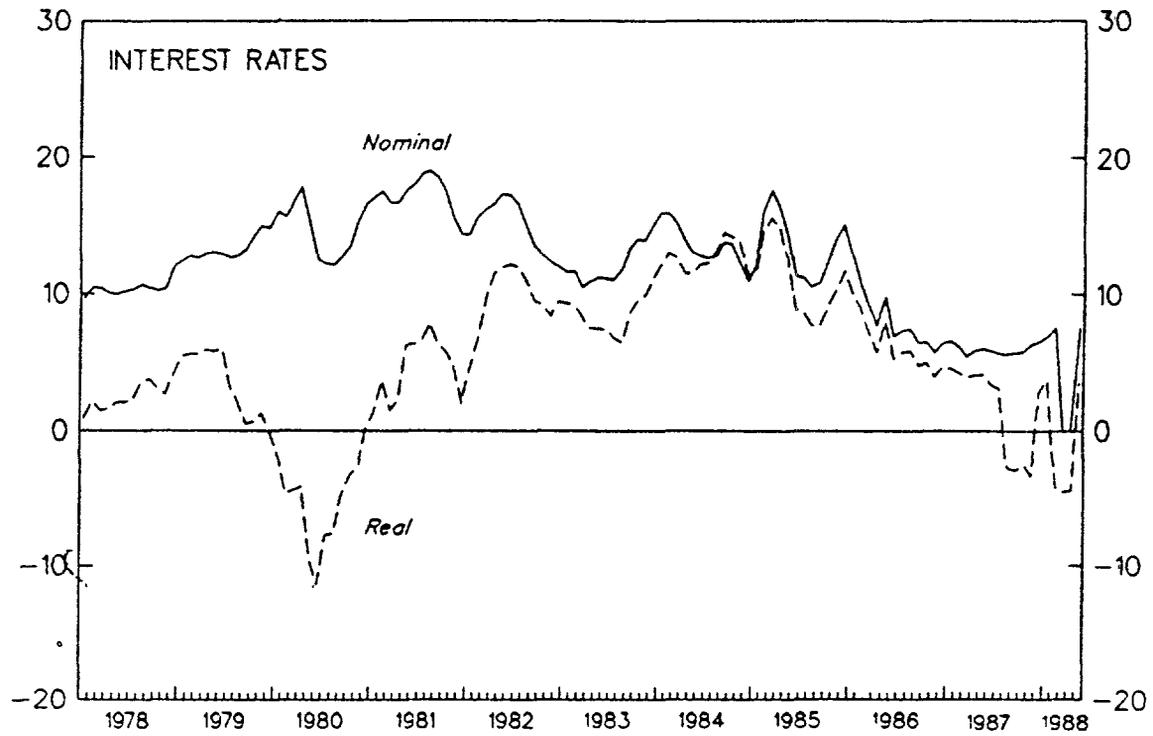
b On a transactions basis, that is, excluding valuation changes.

c Includes refinance and discount facilities, loans to private and public enterprises, and other items.

d Outstanding amount was 2.0 billion baht in the period June-October 1987.

Sources: *IFS*, data provided by the authorities, and staff estimates.

Chart 7.4: Developments in Interest Rates and Monetary Aggregates—Thailand (in percent)



**Table 7.14: Financial Reform and Structural Changes in Interest Rate Determination**

	<i>Nominal Interest Rate</i>				<i>Real Interest Rate</i>			
	<i>Pre-Reform</i>	<i>Post-Reform</i>	<i>Change</i>	<i>Statistics<sup>a</sup></i>	<i>Pre-Reform</i>	<i>Post-Reform</i>	<i>Change</i>	<i>Statistics<sup>a</sup></i>
<b>Indonesia</b>								
Mean (percent)	6.00	15.56	+	t=17.51**	-7.57	7.27	+	t=13.30**
Standard deviation	-- <sup>c</sup>	4.23	+	** <sup>c</sup>	6.02	6.43	+	F=1.19
RSS <sup>b</sup>	--	2.8	+	** <sup>c</sup>	2.6	3.7	+	F=1.45
<b>Malaysia</b>								
Mean (percent)	8.07	3.35	-	t=16.03**	5.29	2.21	-	t=7.66**
Standard deviation	1.95	0.53	-	F=13.54**	2.86	0.55	-	F=5.20**
RSS <sup>b</sup>	3.6	0.2	-	F=17.76**	4.2	0.54	-	F=10.30**
<b>Philippines</b>								
Mean	16.55	20.18	+	t=2.82**	-0.02	7.42	+	t=3.96**
Standard deviation	4.18	8.24	+	F=3.89**	9.99	10.38	+	F=1.08
RSS <sup>b</sup>	0.87	4.0	+	F=5.71**	4.5	7.9	+	F=1.75*
<b>Thailand</b>								
Mean (percent)	13.58	6.43	-	t=19.02**	6.50	2.75	-	t=3.99**
Standard deviation	2.53	0.96	-	F=6.95**	5.75	3.48	-	F=2.73**
RSS <sup>b</sup>	1.2	0.8	-	F=1.46	2.4	0.8	-	F=2.93**

**Note on methodology:**

Data: Monthly money market interest rates (IFS, line 60b, except for Philippines [60c]); deflated by change in CPI (IFS, line 64) over previous 12-month period.

Tests: Standard t and F tests are carried out to check whether there have been significant changes in interest rate levels and variability, respectively, following monetary control "reform." Regressions of the form  $X_t = aX_{t-1}$  ( $X_t$  is interest rate in period t) are run for pre- and post-reform periods, and F-tests are used to gauge whether there have been structural changes in interest rate determination.

The nature and time of reform, and pre- and post-reform periods for each country were as follows:

<i>Country</i>	<i>Reform measure(s)</i>	<i>Time</i>	<i>Sample periods</i>	
			<i>Pre-Reform</i>	<i>Post-Reform</i>
Indonesia	Comprehensive financial reform initiated	June 1983	1/78-5/83	6/83-5/88
Malaysia	Freer money market interest determination	February 1987	2/82-1/87	2/87-1/88
Philippines	Floating of currency	October 1984	1/78-9/84	10/84-8/88
Thailand	More active use of repurchase transactions	May 1986	1/78-4/86	5/86-2/88

- One asterisk indicates that the change has been significant on the 5 percent level, two asterisks on the 1 percent level.
  - Residual Sum of Squares in the regression, divided by the degree of freedom.
  - Nominal interest rate was unchanged during the whole pre-reform period.
- ... is used to indicate that data were not available at the time of writing.  
 -- is used to indicate that the figure is zero or less than half the final digit shown, or that the item does not exist.

Sources: IFS, data provided by the authorities, and staff estimates.

(continued from p. 133) Data availability has restricted this quantitative analysis to only four countries: Indonesia, Malaysia, the Philippines and Thailand.<sup>48</sup>

**INTEREST RATES.** In the Philippines and Indonesia, where it appears that market-based instruments of monetary control have played the most active role in macroeconomic adjustment in the sample of countries, there were significant increases in both the level and variability of interest rates following the reform of their monetary management operating procedures (table 7.14). In both countries, real interest rates also became significantly positive after the monetary reform. These results conform most closely with a simple a priori expectation about what should happen following a move to liberalize interest rates from direct controls and to use interest rates rather than direct credit controls to constrain monetary expansion.

In the other two countries, Malaysia and Thailand, the new monetary policy operating procedures were associated with a significant reduction in the level of interest rates and their variability. In both countries, interest rates had not previously been tightly controlled, as evidenced by the larger regression residuals in the nominal interest rate equations in the pre-reform period for these countries compared to Indonesia and the Philippines. (Compare also charts 1 and 3 with charts 2 and 4.) Moreover, the change in operating procedures occurred following a significant improvement in these countries' balance of payments, which resulted in reserve accumulations, expansion of domestic liquidity, and downward pressure on interest rates. In both countries, market-oriented instruments were used to drain liquidity from their financial systems to prevent an excessive easing in monetary conditions and further falls in interest rates. The results of lower average interest rates and reduced interest rate variability, following the introduction of the new operating procedures, would therefore appear to reflect two factors: the general downward pressure on interest rates associated with the improved external conditions, and the previous variability in interest rates, which money market intervention acted to reduce. These two countries illustrate the stabilizing effect of money market operations. However, in Thailand there was no significant difference in the autoregressive models before and after the introduction of greater money market intervention, which may suggest that this policy was not especially active (see also below).

**MONETARY AGGREGATES.** As regards the likely outcome for monetary aggregates, we would anticipate, other things being equal, an inverse relationship between nominal interest rates and the growth of non-interest-bearing reserve money. This expectation is supported in the results for three of the countries (table 7.15). The relationship between interest rates and broad money is a priori complicated since a part of broad money is interest bearing and could expand with a general rise in interest rates; the relevant interest rate term for broad money demand is therefore the differential between the own rate on money and the interest rate on nonmonetary assets. In addition to interest rates, the demand for reserve and broad money would be affected by developments in income or wealth; however, high frequency data on these variables are not available and have not been taken into account.

In Indonesia and the Philippines, the significant increases in interest rates and their variability after the introduction of monetary reforms were associated with significant reductions in the variability of the growth of reserve money and reductions in its average rate of growth, but the latter tests were insignificant at a 5 percent confidence level. This could suggest that other factors, such as developments in income, are important in addition to the level of interest rates in determining the trend in reserve money growth. Following the financial reforms, there were significant reductions in the variability and rate of growth of broad money in Indonesia. In the Philippines, the average rate of growth of broad money fell significantly following the introduction of the new monetary policy and operating procedures.

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48. For Argentina and Sri Lanka, there is a lack of a consistent time series for interest rates; for Brazil, a reorganization of the monetary authorities led to a break in the time series on reserve money; and in the cases of Kenya and Mexico, there are no decisive reform measures that would represent a clear shift in operating procedures.

**Table 7.15: Financial Reform and the Growth Rates of Monetary Aggregates**

	<i>Reserve Money</i>				<i>Broad Money</i>			
	<i>Pre-Reform</i>	<i>Post-Reform</i>	<i>Change</i>	<i>Test Statistics</i>	<i>Pre-Reform</i>	<i>Post-Reform</i>	<i>Change</i>	<i>Test Statistics</i>
<b><u>Indonesia</u></b>								
Mean (percent)	19.7	16.7	-	t=1.56	28.5	24.0	-	t=3.07*
Standard deviation	13.3	7.7	-	F=2.98**	10.8	4.8	-	F=5.51**
<b><u>Malaysia</u></b>								
Mean (percent)	7.6	3.0	-	t=4.49**	11.6	7.4	-	t=3.21**
Standard deviation	4.9	2.8	-	F=3.08*	3.8	3.4	-	F=1.25
<b><u>Philippines</u></b>								
Mean (percent)	21.2	20.3	-	t=0.36	20.1	13.1	-	t=8.63
Standard deviation	18.5	10.0	-	F=3.42	4.8	4.2	-	F=1.31
<b><u>Thailand</u></b>								
Mean (percent)	11.3	13.9	+	t=2.16**	19.2	14.4	-	t=6.95**
Standard deviation	4.7	5.2	+	F=1.22	3.8	2.7	-	F=1.98*

Note on methodology: Twelve-month growth rates.

Data: Monetary observations: Reserve money as reported in IFS (line 14); broad money the sum of money and quasi-money in IFS (lines 34 & 35).

Tests: Standard t and F tests are carried out to check whether there have been significant shift in money growth and variability, respectively. One asterisk indicates that the change has been significant on the 5 percent level, two asterisks on the 1 percent level.  
The nature and time of reform (see footnote 1c, Table 5).

Sources: IFS and staff estimates.

In Thailand, there was also an inverse relationship between interest rates and reserve money. The average rate of growth and the variability of the growth rate of reserve money increased while average interest rates and their variability declined following the introduction of the more active money market policy of the central bank. However, the effects on the variability of reserve money growth were not significant, which may again suggest that the change in Thai operating procedures was not particularly active. There is also other evidence to suggest that this was the case, such as the fact that the Thai authorities placed limits on the volume of their money market intervention. In contrast, the growth rate and the variability of the growth rate of broad money fell significantly in the post-reform period.

Despite the reduction in interest rates and their variability in the post-reform period in Malaysia, both the growth rate and the variability of the growth rate of reserve money fell significantly—results that are anomalous to the simple inverse relationship hypothesis between interest rates and the growth of reserve money. However, the Malaysian post-reform data period, which begins in February 1987, is the shortest in our sample. These results also highlight the importance of taking into account factors other than interest rates in the determination of the path of reserve money and the complexity of the response of monetary variables to interest rates.

## **Conclusions**

An increasing number of developing countries have begun to operate market-based instruments of monetary policy and to use these indirect instruments more actively to achieve macroeconomic policy objectives. The decision to introduce more market-based instruments reflects a number of factors, including the desire by many countries to liberalize their markets more generally and to free them from administrative controls that have tended to inhibit the efficient allocation of resources; the ineffectiveness of direct interest rate and credit controls for macroeconomic management in the face of financial innovations and disintermediation; and the inhibiting effect of direct controls on market development and hence on savings mobilization and investment.

The developing countries in the sample are in a transitional stage of monetary reform; direct controls have been substantially abandoned by most of them, but fully fledged open market systems of monetary control have not yet emerged. In some countries the markets, institutions, and expertise do not yet exist in a form to allow a full open market system of monetary policy; in others, monetary policy has been inhibited by the government's continuing large domestic financing needs and the subservience of monetary policy to fiscal considerations; and still others have been slow to use active money market management as the central instrument of monetary control. Nevertheless, most countries have developed instruments that would allow them to conduct effective control over money market interest rates or reserve money growth, either through primary treasury or central bank bill auctions, supplemented with a discount or rediscount type facility or through repurchase markets.

In two countries where direct controls were removed and market-oriented instruments were used actively as part of economic adjustment programs, interest rates increased and became significantly more variable, while the average growth rate and the variability of the growth rate of reserve money fell in the post-reform period. These results conform to the simple a priori expectation of what should happen when interest rates are liberalized and monetary policy is directed toward controlling monetary aggregates. In two countries, where interest rates were already free to vary to a considerable extent, the introduction of new monetary policy operating procedures stabilized short-term interest rates. However, the relationship between interest rates and monetary variables tends to be complex.

The development of instruments to manage money market rates or reserve money is only one element of financial reform, but a catalytic one. Institutional and policy reform also has to accompany the change in money market operating procedures to achieve efficient resource allocation and effective macroeconomic control. These reforms include a review of the intermediate targets, institutional reform to free up the structure of interest rates and to

promote competition, an increase in responsiveness of borrowers to financial variables, and the development of secondary and securities markets.

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# 8

## ISSUES ON INTEREST RATE MANAGEMENT AND LIBERALIZATION

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Modern economic thinkers generally acknowledge the important role of interest rate policies as a demand management technique to achieve both internal and external balance and to ensure the efficient allocation of financial resources in an economy. Interest rates influence the demand and supply of investable resources and the decisions of economic agents to invest or consume. They are at the center of any policies that the monetary authorities may choose to undertake to influence business conditions and economic activity. They affect exchange rate and capital movements as well as inflation.<sup>1</sup>

Despite the importance of this variable, many countries have chosen to maintain interest rates at unrealistic levels. A large number of developing countries have traditionally followed a policy of low and unchanging interest rates. These policies are normally the result of three factors: (1) the desire to increase the level of investment, (2) the desire to improve the allocation of investment among sectors, and (3) the desire to keep financial costs down to avoid possible inflationary effects of interest rate liberalization. A vast body of literature appeared in the 1970s to refute the validity of these considerations.

The belief that low interest rates stimulate investment and growth has been vigorously attacked by McKinnon (1973 and 1981) and Shaw (1973), among others. They have shown that if real interest rates are reduced below market equilibrium levels, demand for investment will no doubt increase but actual investment will decrease, since at low interest rates insufficient savings will be generated to finance these investments. Moreover, the excess demand for investment will require the rationing of existing resources among all competing investors willing to borrow at that rate. Where there is rationing and controlled lending rates, it is unlikely that financial intermediaries will choose to provide funds according to a ranking of rates of return on investment. Most likely, other factors, such as the capacity to provide collateral and political influence, will also play an important part in the financial intermediaries' decisions. Consequently, a policy of low interest rates not only inhibits investment but also tends to reduce the average rate of return on investment below the maximum attainable rate.

Attempts to improve the allocation of resources are also an important factor behind the use of low interest rate policies by many countries. These countries are convinced that selective reductions of interest rates to preferred sectors of the economy will significantly improve the allocation of resources. Available evidence tends to contradict this assumption. In most cases in which this hypothesis was tested, results show that the effect of selective credit policies on growth and investment is minimal. The key problem is that of the fungibility of money, which

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*Note:* This paper draws on material from Leite (1982) and IMF (1986). We would like to thank Tomas Baliño, Barry Johnston, and Linda Koenig for valuable comments on earlier drafts of this paper, and Jeffrey Davis for presenting the paper at the Seminar. Opinions expressed herein are those of the authors and do not necessarily represent the views of the IMF. A version of this paper was published in the December 1990 issue of the *IMF Staff Paper*, pp. 735-52.

1. For an elaboration of these points, see IMF (1983).

makes it very difficult to ensure that funds are in fact used for their original purposes (Johnson, 1974 and 1975; Khatkhate and Villanueva, 1978).

The third reason often mentioned in defense of low interest rate policies is the possible inflationary impact of interest liberalization. There is no doubt that there will be some short-term price effects resulting from interest rate liberalization. However, the direction of these effects is a complex empirical issue that cannot be easily resolved on a priori grounds. In any case, the possible inflationary effects of interest rate liberalization tends to be somewhat overplayed by defenders of the status quo. Available estimates of the ratio between financial costs and total production costs indicate that financial costs seldom exceed 10 percent of the total. Thus, the direct effect of an increase in interest rates on production is likely to be small. Moreover, this increase will not necessarily be completely passed on to consumers, as price increases should reduce demand. Finally, interest rate increases are likely to reduce the hoarding of goods, thereby increasing aggregate supply.

The purpose of this paper is to emphasize some key elements that have proved important in the process of interest rate management and liberalization. This process, while relatively straightforward in the abstract, holds a few pitfalls that can perhaps be avoided by learning from the experience of the several countries that have moved toward market-related interest rates in the last decade.

The first step in the process of interest rate management and liberalization should be an assessment of the appropriateness of the prevailing interest rate levels and structure. The first section of this paper discusses a number of indicators that can be used to gauge the appropriateness of prevailing interest rate levels.

The second section discusses the issues in assessing the structure of interest rates. If the level and structure of rates are found to be adequate, the only concern of the monetary authorities should be to ensure that they are flexible, that is, that changes in underlying economic conditions will be fully reflected in interest rate changes so as to keep these rates always adequate. However, if rates are not at acceptable levels, a strategy needs to be designed to move them to more realistic levels.

The experience of many countries that have undertaken this process of interest rate liberalization shows that the transition process from rigid interest rates to a system of more flexible and market-determined rates can be traumatic if not properly managed. Thus, the monetary authorities should plan carefully the proposed liberalization path so as to achieve this goal with minimal side effects to the economy. The third section discusses the transition from fixed to market-determined interest rates.

The fourth section examines government intervention in the economy and its relevance for interest rate policies. It discusses the impact of government financing on interest rates and on the financing of the rest of the economy. The final section presents some concluding remarks.

## **Adequacy of Interest Rates**

Determining the most adequate interest rate level is not a simple task since there is no clear-cut method of assessing the appropriateness of a level of interest rates. However, there are a number of indicators that, together, can help the policymaker judge whether the prevailing interest rate is grossly out of equilibrium. These indicators are discussed below.

### *Positive real rates*

Savings instruments should bear a positive expected real interest rate, otherwise there would be a strong tendency to substitute hoarding of goods and self-investment for financial savings.<sup>2</sup> Thus, a key element in any effort to evaluate the adequacy of a given level of interest

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2. A positive expected real interest rate is defined as an interest rate that exceeds the rate of inflation that people expect will prevail throughout the financial transaction. For instance, if today people expect a

rates should be to check whether these rates are positive in real terms (Chandavarkar 1971, Khatkhate 1972, and Galbis 1977). Clearly, not all real interest rates on financial instruments need to be positive. In most countries, demand deposits (and currency holdings) do not pay interest. However, up to a point, the services and convenience resulting from the use of these deposits make them attractive to hold. Nevertheless, in all cases, and specifically in hyperinflation situations, it is highly unlikely that under competitive conditions the average real rate of return on savings instruments would be negative. Thus, if this return is consistently negative, it is likely to be due to a lack of competition or to government ceilings on interest rates. This is even more true when real lending rates are negative. Occasionally, the real interest rates observed in the economy may be negative, even when rates are free and competitively determined. For instance, if the inflation rate is volatile, people may underestimate the future rate of inflation. This underestimation is likely to result in relatively low nominal interest rates that will turn out to be negative in real terms *ex post*.

Positive real rates give only a floor on nominal rates; other indicators would have to be used to assess how far above that floor interest rates should be. Moreover, a few caveats should be kept in mind when using positive real rates as a guide for interest rate policies. First, when there are price controls, the calculated inflation rate is likely to underestimate underlying inflationary pressures and, therefore, result in unduly low nominal rates. Second, calculations of expected inflation rates are difficult without long, consistent time series, and even then may not be reliable. Third, the most appropriate deflator of the interest rates is a broad-based price index that takes into account the prices of current consumption goods as well as the prices of assets that would produce future consumer goods (capital goods) (Brown and Santoni 1981). Finally, taxation of interest incomes, as well as deductibility of interest payments, should also be taken into account when calculating expected real interest rates (Tanzi 1980).

### *World interest rates*

Economic theory suggests that if two economies are totally open to capital movements, the differential between their domestic interest rates will be equal to the expected movements in the exchange rate between the currencies of these countries.<sup>3</sup> For instance, assuming that the United Kingdom and Switzerland are open to capital movements, the differential between interest rates in these countries will reflect the appreciation of the Swiss franc vis-à-vis the pound sterling that people expect.

Although most developing countries have some form of control on capital movements, these controls can be circumvented to some extent, resulting in different degrees of openness to capital movements. Consequently, a country's leeway in determining domestic interest rates is limited, and failure to take foreign interest rates into account is likely to result in destabilizing capital movements. The ability to determine interest rates independently of international rates is constrained if (1) there are no effective capital controls, (2) the currency is freely convertible, (3) the currency is widely accepted outside the country, (4) there is a thriving black market for foreign exchange, (5) foreign firms have a large role in the domestic economy, and (6) the trade sector is large.

In cases where there is some, but not perfect capital mobility, the interest rate differential, after allowance is made for exchange rate expectations, should not be too large so as to avoid destabilizing capital movements. For this purpose the relevant world interest rates are those of the countries to and from which capital movements are more likely to take place. Note also that if a country is hoping to attract foreign private capital flows, domestic rates should exceed world rates in order to encourage investors to borrow in the international markets.

rate of inflation of 1 percent over the next 30 days, today's 30-day interest rates must be above 1 percent for the expected real interest rate to be positive.

3. However, some other country-specific variables such as political risk or reserve requirements may also play a role.

*Rates of return on investments*

Rates of return on investment projects should exceed the interest rate charged on the funds used to finance them. Therefore, one way of assessing the adequacy of interest rates could be to estimate the economy's overall rate of return—probably on the basis of completed projects—and to compare prevailing interest rates to that overall rate.

The difficulty with this approach is that in most countries, factors of production are not perfectly mobile and there are special constraints to entry into the high return sectors. Also, there is no overall rate of return on investment for the economy, only a spectrum of rates. Moreover, to the extent that real interest rates have been kept below equilibrium levels because of regulation (financial repression), the rates of return of some of the projects undertaken exceed the actual lending rate but are below the maximum rates of return attainable under more competitive conditions. Those projects are clearly suboptimal. These facts have led to the suggestion that the lending interest rate be guided by the rate of return on the modern sector of the economy (Galbis 1977 and Khatkhate 1980). The problem with this approach is how to define the modern sector. Nevertheless, some guidance can be obtained by ranking the rates of return of different sectors and trying to gauge which lending rate would cut off all economically inefficient investment projects (Dasgupta, Sen, and Marglin 1972).

Perhaps more interesting is to compare the rate of return on potential investments with the lending rate. If lack of financial resources seems to hamper the chances of a project being implemented even if its rate of return substantially exceeds the prevailing lending rate, one should suspect that the lending rate is artificially low and that credit is allocated according to other criteria (credit rationing). This is especially so if the rate of return on these potential projects also exceeds the rates of return on a number of completed projects.

*Interest rates in informal markets*

In many countries interest rates in informal markets are substantially above the rates prevalent in the organized financial system. Unfortunately, it is doubtful that interest rates in the informal markets could be used as a guide to the proper level in the organized market. Although by their intrinsic nature informal markets are unregulated, there is no evidence that they are always more competitive than organized markets. Also, informal markets do handle high-risk loans and consequently require a higher premium to cover their expected losses by default (Wai 1956, Bottomley 1963, and Bhaduri 1977). Consequently, interest rates on informal markets, while an additional piece of information, can only provide an upper bound for the rates prevailing in the organized market. Movements in these rates, however, may parallel required changes in the rates in the organized market.

*Relative price of capital and labor*

Interest rates can be viewed as a component of the relative price of capital to labor. This relative price is the ratio of the rental price of capital to the nominal wage rate, with the rental price of capital defined as the product of the price of capital goods and the real (or nominal) interest rate. Therefore, the real interest rate could be chosen so as to restore this relative price to a target level, taking into account the developments in the price of capital goods and the wage rate. This approach, of course assumes that the authorities have some view on the adequate level of this relative price, perhaps based on past experience, when the interest rates were at adequate levels; this is because, all this method can do is to say how the prevailing interest rate levels need to be changed so as to restore the relative prices of capital and labor to some target level. Thereby, this method is not very helpful in situations in which the authorities have no idea of what the proper relative price between capital and labor is.

## **The Structure of Interest Rates**

The structure of interest rates also needs to be examined when evaluating the appropriateness of a system of interest rates. However, ready and easy rules on interest rate structure are yet to be found, as so much depends on the specifics of each market. Interest rates on savings instruments (and lending rates as well) should differ according to their intrinsic characteristics, such as their riskiness, their liquidity, and the convenience of their use. Yields on savings instruments (and loan rates) should be positively related to their riskiness and negatively related to their liquidity. A term structure of interest rates that offers insufficient returns to longer maturity deposits could reduce the availability of term finance for investment.

Under competitive conditions the spread between lending rates and the average cost of loanable funds (that is, funds obtained by the financial intermediaries to on-lend) should be just enough to cover costs, risks, and normal profits. Large spreads common in many developing countries indicate, in many cases, the lack of competitiveness or government intervention in the financial markets. Sometimes they reflect high intermediation costs, often resulting from a large portfolio of nonperforming loans or high operating costs. Whatever their cause, these spreads will most likely result in low deposit and high lending rates, with an inappropriate division of risk.

Against this background, any strategy to improve the interest rate structure should start by abolishing the most obvious causes of the initial distortions. Steps to be taken include the introduction of policies to reduce interest subsidies based on an assessment of their incidence and effectiveness in redirecting resource flows. Also, policies to streamline and monitor the cost-of-funds calculations of financial institutions should be introduced. Other policies that are likely to improve the interest rate structure may include, for example, reduction and unification of liquidity requirements on various groups of financial institutions, the introduction of a prime rate or base lending rate system, measures to monitor and improve the operating efficiency of financial institutions, and legal, regulatory, and institutional changes to minimize the incidence of bad debts.

One strategy to develop an adequate level and structure of interest rates is to free all interest rates from government regulation so that they can reach their equilibrium levels on their own.<sup>4</sup> In theory, this strategy would result in an optimum interest rate structure, if some conditions were to hold strictly, which is unlikely. However, many policymakers would argue that the application of this strategy would at least approach the optimal solution.

Another possibility would be to use the interest rate differentials prevailing in some other countries as a basis for a first approximation of the relationships between interest rates in the domestic markets. One should be careful, however, because country characteristics and government intervention could influence these relationships. Differences in country regulations that affect the operating costs of the financial intermediaries such as liquidity ratios, reserve requirements, access to rediscount window, and so on, will result in different interest rate structures. In summary, while international comparisons are useful, one should take these differences into account when assessing the appropriateness of a given interest rate structure.

One measure to minimize the complications of setting up an appropriate interest rate structure is the reduction of the number of interest rates by eliminating (or at least streamlining) selective credit policies that artificially create new interest rate categories.<sup>5</sup> It is also helpful to increase the integration of the financial markets, for example by moving toward universal banking, as opposed to narrowly defined specialized institutions.

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4. This requires that certain conditions obtain, namely, the existence of perfect competition and the absence of externalities and government intervention.

5. Selective credit policies aim at granting credit to designated sectors (for example, agriculture, exports, and so on) under more favorable conditions (amount, interest rate, and so on) than they would get in the absence of such policies.

## Financial Liberalization Strategy

If a country's interest rate system is inappropriate, and until it obtains conditions for free interest rates, some kind of interest rate management policy may be necessary. This management can take various forms. The following are some alternatives:

The savings deposit rate can be used as the minimum basic rate, and all other rates can be tied to it. The government would then intervene in the financial market by adjusting the savings deposit rate in line with the various criteria discussed earlier, while monitoring its effects on the interest rate structure.

Another alternative used in some countries is to set interest rate ranges for the deposit rates and lending rates separately, and allow the commercial banks to set rates within these ranges. The authorities would then widen these ranges over time so as to phase in the liberalization of the rates.

An alternative that relies more heavily on market forces is for the government to fix the maximum spread between the average cost of funds to the financial intermediaries and their lending rate, while allowing them to determine the level of their interest rates. If the spread allowed by the authorities takes into account normal intermediation costs, risks, and profits (but not excessive monopolistic profits), the result, even in the presence of oligopolistic structures, could be an interest rate structure similar to the equilibrium rates under competitive conditions.

In any case, any move toward a more liberal interest rate regime should be associated with the development of appropriate monetary policy instruments that are capable of influencing the rates indirectly to reflect monetary policy objectives, such as containing credit expansion or ensuring that divergences from world rates are not excessive (resulting in large capital flows), and so on. In this regard, the appropriate choice of operating techniques of monetary policy become important to ensure monetary control without undue impact on growth, and to promote further development of financial markets. For example, raising the level of interest rates and containing credit expansion through increases in unremunerated reserve requirements would result in a larger spread between deposit and lending rates and greater distortions in credit allocation than would alternative methods of containing credit expansion, such as open market operations.

Interest rate liberalization has a better chance of success if the following key questions are addressed at the outset of the liberalization process.

### *Will there be adequate competition?*

To ensure adequate competition, the interest rate liberalization would have to be accompanied by a properly phased freeing and homogenization of various portfolio regulations. In particular, as stated above, various selective credit policies based on below-market interest rates would have to be either eliminated or reduced in scope. In addition, policies toward mergers, licensing, and branching would have to be modified, taking into account possible economies of scale. Without such policy changes, interest rate liberalization could produce significant distortions in the level, structure, and responsiveness of interest rates.

### *Are the money market and monetary policy instruments adequate to influence the marginal cost of funds to banks?*

The issue of instrument adequacy takes on particular importance in the context of interest rate liberalization. Typically, such liberalization would have to be accompanied by, or preferably preceded by, measures to strengthen the interbank transfer of funds, and to improve the effectiveness of monetary policy instruments. In particular, developing the technical ability to monitor the money market and intervene to stabilize and influence money market rates would become important, insofar as these rates serve as the marginal cost of funds to

banks. In the absence of well-developed money markets, the authorities would have to develop and streamline the rediscount mechanisms so that the rediscount rates can serve as the marginal cost of funds to banks.

*Will the response of lending and deposit rates to monetary policy and to developments in international interest rates and exchange rates be sufficiently rapid?*

In addressing this question, a key factor to be considered relates to the relative importance of domestic and international factors in the determination of domestic interest rates. The relative weight of the two factors is likely to undergo a significant change following the liberalization, and this must be closely monitored to judge the extent of monetary independence. To the extent that monetary policy can play a role influencing interest rates, depending on the degree of openness to capital flows and other structural features, the speed of response of interest rates to monetary policy can become a critical issue.

In some countries, following interest rate liberalization, the authorities have introduced significant monetary reforms to develop money markets and strengthen monetary policy instruments. As a result, they have achieved the technical ability to influence money market rates or, more generally, the marginal cost of funds to banks. Nevertheless, bank response in adjusting the lending and deposit rates in line with the marginal cost of funds has been rather slow. This can frustrate policy makers and cause doubts about the wisdom of liberalization. Sometimes, some of the lending rates respond rapidly, but a wide range of lending rates and even deposit rates may respond sluggishly.

Based on the recent experience of countries undertaking interest rate liberalization efforts, it appears that key factors causing such sluggish response include inadequate prudential limits on interbank borrowing, too restrictive limitations on the range of instruments and participants in the money market, the oligopolistic structure of the banking industry, significant differences in the maturity structure of assets and liabilities, and excessive fluctuations in money market rates. Some of the measures that can speed up the responsiveness to monetary policy are appropriate changes in money market regulations; changes in policies on licensing banks, mergers, takeovers, and branching so as to promote greater competition; strengthening defensive monetary policy operations so as to stabilize money market rates; and developing policies to reduce segmentation in the loan markets (for example, loans to related firms and discriminatory regulations on credit).

*Is the banking system sufficiently sound to face interest rate competition? Is the bank supervision mechanism sufficiently strong to anticipate the effects of liberalization and react to it in a timely and efficient manner?*

If many institutions are too weak—with a large share of nonperforming loans and high operating costs—then, without adequate bank supervision machinery, unexpected failures of individual units can lead to systemic crises. Moreover, a large share of nonperforming loans in the system can significantly reduce the interest elasticity of credit demand; this is because if interest rates rise, nonperforming loans would tend to grow automatically insofar as banks try to keep these loans current by capitalizing interest; the resulting increase in nonperforming loans would offset any decrease in demand for performing loans following the rise of interest rates. As a result, the flow demand for credit becomes fairly inelastic, leading to excessive increases or fluctuations in interest rates. These considerations suggest that a close review of the soundness of the banking system and the adequacy of bank supervision is critical for an assessment of the feasibility of interest rate liberalization.

A related issue in the liberalization of interest rates is the liberalization sequence for various segments of the market. Many countries liberalize segments of the financial system in steps. The sequence in which liberalization of nonbank institutions, private banks, state-owned banks, and government securities has proceeded varies from country to country. The appropriate

sequence would depend on the initial regulatory and institutional features. For example, some countries may initially liberalize only parts of the loan or deposit markets (such as short-term deposits) or free the rates of a select group of financial intermediaries (for example, nonbank financial institutions). After they are assured of the soundness of these financial institutions and the ability of these institutions to be competitive, they proceed to liberalize other markets. In some socialist countries, interest rates in the enterprise deposit and loan markets have been liberalized first, while integrating the household and enterprise markets in the second stage. However, a gradual approach to liberalization may introduce distortions of their own; and it raises the question of the political sustainability of the process.

Another issue is possible imbalances resulting from maturity transformation by financial institutions. Institutions that lend long term at fixed rates but whose funds are mostly short term can be caught in the liberalization process. If interest rates increase, their cost of funds will increase while interest income will change much more gradually. During the interest rate liberalization process, the monetary authorities will have to pay close attention to this type of problem to avoid the possibility of a financial crisis. To reduce exposure to interest rate risk, financial institutions that engage in maturity transformation should be encouraged to actively promote adjustable-rate loan contracts. However, these adjustable-rate contracts should be designed in such a way as to avoid unduly increasing the risk borne by borrowers and, thereby, default rates. Some of these techniques, such as interest caps, have been used in the United States, and may help strike the right balance between the interest risk borne by lenders and borrowers.

### **Should the Government Try to Influence Interest Rates?**

Government intervention poses special problems because, while some types of government intervention can improve the allocation of resources, other forms might be the dominant reason behind the misallocation of resources. Thus, it is important to separate those policies that may cause a distortion in interest rates without a corresponding improvement in the allocation of resources from those that may be beneficial.

Monetary policies are an important part of the array of policies a government can undertake. Thus, in most countries, even those that are market oriented, interest rates are influenced by the monetary authorities. It is important to note, however, that while in the past many countries chose to fix the interest rate by fiat, there has been a rising tendency for governments to influence interest rates indirectly through two main mechanisms: (1) financing of government deficits at market-determined rates and (2) open market policies directed at influencing trends in monetary and credit aggregates to achieve given economic targets.<sup>6</sup>

#### *Government deficits and interest rates*

Government budget deficits are financed either from the financial markets or by recourse to the central bank.<sup>7</sup> If the funds are raised in the financial market in equal terms with the private sector, and insofar as the social return on the government's program financed by these funds exceeds the market rate, there need not be a misallocation of resources.

A misallocation can arise more easily when the central bank accommodates the government's credit needs directly or when special incentives, such as tax incentives, use of these government liabilities to fulfill liquidity requirements, and so on, are given to hold government debt.

If the central bank provides the credit accommodation, there is a redistribution of purchasing power in favor of the government; this results in the crowding out of the private

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6. While in the first case the government allows interest rates to be market determined, it still can have a substantial impact on these rates because of the size of its financing operations.

7. On the implications of this choice on the control of the money supply, see Coats and Khatkhate (1978).

sector, particularly if there is a concomitant increase in prices. This is even more so when quantitative credit limits on private sector borrowing are simultaneously imposed to correct existing inflationary tendencies. The same is true when the crowding out effect is achieved through the increase in liquidity requirements to levels above those that might be needed for prudential reasons, with the objective of tapping resources from the financial system at below-market rates.

### *Open market policies*

Open market operations can be conducted either in the primary market or in the secondary market. Many countries have used primary sales of some government securities—either central bank securities or treasury bills—as an instrument of monetary policy. By varying the timing and the volume of primary issues and by issuing them at market rates, it is possible to influence bank reserves and interest rates in the short run. This has provided an attractive alternative technique to influence short-run interest rates and monetary developments, in the absence of active secondary markets in these securities. This has also served as a transitional device to foster the development of secondary markets. Once a genuine secondary market develops, monetary policy can be implemented by operating in these markets. However, to the extent that the budget deficits are large, requiring massive financing, primary sales of government securities tend to be the dominant influence in the financial markets, seriously limiting the use of open market operations as an effective short-run policy instrument and, at the same time, distorting the level and structure of interest rates (Khatkhate 1977).

Therefore, an appropriate level and structure of interest rates can be brought about only if the government gradually reduces its budget deficit to a level that would permit it to borrow directly from the financial market in competition with the private sector, without crowding out the latter and without recourse to special regulations, such as high liquidity requirements.

Moreover, the government's intervention in financial markets should be limited to the financing of expenditures with (social) rates of return above the market interest rate.<sup>8</sup> Unfortunately, this basic rule is of limited practical utility, as the authorities do not normally know what the socially optimum interest rate is. Dasgupta, Sen, and Marglin (1972) suggest that since the overall social rate of return is unknown, the government should proceed to estimate the internal rate of return on each proposed government project, hoping that, over the years, the accumulated experience of comparing the internal rates of return of individual projects, and having to choose among them, would slowly evolve in a basic agreement among the policymakers regarding the level of the cut-off internal rate of return. This rate, when a consensus is finally developed, will be the socially optimum interest rate.

Open market policies can also be used to maintain constant interest rates without having to resort to direct regulation of financial intermediaries. Such a strategy would imply allowing the monetary and credit aggregates to find their own levels. What criteria could guide the authorities' choice between interest rate and monetary (or credit) aggregate targeting? The generally accepted view is that interest rates should be the preferred short-run and intermediate target when the dominant source of instability in the economic system is the financial sector (for example, shifts in money demand due to financial innovations). The targeting of a monetary or credit aggregate should be preferred when real sector disturbances are more important (for example, shifts in terms of trade, fluctuations in real demand for goods and services, and so on). In practice, of course, no simple rule of policy intervention can ensure economic and financial stability. In an economy that may be simultaneously subject to multiple disturbances of varying intensities, on which there is imperfect information, policymakers may prefer to adopt a policy of discretionary adaptation by continuously reviewing the settings of policy targets in the face of the most recent information. Although it would still be necessary to

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8. The social rate of return may differ from the rate of return that a private investor might attribute to a project. In the social rate of return all the benefits and costs of the projects are computed, even those that do not accrue to the owner of the project.

choose between interest rate or money supply targets at any time, this choice would generally be subsidiary to the more important task of setting the consistent target levels to these variables. Thus, even in a liberalized interest rate regime, the authorities must constantly take a view of the appropriate level of the interest rate and strive to achieve it. In addition, central banks generally attempt to smooth out short-term fluctuations in interest rates around their fundamental trends, partly to ensure that changes in trends are not obscured by day-to-day volatility. Such defensive monetary policy operations help to speed up the transmission of the effects of monetary policy and enable smooth functioning of the financial markets.

### Concluding Remarks

Both in the market and in centrally planned economies, it is important to avoid distortions in relative prices, if only to ensure the optimum allocation of resources. For this reason, an interest rate reform should be a component of any policy package aimed at improving the performance of these economies. First, it should be well understood that lower interest rates will not lead to additional investment unless savings are forthcoming. Second, expected real interest rates must be positive in order to prevent unproductive hoarding of goods or the financing of economically unsound projects. Third, interest rates, after allowing for exchange rate expectations, should be set with due consideration to interest rate differentials vis-à-vis world financial markets, taking into account the economy's degree of openness to capital movements. Fourth, whenever public sector dependence on the financial markets is due largely to fiscal imbalances, the servicing requirements of the government debt become a major stumbling block in the path of interest reform. Thus, interest liberalization will have to go hand in hand with an improvement in the financial position of the government. Only after its borrowing requirements are reduced to manageable levels will the government be able to engage in a meaningful interest rate policy. Fifth, in centrally planned economies, as well as in countries where the public sector is a major borrower, it is important that the government projects that are carried out yield (social) rates of return that exceed those of the projects (private and government) that are refused financing. The calculation of internal rates of return for each project can assist policymakers in making rational choices among competing projects. In market economies, the socially optimum rate might be assumed, as a first approximation, to be equal to the rate that the market would freely determine in competitive conditions. The government has an important role in promoting competition, and also in ensuring that its financing operations do not distort market rates.

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# 9

## FINANCIAL SYSTEMS AND DEVELOPMENT

*Millard Long*

Over the last two decades, the perception of the importance of the financial sector (the commercial banks, insurance companies, development financial companies, securities markets, and so on) to development has changed substantially. Twenty years ago financial systems in developing countries were viewed primarily as tools of government in the development process, namely, institutions that could, on the one hand, be tapped for funds to finance government and public enterprise expenditures and, on the other, be used to direct credit to what were considered the priority sectors. Today the approach has changed. Financial systems are viewed as important in their own right as providers of key services such as mobilizing resources; allocating credit; pooling, pricing and trading risk; and monitoring and supervising borrowers' behavior.

That change in perception is reflected in the policies of the World Bank. Twenty, or even ten years ago, the World Bank used financial institutions, primarily development finance institutions, to onlend the Bank's funds. About 25 percent of total funding—30 percent if the International Finance Corporation is included—was channeled to the private sector, of which about 20 percent was for industry, 12 percent for agriculture, and the rest for housing. But aside from the operations of the institutions funded, the Bank paid little heed to the remainder of the financial sector. In terms of sector work, in the years prior to 1980, the Bank had done studies of the financial system in only three countries. In the 1980s the Bank undertook studies of the financial system in most countries in which it had operations. Financial issues have become a key element in the policy dialogue between countries and the World Bank. The Bank made 13 policy based loans in the last 3 years to improve conditions in the financial system, and has another half dozen under preparation.

What are the reasons for the change in the perception of the importance of financial systems?

1. *Emphasis on the private sector.* In the 1960s and 1970s, the government was seen as the engine of economic growth; today much greater emphasis is being placed on the role of the private sector. This is true both in the socialist world and in the countries with more mixed economies. The financial system is clearly important to the success of the private sector. For example, while governments can raise funds through taxation, the private sector must use the financial system to raise the resources, which cannot be generated through retained earnings.

2. *Flow of resources from abroad.* As shown in table 9.1, the net flow of term resources (disbursements minus repayments) to the developing countries has declined from US\$77 billion in 1981, the last year before the debt crisis, to US\$17 billion in 1988; in terms of net transfers, (net flows minus interest payments), the decline is even more marked: from US\$35 billion in 1981 to minus US\$50 billion in 1988, a decline of more than \$10 billion per year on average. Since 1982 the shortage of funding has contributed to an investment crisis in many African and Latin American countries with investment rates little above those needed to cover depreciation. In whatever way the external debt crisis is settled, resource flows from abroad in the the 1990s are unlikely to return to the level of the 1970s. To get investment up, particularly private sector investment, better domestic financial systems will be needed to mobilize domestic resources.

3. *State of financial systems.* It has now become clear that, while there are differences among countries, the financial systems in most developing countries, in large part because so

many financial institutions are themselves in distress, are not able to provide the services required by the economies.

**Table 9.1: Public and Private Long-Term Debt and Financial Flows, 1980-88**  
(Billions of US dollars)

	1980	1981	1982	1983	1984	1985	1986	1987	1988 <sup>a</sup>
Debt disbursed and outstanding	433.6	498.0	562.5	644.9	686.7	793.7	893.9	998.4	993.2
Disbursements (from private creditors)	105.9	124.3	116.9	97.2	91.6	89.3	87.7	87.1	92.3
Debt service	75.3	89.1	98.7	92.6	101.8	112.2	116.4	125.5	142.4
Principal	42.7	47.5	49.7	45.4	48.6	56.4	61.5	71.1	75.4
Interest	32.6	41.7	48.9	47.3	53.2	55.8	54.9	54.4	67.0
Net flows	63.2	76.8	67.2	51.8	43.0	32.9	26.2	16.0	16.9
Net transfers	30.6	35.2	18.2	4.6	-10.2	-22.9	-28.7	-38.3	-50.1

*Note:* Table shows data for the 111 countries reporting under the Debtor Reporting System (DRS). Data for Poland are included only from 1985 onward.

<sup>a</sup> Preliminary.

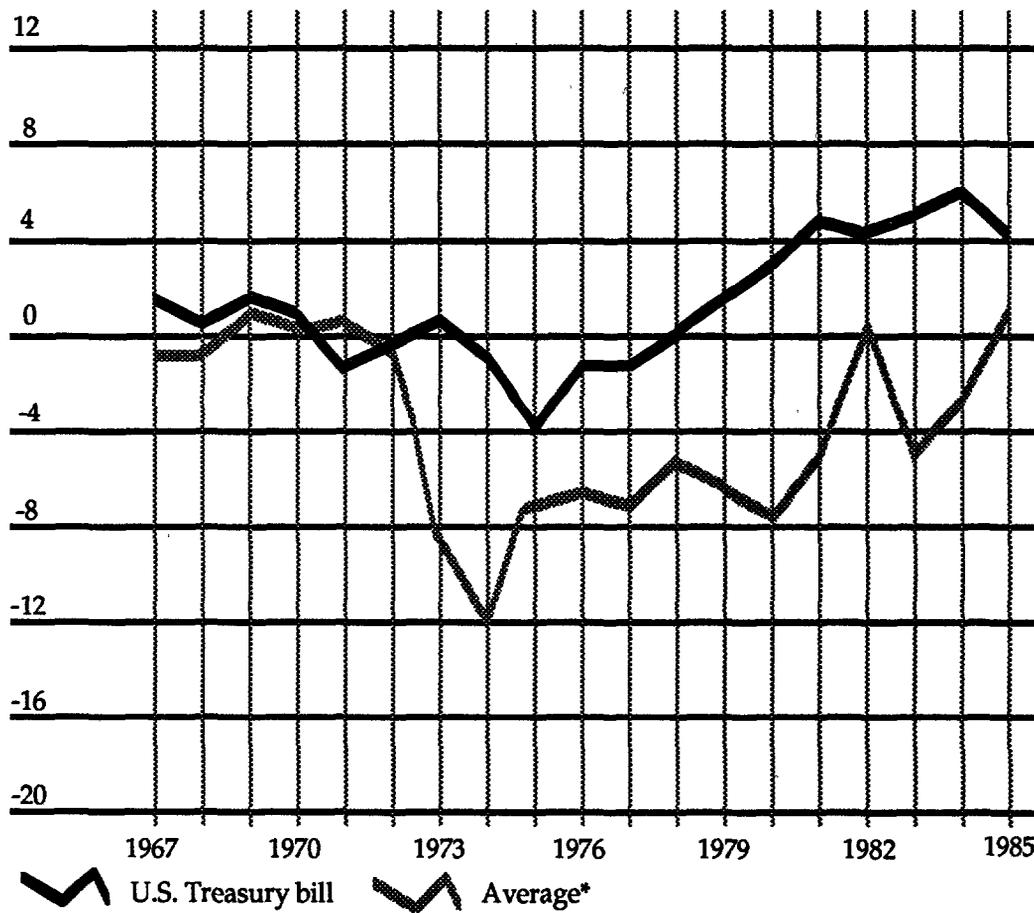
*Source:* *Annual Report 1989, The World Bank.*

### Financial History: The Last 25 Years

To understand how the present problems arose, we need to review the policies followed over the last 25 or so years. At the time the nations of Asia and Africa became independent in the 1950s and 1960s, they inherited colonial financial systems dominated by foreign-owned banks, with limited branch networks located in the capital and port cities, which provided primarily short-term trade finance, much of which went to firms that were foreign owned. The existing institutions did not provide the type of financing the governments judged necessary to develop their countries. Among other objectives, governments wished to develop their industry and small-scale agriculture. They wanted financial systems that would mobilize deposits and make loans in the rural areas, provide long-term finance for investment, and fund local rather than foreign-owned firms.

To accomplish their objectives governments introduced rather sweeping changes in financial practices. In Africa the governments tended to nationalize the largest commercial banks. In South Asia governments nationalized practically all the commercial banks. In almost all developing countries the governments took control of a substantial segment of the financial system. In addition, governments started industrial and agricultural banks (development finance institutions, or DFIs) under public control. With regard to policies in the financial area, governments directed financial institutions to lend to selected industries on subsidized terms. As shown in figure 9.1, interest rates were kept quite low, usually below the rate of inflation. In other words, governments used finance as a tool to achieve their development objectives. Given

Figure 9.1: Real Interest Rates in Developing Countries and the United States, 1967 to 1985



Note: Data are unweighted averages based on a sample of thirty-five low- and middle-income countries, eight of them in Europe, the Middle East and North Africa, and nine in each of Sub-Saharan Africa, Asia, and the Latin American/Caribbean region.

\*Average for the sample of thirty-one developing countries.

Source: World Development Report 1989, The World Bank.

the financial systems then in place, and the models of development prevailing in the 1960s, the approach taken was quite understandable.

By some measures, the policies followed were successful: banks did open many rural branches, government deficits were funded, and credit was channeled to priority sectors and local businesses. But the policies did not create robust financial systems, for the following reasons:

1. With rates of interest on deposits below the rate of inflation, much of the domestic saving did not go into financial assets. Some of the funds went abroad in capital flight, others into physical assets. As illustrated in table 9.2, financial systems remained small in terms of assets and undiversified in terms of institutions and financial instruments.
2. Because of the shortage of domestic credit, borrowers relied heavily on funding from abroad, as shown in table 9.3, which gives the ratio of domestic to foreign loans. In 22 of the of 29 countries in the sample for 1987, foreign loans outstanding were greater than domestic loans outstanding.
3. As shown in table 9.4, governments and public enterprises were the main recipients of domestic credit receiving more than half the loans. Some private firms were crowded out of the market.

The problems created by the approach taken to finance were not so apparent in the 1970s since there was easy access to foreign funding. But after the onset of the debt crisis in 1982, it became much harder to borrow abroad. Governments then turned to borrowing from the domestic markets, further crowding out the private sector and, in some countries, producing inflation. While many developing countries remained price stable, the average rate of inflation in developing countries rose from 10 percent per year during 1965-73, to 26 percent per year during 1974-82, and to 51 percent per year during 1983-87. The number of countries with inflation rates above 20 percent rose from 4 to 15 to 27 over the same years.

The economic problems experienced by the developing countries in the 1980s are well known. In Africa and Latin America, but not in Asia, lack of access to foreign funds, higher interest rates, lower commodity prices, and so on, have led to much slower growth. Recessions have reduced the incomes of business firms in both the public and private sectors; devaluations have increased the domestic burden of the firms' foreign debts; and much higher real interest rates in some countries have made domestic loans harder to service. As a result, many firms have been unable (or unwilling) to service their debts and, as a result, the level of arrears has built up dramatically in financial institutions. The external debt crisis has had an internal counterpart that is equally serious.

The level of arrears is such that financial institutions in many developing countries have been decapitalized; in fact, losses are several times book capital. To take an example from each continent, in the Philippines 160 small financial institutions had to be closed and the authorities had to intervene in the two largest public banks and five large private banks. The bad assets in the two public banks were equal to 30 percent of the assets of the entire banking system. In Guinea almost all loans were unrecoverable, so the government closed the six state-owned banks. In Chile the government had to intervene in 16 banks that held 80 percent of the assets of the financial system. These are just examples of a very widespread phenomenon. Nor has the problem been limited to the developing countries. It is estimated that covering the losses of the savings and loan institutions in the United States will cost the government more than \$150 billion. Banks in Norway and New Zealand have also had serious problems. Returning to the developing countries, there have always been occasional bankruptcies in financial institutions, but never before, not even in the 1930s, has the problem affected as many institutions in so many countries.

Bankrupt financial institutions do not provide funding to the best investments in the economy. In fact, financial institutions in or near bankruptcy allocate resources perversely, rolling over loans that are nonperforming, particularly of the largest debtors, hoping to keep the firms in operation so that their collapse will not in turn bankrupt the institutions. Structural adjustment has been hampered in several countries, because (*text continues on p. 165*)

Table 9.2: Size of Financial System (M2<sup>1</sup>/GDP) for Selected Countries<sup>2</sup>

Country	1975	1981	1987
<b>Industrial Countries:</b>	<b>54.3</b>	<b>54.8</b>	<b>65.4</b>
Canada	41.3	49.8	43.9
France	52.1	48.1	51.6
Germany, Federal Rep. of	54.4	54.0	60.3
Japan	84.7	89.1	108.6
United States	38.8	33.1	62.7
<b>Developing Countries:</b>	<b>32.3</b>	<b>36.3</b>	<b>53.8</b>
Argentina	25.4	32.9	29.4
Bolivia	13.4	19.6	...
Brazil*	17.9	11.2	14.4
Chile*	21.1	24.4	27.9
Colombia	19.4	21.9	20.7
Costa Rica	29.2	56.5	37.6
Cote d'Ivoire**	29.3	27.9	29.7
Ghana	26.2	16.6	14.2
Hungary	44.9	28.7	48.9
India	27.9	37.3	46.7
Indonesia	15.9	16.7	29.6
Kenya	28.6	30.2	30.2
Korea	30.8	33.3	40.4
Malaysia	44.2	58.1	76.7
Morocco**	39.2	45.5	51.2
Philippines	16.8	21.5	22.0
Portugal**	102.2	119.8	113.0
Thailand	34.0	38.5	66.1
Turkey	28.6	27.3	29.6
Uruguay	20.0	44.3	40.1
Venezuela	32.8	36.2	40.0
Yugoslavia**	67.2	73.4	51.0
Zaire	28.6	20.3	23.2
Zambia	31.2	28.1	31.9

<sup>1</sup> M2 is defined in *IFS* as the sum of money and quasi-money or the sum of lines 34 and 35.

<sup>2</sup> The aggregated figures are simple averages of sample countries.

\* 1985 figure is used for 1987.

\*\* 1986 figure is used for 1987.

Source: *International Financial Statistics*, IMF.

**Table 9.3: Ratio of Domestic to External Liabilities**

<i>Country</i>	1975	1981	1987
Algeria	0.94	1.24	2.42 <sup>a</sup>
Argentina	1.93	2.08	0.49
Brazil	1.23	0.90	0.86 <sup>b</sup>
Burundi	0.64	0.38	0.18
Chile	0.37	0.61	n.a.
Colombia	0.93	1.31	0.90 <sup>c</sup>
Costa Rica	0.60	0.49	0.33 <sup>d</sup>
Cote d'Ivoire	0.72	0.35	0.24
Ecuador	0.92	0.45	0.21
India	1.62	2.56	1.95
Egypt	n.a.	0.84	1.70
Gambia	0.72	0.28	0.12
Hungary	n.a.	1.49	0.74
Indonesia	0.34	0.50	0.33
Jamaica	0.59	0.63	0.40
Kenya	0.67	0.66	0.54
Korea	0.88	0.89	1.68
Malaysia	1.82	2.35	1.62
Mexico	0.85 <sup>e</sup>	1.49	0.40
Morocco	1.57	0.59	0.45
Pakistan	0.58	0.93	0.75
Philippines	0.82	0.67	0.30
Sri Lanka	1.08 <sup>f</sup>	0.52	0.44
Tanzania	0.50	0.78	0.23
Thailand	2.79	1.40	1.65
Togo	0.62	0.38	0.47 <sup>g</sup>
Turkey	2.11	0.79	0.48
Venezuela	6.36	2.26	0.76
Yugoslavia	3.06 <sup>h</sup>	2.51	2.16
Zaire	0.38	0.24	n.a.
Zambia	0.53	0.41	0.14

*Note:* Domestic liabilities are defined as the total liquid liabilities of the financial system (*International Financial Statistics*, line 55-L). External debt is the total long-term debt out-standing and disbursed.

a 1986 figure.

d 1985 figure.

g 1986 figure.

b 1985 figure.

e 1977 figure.

h 1977 figure.

c 1984 figure.

f 1977 figure.

*Source:* *International Financial Statistics*, IMF; World Bank data.

Table 9.4: Structure of the Gross Credit of Commercial Banks, 1981-87

Country	Gov't & Reserves	Public Enterprises	Private	Others	Total
<b>Industrial Countries:</b>	<b>15.9</b>	<b>...</b>	<b>64.3</b>	<b>18.3</b>	<b>100.0</b>
Canada	8.4	...	72.6	19.1	100.0
France	5.7	...	59.1	35.3	100.0
Italy	34.4	...	43.0	22.6	100.0
Japan	11.8	3.0	79.0	6.2	100.0
United States	19.3	4.2	68.0	8.5	100.0
<b>Developing Countries:</b>	<b>34.7</b>	<b>9.1</b>	<b>46.8</b>	<b>9.4</b>	<b>100.0</b>
Botswana	28.0	5.2	56.9	9.9	100.0
Colombia	29.2	1.1	62.8	6.9	100.0
Costa Rica	35.5	1.4	55.1	8.0	100.0
Dominican Republic	36.1	2.4	52.4	9.1	100.0
Egypt	26.6	22.1	27.5	23.8	100.0
Ghana	58.9	10.1	28.2	2.8	100.0
Guyana	54.2	22.4	21.0	2.4	100.0
Kenya	20.6	5.2	69.1	5.1	100.0
Mexico	49.6	8.0	34.9	7.5	100.0
Nepal	35.2	12.3	37.9	14.6	100.0
Peru	40.8	1.9	51.6	5.7	100.0
Portugal	24.4	17.2	49.1	9.3	100.0
Thailand	15.7	2.0	71.5	10.8	100.0
Zaire	42.0	0.3	33.6	24.1	100.0
Zimbabwe	23.4	24.9	50.3	1.4	100.0

- Notes: 1. "Government" includes the central and local.  
 2. "Others" include foreign assets and the claims on other financial institutions.  
 3. The aggregated figures for each group are simple averages of the sample countries.

Source: *International Financial Statistics*, IMF.

(continued from p. 162) resources have continued to flow to unprofitable uses rather than to the activities made profitable by devaluations and trade reforms. Delay increases the costs of adjustment, as resources continue to be misallocated. Losses rising by more than \$1 billion per month finally forced action in the case of the United States thrift industry.

A growing number of countries are dealing with the problems in their financial sectors. As mentioned, Chile and Guinea and the Philippines have had major restructuring of their financial sectors. Colombia and Bolivia in Latin America, Ghana in Africa, Malaysia and Thailand in Asia are other countries that have dealt with the problems in their financial institutions. But other countries have not dealt with the problem, or have dealt with it only in the most obvious cases. Governments have failed to take action often because the losses are politically embarrassing, because restructuring of financial institutions would in turn force tough decisions about problem borrowers, often public enterprises, and because of the apparent cost to the treasury of covering the losses in the financial institutions. But the real losses have already been suffered in terms of the bad investments; the costs to the treasury are only transfer payments needed to protect the depositors. Failure to take action is very costly; with delay the real costs mount in terms of the continuing misallocation of resources.

## Building Efficient Financial Systems

To develop financial systems that can in the future finance their private sectors efficiently, countries need to undertake a variety of reforms.

### *Restructuring*

First, the financial institutions need to be restored to viability. This means stopping the accrual of unpaid interest, eliminating rollovers and refinancings of nonperforming loans, and making provisions for the bad debts. Institutions that then have no capital must be recapitalized, merged with healthy institutions, or closed if they have no further role to play in the financial system. As the losses will in many cases exceed the equity of the institution, losses will have to be absorbed either by the creditors of the institutions—who in most cases are the depositors—or by the governments (that is, by the taxpayers). In the cases handled, depositors have experienced some losses, such as in Colombia and Thailand, but most of the losses have been borne by the governments.

### *Financial infrastructure*

Countries must build their financial infrastructure. Under infrastructure, I include three things: information systems, legal systems, and regulatory systems. Financial institutions and markets should make choices among investments to be funded on the basis of expected return and risk. Good information is needed in order to make those choices, to monitor firms' behavior after funding, and to take appropriate corrective action if it appears that things are not going as planned. For all three reasons, financial institutions require reliable company data, which in turn depends upon better accounting, auditing, and rules on disclosure of financial information.

Also, there must be adequate legal protection for both debtors and creditors. In some countries, the company law, the banking and securities laws, and the bankruptcy law are all outmoded or weakly enforced. Rights and responsibilities under financial contracts must be clearly spelled out and enforced. No one considers foreclosure a desirable outcome, but it is the threat of foreclosure that keeps people from willfully defaulting, and it is knowing that debtors will not willfully default that encourages institutions to lend in the first place. Financial agreements are legal contracts, and for finance to flourish there must be an adequate basis for drafting and enforcing these contracts.

The third item under infrastructure is the system of prudential regulation and supervision. Financial institutions have a high degree of leverage: most of the money loaned by a financial intermediary belongs to others, not to the owners of the institution. Typically, in a commercial bank there are US\$19 in deposits to each one dollar of capital. To profit from the high leverage, owners and managers of such institutions have an incentive to manage the institution in a highly risky or even fraudulent manner. A recent study by the Comptroller of the Currency found that fraud and mismanagement were involved in 90 percent of the bank failures in the United States. Relatively small losses in the loan portfolio—in the case of commercial banks cited above, losses of 5 percent—would jeopardize the institution's ability to pay depositors. In most developing countries bank supervision has focused on the implementation of economic directives, such as credit allocation, to be certain bank lending was in compliance with government directives. Very little attention has been paid to prudential supervision, that is, the quality of the loan portfolio, the adequacy of capital, and the soundness of bank management. The huge losses now found in the banks' portfolios in many developing countries are testimony to the poor quality of this oversight function.

The World Bank has been working with member governments on all these issues. To give an example, the Bank runs a joint training program with the United States Federal Reserve Board for supervisors of commercial banks. Thus far, 200 participants have been through the course, which this January 1990 was offered in Ghana, the first time outside of Washington.

### *The policy environment*

Only in a sound policy environment can a financial system develop to its full extent. Some of the important policies are directly financial, such as interest rate and credit control policies, but financial systems are also dependent on macro policy, on exchange rates, and on other policies that affect relative prices. Inflation is basically a tax on those who hold money and certain other financial assets. As holding these assets is voluntary, the public usually chooses to hold a smaller real stock as inflation rises, reducing the tax but also reducing the size of the financial system.

The extent of term finance declines even more rapidly in an inflationary environment. In a country with an overvalued exchange rate, there is capital flight and excessive foreign borrowing. And when the overvaluation is corrected, those with liabilities denominated in foreign exchange suffer large losses. In many countries, the World Bank finds that borrowers, having had trouble in the past, are now unwilling to take loans that carry foreign exchange risk. Any substantial change in relative prices will cause difficulties for financial institutions, because the firms for whom the change in price is unfavorable will be unable to pay their debts. Price reform is now causing serious portfolio problems for banks in the socialist economies. The experience of the 1980s in country after country has made clear the fragility of the financial system in the face of macroeconomic and price instability.

Most developing countries are today rather open in the sense that the more sophisticated investors who hold a large part of the financial wealth can either hold domestic or foreign assets and borrow in domestic or foreign markets. If the rate of return that can be earned on domestic assets is below what can be earned on foreign assets, investors can move a large part of their assets abroad, regardless of whether or not there are capital controls. Those who are unable to move assets abroad will invest in real assets, for example, housing, if the rate of interest paid on deposits is less than the rate of inflation.

To build the financial systems the interest rate paid must be in line with expected inflation and the rate that can be earned abroad. As indicated in figure 9.1, in recent years real interest rates in developing countries have been rising and now are an average roughly equal to the rate of inflation, but in many countries rates are still below those in developed countries. Furthermore, there continues to be a considerable amount of directed credit available on very concessional terms.

### *Institutional development*

Turning now to institutional development, the need for governments to intervene to resolve the problems of distressed financial institutions provides a unique opportunity for them to rethink the structure of their financial systems. What financial services and what instruments will countries need during the 1990s? Each country must decide whether the existing institutions will provide these services. These troubled institutions, which are no longer relevant, can be closed rather than recapitalized.

Financial systems in developing countries are today dominated by their banking systems, which in most developing countries hold at least 80 percent of the assets of all financial intermediaries. In many countries, the markets are controlled by a few large, and often inefficient, banks. Their size is based not on economies of scale, but on restrictions on new bank licenses; on interest rate and credit controls that discourage competition; on forced branching, and so on. As to the costs of intermediation in inflationary countries and in some of the development banks serving small borrowers, the spread needed to cover the difference between the cost of funds and the lending rate can be as high as 10 percent of earning assets rather than the 2 to 3 percent in developed countries. Large spreads force up the cost of borrowing and discourage investment.

Ways in which costs can be reduced include policy changes, improved operations, and greater competition. Greater freedom for banks to set interest rates, choose their own customers,

determine the location of branches, and so on can reduce costs. Competition can be increased by allowing the entry of new banks, by encouraging the development of nonbank financial institutions and capital markets, and by allowing international trade in financial services.

Poor management has contributed to banks' difficulties. Excessive branching and staffing, poor asset and liability management, and inexact accounting and management information systems have all been a source of weakness. Financial institutions in developing countries are plagued by portfolio problems, which in many cases was the result of poor management. Lending to insiders and excessive concentration of lending in one geographic area or in one industry have been important sources of trouble.

Building nonbank financial intermediaries and capital markets as alternatives to banks will increase competition and efficiency and provide for more extensive services. Let me give just one example. There has been concern in the development community about the shortage of term finance for investment. To meet the need for term finance, the countries supported by the international agencies promoted development finance institutions. But there are other possible sources of term money. In most developed countries, contractual savings institutions, that is, life insurance, pension programs, and so on, are the major sources of term finance. With the changes in demographics and living conditions, developing countries also have an opportunity to develop these sources of term finance. For example, in Singapore the pension assets are now equivalent to 65 percent of GNP. In Chile a reformed pension system grew to 18 percent of GNP in 8 years. However, governments usually require that pension and insurance funds be invested in government securities. Hence, these sources are not available to the private sector, though in both Chile and Singapore the pension programs are allowed to invest in some private assets. If a market for sound financial assets can be developed to give these investments liquidity and a reasonable degree of stability, some of the resources collected by pension programs and insurance companies could be invested in private securities and become a genuine source of term finance, just as they have in many developed countries. Some countries already have securities markets, such as Mexico, Brazil, Korea, Malaysia, and Thailand. These are not only useful domestically but are attracting funds from abroad at the rate of at least US\$1 billion per year.

A brief word about informal finance. Informal financial markets can be divided into kerb markets, which serve the larger borrowers, and informal lenders, which serve the noncorporate sector. The economies of the two are quite different. The kerb markets are effectively informal commercial bills markets, which exist primarily to get around government controls on interest rates and credit allocation. When controls are removed, these markets disappear or evolve into bills markets. Informal lenders exist, on the other hand, because when serving the noncorporate sector they have better information—hence lower costs and better repayment rates—than formal institutions.

The noncorporate sector, that is, agriculture plus small-scale enterprises plus households, account for as much as 50 percent of GNP in developing countries. There is a tendency when thinking of finance to think only of the credit needs of the small-scale sector—but the noncorporate sector, including households, is a savings surplus sector. Their dominant financial need is for safe instruments providing reasonable returns in which to hold their wealth. It is these lower income groups who receive less on their deposits when interest rates are set artificially low, yet have relatively little access to subsidized credits. Hence low interest rates tend to have a perverse impact on income distribution.

The credit needs of the noncorporate sector are served to a large extent by informal financial institutions—family and friends provide much of the credit, supplemented by money lenders, pawn brokers, and rotating savings and credit associations (RoSCAs). RoSCAs have a different name in each country, but they are found everywhere. Merchants also provide credit to their customers. While financial institutions have been weakened by being forced to serve small borrowers, informal lenders have thrived on such lending. There are drawbacks to relying on the informal market. The scale is small, the range of services is limited, the markets are fragmented, and interest rates are sometimes high. Nevertheless, these lenders serve clients not reached by institutions. Some governments still try to suppress the informal lenders, but others, recognizing the value of the services provided, have tried to link the informal and

formal financial sectors. Co-ops, group lending, and better flows of credit to middlemen are all steps in this direction.

### *Financial Reform*

During the 1980s, many countries introduced financial reforms. In perhaps a dozen countries, interest rates were fully liberalized; in many more, while rates continued to be set by the government, there was an attempt to keep rates from falling below the rate of inflation. In addition, many countries have curtailed, though few have eliminated, directed credit programs. Competition has been promoted by granting new charters and opening the market to foreign competition and competition from non-bank financial institutions. The centrally planned economies have also made significant reforms in their financial sectors.

What are the lessons to be learned from the experience? Not all the reform programs have been successful and in some cases the governments had to reintroduce the controls they had removed. In the Southern Cone (Chile, Argentina, and Uruguay), liberalization in the 1970s led to disarray. The reforms were very broad-based and were introduced together with sweeping stabilization programs. It is hard to disentangle the failure of the stabilization measures and the financial reforms. But the lesson is clear that financial reforms are not a substitute for macroeconomic or price reforms, and financial reforms will not succeed unless accompanied by a high degree of economic stability. Furthermore, with a distorted price system, liberalization can lead to resource misallocation first, and then debt servicing problems when price distortions are corrected. Also, liberalization must be accompanied by restructuring of insolvent banks and by the introduction of an adequate system of prudential regulation and supervision. Care must be taken to avoid destabilizing capital flows by not opening the capital account until there is considerable macroeconomic stability.

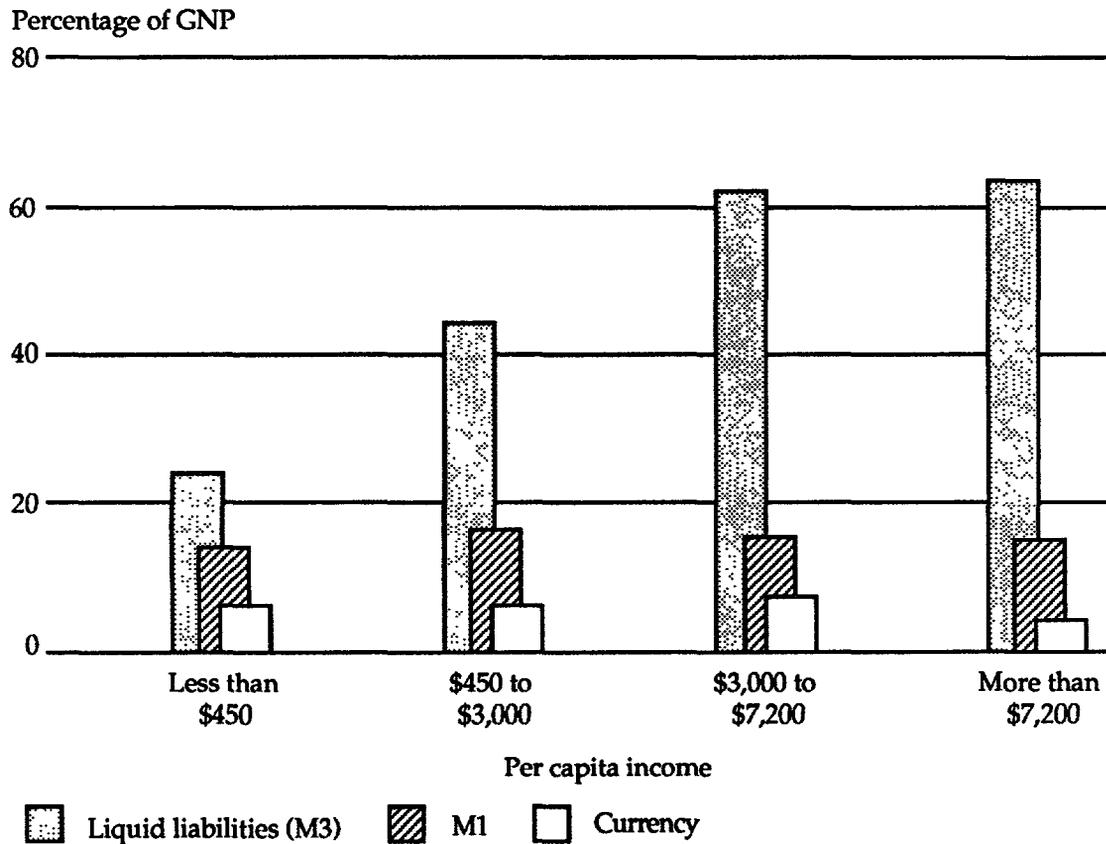
All this makes financial reform sound difficult. But it has been quite successful where it was introduced in Asia—in Korea, Indonesia, and Thailand—and when it was reintroduced in Chile. In the Asian countries there was some, but not substantial, macro instability and price distortions; furthermore, the reform measures were introduced gradually.

To conclude, countries that wish to rely more on the private sector need strong financial systems. For that, confidence is needed that contracts will be honored and real values will not be eaten away by inflation. Getting interest rates right is important but must be complemented by the restructuring of bankrupt institutions, by the institution of adequate accounting and legal systems, by appropriate regulation, and by building the human skills needed for managing complex financial operations.

## Appendix

This appendix complements the background information presented in the section on "Financial History: The Last 25 Years."

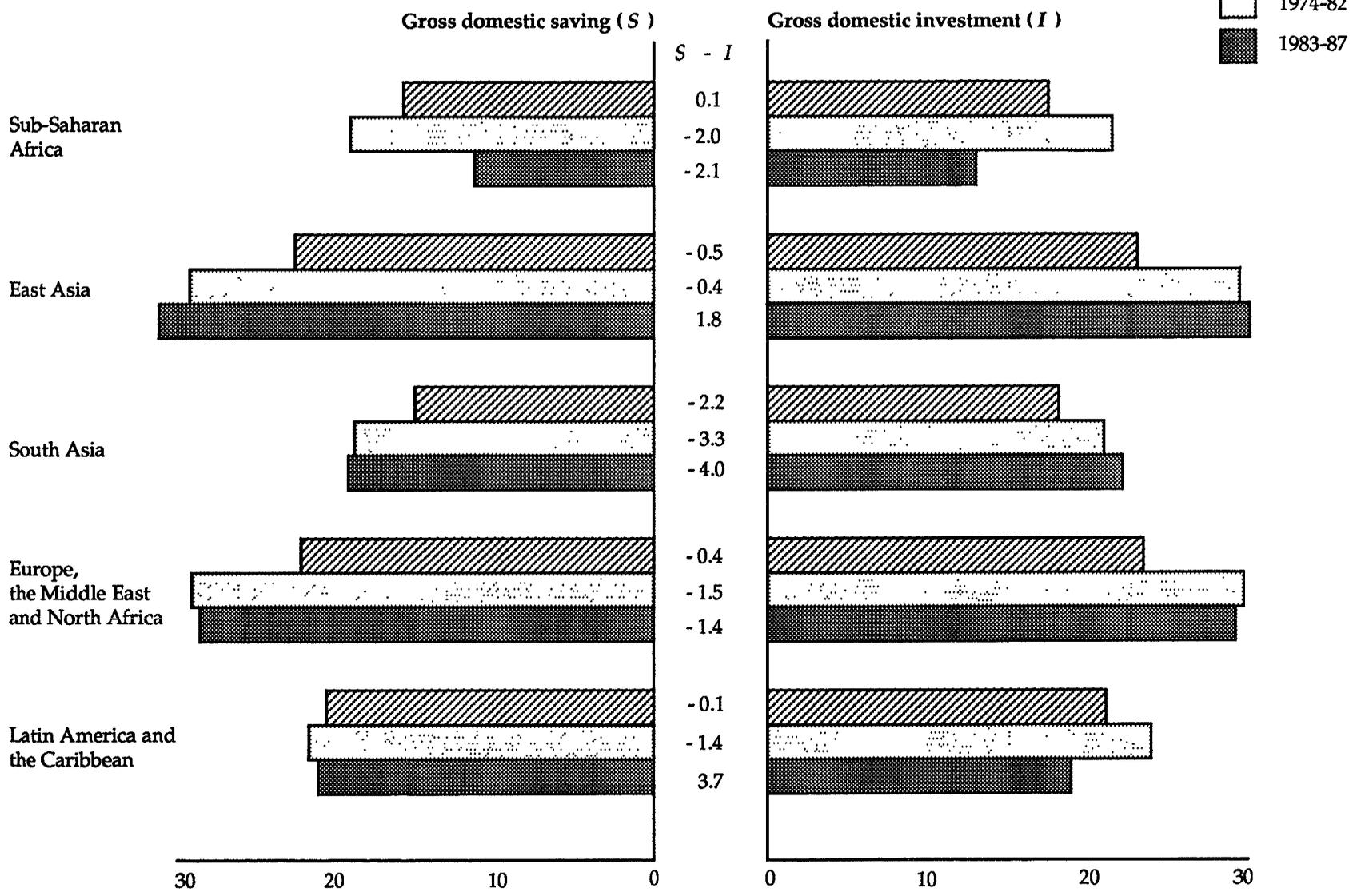
**Figure 9.2: Indicators of Financial Depth**



*Note:* Data are unweighted averages by income group. M1 is the sum of currency and demand deposits. Liquid liabilities are the sum of M1, time and savings deposits, and other deposits at financial institutions.

*Source:* World Development Report 1989, The World Bank.

Figure 9.3: Saving and Investment in Developing Countries by Region, 1965 to 1987



Note: Saving and investment are measured at current prices. Source: World Development Report 1989, The World Bank.



# 10

## PRUDENTIAL REGULATION AND BANKING SUPERVISION: BUILDING AN INSTITUTIONAL FRAMEWORK FOR BANKS

*Vincent Polizatto*

Banks 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.

### **Establishing a Sound Public Policy for Banks**

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 that 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, the government's goal to ensure the stability of the financial system should be of paramount importance.<sup>1</sup> The failure of a large bank or multiple bank failures may force a sudden contraction of the money supply, a failure of the payment 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 toward 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 or prudential regulation, although in some instances regulation has both economic and prudential aspects.<sup>2</sup> This paper will primarily concern itself with the prudential aspects of

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**Note:** 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).

1. For more on prudential supervision as an aspect of public policy, see Bench (no date), "International Lending Supervision."

2. 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), and so on. Prudential regulation refers to the set of laws, rules, and regulations that 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

regulation and supervision that are designed to remove or lessen the threat of systemic instability.

If prudential regulation is the codification of public policy toward banks, banking supervision is the government's means of ensuring the banks' compliance with public policy.<sup>3</sup> 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 policymakers may make faulty decisions in response to a problem, potentially worsening it. The more decisionmakers 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 toward 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, 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 toward the protection of depositors, monetary stability, and an efficient and competitive financial system.

For banking supervision to be effective then, the role of bank supervision must be clearly defined and understood by public policymakers. 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.

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capital adequacy guidelines, liquidity ratios, and so on. These are discussed in greater detail later in the paper.

3. Banking supervision refers to the banking agency's ongoing monitoring of banks and enforcement of banking regulations and policies.

**Box 10.1 Public Policy in the United States**

A 1974-75 study of the Office of the Comptroller of the Currency framed the following public policy objectives for banking supervision:

1. to prevent undue concentration of economic power and promote competition in banking markets
2. to moderate banking instability and protect the public against the worst consequences of instability
3. to encourage and promote a high level of operating efficiency and innovation in banking
4. to meet the needs of the public for conveniently available banking facilities and services
5. to encourage and promote a high level of efficiency and equity in the allocation of credit to various sectors of the economy
6. 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..

*Source: Office of the Comptroller of the Currency, Washington, D.C.*

## 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 on the financial marketplace, possibly leading to fragmentation of the financial markets. Care must be taken to implement the regulatory framework in a manner that is not distorted but that 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>4</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 at home and abroad.

4. 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.

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 on 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 most small banks fail because of poor management and connected lending, the initial decision to grant a license is an important one.<sup>5</sup> 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 is a form of patronage or is designed to serve a special interest group, for example, 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 that 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, whether expressed in terms of assets and off-balance sheet items or in relation to risk assets and restrictions on dividend payments when the

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5. Failures of large banks are more often caused by undue concentrations of risk in different sectors of economic activity (agriculture, energy or real estate) or in regional and small national economies (for example, Texas and Norway). These may be brought about by restrictions on risk diversification imposed either by branching laws or by foreign exchange controls.

bank is incurring losses. As a result, capital, as a cushion for unusual losses, is simply not sufficient for the risks that 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 that would otherwise be required in managing a privately owned institution. A common result 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 affect 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 to 8 percent should be the absolute floor. However, this percentage may need to be increased on a case-by-case basis because of 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, that is, 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 percent 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 percent 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 or 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.

**Box 10.2 The American Southwest**

Banks in Texas and Oklahoma provide examples of the risks involved in concentrating credit to a particular industry. Banks in those states were primary lenders to borrowers engaged in oil and gas production, oilfield services, oil refining, and other related activities. In addition, a large proportion of their lending activities depended on 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 of Houston, Interfirst Bank NA of Dallas, and First Republic Bank NA of Dallas. Similar problems occur in the developing countries, particularly where the economy is poorly diversified or dependent upon only a few commodities.

A lending limit of 10 to 15 percent of the bank's capital is appropriate. In no event should the maximum lending limit exceed 25 percent 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 enough capital to attain a scale of operations that 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.

### Box 10.3 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 that owned 20 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 that 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 arm's length as if they are ordinary third parties, that ownership is scattered among a number of parties, that proper internal controls and credit limits are in place, and that concentrations of credit are avoided.

### *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 or enter lines of business that 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 that far exceed their banking needs. In other countries, banks engage in activities that are clearly nonfinancial, 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 therefore detail the permissible activities for banks, or, conversely, the prohibited activities. Such regulations should address whether banks can engage in commercial activities, own equity stakes in firms or enterprises, and participate in nonbanking 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 nonperforming 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 nonperforming 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 nonperforming 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 that 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.

#### Box 10.4 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 90-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, let us say that 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 when 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 that 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.

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 that require banks (1) to classify their assets as to quality according to specific criteria, (2) to define nonperforming assets, (3) to require the suspension of interest and reversal of previously accrued but uncollected interest on nonperforming 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.<sup>6</sup> 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.

#### *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 on 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 for the bank to 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 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 decisionmaking, 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 treating interest on nonperforming 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 way that 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

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6. In regard to point 1 above, 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. Regarding point 2 above, a frequently used definition defines nonperforming assets as those that are 90 days or more past due and not well secured and in the process of collection .

very often are to cancel the banking license or to do nothing, neither of which is acceptable. As a 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 that 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 that 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, for example, violations of the lending limit that 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 the 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, that 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, their purpose may also be to protect small depositors and promote competition by encouraging the creation of 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, and so on. Deposit insurance can take many different forms, but 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 that 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 banking sector is that of debt collection or recovery. In many countries, aspects of the commercial law dealing with debt collection and recovery overwhelmingly favor 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, for example, 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 that focus on technical compliance with laws and regulations or that 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 off-site 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, for example, 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 that 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 the 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 (Blackhurst 1985). 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 that brought British practice closer to continental European practice. Following the Johnson Matthey affair, which precipitated a reappraisal of the existing 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.<sup>7</sup> Steps were also taken to improve the off-site surveillance capability of the Bank of England.

For the informal approach to be effective, the experience of the United Kingdom 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 Australia and New Zealand, in many other Commonwealth countries in Africa and Asia, which tried to promote indigenous banks in competition to the hitherto dominant role of foreign banks, problems have emerged because of the lack of strong supervisory guidance.

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7. For a discussion of the Johnson Matthey Bankers affair and the role of the Bank of England, see Ollard and Routledge (1985).

### Box 10.5 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. As is the case in 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 banks' 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 nonperforming 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.

### *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, these 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 that 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 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, that is, 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 United States, periodic on-site examinations have been the cornerstone of the supervisory process. The American approach is justified by the large number of small banks that is the result of various restrictions on interstate banking, on unit banking within particular states, and on bank mergers. Unlike the more concentrated banking systems of European countries, which internalize most of the costs of policing branches and the absorption of losses at the branch level, in the American banking structure policing costs are incurred to a much greater extent by regulatory agencies, while bank losses have to be covered to a greater extent by taxpayers through formal deposit insurance schemes (Vittas 1989). 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 United States 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 off-site 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 large number of financial institutions supervised in the United States (around 20,000 in 1988) 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.<sup>8</sup> The CAMEL rating quantifies a supervised institution's condition in five critical areas and assigns an overall composite rating, while the Uniform Bank Performance Report (UBPR) is a statistical analysis of bank performance that is based on data from quarterly prudential reports and on-site examinations. This 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 performed. In the latest stage of technological advance, expert systems, that is, artificial intelligence, are being used to analyze prudential reports and generate written comments.

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8. CAMEL is an acronym for Capital adequacy, Asset quality, Management, Earnings, and Liquidity, asset and liability management.

### *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 because of 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 counterparties, 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 because of 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 so-called "Group of Ten" countries, plus Switzerland and Luxembourg.<sup>9</sup> 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 (Dale 1982, p. 16):

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
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.

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 (Committee on Banking Regulations and Supervisory Practices 1986).

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, off-site supervisors should check their completeness, accuracy, and consistency as well as their compliance with prudential ratios and regulations; analyze the financial situation of reporting banks and identify the main changes in financial ratios; and prepare a summary for the management of the supervisory agency and recommend action. 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.

The main function of on-site inspectors is to check the accuracy of the periodic reports 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

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9. The Group of Ten countries are Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, the United Kingdom, and the United States.

problems identified by off-site surveillance. They should assess the quality of assets, management and control procedures, and accounting systems. The inspector should, in particular, study the main credit files (and a sample of smaller files) to assess the credit procedures and the quality of the loans; evaluate credit procedures and review minutes of meetings of the credit committee and the board of directors; check management information systems and internal controls, with regard to both the activities of branches and subsidiaries and the functions of head office departments that invest the bank's and customer resources in marketable securities and foreign exchange; and evaluate accounting procedures, especially those for provisioning and interest accrual.

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

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.

#### *Political interference*

As an example of political interference, 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 regime 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 policymakers genuinely lack the knowledge and ability to deal with the problems. Secondly, the problems may require short-term adjustment. Policymakers 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 that is solely responsible for bank supervision will devote greater attention to the fulfillment of its role than one that 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 (Dale 1982).

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 would become 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 differ. The division of responsibilities affects the supervisor's ability to prioritize and focus supervisory concerns and corrective action where it is needed most.

Responsibilities for nonprudential 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 often 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 a banking crisis and its debilitating effects upon economic growth and development. The cost of even one bank failure may far exceed the costs incurred in employing and retaining competent staff. There are precedents for banking persons to be exempted from normal civil service guidelines and salary scales.

### *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 United States, where bank supervisors require about five years 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, and 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, for example, 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 because of credit losses that 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 nonperforming assets through on-site examination and verification. By determining asset quality and the condition of an institution, bank supervisors provide critical information to government policymakers 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 day 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 that 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 power 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 that 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, for example, asset quality, interest rate risk, foreign exchange activities, and so on.

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 that have a significant impact on the institution's overall position, plus a sample of the remaining units.

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, that is, 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 on 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 that 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. However, in other cases, it might be necessary to send examiners into a bank to follow up on weaknesses identified offsite. 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 permits 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. To counter this, a systematic approach and mechanism for dealing with insolvency is necessary.<sup>10</sup>

### **Strengthening the Accounting and Auditing Framework**

The development of a strong accounting profession can ensure the establishment of uniform accounting standards that 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 nonexistent. The effect is to hinder the development of a well-functioning financial system.

A major weakness in bank accounting and auditing for many developing countries is the absence of adequate accounting standards. Criteria for determining nonperforming assets is subjective, problem assets are not identified or properly valued, interest continues to accrue on nonperforming 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 that make analysis and comparison difficult.

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.

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10. For additional information on bank restructuring, see de Juan's paper in this collection (Chapter 4).

To deal with these problems, accounting standards and the auditing profession must be strengthened. Standards that should be established include guidelines for asset classification, definitions for past dues and nonperforming assets, prohibitions against the capitalization or refinancing of interest that is due and unpaid, reversal of previously accrued but uncollected interest on nonperforming 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 policymakers 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, for example, 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 that 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. These will normally require the replacement of management, the elimination of shareholders' interests, and the 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 nonbankable. The accrual of interest should cease on nonperforming assets, and previously accrued but uncollected interest should be reversed. Interest capitalization should normally be prohibited. Realistic past due and nonperforming 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 institutional building should include a clear definition of the roles and responsibilities of the board of directors (see box 10.6 on next page). 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 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, including 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 decisionmaking and control.

*WRITTEN POLICIES AND PROCEDURES.* To ensure that management executes business objectives 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 comprise a large 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.

#### Box 10.6 Duties and Responsibilities of Directors

Directors are given the following duties: 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, and to effectively supervise the institution's affairs by exercising reasonable business judgment and competence and by devoting sufficient time to becoming informed about the bank's affairs. The legal framework should not allow directors to avoid responsibility for the bank's sound management or its problems and, if negligence is involved, responsibility should extend to personal financial liability. Directors may delegate certain authority to executive officers, but they cannot delegate the primary responsibility to maintain the bank and its policies on a sound and legal basis.

Directors must 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.

Directors must avoid self-serving practices. Unwarranted loans to a bank's directors or to their interests are a serious matter from the standpoint of credit and management. Losses that develop from such unwarranted loans are bad enough, but the weakening effect on the institution's general credit standards is likely to be even worse. Directors who become financially dependent on their institution normally lose their usefulness as directors.

Directors need to be informed of the bank's condition and management policies. As part of a director's responsibility to be informed of the bank's condition and management policies, directors should employ an external auditor on their behalf. External audits are most beneficial when the examining committee or the entire board takes an active part, at least to the extent of appraising policies, obtaining an understanding of the procedures to be employed in the auditing process, and reviewing the audit report with the auditors. Before concluding the review, directors should understand thoroughly the significance of findings contained in the audit report.

Directors need to maintain reasonable capitalization. A bank's board of directors has the responsibility of maintaining its institution on a well-capitalized basis.

Directors must 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.

Finally, directors need 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, especially needs for legitimate new and developing business credit.

**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 decisionmaking 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, that is, operational auditing (*Office of the Comptroller of the Currency 1977*).

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 (*Office of the Comptroller of the Currency 1977*).

Both internal and external auditors must demonstrate competence and more important, independence. Internal auditors should report directly to the board of directors while external auditors should not have any formal interest in the bank being audited.

**MANAGEMENT INFORMATION SYSTEMS.** To make informed decisions, management must have timely, accurate, and relevant information. This includes mostly financial statements, including information on credit expenses, interest rate, and foreign exchange risks. 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 10.7: The Case of Nepal**

To illustrate the problems of incomplete management information, one can look at the case of Nepal. Being a developing country, Nepal is lacking in adequate infrastructure, that is, highways, transportation, communication, and so on. 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 a 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 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.

**Conclusions**

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.

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# 11

## DEVELOPING FINANCIAL MARKETS IN SUB-SAHARAN AFRICA

*Paul A. Popiel*

There are several reasons for developing financial markets, all of which relate ultimately to improvement in financial intermediation, which is a key factor to economic growth. Broadly, these reasons can be grouped into two categories, with different intermediate purposes and different time horizons. One category groups reasons primarily and directly related to improvement in mobilization and allocation of financial resources. The other category groups reasons indirectly related to this improvement through the direct aim of facilitating the management of liquidity and money in an economy.

Of course, from reasons of the first category to reasons of the second category and vice versa, the causality is reciprocal. Better management of liquidity and money offers greater potential to improve mobilization and allocation of financial resources. Better mobilization and allocation of financial resources offers a financial environment conducive to better management of liquidity and money.

The pursuit of both these objectives requires and leads to deepening financial markets.

### **The Importance of Developing Financial Markets**

The ultimate function of financial markets is to increase the financial resources available to the economy and to enable a more efficient use of those resources, that is, to facilitate financial intermediation and its management in order to stimulate and accelerate the process of economic growth. Hence, financial markets are essential for the efficiency and solvency of financial systems and for the effective management of liquidity and money in the economy.

Financial markets intermediate in both debt and risk capital finance. In essence, the supply of these two types of funds stems from two different functions: a lending function and a venture capital function. A lender has a different perception of risk and, therefore, different expectations with regard to the application, reimbursement, and yield of its funds than a venture capitalist. The latter is ready to take more risks and losses to maximize profit. Money markets deal in short-term debt instruments and securities markets deal in long-term debt and equity instruments.

While the general role of capital markets is also to mobilize savings and channel them into productive investments, their primary, though not unique, role is to provide long-term debt financing and risk capital, through issue of bonds and shares, for investment in long-term assets. In addition, by providing access to risk capital and long-term financing, securities markets help to strengthen the financial structure of corporations and improve the general solvency of the financial system.

By increasing the range of financial instruments available to savers and investors, financial markets contribute to increased competition in the financial system and help channel resources toward the highest return investments for a given degree of risk. This, in turn, stimulates economic growth and lowers financial intermediation costs.

Moreover, the level of development of financial markets is an important determinant of the flexibility and pace with which the financial system can adjust to internal and external change and absorb shocks. The simple reason is that money and securities markets represent the deep

end of the financial system, and the deeper the system, the greater its stability and resilience. Many developing countries today are faced with difficult adjustment problems that can be considerably eased by a well-developed and flexible financial system.

Finally, by developing financial markets, a domestic financial system can be linked to the international system, thereby enhancing capital flows and creating new opportunities for risk-reducing portfolio diversification.

## Financial Markets Development

These general reasons apply in the countries of Sub-Saharan Africa where some of their aspects reflect specific features of the region's financial systems. One of these aspects is enhancing competition in the financial system through diversification. Another is providing an institutional framework for monetary management.

### *Enhancement of financial competition*

Seen in perspective, the approach to the development of financial systems in Sub-Saharan Africa has, hitherto, tended to focus on the banking system, including, for the purpose of this presentation, development finance institutions. As a result, the development of nonbank financial institutions and financial markets kept receiving lower priority. This approach reflects two factors. First, it reflects the financial policy focus of most countries in Sub-Saharan Africa. No sector is more regulated than the banking sector. Nor is there a sector with such apparent abundance of financial resources ready to meet budgetary needs. Second, it reflects the urgency of existing problems, and there are many important and threatening problems in financial sectors in Sub-Saharan Africa. Probably the most pressing one today is the financial distress that plagues many financial systems.

Overfocus on the banking sector is, in a sense, a self-feeding process. The prevailing policy concentration and the problems' immediate urgency capture attention and resources and reinforce the focus on what is, and should be, only a part of the financial system. This process leads to the relative neglect of the nonbank part of the financial system. To the extent that, in the long term, the ultimate objective is to strengthen the financial system and make it more resilient to external shocks, this process is self-defeating.

Indeed, to achieve its objectives, the financial system must be efficient and solvent. Since efficiency is best promoted by competition, dilemmas arise when competition cannot be promoted to the same degree in all segments of financial markets. This is because in bank-centered financial systems, which are common in many countries of Sub-Saharan Africa, the main component, namely the commercial or deposit-taking banks, have exhibited, and perhaps may even have to exhibit, strong oligopolistic features in the interest of institutional stability and solvency.

But solvency and efficiency may be at odds and lead to a contradiction in promoting bank-centered financial systems. Operational considerations tilt the policy toward fewer and larger units, but this diminishes real competition and therefore eases pressures for efficiency while intensifying the risk factor. There is another practical problem in achieving long-term competitive conditions in a bank-centered financial system. The process of competition itself is not necessarily a stable equilibrium; after a while, the strong institutions eliminate or absorb the weak and inefficient ones. This, then, results in sector concentration that may again have monopolistic overtones. Moreover, recent studies of modern banks have shown that larger unit size and fewer numbers do not necessarily lead to economies of scale.

Hence, it becomes necessary to find other, more meaningful sources of competitive pressure while preserving the solvency and restraining the risk concentration in the banking sector.

This is where development of money and capital markets can play a crucial role. The lower capital requirements and the greater importance of entrepreneurship in nonbank financial institutions mean that two out of three factors that make a market competitive are being introduced: greater number of participants and greater ease of entry (the third factor being

transparency and information flow). Development of money and capital markets should lead to a higher degree of competition and, therefore, transparency.

Thus, in seeking to bring about efficiency through competition, the focus on competition within the banking sector may be misplaced. Rather, it may be useful to redirect attention to intersectoral competition between deposit-taking banks on the one hand and nonbank financial institutions on the other. Public authorities could continue to promote safety, solvency, and possibly economies of scope through high capitalization, large units, and cautious liquidity and solvency policies, while at the same time prodding banks to be more efficient through competition from the money and capital markets, institutional investors, and specialized quasi-banking institutions such as leasing, venture capital companies, hire purchase, check discounting, and the like. Only a few countries have pursued such policies consciously and systematically: the United States, Canada, Japan, Brazil, Malaysia, Thailand, and the Republic of Korea. In all these cases, the result has been healthy and viable markets.

Hence, one among reasons related to improvement in financial intermediation, particularly in Africa, is the introduction of competition in the financial system by removing the policy overfocus on the banking system.

#### *Developing an institutional framework for monetary management*

Effective management of liquidity and money—an essential function of monetary authorities—ultimately aimed at maintaining a stable level of prices and a situation of the balance of payments that is sustainable in the long term, requires relatively developed financial markets and, in particular, relatively developed money markets.

Monetary authorities use basically two ways to manage liquidity and money in an economy. The first is through the extension of direct controls. The second is by indirect ways and means aimed principally at influencing the levels of banks' reserves and, in some cases, of interest rates. Indirect monetary management is generally considered far superior to direct monetary management in terms of effectiveness and efficiency as well as in terms of unwanted or undesirable side effects, which are fewer and less pronounced. In particular, indirect monetary policies and instruments are better and wider transmission mechanisms and affect liquidity conditions and interest rates in the economy at large. This is in contrast with direct monetary policy and instruments whose effect is predominantly restricted to the targeted financial institutions and whose undesirable side-effects are numerous and pernicious to financial intermediation. Finally, indirect conduct of monetary policy permits monetary authorities to modulate this policy better, because it opens more policy options and permits the use of alternative monetary instruments. This is the reason why many developing countries are today striving to shift their monetary policies from control of liquidity and money through direct instruments toward management of liquidity and money through indirect, more market-oriented instruments.

There are several countries in Sub-Saharan Africa that have initiated or have been pursuing for some time this shift from direct to indirect ways and means to manage money. Among them are Ghana, Kenya, Madagascar, Malawi, Zaire, and several others.

But indirect monetary management, as mentioned earlier, requires a sufficient level of development of financial markets and in particular of money markets. Hence, the importance in Sub-Saharan Africa of developing them.

### **The Financial Market**

In the broadest sense, a market is an institutional arrangement in which demand and supply meet to establish the exchange of goods or services at a price. A financial market comprises two distinct types of markets: a money market and a capital market. A money market—which frequently includes an interbank market—is for short-term debt instruments and serves to redistribute cash balances in accord with participants' liquidity needs. It also forms a basis for the management of liquidity and money in the economy by monetary authorities. A capital

market is distinguished from a money market by the longer term of the financial instruments and dealings in equity. These instruments are issued and traded through institutions, the nature of which depend on whether they deal in debt, equity, or a combination of the two.

### *The money market*

The role of the money market is twofold. (1) The objective of the money market is to provide the public and private sectors with means to raise short-term money and invest cash for short periods with the understanding that it can be quickly liquidated and, thereby, allow the financial system, economic agents, and the treasury to adjust their liquidity position frequently; and (2) by so doing, the money market provides a basis and a framework for the management of liquidity and money by the monetary authorities.

Money market instruments have four main characteristics:

- short-term maturity
- good credit-worthiness, that is, they are created by institutions with good credit ratings
- highly liquid
- bought and sold in large denominations to reduce transaction costs.

The specific type of money market instruments employed and their quality level varies from country to country. In Sub-Saharan Africa, the main money market instruments employed are treasury bills, short-term draft, and in several countries, government securities.

It is important to note that there is an inextricable link between the money market and the capital market. In many instances, the same financial institutions will be actively involved in both markets and will use the money market to provide liquidity for their longer term investments. It has been observed that in the process of financial markets development, the development of a money market typically precedes development of a capital market.

### *The capital market*

Within a capital market, a distinction can be made between securities and nonsecurities segments. The nonsecurities segment is characterized by institutions of a banking nature, including savings and loan institutions, housing finance institutions, and commercial banks. Typical instruments within the nonsecurities market are debt related, such as term loans and mortgage. In contrast, the financial instruments that form the basis of the securities side of the capital market are mostly equity or quasi-equity in nature, such as shares. The players in the market are also different. In addition to banking institutions, the securities market usually contains investment bankers, brokers, and venture capitalists.

Of the various types of markets hitherto mentioned, the securities market is the most difficult to create. In general terms its purpose is to:

- mobilize long-term savings to finance long-term investment
- provide risk capital in the form of equity or quasi-equity to entrepreneurs
- encourage broader ownership of productive assets
- improve the efficiency of capital allocation through a competitive pricing mechanism.

Typically, the primary users of a securities market are new or expanding businesses. A firm will usually seek access to the primary market only on special occasions, while it takes care of its daily business through the commercial banks. Entry into the primary market may be made by selling securities directly to investors, but more likely the sale will be made through intermediaries. These intermediaries include brokers, dealers, and investment merchant bankers, all of whom purchase securities from issues for resale to the public.

### *Primary and secondary markets*

Secondary markets are necessary adjuncts to both the money market and the capital market. Primary markets are essentially those markets in which primary sales of financial

instruments, short- and long-term, are made; secondary markets are those in which these instruments are traded.

The ability of a public or private entity to use the primary market as a vehicle to raise short- or long-term funds is largely dependent on the liquidity of the market. Lenders or investors do not want to be locked into a commitment for an indefinite period; rather, they want some means of exchanging their loans (sometimes securitized) or investments for cash. The secondary market, therefore, is a critical adjunct to the primary market. The main function of a secondary market is to provide an organized mean of trading short- and long-term financial instruments to provide cash to lenders and investors. Trading in this market occurs through discount houses, dealers, and brokers who may or may not take positions in the instruments traded, merchant banks, and in either organized stock exchanges or over the counter.

### *Financial markets' depth and the in-between market*

Financial markets' depth is usually measured by relating monetary and financial aggregates such as M1, M2, M3, and dcM4<sup>1</sup> to the GDP. But this measure masks qualitative features of financial markets development.

These features are the range and diversity of instruments and markets as well as the degree of markets integration. From this qualitative standpoint, it can be said that financial markets are deep when:

- They offer savers and investors a broad range of financial instruments different in terms of liquidity, yields, maturities, and degree of risk, including debt instruments, equity instruments, and, in between, quasi-equity instruments.
- They encompass a diversity of markets, or sub-markets trading in different financial instruments.
- These financial markets are linked through financial instruments and through financial institutions with functions of market makers and brokers.
- Mature, domestic financial markets are integrated into the international financial market.

Hence, a mature financial market can be visualized as one market encompassing a number of submarkets trading in a number of financial instruments, with a market for very short-term debt maturities at one end and another for quasi-equity and equity finance at the other end, animated by a number of banks (at one end) and nonbank financial institutions (at the other end) including commercial banks, finance companies, discount houses, dealers, brokers, merchant banks, investment companies and mutual funds, venture capital companies, and stock exchanges.

The depth of the market is to a large extent determined by the markets, mechanism, instruments, and institutions that intermediate (in sequence) between the short- and long-term of the market. So to speak, "the strength of the market comes from the middle." This aphorism is germane to the situation of several countries of the region that have at one end a budding money market and at the other a stock exchange, with few component to ensure in between trading and intermediation. That is the area where, ultimately, the main part of the endeavor of developing financial markets in Sub-Saharan Africa should focus.

As mentioned above, the next level of development for a mature market occurs when it integrates into the international financial market.

## **Development of Financial Markets**

The development of financial markets implies the promotion of the demand for and supply of financial instruments, as discussed below. However, authorities need first to make a strategic choice between an evolutionary or a planned approach to developing the markets.

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1. The "dc" stands for "domestic currency."

*Evolutionary versus planned approach to developing financial markets*

The role played by governments in the evolution of financial markets has been significant in most countries. One can generally find laws governing the structure of financial markets—banking acts, companies acts, securities acts—that have been implemented to structure and guide financial market activities. Monetary and fiscal policies have had an especially important bearing on the rate and course of development of financial markets. The predominant experience in money and capital markets development, however, has been an evolutionary one, and policy measures concerning them are often taken in a rather piecemeal way, at the expense of long-term objectives and consistency. Only a few countries have taken a more actively planned approach, such as the use of laws, regulations, and other policy instruments to stimulate the development of capital markets in a specific direction. With hindsight, this actively planned approach to the development of money and capital markets has proved to be desirable and beneficial. It has been shown to have a number of advantages leading to the strengthening of financial systems and financial deepening:

- A planned approach fosters the broadening of the range of market instruments and participants, and it allows the capital flowing through it to be priced rationally and, therefore, to finance the most productive opportunities. Concomitantly, it permits more rational planning of long-term industrial development, since long-term sources of funds—both debt and equity—can be tapped to match long-term investment commitments.
- It stimulates financial resource mobilization by offering to savers, investors, and borrowers more varied risk/return choices and a more efficient means to adjust their portfolios to meet changing circumstances. For institutional investors, the ability to adjust portfolios to liquid markets means a lower cash liquidity requirement and, thus, a lower intermediation cost.
- It forestalls the emergence of unofficial markets usually characterized by wide spreads, high risks, and tax evasion.
- It introduces immediately the right technology, adapted to local conditions.

*Requirements and ingredients*

In the first place, both the development of money and capital markets is dependent on the health of the economy, which implies that policies for efficient economic development have an important bearing on their future. Investors are very sensitive to political or economic uncertainty. Hence, a combination of macroeconomic and sector policies aimed at the maintenance of political stability, steady economic growth, and low inflation is necessary to foster an environment conducive to the harmonious development of money and capital markets. This also means that government policies must promote the efficient allocation of resources, in accordance with market forces rather than government directives, and allow enterprises and entrepreneurs to respond to undistorted market signals.

Some of the more commonly observed policies that distort market signals and discriminate against capital market development include the following:

- Tax policies that are more favorable to interest earned on bank deposits than on yields from stock and bonds
- Credit policies that give priority of access to a certain sector or type of investment
- Interest rate policies that hold interest rates below market levels, thus reducing the cost of borrowing and encouraging debt financing instead of equity financing.

Policies that interfere with market signals lead inevitably to distortions in the risk/return relationships of different investment choices. The effects of these distortions are to prevent resources from being channeled into the highest return investments and to reduce the supply and demand for securities, hence thwarting a balanced development of capital markets.

*Promoting the supply of and demand for financial instruments*

The following is a quick checklist of the most common impediments to the increase in supply and demand for financial instruments in the field of finance that are meant to have rapid, punctual effects. Policies for developing money and capital markets require a more long-term approach that consists of the systematic removal of impediments to their development as well as the establishment of an adequate framework of policies, laws, and regulations.

*OBSTACLES TO LARGER SUPPLY OF FINANCIAL INSTRUMENTS.* Frequently, the main problem in securities market development is that companies do not raise finance through the securities market, but instead rely on internal funds, bank finance, or other borrowing. In developing countries, companies' securities are usually closely held, that is, held by individuals or groups closely aligned with one another. Therefore, a main step in financial market development is to determine why businesses do not raise long-term finance through the securities market. The next step is to formulate measures to encourage an increase in the use of these markets. The following are some of the main elements that experience has shown to limit the supply of securities:

- Government allocated or subsidized credit.
- Tax limitations. For example, the tax environment in developing countries is almost always biased against financial market development. One common impediment to an increased supply of securities is the tax advantage given to debt financing as opposed to equity financing. Interest on debt is tax deductible. Dividends are not tax deductible and are taxed twice—once at the company level and once at the shareholder level. Moreover, the capital gains shareholders obtain upon sale of securities may be subject to excessive taxation, encouraging them to retain their shares and take out profits in dividends and various undeclared payments.
- Blanket insurance of bank deposits.
- Fixing of issue price. For example, a major impediment to public issues is the arbitrary determination by the authorities of the price at which an issue can be offered in the market.
- Fixing of brokerage and underwriting commissions.
- Queuing. For example, companies that plan public offerings are subjected to government enforced share-offering procedures that favor government and not market priorities.
- Explicit or implicit limitations on types of securities, such as bonds, convertibles, or negotiable commercial paper.
- Approval requirements for the issuance of securities.
- Listing requirements that are excessively constraining.
- Excessive limitations on foreign shareholding.
- Preemptive rights, such as the practice of granting preemptive rights to existing shareholders to purchase all new shares—and sometimes debentures and bonds—issued by a company.
- Inadequate understanding on behalf of the entrepreneurs of corporate financing techniques.
- Investment incentives.
- General government interference in business.

There are fewer obstacles to the development of short-term financial instruments that can be strongly promoted through the introduction of treasury bills and other government short-term paper.

*OBSTACLES TO A GREATER DEMAND FOR FINANCIAL INSTRUMENTS.* If one of the main problems in financial markets development is impediments to the increase in supply of short-, medium- and long-term financial instruments, countries with underdeveloped markets can also suffer from

limited demand for such instruments. The main reasons are again tax laws, lack of transparency and information, lack of adequate mechanisms to finance securities transactions, lack of a secondary market ensuring an adequate degree of liquidity, constraints on foreign exchange convertibility and repatriation of dividends and capital, poor market performance, lack of adequate accounting and auditing standards, weaknesses in the legal system and in the mechanisms available to enforce contracts, and lack of confidence in the markets' institutions and operations.

*DEVELOPING A CRITICAL MASS OF REGULATIONS, INSTITUTIONS, MARKETS, AND SKILLS.* In addition to the general economic environment and the existence of a sufficient supply and demand of short-, medium- and long-term financial instruments, there are other legal and institutional factors that are critical to the successful development of capital markets. These include:

- The existence of a sufficient number of market intermediaries such as brokers, dealers, and underwriters.
- Reasonably well developed accounting, auditing, and disclosure standards, so that all needed financial information may be available, transparent, and accurate.
- Establishment and vigorous enforcement of rational and comprehensive legal and regulatory frameworks, so that abuses are prevented and investors protected. This is extremely important for maintaining the integrity of the financial system and sustaining investor confidence.

A sound and rational development of capital markets requires, therefore, not only favorable policies, but also the establishment of the legal and institutional infrastructure to support the operation of such markets.

### **Translating the Theoretical Objective Into Institutional Reality**

Enhancing the efficiency of financial intermediation and deepening financial markets are interrelated objectives. Other things being equal, the deeper the financial markets are, the more potential they offer for the efficiency of financial intermediation. This is because, as financial markets deepen, they offer savers and investors increasingly diversified financial instruments, not only in terms of maturity and liquidity but also in terms of risk factor; fully developed financial markets offer both debt and risk capital finance.

As mentioned earlier, the supply of these two types of funds stems from two different functions: a lending function and a venture capital function. This differentiation between the lending and the venture capital function has several implications, some of which are more pertinent to developing financial markets.

One of these implications is that most of the financial institutions found in developing financial markets are specialized in one or two functions. This early specialization is a feature that has been observed frequently in the process of financial markets development. There are several reasons for this. A unique learning curve is easier to follow than a multiple one. Scarcity of skills and techniques call for utilizing them more narrowly than when these are abundant. Finally, less developed financial markets offer a pattern of financial operations that induces specialization. As financial markets develop and their markets begin to overlap, financial instruments to bridge markets multiply, and term transformation diversifies, there is more scope for universalization of financial institutions. This may happen in particular if the regulatory framework is conducive to such a development.

Specialized institutions in developing financial markets seek to maximize returns on a limited range of operations and instruments, thereby concentrating their resources and skills on well-defined objectives. To the contrary, universal institutions in developing financial markets are likely to be unable to pursue all different opportunities open to their financial operations with equal vigor and determination. By virtue of the development process they are likely to concentrate on operations in which the skills and technology they command provides them

with a tangible comparative advantage, leaving other opportunities only marginally exploited.

Although this point is still debated by scholars and experts, there are indications that there may be economies of scope, if not of scale, in financial institutions' specialization in earlier stages of financial development. An additional argument for cautiously promoting such a specialization, is that supervision and regulation of specialized institutions is considerably simpler and easier than that of universal ones.

Hence, a possibly desirable strategy of financial development and market deepening in most countries of Sub-Saharan Africa is to encourage specialization. Conversely, financial functions that do not correspond to their main specializations should not be imposed on financial institutions. For instance, commercial banks are geared for short- to medium-term depositing and lending, the latter with collateral. This is the fundamental nature of their operations dictated by the maturity structure of their liabilities. They are not financial development institutions or market makers. This function belongs to merchant banks and brokers. Merchant banks and brokers, in turn, are not venture capitalists. This function belongs to venture capital funds. A strategy of development of financial markets should take these specificities into account.

#### *Development of money markets*

The development of money markets most of the time precedes the development of a securities market. Skills, techniques, instruments, and institutions emerge and develop more easily at the shorter term end of the financial markets. They later expand and diversify toward the securities and stock markets. Hence, a strategy of financial markets development in countries of Sub-Saharan Africa should concentrate on fostering first primary and secondary money markets and related instruments and institutions.

#### *Toward the emergence of a capital market*

The development of a capital market usually follows and builds upon the development of primary and secondary money markets. There are few, if any, shortcuts to collapse this time sequence. Most developing countries have leasing companies and development finance institutions that supply long-term finance and some risk capital. Without active financial markets surrounding and supporting them, however, these institutions' financial contribution to intermediation is, by necessity, limited. They stand like isolated bridgeheads waiting for the capital markets to develop around them.

But, as mentioned earlier, development of a capital market calls for a number of prerequisites that are worth repeating:

- sufficient supply of securities
- sufficient demand for securities
- tax neutrality toward financial instruments
- a critical mass of merchant banks, brokers, and other market makers
- adequate information standards including proper auditing capacity and adequate information flows
- a minimum population of enlightened investors.

It follows that a strategy most countries of Sub-Saharan Africa might consider in order to develop a capital market is, in a first stage, to strengthen and expand those trading and market making functions and activities of the money market that are easily transferable into capital markets operations. On the way toward developing these markets, some mechanisms and institutions could be added, while the prerequisites mentioned in the preceding paragraph develop.

*STRENGTHENING AND EXPANDING THE MARKET-MAKING FUNCTION.* Functions that are essential to the operation and development of capital markets and that can be transferred without too much change to securities and capital markets are those involving market making and, in particular, those leading to provision of liquidity and term transformation and matching of supply of, and demand for, various financial instruments. The promotion of these functions toward dealing in longer term instruments should be actively pursued. In particular, the matching and trading functions can gradually be extended toward private placement of shares. This operation, the first one that usually appears in the process of capital markets development, consists in the sale of shares to a pre-identified group of purchasers, such as institutional investors. In general, a private placement does not require a prospectus to be issued because the purchasers have sufficient information on which to base their investment.

*EXTENDING THE MATURITY OF FINANCIAL INSTRUMENTS.* To create a demonstration effect and introduce trading in longer maturities, the government may issue longer term bonds. To ensure their liquidity, the central bank may accept them for rediscounting. Another option is that the central bank backs a discount house that, with or without a government deposit, would act as a lender of first resort.

*PROMOTING VENTURE CAPITAL COMPANIES.* This is where development of a capital market is steered toward supply of risk capital. The difference between a lending and a venture capital function has been mentioned earlier. Venture capital companies are institutions that specialize in the latter function. There are many different types of venture capital companies, some catering for large ventures, some fostering small entrepreneurs. In developed countries they tend to specialize by sector, products, technologies, or clientele. Experience with venture capital companies operating in developing countries is emerging only now. Perhaps the main difference with those in developed countries is the degree of involvement of the venture capital company in the implementation of the project. Without getting into sweeping generalizations, it can be noted that in developed and developing countries alike, the decision to invest in a project is taken according to a number of criteria, including the quality of the technology, and the management, the market potential, and other similar elements. But once the project is approved in developed countries, it is left to itself to start and mature.

In contrast, in developing countries, it appears that successful venture capital companies are those that assume most of the functions needed to design, start, and bring the project to maturity, until such time as these functions are developed within the project and can be taken from the venture capital company. It is a formula that is close to the financing project activity and project support that many development financial institutions carry out already in developing countries. It is also a formula suitable for the development of medium and small enterprises. The difference is, of course, the degree of risk taking and the provision of risk capital. It is also very much the willingness of the venture company's management to take losses.

Usually an over-the-counter market is needed for venture capital companies to sell shares in successful companies it financed, so as to recycle its capital and take its profit. Until an over-the-counter market emerges, this trading function can take place, first, on a private placement basis.

Finally, the establishment of venture capital companies may require specific legal provisions. Two of them are essential: tax deductibility of capital losses and nontaxation of capital gains.

There are financial institutions in countries of Sub-Saharan Africa that could almost immediately or in the near future assume a venture capital function independently or within a merchant banking function, drawing on their experience with project financing or their contacts with entrepreneurs from the sector of medium and small enterprises.

*FORMALIZING INVESTMENT FINANCE AND TRADING.* Once private placement has led the way to over-the-counter trading, there is room for merchant banks and other market-making financial

institutions to establish investment funds and unit trusts. Gradual formalization of these institutions' mechanisms and investment vehicles will pave the way for the establishment of a stock exchange on which all types of securities should be traded.

*DEVELOPING AN ADEQUATE REGULATORY AND PRUDENTIAL FRAMEWORK.* Early in the process of fostering the development of money and capital market the authorities may give due consideration to the formulation and adoption of a comprehensive securities market law. This would ensure the necessary degree of uniformity of regulations for the closely related primary-issue and secondary-trading markets. It is of utmost importance that the development of a regulatory, supervisory, and prudential framework remains a few steps ahead of the development of the markets themselves. This will prevent insider trading, other irregularities, and bust-and-boom cycles—all adverse developments that, because of their deleterious impact on public confidence, set the development of financial markets back, not by months but by years.

## Appendix I: Options for Capital Market Development

There is no ready-made blueprint for developing financial markets. There are, however, certain key features that will determine the strategy adopted, including:

- the need for market makers who undertake to buy and sell specified securities to maintain an orderly and relatively stable market
- the need for financial intermediaries to buy, sell, and manage securities on behalf of customers
- the need for secondary markets to buy and sell financial instruments to create liquidity for savers and investors
- the need for a fiscal, legal, and regulatory environment that permits a reasonable return on investment.

Although in theory, there are a number of ways of developing this institutional framework, in practice there are relatively few viable approaches that can be implemented because of the institutional capacity currently in place in countries of Sub-Saharan Africa. The following section analyzes a range of investment mechanisms that are suitable for the region.

### *Investment mechanisms and intermediaries*

A brief definition of each investment mechanism or intermediary is provided, followed by a discussion of the structure and operations and of the advantages and disadvantages in establishing or using the mechanisms.

*PRIVATE PLACEMENT.* A private placement is the sale of shares to a preidentified group of purchasers, such as institutional investors. In general, a private placement does not require a prospectus (a legal document prepared in connection with a public offer disclosing all material information about a security to be issued) because the purchasers have sufficient information on that to base their investments.

The mechanics of this transaction are similar to that of a direct investment, except that two or more passive investors are to be involved. The motivation for investment is capital growth and income without management and operational responsibilities. The mechanics of selling shares through this vehicle are flexible; a formal solicitation of bids from prospective investors can be sought or direct negotiation with preselected buyers can be conducted.

Institutions such as pension funds and insurance companies constitute the target market for a private placement. These institutions usually have relatively large sums of money available for investment. Purchasing shares through private placements provides an opportunity to invest in equities without assuming the administrative costs associated with direct management responsibilities. Few individual investors are likely to participate directly in such transactions since typically there are not many individuals with sufficient funds available to purchase and retain large blocks of shares.

The transaction costs for a private placement include preparation of an offering document. This is normally assumed by the seller and recovered through the sale of the shares. Recurrent operating expenses would only be incurred if the purchasers desired external management of the portfolio.

As mentioned above, this investment mechanism usually does not enable the independent investor to participate, because the financing requirements are often excessive at the individual level. In addition, the use of private placement may result in concentration of wealth within the economy. The objective of mobilizing savings is, therefore, only partially achieved. A private placement also exposes the individual or group of investors to the risks of the financial performance of a small number of companies. Therefore, this investment mechanism is to be used at the beginning of the development of financial markets and only as a transitory mechanism until such time as alternative mechanisms that are better able to spread ownership and risk emerge.

**INVESTMENT COMPANY.** An investment company is a privately held company (most likely a limited liability company) that invests in a broad range of securities. The investment company could be a passive investor or could take an active role in the management and operation of its investments.

The main objective of an investment company is to realize capital growth from the underlying investments. Securities are generally held for an extended period and not traded on a frequent basis. Accordingly, a typical investment company must have access to long-term sources of funds and will have little need for liquidity.

The terms and conditions of buying or selling shares in an individual corporation by an investment company are normally determined through a process of negotiation. Often, the shareholders of the investment company will develop criteria for new investments and disinvestment. In some instances, the articles of association may specify priority sectors for investment and the conditions of shares acquisition or disposal.

The participants in an investment company could include institutional investors and/or possibly a few select individuals. At inception, long-term funds to purchase the initial shares in the company would have to be sought with the understanding that the ability to liquidate the investment is limited. Moreover, the company must have access to additional long-term funds for future investment.

In addition to those costs normally associated with the establishment of a corporate entity, the investment company would also incur duty on authorized share capital and often stamp duty on all transactions in shares. Ongoing operating expenses would include that of a general manager, as well as professional, support, and administrative staff.

The advantages and disadvantages of an investment company are broadly similar to that of private placement. This mechanism neither contributes to promoting wider share ownership of assets nor mobilizes all available saving for productive investment. In addition, an investment company is not typically geared to liquidate holdings rapidly when and if the need arises. Because of this lack of liquidity, it is unlikely that, as mentioned earlier, an investment company would fulfill its objectives unless there is some public sector involvement or a well-developed secondary market.

An investment company, however, would likely involve significant public sector participation. Similar to the current institutions involved in the capital market, the investment company would suffer from inability to liquidate holdings as and when the need arises. Because of this lack of liquidity, it is unlikely that the company would fulfill its objectives without some public sector involvement and contribution.

**UNIT TRUST.** A unit trust is an investment mechanism that provides a large number of investors with a means to participate in a diversified portfolio of investments. The basic idea is simple: a large number of investors pool their money to obtain a range and spread of professionally managed investments that they could not obtain individually. The advantage is that the investor in a unit trust is taking much less of a risk than a direct equity investor, because the diversity and breadth of the portfolio reduce the effect that any one share can have on its overall performance.

A unit trust is divided into equal portions called units, with each unit being worth the same amount. The price of units is calculated regularly by the managers and is governed by the value of the underlying securities. Generally, two prices are quoted; the higher (offer) price being the price the investor pays to buy units and the lower (bid) price being the price he or she will receive for units sold back to the managers. The spread between bid and offer prices is dependent upon market conditions. In the United Kingdom, for instance, it is typically on the order of 5 to 6 percent.

Unit trusts have different investment objectives. For some the dominant objective is capital growth, that is reflected principally in an increase in the unit price. For others, it is regular income for the unit holders, that is, dividends. The income generated by the underlying

investments is usually distributed twice yearly on specified dates. The income is distributed after the deduction of the annual management fee and net of the basic tax rate.

A unit trust is set up by a trust deed, that is an agreement between the trustees and the managers, and covers the main aspects of the running of the trust. The essential characteristics of the deed are that it states the rights and responsibilities of all concerned, the provisions enabling new members to join, the charges that can be made by the managers for administering the funds, and provision for calculating the buying and selling prices of units.

The unit trust management makes the day-to-day investment decisions necessary to the running of the trust and deals in units with the public. The trustee is an independent party whose job it is to hold the actual cash and securities belonging to the trust and also to ensure that the management is running the trust properly, that is, in accordance with the trust deed. The trustee is often a major bank or insurance company. Because of the trust structure of the investment and the fact that the management does not actually hold the money or stocks that make up the fund, there is no risk to the investor in the event of a management group's collapse.

One of the most important functions of the trustee is to act as custodian of all the cash and securities in the trust. All the assets of the trust are held in the trustee's name and it is the trustee who issues certificates to the unitholders, not to the managers. Similarly, before any proceeds are released to meet the sale of the units, the trustee has to receive the relevant cancelled units. Supervising the register of unitholders, settling all investment transactions, and collecting and distributing the income of the trust are just some of the tasks performed by the trustee that are essential to the running of a trust. By becoming so involved in the day-to-day operations of the trust, the trustee serves to protect unitholders and the public from any possibility of fraud on the part of the management.

The other main duty of the trustee is to ensure that the trust is managed within the terms of the trust deed. From the unitholder's point of view, the most important aspect of the deed is the investment aim of the trust. It is the task of the trustee to ensure that the investment aim is adhered to.

The majority of unit trusts issue interim, as well as final, reports of their funds. This means that the investor will receive a regular, six-month update on how his or her investment is progressing. All reports give details of the directors of the unit trust company, the auditors, investment managers, and trustees.

In most countries, investors in unit trusts are individuals who have neither the time, money, nor perhaps the expertise to successfully undertake direct investment in equities. In theory, a unit trust can reach and accommodate a broad range of investors including pension funds and insurance companies, corporations, and individuals. Although the structure of a unit trust can easily accommodate the small investor, it is likely that in Sub-Saharan Africa, at least initially, individuals will purchase only a small percentage of the units in the trust. Not only are individual savings in the region relatively limited, but mobilizing this source of investment requires development of confidence in the market. At the beginning, therefore, the primary sources of investment are likely to be institutions.

Development of a unit trust involves a number of up-front costs including, but not limited to, the preparation of a trust deed. These initial costs can be recovered through either an initial front-end charge added to the price of a unit or recovered through annual fees. The initial charge is often waived or reduced for large investors. In addition, an annual management charge is also incurred. This annual charge is normally taken out of the income of the trust fund and used to pay the managers as well as the trustees.

In the United Kingdom and the United States, there is no statutory limit on the unit trust charges, though the trust deed itself will normally state the maximum levels the managers are permitted to charge. Common rates are 5 percent for the initial charge and 0.75 to 1 percent for the annual charge.

*INVESTMENT TRUST.* An investment trust is a limited liability company usually set up under and subject to the provisions of the Companies Act. An investment trust has a fixed-share capital base and its shares are normally traded on stock exchanges. It is, thus, a closed-ended

investment vehicle as opposed to open-ended, such as unit trusts (although there exist closed-ended unit trusts). There are only a fixed number of shares in each investment trust available, although companies can increase their authorized and issued share capital just as any other limited liability company. The managers of unit trusts, on the other hand, can simply create or cancel units according to public demand.

With regard to objectives, investment trusts have many similarities with unit trusts. In terms of operation, however, they are two very different investment mechanisms. Investment trusts, in fact, preceded unit trusts into the world by more than 50 years. The first investment trust was established in 1896 with the aim of providing investors with moderate means the same range of investments that were previously only available by direct investment to investors of greater wealth. Would-be capitalists of limited resources could pool their funds, achieve a spread of investments and, it was hoped, benefit from professional investment management at low cost.

The differences between an investment trust and a unit trust are many. First, an investment trust is not, in fact, a trust at all. It is a public limited liability company that invests its own share capital supplemented by borrowings, if required. The so-called trust feature arises from the normal requirement that all income be distributed by way of dividends to the shareholders rather than being partly retained to finance growth. Profits arising from investment switches, however, are generally retained.

A second, and perhaps the most important difference is the closed-ended nature of an investment trust. There are only a fixed number of shares in each investment trust available, although companies can increase their authorized and issued share capital as any other limited liability company can. Moreover, it would be extremely difficult to reduce share capital in an investment trust should the demand for shares decline dramatically. The managers of a unit trust, on the other hand, can simply create or cancel units according to public demand.

A third key difference is the manner in that shares in an investment trust are valued. Investment trust shares are normally bought and sold on a stock exchange, but the quoted price does not necessarily equal the underlying asset value. The actual price per share is the equilibrium price equating supply of, and demand for, shares: when demand exceeds supply, the price will tend to rise and the discount will narrow, and when demand is weak prices will fall and the discount might widen. This sharply contrasts with the way in that units are valued in a unit trust, a method whereby the price faithfully mirrors movements in the prices of the underlying investments.

In principle, investment trusts, in contrast with unit trusts, require the existence of operating stock exchanges. Without these, transactions in shares and their valuation is cumbersome. In the absence of a stock exchange, any intending seller would have to seek out a buyer for his or her stake. Valuations would then be based on the overall demand for equities as well as the underlying value of the investments.

Finally, management discretion in a unit trust is much more restricted. Investment trust managers can be more entrepreneurial in their investment decisions because they are not governed by trust deeds that limit the size of stakes that can be taken in individual companies relative to the size of the trust. They are only bound by their own memoranda and articles of association, plus the prudence of the management team. Unit trusts tend to be limited to modest stakes, and there is little or no opportunity for the unit trust managers to exert the sort of influence over the development of companies that investment trust managers are generally afforded.

Shares in an investment trust can be purchased by anyone, including institutional investors, corporations, individuals, and other investment trusts. Individuals, however, usually do not have the means or the propensity to invest if shares are sold in large blocks. The main sources of investment would, therefore, be institutional investors and select corporations.

Such a pattern of investment is found today in the United Kingdom's investment trust industry. Investment from individuals now accounts for less than 25 percent of total investment trust shareholdings. This is a dramatic decline from the amount of investment in the 1960s

when investment from individuals accounted for the majority of investment. There are a number of external factors that account for this shift in investment, but analysts believe that competition from unit trusts is the major factor.

The preoperational expenses for an investment trust include all costs associated with the formation of a limited liability company, including duty on share capital and the costs associated with preparing a prospectus. Moreover, the company could be subject to stamp duties on transactions in shares.

Ongoing management expenses will also be incurred, including the appointment of a professional manager, professional advisors, and professional, support, and administrative staff. Professional advisors are normally appointed by the shareholders on the basis of the size of their shareholding, and compensation is generally based on a percentage of profits plus a small fixed fee.

*UNIT TRUSTS AND INVESTMENT TRUSTS.* An investment trust fulfills certain objectives that are not possible through a private placement or investment company. Such a trust could mobilize savings for productive investment through structuring the fund to meet the preferences and requirements of the institutional investors. Unlike the first two options, a trust company would permit investors to acquire an ownership position in a broad range of investments and thereby reduce their exposure to the financial performance of any one company.

An investment trust, however, does not usually cater to the retail market or smaller investor. Because the number of shareholders is usually small, the opportunity for selling shares in the fund is more limited than with a unit trust. Rather than being sold in large blocks, the shares in a unit trust are sold in units that could be priced in such a manner as to attract the retail market. Although this segment of the market is not currently viewed as a major source of funds in most countries of Sub-Saharan Africa, this option would at least permit the individual an opportunity to invest savings in equities and begin the process of capital accumulation.

A unit trust is also usually open-ended, which permits an increase in investments through the issuance of additional units to the public. This does not mean that it can do without an operating stock exchange. The latter is needed for the valuation purpose of the underlying stock. Conversely, an investment trust could only be increased in size by an increase in shareholding authorized by the majority of existing shareholders. New acquisitions would be difficult, and an investment trust would not, therefore, emerge as a new financial intermediary in the long term.

The management function in an investment trust is usually strongly influenced by the majority shareholder. Conversely, the management function in a unit trust would not be controlled by any individual unit holder; the trust deed would define the powers and authority of the trustees and the managers. Fees, however, may be slightly higher with a unit trust than, say, an investment trust because of the larger number of shareholders and heavier administrative requirements.

*STOCK EXCHANGE.* A stock exchange is one of the institutions in the secondary market where securities that meet prescribed listing requirements are traded. Brokers, or securities professionals, act as agents for both buyers and sellers, usually without trading on their own account. In active markets trading is conducted on a continuous basis. In less active stock exchanges, securities are bought and sold in rotation or at a specific time.

Trading in securities may also occur outside the organized stock exchanges. In these so-called over-the-counter markets, transactions take place by means of negotiation between the buyer and seller. An example of such a market is the National Association of Security Dealers' Automatic Quotation system (NASDAQ) in the United States. In an over-the-counter market, the brokers buy and sell securities to and from their own inventories. Customers, or other brokers representing customers, buy or sell securities from other brokers who act, in fact, not as agents, but as principals, that is, as dealers. Thus, the over-the-counter market is off the exchanges; it is a dealers' market.

Traditionally, the instruments traded on stock exchanges are shares. Equity-related instruments such as convertibles, bonds, and issues with warrants are also often traded. Shares and bonds are likely to constitute the only instruments traded on exchanges in the early stages of development. Over time, however, other instruments are likely to arise to meet the country's changing conditions. Other instruments, such as floating-rate bonds, indexed bonds, options, and futures, are likely to develop with time. Security markets in futures, for example, have been developed only recently to minimize risk against foreign exchange fluctuations. These are simply mentioned to illustrate the flexibility of exchanges and their responsiveness to changing conditions.

Stock exchanges are regulated in one form or another to provide fair, orderly, and open markets. In most developed countries, markets are controlled through self-regulatory organizations that place responsibility with the exchange itself in conjunction with associations of securities professionals. In all instances, listing requirements on the exchanges are specified as well as trading rules, including priority, parity, and precedence. Listing requirements will include regulations on disclosure—the need to make available to potential investors in a public offer relevant information about the issuer and its business, operations, and financial status. The purpose of disclosure is to give investors the information that would enable them to make informed decisions on whether to invest in a company, that is, material information.

In other stock exchanges, particularly in Africa, further listing requirements are usually established in an effort to protect investors. These requirements may include minimum limits on paid-up capital and limitations on the amount of the shares that can be offered.

The price at that securities are bought and sold in a stock exchange is generally determined by market principles. In developed countries, prices are determined by investor perceptions of future earnings and capital appreciation. In other instances, such as the Nairobi Stock Exchange, the initial offer price is determined by public organization, rather than on the basis of supply and demand.

The final investment mechanism, the stock exchange, is ideal in terms of providing the necessary liquidity in the marketplace and providing opportunities for smaller investors to participate in a wide range of debt and equity instruments. Development of a stock exchange, however, is not considered feasible in the short to medium term. An interrelated set of institutional, fiscal, tax, and legal issues, as mentioned in the main paper, has to be resolved before the development of a successful stock exchange is possible. From an institutional perspective, most countries of Sub-Saharan Africa currently lack any market intermediaries (for example, brokers, dealers, or investment banks) that bring buyers and sellers together. The financial instruments associated with trading in this type of market are also not commonly used within the corporate sector of Sub-Saharan Africa. Finally, there are a number of legal and regulatory issues that require alteration to attract public offerings and investors.

In the long term, the development of a stock exchange is both desirable and necessary to channel savings into long-term investments and encourage development of productive enterprises. In the short to medium term, however, it is not feasible to expect that the creation of a stock exchange in and of itself will create an equities market or meet any of the objectives of the current program.

*Source:* IFC data.

## Appendix II: Instruments and Institutions of the Financial Markets

Figure 11.1 The Money Market

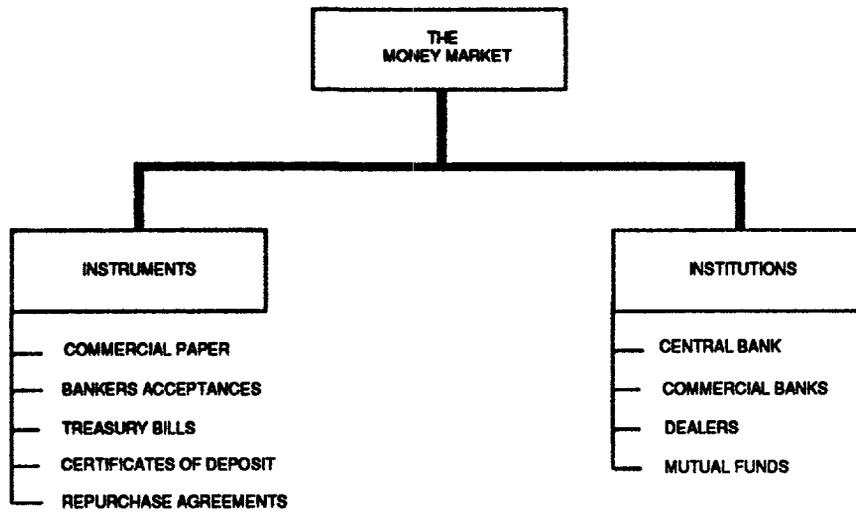
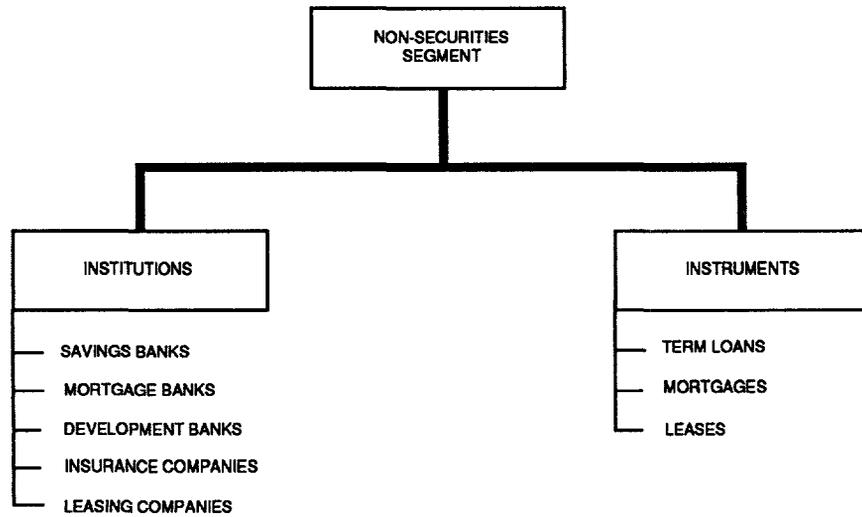
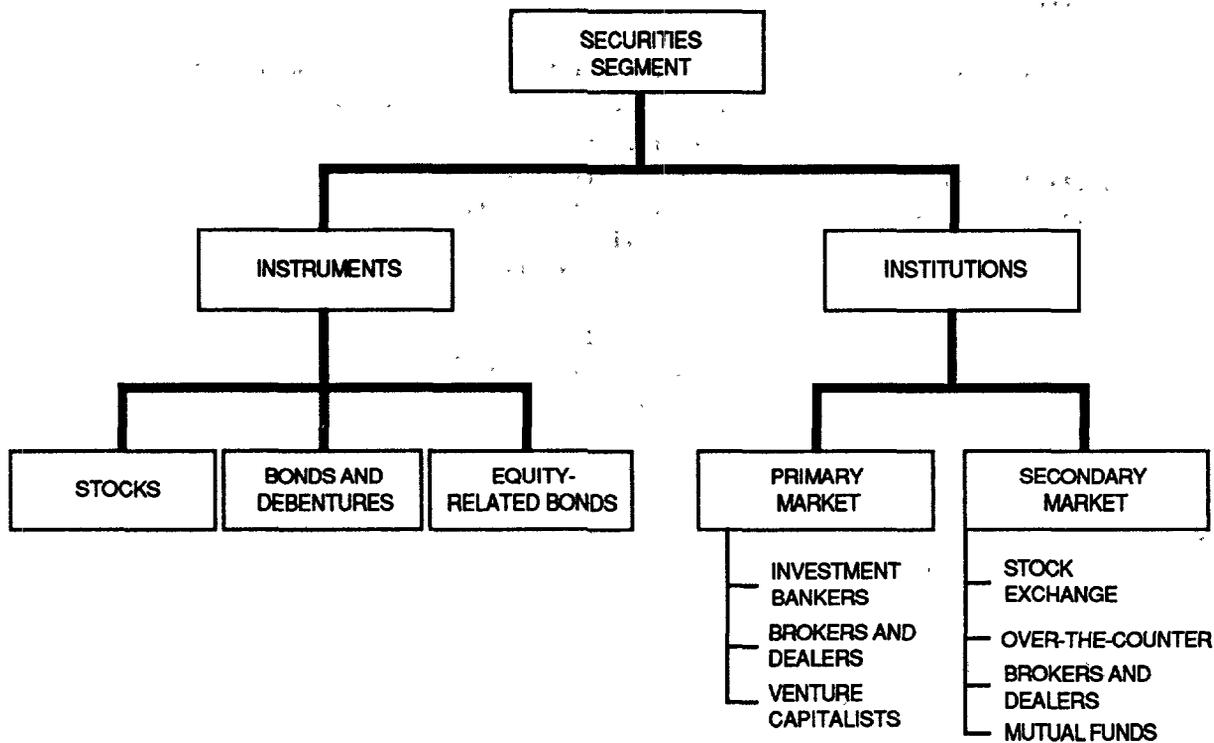


Figure 11.2 The Capital Market—Non-Securities Segment



**Figure 11.3 The Capital Market—Securities Segment**



**Table 11.1 The Capital Market—Securities Market Instruments**

<i>Short-term</i>	<i>Long-term</i>	
<i>Money Market</i>	<i>Bond Market</i>	<i>Equity Market</i>
<b>Government</b> Treasury bills Treasury certificates	<b>Government</b> Government bonds Indexed government bonds Foreign-currency-linked bonds Lottery bonds Commodity-linked bonds State bonds Municipal bonds Public agency bonds	
<b>Financial institutions</b> Interbank market Certificates of deposit Bankers' acceptances Finance company promissory notes	<b>Financial institutions</b> Finance company bonds Mortgage bonds Indexed mortgage bonds Floating rate notes	
<b>Corporations</b> Bills of exchange Commercial paper Trade acceptances Company deposits Early redeemable bonds Repurchase agreements Financial futures Money market funds	<b>Corporations</b> Corporate bonds Convertible debentures Commodity-linked bonds	<b>Corporations</b> Common shares Preferred shares Warrants Options

Source: International Finance Corporation, Capital Markets Department, 1988.

**Table 11.2** The Capital Market—Securities Market Institutions

<i>Issuers</i>	<i>Regulators</i>
Government	Securities commission
Government agencies	Ministry of finance
Financial institutions	Ministry of commerce
Corporations	Central bank
	Self-regulatory associations of securities dealers
<i>Intermediaries</i>	<i>Investors</i>
Brokers	Individual investors
Market makers/dealers	Institutional investors
Underwriters	Pension funds
Securities finance institutions	Mutual funds
	Insurance companies
<i>Marketplace</i>	Banks
Stock exchange	National investment trusts
Over-the-counter market	Fiscal funds
Futures market	Social security funds
Options market	Government-sponsored market makers
	Rescue fund

*Source:* International Finance Corporation, Capital Markets Department, 1988.

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# 12

## THE ART OF BANK RESTRUCTURING: ISSUES AND TECHNIQUES

*Andrew Sheng*

Confucius, when asked what are the three key elements of good government: "Adequate arms, food and faith in government."

"If you had to give up one of three, which would you choose?"

"Arms."

"If you had to give up one of the last two?"

"Food—for death is inevitable, but human society cannot survive without trust in government."

This paper is about bank restructuring as one aspect of good government because bank failure is mainly about the failure of a key human institution: money and banking; and about the restoration (or maintenance) of faith and confidence in government. Most economists deal with financial distress (or bank failure) as an economic or financial problem. The causes of financial distress are usually attributed to one or a combination of two factors: microeconomic (bank mismanagement) or macroeconomic (changes in relative prices, poor macroeconomic policies, or external shocks).

This paper starts with the premise that bank failures are the failures of human (financial) institutions, involving losses to the participants. Bank failures are, therefore, questions of political economy, incurring losses to participants arising from the failure of contracts, legal systems, or the lack of a political mechanism to allocate such losses equitably. There is no unique or optimal solution in bank restructuring. The resolution of bank failures will depend on the individual society's legal, social, and political framework, and more generally, on its social utility function/value systems. Our knowledge of bank failure and its successful resolution is too recent and too sketchy to attempt a comprehensive report on the scientific methodology of bank restructuring. What this paper attempts to do is to bring out some general approaches to bank restructuring, based on the author's personal experience in bank restructuring in five countries, and from the case studies of a number of countries, which have been compiled for the first time for the Research Project on Bank Restructuring from the World Bank papers and specially commissioned studies.<sup>1</sup>

The paper owes a huge intellectual debt to the pioneering work of Long (1988) in identifying the crises in the financial sector of many developing countries, Hinds (1988) in charting the economic consequences of financial distress, and the two insightful papers by de Juan (1991 and Chapter 4 of this collection) on the importance of bank management in the resolution of banking crises. This paper also tries to build on the comparative studies on banking crises by Sundararajan (1988), and Thorne (1988), as well as the important paper on the need for a prudential regulatory framework in rebuilding any financial system by Polizatto (Chapter 10 of this collection). Various techniques of bank restructuring have already been highlighted by

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1. Case studies of bank restructuring have been documented in the following countries: Thailand, Malaysia, the Philippines, the United States (savings & loans), the United Kingdom (secondary banking crisis), Spain, Chile, Argentina, Colombia, and Guinea. Currently, the World Bank is involved (through technical assistance or credit projects) in bank restructuring exercises in a number of other developing countries, including Uruguay, Yugoslavia, Turkey, Pakistan, Hungary, Kenya, Ghana, Nepal, and Nigeria. These have not yet been fully documented.

Popiel (1988). This paper does not depart from those studies except in trying to synthesize different approaches to the complex issues involved, using a New Institutional Economics (NIE) analytical framework<sup>2</sup>, and drawing on the lessons of these case studies. An analysis of the theoretical issues of bank failure using the NIE approach has already been made in a separate paper (Sheng 1989b), and that discussion will not be repeated here. What follows is a short review of the main issues involved in bank failure, leading to a discussion of the different techniques of bank restructuring used in different countries. The techniques identified are designed to assist policymakers and the World Bank staff in the field in considering various ways to restructure banks under different sets of conditions.

## The NIE Approach to Financial Institutions

The NIE approach starts with the premise that firms (including financial institutions) may be viewed as a bundle of contracts between members or participants of the institution, which are designed to protect property rights. Specifically, we can view a bank as a financial institution that engages in intermediation through two basic sets of contracts: a civil contract between the depositor and the bank (in which the bank borrows funds from the depositor and warrants to return the nominal value of the deposit plus interest at due date); and another contract between the borrower and the bank on a loan in which the bank deploys its resources. Both contracts are made subject to conditions precedent, that is, general assumptions as to the prevailing conditions of law and order, or even the existence of normal economic conditions. Some contracts could be voided through force majeure, that is, changes in conditions outside the anticipation of both parties.

In general, these contracts protect property rights through the warranty of solvency. The bank warrants (assures but does not guarantee) to the depositor that so long as it is solvent, with strong capital adequacy, the nominal value of bank deposits will be secure. Similarly, the entrepreneur/borrower warrants to the bank that he or she will repay his loans, through either a personal pledge, or the specific charge against collateral assets.

There is, however, a second set of contracts that may be binding or not wholly binding on the civil contracts of borrowing and lending. For want of a better phrase, these may be called the social contract between the state and the banks and the depositors and borrowers. Through the social contract, the citizens expect that the state will protect individual property rights by enforcing the civil contracts through regulatory agencies and an impartial judiciary system. In developed economies, where there exists a written constitution, a well-established judiciary system and legal history, property rights of citizens are relatively well defined. Established financial systems, for example, have explicit deposit insurance schemes where the rights of depositors are protected. In developing economies, these property rights are not so well defined, with little historical precedence to go by. Greater opportunities exist for cheating, shirking, and opportunism, especially where enforcement of laws is lax. Where colonial contractual laws have been adapted in developing economies, the social contracts are often an amalgam of western contractual or constitutional law, with customary and religious laws that can be contradictory to each other. Gary (1989) has commented on the role of informal legal systems in economic development, where lack of objective standards, reliable enforcement, and conflict resolution procedures lead to high cost of information and higher risks, which can retard economic development. This is certainly true in the field of banking regulations and accounting standards, the vagueness of which compound problems of bank restructuring.

Banking crises or distress occur when depositors fear the loss of their property rights and the breakdown of contractual obligations. This leads to bank runs, run to quality and even capital flight, as depositors seek to avoid capital loss. The uncertainty generated often raises real

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2. See the work by Oliver Williamson, "The Economic Institutions of Capitalism," 1985, and related studies in this field. Refer also to *World Development's* special issue on "The Role of Institutions in Economic Development," September 1989, especially the articles by North and Leibenstein.

interest rates, creates higher costs of transactions, and disrupts the payments mechanism. If left unchecked, financial distress tends to generate massive misallocation of resources.

To prevent this, governments engage in bank restructuring mainly in order to restore (or maintain) public confidence in banking and preserve therefore, the sanctity of the social contract (that is, the state protection of private property rights). Even though in most economies, civil remedies exist for depositors to (attempt to) recover their losses from failed banks through legal channels, depositors generally expect the government to protect their deposits through either explicit deposit insurance schemes or drastic action (bank rescues or restructuring) to protect their property rights. Failures to do so have often been associated with capital flight, changes in governments and social disorder, hence the importance of bank restructuring as a demonstration of good government.

### **Civil Contracts, Enforcement, and Social Implications**

Using the above framework, it can be argued that bank failure can be seen as the failure of a civil contract by a bank to honor its debts to its depositors. This failure could be the result of a related failure of civil contracts of borrowers to the bank, the lack of suitable enforcements of such contracts by the regulatory authorities, deliberate breaches of contract through fraud or conflict of interest transactions by bank management or even force majeure—catastrophic events that void the fulfillment of contracts. Bank failure can also be caused by bad macroeconomic policies, where governments apply inflationary policies to finance fiscal deficits, impose excessively high statutory reserves on banks, maintain negative real interest rates, and force banks to channel resources to inefficient projects.

Financial intermediation contracts are important to any market-based economy because such contracts protect property rights, reduce the cost of transactions, provide certainty of information, and reduce risks of settlement default generally. The externalities of civil contracts related to deposit taking and general financial intermediation can be so large that the enforcement of contracts by the state and the establishment of efficient dispute-resolution mechanisms are important public goods in any developed financial system.

Viewed in this manner, illegal behavior (breaches of contract) can result in individual gain of resources at large social costs. For example, bank mismanagement occurs because bank owners and management can obtain insider information on market transactions or have privileged access to bank resources not generally available to other persons. In less developed economies, where the rules of the game are not clear, bank management and owners can use the resources of banks to attain oligopolistic or monopolistic positions in the financial system, as well as the industrial or agricultural sectors, thus creating inequitable distributions of income and wealth.

Becker's classic 1968 economic analysis of crime and punishment showed that optimal policies to combat illegal behavior are part of an optimal allocation of resources. The calculus of illegal behavior suggests that criminals will engage in maximizing private benefits at the expense of social losses, depending on (p) the probability of the offense being discovered and the offenders apprehended and punished, and the size of the punishment (f). The state can minimize such social losses by improving the definition of crimes, increasing the expenditure on law enforcement (thus raising p), and raising the level of punishment (f). These general principles of legal reform and law enforcement are common in almost all instances of bank restructuring. What is less obvious is the degree to which the state should bear the cost of bank failure and how such costs are ultimately distributed to the different components of society. Such questions ultimately boil down to political issues, which partly explain why governments are often unwilling to recognize the existence of financial distress and even more unwilling to take action on resolving bank failures. One common observation that supports this view is that the willingness of a government to undertake bank restructuring is inversely proportional to the proximity of the next general election date. The corollary of this is that most decisions to undertake bank restructuring exercises are undertaken by new administrations or upon the success of a fresh general election.

## Common Elements of Bank Restructuring

The common elements of a bank restructuring exercise, which have already been well covered by de Juan (Chapter 4 of this collection) and Popiel (1988), are broadly as follows:

1. diagnostics
2. rules reform
3. who should bear the loss?
4. restructuring options
  - regulatory forbearance
  - across the board solutions
  - rehabilitation in situ
  - sale/merger
  - liquidation
5. restructuring mechanisms
  - market based solutions
  - carving out bad assets
  - bank hospitals
  - changing of the guard
  - phoenix from the ashes

To the above, I would add the following:

6. restructuring macroeconomic policies
7. counting the costs
  - monetary
  - fiscal
8. restructuring borrowers

The following sections discuss the experience and issues involved in bank restructuring based upon the lessons culled from the available case studies.<sup>3</sup> The lessons are by necessity tentative, since most of the bank restructuring exercises are still on-going, and the verdict on the success of these exercises is still out.

## Groups of Countries

For the sake of convenience, the experience in bank restructuring can be broadly grouped into four major country groups:

- A. high-income countries with established banking systems, such as Spain, the United States, the United Kingdom and recently Norway (which unfortunately has not yet been fully documented)
- B. low- to medium-income countries with (mixed) developing banking systems and modest inflation levels, such as Malaysia, Thailand, Philippines, Kenya and Colombia
- C. centrally-planned economies with broadly nationalized banking systems in process of transition to market based economies, such as Hungary, Poland, Guinea, and Pakistan
- D. high-inflation, high-debt economies, and badly affected banking systems, with the most extreme example being Argentina, but would also include countries such as Turkey, Yugoslavia, and Chile.

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3. Summaries of case studies for nine countries (Spain, the United States, the United Kingdom, Colombia, Chile, Thailand, Malaysia, the Philippines, and Guinea) are presented in the appendix. The case studies for other countries earmarked in the Research Project on Bank Restructuring (Yugoslavia, Hungary, Argentina, Pakistan, Mauritania, Kenya, and Ghana) have not been completed as restructuring exercises are still ongoing and data are not fully available.

The above groupings cannot be carved into stone, because certain countries share common characteristics, even though they may be placed in different groups. For example, the sharp decline of energy prices affected badly the banking systems of the southwest United States, Norway, and Malaysia. Yugoslavia could be included in the centrally planned economy group C, but the existence of high inflation, which requires major macroeconomic adjustments together with microbank restructuring, would place it instead in group D.

## **Diagnostics**

There is ample evidence that bankers and policymakers all develop disaster myopia in the face of an impending banking crisis. de Juan has already highlighted the tendency of bankers to engage in cosmetic behavior, evergreening bad credits, assetizing losses, and hiding material risks and losses from the public and bank supervisors.

The same can be said of many governments, which have allowed banking laws to become outdated, neglected enforcement of existing laws and regulations, or worse still, engaged in perverse or financial repressive policies that use the banking system to finance large fiscal deficits. Sundarajan's (1988) study of banking crises in six countries showed that banking crises were typically associated with large internal and external imbalances due mainly to the pursuit of inappropriate macroeconomic policies.

In a number of instances, the bank failures were the result of financial liberalization having been done without first putting into place appropriate regulatory and monitoring systems. The banking crises in Argentina and Chile in the early 1980s followed the extensive financial sector liberalization in the 1970s without creating a strong supervisory regime. A key lesson of the U.S. savings and loan debacle is the danger of permitting the thrift institutions to diversify out of traditional housing finance into commercial lending without adequate supervisory checks and balances.

Typically, when banking problems begin to surface, the supervisory authorities fear to face up to the issues because of the high budgetary costs involved, the sensitive political issues, and the bureaucratic wishful thinking that the problems would go away. In many instances, the authorities refrain from the reform of the laws and accounting standards and even engage in regulatory forbearance—allowing more and more ailing institutions to break the law, hoping that time and economic recovery will resolve the problems. As Hinds (1988), de Juan (1991, a & b) and others have amply demonstrated, such problems do not simply go away; rather, they compound the problems of macroeconomic management and worsen the recovery process.

The World Bank is getting quite good at helping countries to get out of the dark (de Juan, 1991b). The measures typically include improving the bank accounting standards, especially loan classification and interest accrual standards; auditing portfolios and studying the diagnostics of ailing banks; creating greater bank financial disclosure; reforming banking laws and regulations; and upgrading the bank supervisory capacity, especially in off-site surveillance and onsite inspection. This is the easy part of the game. Many governments, induced by prospects of funding, have undertaken such reforms with zeal, including even the establishment of deposit insurance schemes. Many, however, have hesitated at the great divide between aspirations and reform, especially when the size of the problems—financial, legal, institutional and political—come into clearer focus after the diagnostic studies become known.

One aspect of diagnostic studies needs special mention: the issue of bank asset valuation. Asset valuation is relatively straightforward in developed economies, with established markets, professional valuation expertise, and set accounting and asset valuation standards. Asset valuation is much more difficult for less developed economies where the markets are narrow, there is little or no professional valuation expertise, and accounting standards are vague or nonexistent. This is particularly true of economies in transition, such as centrally planned economies switching to a market-based economy. It is therefore the job of the authorities to develop such standards and expertise.

In many countries, however, bankers and supervisors spend an inordinate amount of time arguing whether such standards on loan provisioning are too stringent or not, because that affects basic bank solvency. This misses the whole point of bank accounting: bank assets should be valued on the basis of current cash flow and revenue, on current economic conditions, rather than on future or expected events, which is speculative in nature. This banking principle remains true, even in centrally planned economies and high inflation systems. Bank assets should be valued on borrower viability rather than collateral.

It should be noted that high inflation economies have one additional problem in valuation. Under hyperinflation situations, such as in Argentina recently, domestic currencies no longer serve as numeraires, and adjustments to asset valuation using price indices can be quite meaningless in the face of rapidly changing markets. In such circumstances, valuation may have to use acceptable foreign currency as numeraire, such as the U.S. dollar.

In sum, getting out of the dark really means setting objective standards of measurement, independent verification of results of bank operations (through auditors or supervisors), and full disclosure of results to all parties involved in bank restructuring, including depositors, shareholders, bank employees, and management and the supervisory authorities. The true extent of losses and implications of loss distribution should be transparent to all parties, as perceptions of inequitable distribution of gains or losses, based on imperfect information, can sabotage any restructuring efforts.

## Rules Reform

Bank restructuring essentially involves the apportionment of losses arising from the failure of a set of existing contracts, and the renegotiation of a fresh set of contracts—a new institutional setup. Elements of game theory therefore apply to bank restructuring. Under conditions of imperfect information and uncertainty as to behavior of other game participants, should all parties cooperate in a mutual contract that maximizes social gains (Coase's Theorem), or should each participant maximize self-interest, leading to large social loss (Prisoner's Dilemma)?<sup>4</sup> Indeed, to what extent should the gainers compensate the losers (or minimize their losses) in order to achieve social optimality?

Conventional rule changes typically emphasize the importance of prudential re-regulation, redrafting of banking laws, enforcement powers, clearer bank entry requirements, regulations to prevent insider trading, connected lending, ownership concentration, and clearer bank exit (restructuring) rules. In many developing countries, the existing bank laws and regulations, many of which were retained from colonial regimes, have become hopelessly outdated. The simplistic banking laws of the preindependence era cannot cope with the technological advances in banking and innovation in banking services. Moreover, the emergence of indigenous bankers amid enclaves of foreign banks, together with the rise of public-owned banks with socioeconomic objectives, has created new pressure groups with their own agendas of priorities, which do not necessarily include economic efficiency. In Pakistan, for example, unionized employees in the nationalized banking system make it highly difficult to retrench staff to improve bank productivity. Under the Marcos regime in the Philippines, political connections could determine priorities in obtaining funding from government banks, rather than pure project viability and efficiency. From a political perspective, banks (and especially government-owned banks) play a major role in control over economic resources and are power centers in themselves. Bank licenses to politicians in some developing countries are franchises to support political activities, with disastrous consequences for asset quality and bank efficiency.

Improving the rules of the game generally implies improving competition and bank intermediation efficiency, leveling the playing field, preventing monopolistic or oligopolistic

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4. See Michael Lipton (1985). Lipton views the prevalence of noncooperation situations (Prisoner's Dilemma) in developing countries as partly due to risk aversion among the poor, and a transition of trust, where the new state authority has not yet fully acquired the information or the power to penalize or reward, relative to the old clan or tribal authorities, who apply common law or traditional customs.

practices, and defining more clearly (and, it is hoped, more equitably) the gains and losses of banking. Included in such reforms are the establishment of deposit insurance schemes to protect the small depositors, and bank ownership dispersion rules to prevent concentration of ownership in a single economic class.

However, prudential re-regulation and institutional reforms take time to renegotiate and develop. Normally, a social consensus has to develop before such laws and institutional reforms can be implemented. The dangers of market liberalization without clearly defined prudential rules and enforcement are clearly demonstrated in the financial liberalization experience of the Southern Cone economies. Such liberalizations resulted in excessive concentration of wealth (with interconnecting ownership of banks and enterprises) that developed oligopolistic practices, retarded competition and efficiency, and in many instances, created massive fraud that was borne ultimately by depositors and the taxpayer. The Chilean and Colombian bank restructuring experience contained deliberate attempts to broaden bank ownership and cut out interconnected lending, with limited results. These lessons are particularly applicable to nationalized banking systems in Eastern European economies seeking to divest ownership and control to the private sector.

A final word on the rules of the game. The best bank laws and regulations are useless if they are not enforced. In the face of entrenched interests, many bank supervisors fear to enforce even existing laws, preferring to wait for legal changes. Even the Bank of England would agree that raising the governor's eyebrow will not suffice today to deter wrongdoing, hence the recent prosecution on the Blue Arrow affair.

### **Who Should Bear the Loss?**

Conventional western thinking assumes that losses in banking should be borne, in broad descending order, by borrowers, shareholders, fellow bankers, other creditors/employees in situations of liquidation, government, and, lastly, the depositors.

The experience of banking in developing economies is not so clear-cut. Certainly, in some cases, bank debts owed by politicians have sometimes been known to have been repaid through political favors rather than in cash. In other cases, borrowers prefer to reduce their losses through bribing bank management to lose security documents, or delay enforcement by bribing court servers to lose their files. In many developing countries, bank losses do not necessarily occur because of poor credit evaluation, but because of borrowers' unwillingness to repay, reinforced by the delays in courts to enforce repayment, and the use of political clout to pressure banks not to pursue repayment. In other words, where governments do not enforce contracts, borrowers gain by cheating and shirking such contracts, passing on more losses to the banks.

In the same vein, the principle of shareholders bearing the first brunt of losses is not always followed in developing countries. In Colombia, government injection of capital into one bank helped cushion losses for existing shareholders. Before laws were changed in Thailand and Malaysia, initial bank restructuring efforts involved only losses being borne partially by shareholders. In Thailand, the finance company shareholders only surrendered 25 percent of their shares to the ministry of finance in return for lifeboat support, while in Malaysia, central bank injection of capital absorbed *pari passu* losses of three commercial banks with existing shareholders. Subsequently, both countries required full capital reduction of losses before government assistance became forthcoming.

The issue of forcing fellow bankers to absorb losses of failed banks is an open one. The European banking community, especially the British, maintain a tradition of inducing established bankers to absorb small bank failures, thus encouraging greater bank concentration through mergers. European bankers tend to tolerate banking cartels, which offer greater banking stability at the expense of higher spreads and lower competition, although this has changed recently. In Hong Kong, for example, the Hong Kong & Shanghai Bank absorbed Hang Seng Bank when the latter faced difficulties in the late 1960s, and the strengthened subsidiary was instrumental in absorbing smaller banks in difficulties in the early 1980s.

A protracted problem in bank restructuring is the position of employees. In many developing economies, banks are large employers. The Argentinian banking system has a labor force of 145,000, three times that of Malaysia with only twice the latter's GDP. The bank employees become a strong lobby against the closure of banks, particularly government-owned banks. For insolvent banks, staff retrenchment may be inevitable, but the labor laws must have equitable retrenchment benefits, which must be taken into consideration under the costs of restructuring. One of the worst excuses for keeping insolvent banks open is that of maintaining employment.

Developed banking systems with explicit deposit insurance schemes typically shelter depositors fairly fully from bank losses, particularly if there is quick action by supervisory authorities to merge with or acquire ailing banks before they fail. The assumption is that depositors must be protected to encourage savings and maintain confidence in the banking system. This assumption is certainly not held in high-inflation and financially repressed economies, where the authorities have not hesitated to pass on losses to the depositors through the inflation tax or through negative real deposit rates.

In low-inflation economies without explicit deposit insurance schemes, however, some losses have been borne by the depositors. Two interesting cases deserve special mention. In the case of the failed finance company depositors, the Thai authorities agreed to repay only the deposit principal, without interest, over 10 years, at the rate of 10 percent per year. With an average inflation rate of 5 percent per annum, the depositor bore, in real terms, approximately 50 percent of losses. In the case of the failed Malaysian deposit-taking cooperatives, the Malaysian authorities agreed to repay the principal, 50 percent in cash over 2 to 3 years at a positive (but low) interest rate and 50 percent in equity or convertible bond in a licensed finance company that absorbed the assets of the failed cooperatives, and whose shares would be publicly quoted in the near future. The depositors effectively had a put option. If the finance company succeeded in turning around, they stood a good chance of future capital gains, possibly in excess of their lost interest. If the finance company failed, the depositors' loss would not be worse than if the cooperatives were liquidated.

The deposit-equity conversion of banks is a good way of recapitalizing banks and building safety cushions in the banking system against shocks, provided management is in good hands, and an efficient domestic capital market exists. Deposit-equity conversion in the case of phoenixes (ailing institutions merged into a viable institution under sound management) is probably a technique that should be explored further. This is no different from the debt-equity conversion solutions for international debt.

The question remains on how much of the residue losses should be borne by the public sector. Moreover, should the bank failure losses be absorbed by the treasury or the central bank? Conceptually, the central bank forms part of the public sector, and there should be no difference between the treasury and the central bank. In practice, the financing of the losses can be critical in the design of the bank restructuring scheme. The key lies in the solvency of the central bank and its net savings in foreign exchange reserves.

A traditional central bank with only non-interest bearing monetary liabilities, high capital, and reserves represented mainly by foreign exchange assets should have little problems in absorbing the bank failure losses. The stock of savings of the public sector is reduced by the extent of the write-off. To the extent that the private sector engages in capital flight, the central bank may lose some foreign exchange reserves. The losses in the failure of some small banks in Hong Kong in the early 1980s were written off partly against the reserves of the Exchange Equalization Fund. For such solvent central banks, devaluations create large revaluation surpluses that could easily absorb the losses from banking failures, while at the same time correcting for deflation arising from the decline in export incomes.

On the other hand, central banks with high interest-bearing liabilities and net foreign exchange liabilities do not have the capacity to absorb bank failure losses. These central banks would monetize such losses through the growth of their monetary liabilities, generating the inflationary pressure that in effect distributes the losses to the holders of currency and central bank liabilities. Indeed, devaluations to combat external imbalances have worsened the inflation situation, since the central bank incurs further foreign exchange losses from its net

foreign exchange liabilities. Large quasi-fiscal deficits incurred by the monetary authorities have been a major source of inflation in countries such as Yugoslavia and Argentina.

Experience would suggest that where central banks do not have the capital and reserves to absorb bank failure losses, the losses should be absorbed by the treasury. In essence, the treasury may finance bank failure losses through six options: raising additional taxes, cutting expenditures, introducing domestic long-term borrowing, introducing external borrowing, using the inflation tax, or selling its real or financial assets. All involve passing on the burden of bank failure losses ultimately to either the taxpayer or the holder of public debt. The implications of different forms of financing is discussed in the section on the monetary and fiscal costs of bank restructuring.

## **Restructuring Options**

The options for restructuring distressed banks depend on the circumstances specific to each country. It will be useful to classify countries in four groups: the developed countries (group A), the developing countries with a relatively stable macroeconomic environment (group B), the centrally planned economies (group C), and the highly indebted/high inflation countries (group D).

### *Group A*

Up until 1980, well-documented bank restructuring experiences have been confined mainly in the group A (developed) countries, such as the lifeboat scheme of the United Kingdom, and the Federal Deposit Insurance Corporation (FDIC)/Federal Savings and Loan Insurance Corporation (FSLIC) purchase and assumption model in the United States. Initially, bank rescue schemes involved primarily liquidity support by either the central bank or a deposit protection scheme (funded by the government), but as most liquidity cases deteriorated into solvency problems, concrete restructuring techniques and mechanisms had to be developed.

The U.K. Lifeboat scheme was fairly straightforward in operations. Banks seeking support came to a control committee staffed by clearing bank representatives and chaired by the deputy governor of the Bank of England. Each applicant was assigned a related bank (the clearing bank that had the most exposure), which evaluated its solvency. Those found solvent were given liquidity support from the fund. Some were sold or merged into other institutions. Those that were found insolvent and could not be sold were put into receivership and eventual liquidation.

These relatively informal private sector/central bank efforts were more formally developed in the U.S. FDIC/FSLIC failure management models. These involved basically a purchase and assumption technique, which required a healthy bank to buy the good assets of the failed bank and assume all deposit liabilities. The FDIC/FSLIC made up the difference through an income maintenance package that replaced the lost income due to non-performing loans, or FDIC bought out the bad assets. To replace lost capital, the FDIC issued net worth certificates to ailing banks, which had to be repaid over time. Banks that could not be sold were liquidated by the FDIC liquidation division. As the number of failed banks increased, the FDIC merged some of them together, changed management and sold or merged them to healthy banks as phoenixes. For banks on the borderline of insolvency, the FDIC even engaged in regulatory forbearance, which relaxed capital adequacy standards and other compliance requirements.

The Spanish experience brought an innovation in the form of the bank hospital, the Guarantee Fund. The accordion principle, which wrote off all losses against existing capital before providing fund help, was a clear legal mechanism to place the burden on existing shareholders to absorb losses. It also made the fund the majority owner and gave considerable latitude and flexibility to rehabilitate the ailing bank by changing management, redesigning a financial package, and selling to another institution.

The group A countries all had the following favorable features: strong central banks and highly professional bank supervisors, a large pool of professional bankers to help rehabilitate

ailing banks, and a deep market for bank sales or mergers because of the existence of strong banks. These generally helped to resolve banking failures quite successfully, except in the case of the U.S. savings & loans, which turned out to be very expensive, partly because of the compartmentalized approach to regulation over U.S. financial institutions, and the close links between the regulators and the thrift industry, which led the regulators to underestimate the problems and delay early resolution.

### *Group B*

Group B countries' bank restructuring mechanisms were generally modeled on the developed country systems. The Thai Rehabilitation Fund had elements of the U.K. Lifeboat Fund, while the Colombian Guarantee Fund was based on the Spanish model.

An interesting development in the spread of technology on bank supervision and bank restructuring was the coordination of bank supervision in the Southeast Asian Central Banks (SEACEN) region. Malaysia was able to benefit from the experience of the emergence of problem banks in Thailand and the Philippines through regular consultations with fellow bank supervisors at SEACEN meetings. Consequently, Malaysia was one of the few countries to bring into force legislation that empowered the central bank to handle the banking crisis when it emerged. Of particular significance was the emergency legislation that allowed the central bank to freeze assets of failing institutions, to allow time for investigation, and to apply to the high court for speedy decision of cases, which included important rulings on staff retrenchment, priority of claims, and the principle of deposit-equity conversion.

The Philippines' experience with bank restructuring had several important lessons. First, a rapid carve-out of bad assets from the two ailing government-owned banks into a special fund, together with a change in management and minimal government interference in day-to-day operations, quickly turned around the banks. One of the banks divested 30 percent of its shares to the public, which was oversubscribed. Second, the existence of a deposit insurance scheme did not necessarily prevent bank runs. The slowness in repayment of deposits (due to delays in liquidations and shortage of funds for the Philippine Deposit Insurance Corporation) worsened the confidence problem.

Most of the medium-income countries had sufficient domestic banking expertise to call on to help resuscitate ailing institutions. This may not necessarily be true for the smaller and lower-income countries. The relatively successful bank restructuring exercises in Thailand, Malaysia, the Philippines, and Colombia all demonstrated considerable political will in addressing the banking problems. In all four cases, the committed adjustments in the fiscal and external imbalances, together with the stabilization of the banking system, probably aided economic recovery and the revival of confidence. Nevertheless, not all the nonperforming loans have been eradicated in the recovery, and the supervisory authorities will have to face the second hurdle on how to manage the banking system in the next economic downturn.

### *Group C*

The centrally planned economies' banking systems are still at a point of transition. The problems facing the nationalized banking system are fourfold:

1. There is a lack of banking professionals with good understanding of market-based banking (as well as shortage of bank supervisors).
2. There is a lack of good pricing mechanism to determine asset valuation and quality. Most of the loan assets inherited from the single national bank structure in socialist economies have been at historical cost, which do not reflect their true market values. A mechanism for recapitalization of the banks to adjust for the loss when markets begin to develop will have to be established.

3. Under the state ownership of banks, or in the transition period, the lack of experience in banks and bank supervisors in managing credit and other bank risks could cause some losses. Nationalized banking systems do not encourage competition and innovation. On the other hand, credit losses and inefficiencies can be very large because of insufficient checks and balances in the system, as all risks are borne by the state. Incentives for professional bank managers may not be great in situations where key executive posts in the government-owned banks change with every new government, as has been the experience in Pakistan.
4. There are difficulties in separation of the ownership of banks from enterprises and the interconnection of loans to shareholder/enterprises. This must be addressed in order to develop independent and objective credit evaluation and supervision for the banks.

The nationalized banking systems, without inadequate checks and balances in the system, can be subject to many incidents of fraud and mismanagement. Because public-owned bank management are fellow civil servants or political appointees, with similar pay or equal rank to bank supervisors, the supervisory mechanism is not as effective as normal public sector supervision of private sector banks and enterprises. The most extreme example of fraud and abuse in the nationalized banking system is Guinea, which had to close down six wholly government-owned specialized banks in 1985 because of massive fraud, where fictitious assets accounted for as much as 76 percent of total reported assets.

#### *Group D*

The group of countries facing the most severe financial distress in their banking systems are the highly indebted/high inflation countries, of which the most spectacular example is Argentina, which is still reeling from one crisis to another. The only country that has so far emerged relatively successful out of this, after a painful adjustment process, is Chile. In one of the few across-the-board solutions attempted and recorded, the Chilean central bank bought out the bad loans from the banks in exchange for 10-year bonds, repayable over 20 installments at 5 percent real interest rate per annum. This innovation managed to keep the banking system functioning during the crisis, however tenuously, until fundamental structural adjustments on the real front could help turn the tide.

The exact causes and processes that generate the high inflation in these economies, and their relationship with the banking system, are fully understood (at least by this author, who comes from a low-inflation economy). My own personal interpretation is that the public sector attempts to transfer its high debt burden (arising from cumulative large fiscal deficits and the inability for one reason or another to tax the population sufficiently) to the private sector through the inflation tax. The inflation that arises completely distorts allocation of resources, erodes the real value of private sector savings in currency and public debt, and constitutes a distinct breach of the social contract.

Once the social contract is breached, faith in the government as a protector of private property rights is eroded, and a massive prisoner's dilemma game is played by all citizens. All kinds of cheating, shirking, and opportunism, as well as speculation occur in order to maximize individual gains (if necessary, at large social costs).

In the initial stages, the public sector is able to finance its deficits from external borrowing. However, once the foreign sector is no longer willing to extend further credit (and indeed begins to demand early repayment), the public sector can only finance its growing deficits through domestic borrowing or the printing press.<sup>5</sup> The overhang of a large public debt with little prospect of repayment implies that wealth holders would be taxed sooner or later, either through direct taxes or through the inflation tax. Such wealth holders can escape the pending tax burden through capital flight. The banking system can also be exploited, because large

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5. There is increasing awareness in the literature on this problem. See Thorne (1989).

borrowers having access to bank funds can borrow to speculate against the domestic currency, creating self-fulfilling devaluations. These devaluations serve to worsen the debt-servicing burden of the public sector. At the same time, the bank failures (partly because of nonrepayment by borrowers engaged in capital flight and partly because of failure of enterprises) imposes a further burden as the public sector is forced to provide liquidity to the banking system in order to prevent a wholesale banking collapse. To stem the capital flight, the tight monetary policy raises real interest rates to such a level that private sector borrowers begin to fail from the interest burden, leaving the banking system in greater dependence on the public sector. In Argentina, more than 70 percent of bank assets comprised forced savings with the central bank. These have now been compulsorily converted into dollar-denominated bonds with the government.

In varying degrees, the highly indebted countries in group D all suffer from the above-mentioned problems. Bank restructuring in such circumstances cannot be divorced from drastic macroeconomic adjustments, including generating a primary surplus in the budget, debt rescheduling and part-forgiveness, removing the source of the inflationary pressure, and major currency and banking reforms. The Chilean experience shows that the vicious circle can be broken, but at a high cost. Of crucial importance is the need to restore public faith in the government, and this may mean budget balancing, currency reform such that the currency used is a meaningful numeraire and store of value, and general protection of property rights. In essence, the government has to move the economy from a prisoner's dilemma into a cooperative Coase's outcome, where everyone shares the burden equitably.

## Restructuring Mechanisms

The above survey indicates that restructuring techniques may have to vary according to the economic condition of the country and the resources available for restructuring. However, some comments about the general restructuring mechanisms are in order.

As a general rule, market-based solutions appear to be the most efficient and least costly to the taxpayers. If private sector purchasers cannot be found for a failed bank, in general, liquidations are cheaper than keeping insolvent banks open. However, in a number of developing countries, ailing public-sector banks have been kept open for employment purposes, or for purposes of national pride. This imposes a drain on public resources that few developing countries can afford. In Malaysia and the Philippines, even partial privatization of government banks can raise profitability and efficiency quite noticeably.

A common dilemma that arises is whether bad assets should be carved out of banks, in exchange for, say, government bonds or central bank liabilities. Alternatively, should the bad assets be retained in the books, and the lifeboat assistance comprise long-term loans or equity? The experience varied in results. In Chile and the Philippines, the bad assets were carved out. In Malaysia, Thailand, and the United Kingdom, the assets were retained in the banks' books. In the United States, the disposal of assets of failed thrift banks have been centralized in a corporation run by FDIC. Much would depend on the legal issues of whether the new asset managers have full power of disposal of assets, and whether the bank managers can be trusted to dispose of such assets at fair market value. The Thailand experience suggested that central bank examiners are not the best equipped to act as receivers or liquidators of banks, and the strategy was quickly switched to consign management to healthy commercial banks under the supervision of the Rehabilitation Fund.

As a general rule, central bankers should not be involved in credit decision-making, which can compromise their supervisory authority. The business of loan rehabilitation, sale of assets, and bank liquidation are best delegated to a separate agency (with or without central bank support with full powers to manage and dispose of failed bank assets at market prices.

A common restructuring mechanism is the idea of a bank hospital, the deposit insurance scheme being the vehicle for rehabilitation and liquidation. In the context of the United States, where there are more than 14,000 banks with relatively free entry, an official exit mechanism is probably indispensable. The question is whether in a small economy with a

relatively small number of banks, another public institution with a (it is hoped) temporary mission to rescue banks is efficient and necessary. On balance, an independent and objective institution, with the flexibility to recruit professionals to do the job, working closely with the bank superintendency or central bank, is probably a good way to deal with bank failures flexibly and pragmatically. Many developing country central banks have low civil service pay, restrictions on recruitment, and also limited powers to act in liquidation and rehabilitation work.

In almost all bank restructuring experiences, a common feature stands out across countries—the need for a complete change in bank management for failed banks. Leaving old management to look after assets can lead to even greater losses. As the Malaysian central bank governor remarked during the 1986 cooperative crisis, “You cannot allow monkeys to look after bananas.” This adage must also apply to senior bank staff and even down to the supervisory level. In many instances, retaining staff with suspect integrity had resulted in continuing weaknesses in control over asset quality.

A final comment on the mechanism of creating phoenixes, in which a number of failed institutions have been grouped together under one umbrella with new management with the objective of turning around the operations. This has been tried in the United States (by the FDIC), in Malaysia and, recently, in Kenya. In conditions of scarce managerial talent, it is not a bad idea to consolidate resources. The Malaysian experience is that integrating diverse groups of staff and procedures into one new institution have turned out to be much more difficult than initially envisaged, and public appointed boards may not be as dynamic and market-oriented as private sector ownership. As in the case of the FDIC, the creation of phoenixes is a third best solution, devised in order to package disparate assets together into a viable institution such that these can be sold later into private hands.

## **Changing Macroeconomic Policies**

Many economists engaged in structural adjustment programs feel that if the macroeconomic policies are set right, with the right price incentives, correct level of exchange rates, reduced fiscal deficit, and elimination of subsidies and market distortions, the banking sector would take care of itself. The (relatively) successful experiences of Chile, Malaysia, and Thailand certainly show that strong supervisory laws and enforcement, together with appropriate macroeconomic adjustments, have aided the recovery process. In both Malaysia and Thailand, the recovery of property prices and improved national income had reversed substantially previously non-accrued income and bad debt provisions, but the Malaysian experience is that even with a strong recovery, roughly one-third to one-half of bad debt provisions may never be wholly recovered. This implies that fraud and asset mismanagement can exist even in the best of times, and that strong bank management with prudent bank accounting standards, asset diversification, and risk control, can minimize the damage from macroeconomic shocks.

A lesson for developing countries, therefore, is that fiscal expansion or development planning must take into consideration the performance and behavior in the banking industry. In many countries, such as the Philippines, policy makers failed to anticipate the sharp and deep contractionary impact of fiscal retrenchment on the fragility of the banking system. Neither did many countries calculate the ultimate monetary and fiscal costs of bank restructuring in their structural adjustment programs.

## **Counting the Monetary and Fiscal Costs**

There has not been much work done on the calculation of the monetary impact of bank restructuring. Sundararajan (1988) tracked the behavior of monetary aggregates during the crisis periods of six countries and observed tentatively that the money multiplier declined sharply during the crises. Central bank lending to aid banks is generally expansionary on money supply, but this could easily be offset by losses in foreign exchange assets arising from capital flight. Unfortunately, data are not readily available for this aspect of bank

restructuring. Further research is needed to examine the monetary budgets of the different central banks during the crises period to explore this point further.

In recent years, macroeconomists working on structural adjustment programs have caught onto the sizable impact of the quasi-fiscal deficits generated by central banks. A major component of such quasi-fiscal deficits is the cost of bank restructuring. Are bank failure losses a one-off cost or a recurring cost? The answer is that bad debt losses of banks are a stock loss (comprising partly cumulative operating losses), which ideally should be written off against capital and reserves. If the losses cannot be wholly written off in one year, and must be amortized over time, then there is an annual finance cost of nonperforming assets.

If the decision of the government is to replace the bad assets with government bonds, then the fiscal cost to the government is not the gross size of the bonds issued, but the annual interest burden on such bonds. The swap of bonds with the bad assets of, say, government-owned banks, is only a financial transaction, recognizing explicitly losses and making transparent the fiscal cost of such losses. The continuing operating loss in the government-owned banks (without such a bond swap) is a quasi-fiscal deficit, which should be calculated and included in the structural adjustment program.

One possible technique to replace bad assets of banks is to inject government financial and real assets into the banks as part of a privatization package. For example, government-owned shares in development banks or even specialized banks can be sold to the private sector to raise resources to finance bank restructuring. Alternatively, such government banks can be merged into ailing banks as part of the recapitalization scheme. By placing low-yielding assets into private-sector management, the government hopes that overall efficiency improves in the economy. The fiscal costs remain the lost interest or revenue earned on such financial and real assets. However, the economy as a whole gains, if the banking system or the private sector is able to generate greater revenue from the use of the real assets or the injection of the financial assets helps to develop the domestic bond or money markets.

### **Restructuring Borrowers**

A case can be made that the priority of the government during a financial crisis is to restructure the real sector and not the financial sector. After all, bad loans are due to ailing enterprise borrowers. For various reasons, restructuring enterprises and banks have always been treated as separate exercises. Other than in the post-war reconstruction period, when specialist development banks were set up to help revive key industries, group A economies have tended to let the banks work out their own problem loans. The German banks, in particular, have been much more active in helping to manage industrial recovery, because of their universal banking structure.

In the aftermath of the international recession and debt crisis on the developing countries, much of it accompanied by bank failures, special attention perhaps is needed on the restructuring of ailing enterprises. The problem is most acute for countries in groups B, C and D. In group B, Malaysia is the only country that has attempted to establish a special Enterprise Rehabilitation Fund to assist ailing but viable small to medium (indigenous) enterprises to revive, with seed capital, soft loans and professional advice. The problem is highly important in the group C economies, where the nationalized banks have lent considerably to large and inefficient industry/enterprises that have to be restructured into market-based competitive institutions. Neither the enterprises nor the lending banks in these economies are equipped to handle this problem. This problem is also acute in the group D economies, but it can be argued that in some cases, the problem borrower is the government, rather than private-sector enterprises. Clearly, reform of the banking industry must include the development of its expertise and knowledge of the operations and viability of its borrowers. This has to be a critical element in the next important phase of bank restructuring, particularly in the context of developing countries.

## Concluding Remarks

In conclusion, bank restructuring is a process of political economy, in which the interplay of gains and losses among different groups in the economy determine very largely the success of its outcome. This paper has surveyed the available experience in the field, and showed that the restructuring work is much more multidimensional than pure economics. Policymakers involved in bank restructuring must understand the contractual nature of institutions, the importance of law and regulations, formal and informal, the need for government enforcement of such laws, the correct diagnostic of the causes and effects of bank failure, and the careful design of reform measures.

There are several broad trends discernible from the disparate experience of different countries. Most banks fail because of overgearing of their enterprise borrowers, and through their own undercapitalization, mismanagement of asset quality, and, possibly, fraud. The lack of capital depth (including inappropriate bank accounting that disguised the risks and exposure of the asset portfolio) were primary reasons for the fragility of the banking system when subject to macroeconomic shocks or the mistakes of inappropriate government policy. There is certainly a case to be made for higher levels of bank capital and a more prudent approach to valuation of bank assets.

The interesting point about the level of enterprise capital, bank capital, and public-sector solvency is that those economies with high levels of savings, strong market depth, and professional expertise, and capable public-sector management, generally had little difficulty in dealing with bank failure. At the other end of the spectrum, those countries with high debt, especially an insolvent public sector unable to service its debts except through inflationary financing, had almost no room to maneuver. Indeed, the insolvency of the public sector very quickly translated into insolvency of the banking system, with resulting capital flight and further turmoil.

There appears to be an important lesson for developing banking systems and evolving capital markets. Banking systems should be developed in parallel with capital markets, to establish the capital cushions against shocks. This calls for higher domestic savings—savings not only in the form of enterprise and bank capital, but also public-sector savings. The importance of high foreign exchange reserves, plus low external debt as cushions against external shocks has not been accorded sufficient academic interest. The full faith of money and banking rests on the level of government solvency, that is, its financial discipline to maintain at least a primary surplus, and to engage in policies that promote competition, efficiency, and general equity in income distribution and wealth.

In general, bank restructuring work cannot be conducted independently of an appropriate package of macroeconomic adjustment policies. While the resolution of the banking sector, through improved supervision and recapitalization, will help to aid economic recovery, the longer lasting reforms must include not only changes in the real sector, but also political will and public financial discipline, that civil laws are clear and strictly enforced, and the fundamental social contract—the state protection of property rights—is strictly adhered to. Without such faith in the sanctity of the social contract, financial discipline breaks down in the banking system, and disorder multiplies. The bitter experience of many distressed banking systems is that breaches of the social contract can only be remedied at high social and human costs.

## Appendix: Summary of Key Case Studies on Bank Restructuring

### 1. Spain

- I. Period of banking crisis: 1978-83
- II. Institutions affected: 52 out of 110 banks, mainly small- and medium-sized banks, with recent history. Seven largest established banks had limited damage.
- III. Size of deposits affected: Ptas 2 billion, or 20 percent of total deposits
- IV. Key background: Interest rate liberalization in 1974. First small bank failure in 1978. Crisis peaked in 1982-83 when Rumasa Group failed.
- V. Macroeconomic factors: Oil shock; terms of trade fell from 106 in 1973 to 84 in 1980; real growth declined between 1975 and 1980 to 2 percent.
- VI. Policy response: 1977—Deposit guarantee fund established; 1980—Bank Guarantee Fund established, with Bank of Spain governor as chairman. Joint contribution to fund by Bank of Spain and commercial banks. Guarantees roughly US\$10,000 for each depositor.
- VII. Restructuring technique: Two key approaches:
  1. "Accordion operation" to reduce capital to net asset value, with fund buying control at nominal value of 1 ptas per share; or
  2. Fund subscribes to share capital increase.

After control, fund removes old management, cuts overhead and staff, and provides financial package, comprising:

  - purchase of bad assets
  - provision of guarantees
  - long-term soft loans
  - regulatory forbearance, temporary relaxation of supervisory ratios for ailing banks.

Sale of bank to highest bidder within one year of fund take-over.
- VIII. Burden of losses: First cut, shareholders; deposits and creditors did not suffer directly. Fund costs borne through joint contributions of banking system and Bank of Spain. Peak Bank of Spain lending at 7.25 percent p.a. was US\$2.9 billion in 1984. For 20 Rumasa banks, Bank of Spain lent US\$2.5 billion at 8 percent p.a., on top of government loan of US\$2.5 billion (interest free).
- VIII. Key lessons:
  1. Pragmatic and flexible response to crisis.
  2. Specific restructuring machinery (Guarantee Fund) with ample resources and clear-cut mandate.
  3. Availability of established banking sector, and sufficient professional expertise to deal with problems.
  4. Mature banking community was able to deal with limited shock (20 percent of total deposits affected).

Source: Larrain and Montes-Negret (1986).

## 2A: U.S. Savings and Loans Crisis

- I. Period of banking crisis: 1979-90
- II. Institutions affected: 346 out of 3,147 thrift banks insolvent at end of 1987 (4,242 at end of 1979). Between 1979-87, 1,506 thrifts merged, 111 were terminated, and 65 were liquidated. Southwest thrifts badly affected by oil and property price declines. 109 out of 281 Texas thrifts insolvent.
- III. Size of assets affected: Insolvent thrifts accounted for US\$99.1 billion in total assets (or 7.9 percent of total thrift assets). Insolvent thrifts lost in 1987 US\$10.2 billion, resulting in industry loss of US\$7.8 billion.
- IV. Key background: Interest rate shock of 1981 hit major thrift assets of 25-30 year fixed rate mortgages. Authorities allowed thrifts to grow out of initial losses, through regulation forbearance, and liberalized lending powers in 1982. Authorities underestimated credit risks and did not tighten supervision sufficiently. Deterioration due to poor asset quality in commercial loans and real estate financing.
- V. Macroeconomic factors: Interest rate shock in 1981, when tight monetary policy increased interest rates costs. Southwest thrifts and California thrifts badly hit by decline in oil and farm prices in second half of 1980s. Fraud rose due to inadequate supervision.
- VI. Policy response: Shored up FSLIC (Federal Savings and Loan Insurance Corporation) in 1987 through Competitive Equality Banking Act. Recapitalized FSLIC with US\$10.8 billion. In 1989, administration decided to merge FSLIC into FDIC. FSLIC's existing debt of US\$50 billion taken over by treasury. Created Federal Resolution Trust Corporation to take over and dispose of failed thrift assets. Key legislation, Financial Institutions Reform, Recovery and Enforcement Act, 1989 (FIRREA) passed.
- VII. Restructuring technique: Two key approaches:
  1. Acquisition or merger, with FSLIC purchase of problem assets and financial assistance.
  2. Liquidation, after pay-off insured deposits (S&Ls not subject to general bankruptcy laws). Depositors have priority over other creditors and shareholders.Under Acquisition/merger, FSLIC agrees to income maintenance program, whereby FSLIC pays acquiring thrift difference between earnings on assets of failed thrift and cost of funds.  
Accounting forbearance—allow good will—shortfall in assets to be written off over 30 years.  
Phoenixes—mergers of groups of insolvent thrifts with new management and board for turnaround.  
Management consignments—placing troubled thrifts in hands of professionals or other well-run thrifts.
- VIII. Burden of losses: First cut, shareholders; depositors did not lose, as most insolvent thrifts were merged or acquired into ongoing

concerns. Main burden was on FSLIC. Resolution costs are quite high—in first half of 1988; resolution of 44 insolvent thrifts cost US\$4.5 billion or 42.4 percent of total assets.

Total losses for the thrift debacle have been estimated at about US\$100 billion, or 2 percent of GDP.

IX. Key lessons:

1. Fixed rate lending institutions with limited management capabilities, limited investment options highly vulnerable to interest rate fluctuations.
2. Regulatory system too closely tied to industry to identify problems in early stages and impose discipline.
3. Deposit insurance scheme without adequate supervision encouraged moral hazard. Thrift managers sought high growth strategies with low capital and high risk to FSLIC.
4. Risk position of insured institutions must therefore be monitored by supervisors on timely and accurate basis, with quick enforcement response.
5. Political involvement in some cases delayed resolution, at high cost.

*Sources:* Silverberg (1989a), Federal Home Loan Bank Board (1987).

## **2B: U.S. Banking Sector**

- I. Period of banking crisis: 1982-90
- II. Institutions affected: FDIC reported 1,575 problem banks (CAMEL rating of 4 or 5) in 1987 or 11 percent by number of 14,289 FDIC-insured banks.
- III. Size of deposits affected: Bank failures rose from 40 in 1982 to over 200 in 1988 (184 in 1987 with total deposits of US\$6.4 billion or 0.27 percent of total U.S. bank deposits of US\$2.3 trillion.  
  
In 1987, the 29 largest national banks with assets exceeding US\$10 billion made loan loss provisions of US\$16 billion (US\$6 billion in 1986), incurring losses of US\$4.7 billion in 1987. Total bank profits were down from US\$9.5 billion to US\$0.3 billion in 1987.
- IV. Key background: In the 1980s, oil shock, increasing competition, deregulation, and the international debt crisis led to large loans domestically in real estate and farm loans, as well as provisions for international debt. In 1982, claims on rescheduled countries of nine U.S. internationally active banks was 233 percent of capital (101 percent by March 1989). Real estate loans was 32.8 percent of total bank loans at the end of 1987. Nonperforming loans peaked at US\$75 billion or 4 percent of gross loans in 1987. Southwest banks particularly hard-hit. Thirty-six percent of banks there lost money in 1987. Nine out of the 10 largest Texas banks failed.
- V. Macroeconomic factors: Decline in farm prices affected midwestern banks. In southwest, decline in oil prices and collapse of real estate affected regional banks. Internationally active banks became highly exposed to sovereign debt risks in the 1980s.
- VI. Policy response: Tightened up overall bank supervision. New capital adequacy guidelines to meet Bank for International Settlements (BIS) standards by 1992. Emphasis on timely and realistic on-site examinations of asset quality to determine capital adequacy and solvency. Move towards deregulation of banking activity into investment banking and capital market fields.
- VII. Restructuring technique: FDIC approaches similar to FSLIC:
  - 1. Assistance transactions—FDIC provides financial assistance to prevent closing of insured bank, where cost of such assistance is less than cost of liquidation. Assistance requires additional capital and management commitment. Assisted banks are then merged or sold to other banks. 72 percent of failed banks underwent “purchase and assumption” transactions. Healthy bank assumes written down assets of failed bank, with some assistance from FDIC.
  - 2. Liquidation, after pay-off insured deposits. Depositors have priority over other creditors and shareholders.

For bank approaching insolvency, FDIC can issue net worth certificates under 1982 to meet capital guidelines. Such

certificates were issued subject to restrictions on deposits growth and investment policies.

Bridge banks—The Competitive Equality Banking Act of 1987 allows FDIC to establish bridge banks for 3 years to take over failed banks.

Accounting forbearance—allow good will or agricultural loan losses to be written off over long term.

VII. Burden of losses:

First cut, shareholders; depositors did not lose, as most insolvent banks were merged or acquired into ongoing concerns. Losses of FDIC was substantially smaller than FSLIC. FDIC costs of handling failed banks of US\$150 billion in 1980 was US\$2 billion, compared with FSLIC cost of US\$80 billion for thrift asset size of US\$600 billion.

IX. Key lessons:

1. Tighter supervision and prompt action can limit bank failure losses.
2. Banks with regional or sectoral focus with less geographical spread are subject to high risks when economic conditions change.
3. Owners and managers must have adequate capital at risk and be given incentive to control their risk exposure.
4. Prompt action must be taken to recapitalize or close banks that are close to insolvency. Allowing these institutions to operate with little capital by living off the deposit insurance safety net is highly costly to the taxpayer.
5. Loans whose repayment is not realistic in terms of current (as against future or expected) cash flow and economic conditions are highly speculative, of junk bonds.

*Sources:* Silverberg (1989b), Federal Deposit Insurance Corporation (1987), Johnson (1989), Clarke (1988).

### 3. U.K. Secondary Banking Crisis

- I. Period of banking crisis: 1973-76
- II. Institutions affected: 26 "fringe banks" of which eighteen were deposit-taking institutions and 5 were authorized banks. Eighteen were reconstructed or merged into other companies, while eight eventually were liquidated or placed into receivership. None of the major clearing banks were affected.
- III. Size of funds affected: Not published. However, total lifeboat support was Stg 1.2 billion, equivalent to 40 percent of total capital of capital reserves of all English and Scottish clearing banks.
- IV. Key background: Growth of fringe banks and deposit-taking companies in 1960s and early 1970s. Such institutions were effectively not supervised under the law, nor were they subject to credit control. These fringe banks borrowed heavily from money market and financed property boom of early 1970s. Tight monetary policy in 1973 following volatile currency markets and deterioration in balance of payments caused liquidity squeeze. Collapse of commercial property prices led to failure of London and Counties Securities in November 1973.
- V. Macroeconomic factors: Oil shock, volatile currency markets, and deterioration in balance of payment. Crisis of confidence on sterling arising from miners' strike. Tough 1974 budget led to collapse of property prices. Bank of England rescued Burmah Oil, Slater Walker Securities, and Edward Bates to maintain confidence in London as international financial center.
- VI. Policy response: In December 1973, establishment of joint committee of Bank of England and clearing banks chaired by deputy governor (lifeboat). This provided liquidity loans at commercial rate to solvent deposit-taking companies or banks up to Stg 1.2 billion limit. Thereafter, burden was borne solely by Bank of England.
- VII. Restructuring technique: Initially concentrated on deposit recycling. Lifeboat lent to fringe bank under liquidity attack, subject to security and proof of solvency.  
  
After liquidity crises turned to solvency crisis in 1974/75, failed institutions sent to receivership or liquidation. Bank absorbed sole risk after ceiling of Stg 1.2 billion was reached in March 1975. In 1975 and 1976, bank took over Slater Walker Ltd., and helped reconstruct Edward Bates. These were subsequently sold to private sector.
- VIII. Burden of losses: First cut, shareholders; initial joint provision of funding between clearing banks and the Bank of England. However, overall residue losses probably absorbed into Bank of England's books.
- IX. Key lessons:
  - 1. Clear need for supervision of deposit-taking institutions and legal powers for the central bank to do so.

2. Quick, pragmatic, and flexible action of Bank of England staved off systemic failure and collapse of confidence in fragile environment.
3. Availability of established banking sector, and sufficient professional expertise to deal with problems.
4. Mature banking community responded positively and quickly to deal with crisis in the secondary banks, enabled the containment of problem.

*Source:* Bank of England (1978).

## 4. Colombia

- I. Period of banking crisis: 1982-87
- II. Institutions affected: Six out of 26 banks, including the largest and second largest commercial banks, 5 development finance companies, and 8 finance companies.
- III. Size of assets affected: The 6 banks accounted for 23.5 percent of total bank assets.
- IV. Key background: Financial sector and interest rate liberalization in 1974. High concentration of bank ownership linked with enterprises, coupled with excessive borrowing. Fraud and failure in offshore affiliates. At peak (1984), nonperforming loans were 25 percent of total loans.
- V. Macroeconomic factors: Overvaluation of currency; excessive external borrowing; sharp slowdown in growth between 1981-84 after coffee boom of 1976-80. Current account deficit worsened to 11.3 percent of GDP in 1982, and high fiscal deficit (5-6 percent of GDP).
- VI. Policy response: At macro-level, sharp devaluation and cutback in fiscal deficit. At bank level, 1982, declared economic emergency to allow nationalization of second bank to fail (first bank liquidated). Initial central bank liquidity support, then largest bank, Banco de Colombia nationalized in 1985. Deposit guarantee fund established in 1986.
- VII. Restructuring technique: Guarantee fund empowered to nationalize by purchasing 100 percent of shares, or officialize, by holding majority control, and the government guarantee is proportionate to government equity share.
- Not only can fund invest in bank equity, it can also extend loans, buy real estate, assume domestic or foreign debt, offer guarantees, establish a deposit insurance scheme, and administer viable institutions.
- Techniques applied similar to Spanish guarantee fund.
- In the Banco de Bogota case, shareholders were also bailed out through central bank loans to trust fund, in which existing shareholders pledged their shares, and funds were used to increase bank capital.
- VIII. Burden of losses: First cut, shareholders, although not all shareholders lost, as policy attempted to prevent further concentration of bank ownership. Small depositors did not suffer, but other depositors and creditors had to await results of liquidation. Major burden fell on the central bank and the government.
- IX. Key lessons:
1. Need for strong supervision to reduce loan concentration and bank fraud.
  2. Need to control bank overseas affiliates and subsidiaries as means to bypass domestic bank regulations and exchange control.
  3. Need for early warning system to alert the government to solvency problems.

*Source:* Montes-Negret (1989).

## 5. Chile

- I. Period of banking crisis: 1975-85
- II. Institutions affected: Government intervened in 13 out of 25 domestic banks, and 6 financial companies out of 18. These included 2 of the largest banks.
- III. Size of loans affected: 1983 intervention involved 45 percent of total bank loans. Nonperforming loans reached as high as 113 percent of total bank capital and reserves by May 1983. At peak (end of 1986), bad loans sold to central bank amounted to 23.8 percent of total loans.
- IV. Key background: In 1974, government denationalized 20 banks. Interest rate liberalization led to high real interest rates, averaging 77 percent p.a. between 1975 and 1982. Overborrowing by private sector from 5 percent of GDP in 1974 to 61.7 percent by 1982.
- V. Macroeconomic factors: Collapse of major export prices (mainly copper), deterioration of competitiveness, high domestic interest rates, and deterioration in balance of payments.
- VI. Policy response: Devaluation in 1982, monetary policy aimed at reducing interest rates, 1983-84 introduced schemes to help domestic borrowers by rescheduling debt at reduced interest rates (one-fifth rescheduled in 1985).
- VII. Restructuring technique:
 

Emergency loans to banks subsequently converted into equity.

Central bank (CB) subsidies to banks and finance companies to allow rescheduling of borrowers.

Central bank purchase of bad loans, initially up to total bank capital and reserves, by swap with non-interest-bearing central bank bonds (5 percent repurchased every 6 months for 10 years).

In 1984 revised to cash purchase of bad loans up to 150 percent of capital and reserves, repay CB debt and balance buy CB IOUs. Loans sold for cash had to be rebought over 10 years plus 5 percent real rate. No dividends allowed until repurchase was completed.

Forced capital increases, first by existing shareholders, then new subscribers, then CORFO (state development agency). Emergency loans converted into equity. CORFO shares limited to 49 percent, balance of loss absorbed by central bank.

CORFO would sell bank shares within 5 years, balance unsold to be transferred back to shareholders that had contributed to equity increase. Share sale was on attractive terms of 10 years, small down payment at 5 percent real interest.

Preferential exchange rate scheme for external debt servicing, subsidy paid with CB six-year notes.

Interest subsidies on swap operations eliminated in 1987.

VIII. Burden of losses:

Almost exclusively on central bank and government. In August 1985, amount of bad loans bought by central bank amounted to US\$2.36 billion.

IX. Key lessons:

1. Drastic relief program at high cost to central bank kept banking system functioning and stabilized confidence.
2. Financial liberalization without adequate banking supervision does not lead automatically to well-functioning markets.
3. In the Chilean experience, bank supervision should prevent loan concentration and interconnected lending.
4. Financial crises can aggravate macroeconomic disequilibrium. Distress borrowing can escalate, generating a widespread cry for bailout.
5. Wait-and-see attitude delays macroeconomic recovery. Problem should be tackled as decisively and quickly as possible.
6. Across-the-board solutions are quick, but costlier in being unable to distinguish between different levels of insolvencies. Case-by-case solutions are administratively complicated and face political obstacles.

*Sources:* Larrain (1989) and Velasco (1988).

## 6. Thailand

- I. Period of banking crisis: 1983-87
- II. Institutions affected: In 1983 finance company crisis involved closure of 19 finance companies, involving 12 percent of total financial system assets. In 1986-87, government intervened or supported 5 commercial banks, involving 24 percent of total commercial bank assets. Between 1983 and 1988, 50 finance companies and 5 banks intervened, involving one-quarter of total financial system assets. Twenty-four finance companies and security companies have been closed and 9 merged into other companies.
- III. Size of deposits affected: Bht 168 billion (1986) for 5 banks supported, involving 25 percent of total local bank deposits.
- IV. Key background: High concentration of banking, lack of professional bankers, and heavy family ownership and control. Initial lax supervision of rapidly growing finance companies, which became heavily involved in speculation in shares and real estate. After failure of Raja Finance in 1979, flight of deposits to banks.
- V. Macroeconomic factors: Oil shock in 1979-80; sharp decline in growth in early 1980s, led to macroadjustment; devaluation and tight monetary policy led to deterioration in loan portfolios. Recovery of economy since 1987 helped to increase bank capitalization and recovery of bad debts sunk in real estate.
- VI. Policy response: At macrolevel, devaluation, tight monetary policy and budgetary restraint, plus export push helped turned around economy.
- In 1983 crisis, establishment of Bht5 billion joint government/commercial bank "lifeboat fund." Liquidity provided at commercial rates. Lifeboat also provided capital through government bank (Krung Thai) Bht 2.4 billion, and soft loan from Bank of Thailand of Bht 6.4 billion at 0.1-2.5 percent p.a. Funds deployed in government bonds. Central bank takeover of ailing finance companies not found to be successful.
- Entrants to lifeboat scheme had to inject fresh capital, or surrender 25 percent of shares to government, plus 50 percent to be resold to original owners at price to be fixed within 5 years.
- In 1987, establishment of Fund for Rehabilitation and Development of Financial Institutions (Rehab Fund). Krung Thai Bank added credit lines of Bht 4 billion, bringing total fund to Bht 19 billion.
- VII. Restructuring technique: Cease and desist powers applied, but initial assumption of control by Bank of Thailand of finance companies not successful in rehabilitation. Management subsequently consigned to Krung Thai Bank, and ailing finance companies sold to banks or new investors.

After Emergency Decree of 1985 gave powers to Bank of Thailand, capital of ailing bank/finance company reduced before Rehab Fund intervention. Thereafter, voluntary capital increase encouraged.

**VIII. Burden of losses:**

For finance company depositors, principal assured and repaid over 10 years, interest-free. Financing through Bank of Thailand soft loans. Depositors of ailing banks did not suffer because of takeover or rehabilitation. Burden mainly fell on central bank, with outstanding loans to banks and finance companies of Bht 28 billion at end June 1987.

**IX. Key lessons:**

1. Need for clear lines of supervisory authority and legal powers. Full bank supervision powers were transferred to central bank from ministry of finance only in 1979. Law had to be amended several times, and twice by Emergency Decree to deal with crisis.
2. Direct central bank intervention exposes central bank staff to confrontation on labor/credit issues, which they may not be best equipped to handle. Subsequently, rehabilitation was indirect through management consignment to government bank or Rehab Fund.
3. Correct macroeconomic policies, together with firm handling of financial crisis, aided recovery process.

**Sources:** Bank of Thailand (1985), Johnston (1989).

## 7. Philippines

- I. **Period of banking crisis:** 1981-87
- II. **Institutions affected:** Total of 182 banks (3 commercial banks, 32 thrift banks, and 147 rural banks) with 14 billion pesos failed between 1980-87. Two of the largest government banks, Philippine National Bank (PNB) with P79 billion, and Development Bank of Philippines (DBP) with P74 billion, had to be rehabilitated.
- III. **Size of assets affected:** Rural and thrift banks only accounted for only 9 percent of total bank assets, however PNB plus DBP before rehabilitation accounted for more than one-third of total banking system (exclude central bank) assets in 1986.
- IV. **Key background:** Interest rate liberalization and introduction of universal banking in 1980. In 1981, Dewey Dee, a textile magnate with heavy borrowing and financial interested, fled country and sparked off bank runs and liquidity crisis. Heavy family ownership of banks, loan concentration, and political interference in credit decisions. Large amount of loans to directors, officers, stockholders and related interests (DOSRI). Lax enforcement of banking laws. Bank failures accelerated in 1980s as economy deteriorated.
- V. **Macroeconomic factors:** Rapid growth in late 1970s reversed by oil shock. Terms of trade deteriorated from commodity price falls, while oil import bill rose. From 1983 to 1985, economy contracted under large balance of payments deficit (4 percent of GDP in 1983) and capital outflow due to drying up of international credit. Fiscal adjustment caused further contraction in enterprise income, leading to large debt arrears (amounting to peak of 22.9 percent of total bank loans in 1985).
- VI. **Policy response:** Deposit insurance scheme established in 1970, but slow payments due to insufficient funds exacerbated confidence in banking system. Monetary board allows central bank of Philippines (CBP) to intervene, but case dragged to courts. Problem banks generally put into "conservatorship," with new management and loans from CBP. After 1983, key decision to allow ailing banks to fail. In 1986, key decision to rehabilitate ailing government banks.  
  
Powers of CBP strengthened to aid bank restructuring, including cease and desist powers.  
  
Credit Information Bureau Inc (CIBI) formed by CBP to monitor bank credits to connected borrowers and prevent excessive borrowing and DOSRI.
- VII. **Restructuring technique:** Large amount of CBP liquidity loans to ailing banks, after "conservator" put into place.  
  
After evaluation, and monetary board (CBP governor chairman, and minister of finance member) decides, insolvent institution liquidated, and PDIC pays off insured deposits.

For PNB and DBP, hived off non-performing assets to government account, Asset Privatization Trust (APT) for workout, while corresponding liabilities, especially external debt, also transferred to government's books. DBP assets size cut from P 74 billion to P 10 billion, while PNB size cut from 79 billion to P 26 billion. PNB subsequently sold 30 percent of its equity to public successfully. Six government-acquired banks also fully or partly privatized.

**VIII. Burden of losses:**

First cut, shareholders; however, depositors bore large part of loss. Out of P7.6 billion deposits of closed banks (1980-87), only P3.5 billion or 46 percent covered by insurance. Loss equivalent to 5.2 percent of average total deposits or 0.6 percent of GNP in 1987.

Government bore brunt of bailout of government banks; absorbed US\$3.9 billion of DBP external debt, and PSS billion of PNB liabilities, including write off of P5 billion in losses.

At its peak, CBP loaned P19.1 billion in assistance to financial institutions in early 1986, equivalent to 47.3 percent of reserve money.

**IX. Key lessons:**

1. Design of macroeconomic adjust-ment policies after oil shock perhaps underestimated impact on financial system, and contraction exposed structural weaknesses of connected lending/fraud, which after exposure, created lack of depositor confidence in system.
2. Supervisory machinery may be in place, but execution and enforcement may not be effective because of political interference and interconnected lending.
3. Extreme danger of funding fiscal deficit through international inter-bank borrowing by government banks, which shuts out liquidity when debt crisis erupted.
4. Delays in closing down ailing banks are costly both in losses, as well as tying down scarce supervisory staff.
5. "Distributing political patronage through government banks is a way of killing banks." Having independent boards and public accountability (through financial disclosure) helps checks and balance abuses.
6. Slow payments of deposit insurance scheme (due to shortage of funds) worsens confidence, rather than improves it.
7. Applying professionals with minimal political interference can turn around bad banks.

*Sources:* Lamberte (1989), Valenzuela (1989), World Bank (1988).

## 8. Malaysia

- I. **Period of banking crisis:** 1985-88
- II. **Institutions affected:** Government intervened in 32 out of 35 deposit-taking cooperatives (DTC); 4 out of 38 banks; 4 out of 47 finance companies.
- III. **Size of deposits affected:** M\$9.4 billion, or 10.4 percent of total deposits
- IV. **Key background:** Interest rate liberalization in 1978. Lax supervision of DTC led to failure of 24 in July 1986. Significant problems of under-capitalization, mismanagement, speculation in property and shares found in DTC investigation. central bank intervention in DTCs, 4 banks and 4 finance companies. Nonperforming loans of banking system reached peak of 31 percent of total loans. Total losses of financial institutions in 1985/6 amounted to as much as 4.7 percent of 1986 GNP.
- V. **Macroeconomic factors:** Sharp economic contraction after export commodity prices fell sharply in 1985/86; real growth GDP declined in 1985. Collapse of share and property prices.
- VI. **Policy response:** 1986 - Emergency legislation empowered central bank freeze of failed DTCs. Merged 12 failed DTCs into one licensed finance company. central bank inject soft loans to assist rehabilitation and refund of depositors, who received 50 percent in cash and 50 percent in shares in finance company For 4 banks intervened, central bank inject fresh equity. Assumption of control over 4 ailing finance companies.
- VII. **Restructuring technique:** Assumption of control and investigation. In viable institution, central bank soft loans provided. For commercial banks, central bank injection .of equity, with buy-back option by shareholders after recovery. After 1988 law reform, capital of ailing financial institution must be reduced by extent of losses, before central bank assistance.  
  
After control, central bank removes old management, cut overheads and staff and appoints new management seconded from other banks.  
  
Merger/acquisition of ailing finance companies into bank groups.
- VIII. **Burden of losses:** DTC shareholders took first cut losses. Depositors took up to 50 percent, received shares in finance company in exchange. For licensed banks and finance companies, shareholders increase capital, failing which central bank injection of capital. (No explicit deposit insurance scheme).central bank injected M\$672 million in equity, plus total Government soft loans of M\$1.3 billion.
- IX. **Key lessons:**
  1. Pragmatic and flexible response to crisis.
  2. Extensive powers given to central bank to act on ailing financial institutions, including powers to freeze assets and investigate fraud.
  3. Availability of established banking sector, and sufficient professional expertise to deal with problems

4. Strong political commitment and backing to bank restructuring vital to success.
5. Importance of firm macroeconomic adjustment package to address fundamentals. Economic recovery helped bank recovery and reduced nonperforming loans.

*Sources:* Sheng (1989a), White Paper (1986).

## 9. Guinea

- |       |                            |   |
|-------|----------------------------|---|
| I.    | Period of banking crisis:  | 1982-85   |
| II.   | Institutions affected:     | Closure of six government-owned specialized banks, accounting for 95 percent of total deposits of banking system.   |
| III.  | Size of deposits affected: | 10.3 billion Guinea francs, or approximately 95 percent of total deposits of banking system.  |
| IV.   | Key background:            | Extensive fraud and mismanagement, with lax supervision. Loans mainly to loss-making public sector enterprises. Private sector loans less than 5 percent of total assets. Fictitious assets and accounts accounted for 76 percent of total assets at point of closure in end-1985.  |
| V.    | Macroeconomic factors:     | No material macroeconomic impact on banking system. Economy depended almost exclusively on foreign-managed bauxite exports.   |
| VI.   | Policy response:           | In 1985, banking law reform allowed banks to have foreign management. Three new banks with foreign participation started in 1985. Deposits of failed banks frozen.<br><br>Central bank reorganized in 1986. Liquidation of failed banks entrusted to Liquidation Unit under central bank. Government paid off depositors. |
| VII.  | Restructuring technique:   | Complete liquidation as balance of assets comprised only claims on public sector, and other assets minimal.   |
| VIII. | Burden of losses:          | Government settled depositors' claims, amounting to 41.2 billion Guinea franc (US\$100 million), equivalent to 7 percent of 1987 GDP.   |
| IX.   | Key lessons:               | <ol style="list-style-type: none"> <li>1. Poor management, complete lack of supervision, fraud created large losses.</li> <li>2. New banks established with domestic equity control, but foreign management and equity participation proved banking can be profitable.</li> </ol>   |

*Source:* Tenconi (1988).

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# 13

## BANK SUPERVISION: PRINCIPLES AND PRACTICE

*Andrew Sheng*

Nobel laureate Sir John Hicks once said, "Money is not a mechanism; it is an institution, one of the most remarkable of human institutions." Central banks have a central role in managing the institution of money, since their functions include the issue of currency, the management of the money supply and the regulation of banks. This paper surveys the what, why, and how of bank supervision.

### Financial Intermediation and Supervision

Money is not just a unit of account, medium of exchange, or store of value; it is also the financial liability of the monetary institutions, namely, the central bank and the commercial banks. The relationship between money as a liability and the real economy can be seen from the following illustration:

Assume that the central bank issues currency and its sole assets are holdings of government securities (lending to the public sector) and foreign exchange (lending to the external sector). The balance sheet of the central bank may be expressed as follows:

*Liabilities*

*Assets*

$$\text{Currency} + \text{Capital} = \text{Government securities} + \text{Foreign exchange reserves}$$

Assume also that the commercial banks issue only demand deposits and their assets are only loans to the private sector and holdings of Government securities. The balance sheet of the commercial banks may be expressed as follows:

$$\text{Demand deposits} + \text{Capital} = \text{Loans} + \text{Government securities}$$

Combining the two balance sheets of the central bank and the commercial banks together, we arrive at the classic money supply equation for narrow money M1:

$$\begin{aligned} \text{M1 (Currency} + \text{Demand deposits)} &= \text{Loans (lending to private sector)} \\ &+ \text{Government securities} \\ &\quad \text{(lending to public sector)} \\ &+ \text{Forex reserves} \\ &\quad \text{(lending to external sector)} \\ &- \text{Capital of monetary institutions} \end{aligned}$$

In other words, money supply is increased either by net lending to the private sector (loans or investment in shares), net lending to the public sector, and increase in external claims (through a surplus in the balance of payments) but is reduced by an increase in capital and reserves of the banking system. Bank lending to finance consumption or investment by either the public or private sectors is expansionary on money supply.

Because money is essentially a liability or promise to pay, backed by the security of a real asset or another promissory note, it is subject to the problems of valuation and confidence. At the simplest level, money should be created only in a stable direct relationship with the growth in real assets, so as to ensure a stable value of money. However, since money can also be created easily against other financial assets, such as government securities, stocks, and shares

or even futures, there is an inherent instability in the monetary equation. An increase in money supply, without a corresponding increase in real assets, results in inflation or a debasement in the value of money.

Alternatively, failure to honor by one party to the transaction or the claim (by either the private sector, public sector, or external sector) can result in the loss of value of monetary holdings, leading to a crisis of confidence. Monetary institutions, or more broadly all financial intermediaries, are subject to the stresses and strains of fluctuations in their valuation and confidence. The more tenuous the link between real assets and financial claims (which are representations of real assets), the greater the problems of valuation and the more fragile the public confidence in the financial intermediation process.

### *Theory of financial intermediation*

Financial intermediation helps the process of savings and investment in the economy because financial institutions reduce the risk of capital loss by savers, reduce transactions costs, and provide the investor/entrepreneur/ consumer with funding in quantities and repayment schedules convenient to them. The financial institutions help to mobilize savings by issuing liabilities (financial instruments) that are tailored to the savings and transactions needs of the saver and, using these funds, provide loans or financial assets that are tailored to the needs of the borrowers (consumers or investors).

By reducing the savings loss risk and timing of payments (liquidity) risk of the savers, the financial intermediaries are exposed to the following risks on both sides of their balance sheet:

Asset management	Liability management
Credit risk	Maturity mismatch
Country risk	Funding risks
Forex risk	Solvency/capital adequacy
Interest rate risk	
Counterparty failure risk	
Transfer risk	

Banks absorb all these risks and attempt to make a profit through a spread—the difference between their lending rate and their cost of funds and overheads. In general, the spread is very thin relative to the risks involved. A bank would be lucky over the long term to make 2 percent per annum on gross assets, and yet it can be subject to wide fluctuations in loan losses. A 10 percent loan loss would take a bank 5 years in profits to recover. Banks therefore try to cushion their losses from abnormal risks through their capital base. However, since banks are usually highly geared, even the margin of capital (usually 5 to 8 percent of total assets) may not be sufficient to withstand a large shock. On the contrary, since the returns to shareholders are higher with higher gearing, there has been a tendency in recent years for banks to expand their asset base without corresponding increases in capital. The issue of capital adequacy will be dealt with in a later section.

### *Financial deepening and instability*

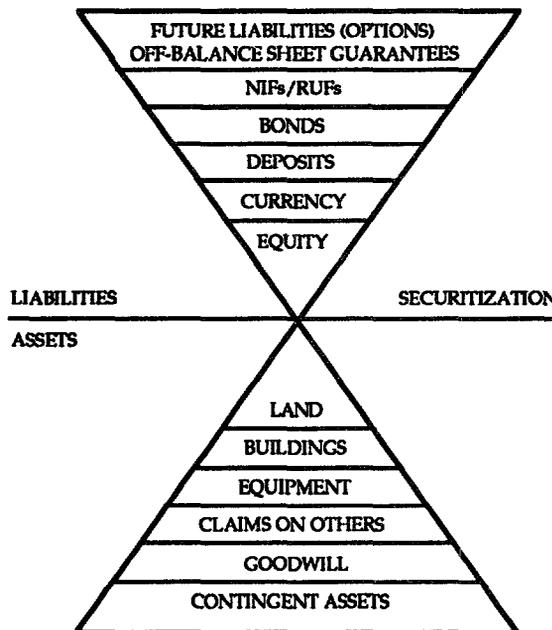
The pioneering work of Shaw and McKinnon in the early 1970s has suggested that financial development is important in economic growth, since an improved financial system fosters the efficient mobilization of domestic savings and allocates resources to their optimum usage. Monetary authorities can therefore help the savings process by removing barriers to “compartmentalization” and segmentation of financial markets and promote the process of financial “deepening,” that is, the creation of more financial instruments, institutions and markets. A cornerstone of this approach is the maintenance of positive real interest rates.

While the process of financial deepening is commendable, it carries with it the risks of greater instability.

The irony of financial deepening is that while it pays to diversify into as many different types of assets as possible, this is not necessarily true for liabilities. Conventional portfolio theory suggests that assets diversification into assets with little correlation with each other reduces risks. However, diversification into a wide array of liabilities tend to increase the risks involved. Brignoli and Siegel (1987) have demonstrated mathematically that the "interaction growth" of assets diversification with rebalancing is always positive, but when liabilities alone are involved, the interaction growth is always negative. Intuitively, this must be correct because the safest liability for an institution is its own capital. The minute an institution borrows from a new source, it increases risks that the lender may impose on the borrower, such as higher interest rates, changes in repayment schedule, and foreign exchange risks.

Financial deepening, therefore, involves a process of inverted pyramid building (figure 13.1). As financial institutions build their asset base by expanding their liabilities, the spreading of assets would reduce risks through diversification, but the corresponding risk of liabilities diversification increases, unless the liabilities are solely internally generated funds or capital. Periodically in history, the financial pyramid has collapsed through excessive speculation or monetary creation, particularly at times when there were major cyclical changes in the real economy. The most spectacular example was the Great Crash of 1929, followed by the Great Depression in the 1930s. To protect or shore up the inverted pyramid, therefore, society has established the central bank to regulate and prevent the toppling of an inherently wobbly financial superstructure.

Figure 13.1 The inverted pyramid



### *Payments system*

There is another reason why financial institutions, especially banks, are heavily regulated: they operate the payments mechanism in the economy. Through their deposit liabilities and their branch network, commercial banks are not only the major depository of private sector savings, the primary channel of credit and investments in the economy, but also the operators of the main payments mechanism. In the distributed network of the payments mechanism, which affects the timing of payments transactions in almost every facet of the economy, the banking system is not unlike a public utility with a network or grid. The stability and efficient operation of the grid is so important to the public that its failure in part or in substance would have a high social cost.

For this reason alone, the banking system is highly regulated and, in some centrally planned economies, even nationalized. Generally speaking, payments systems should be designed to be secure, cost efficient, responsive to market forces, and interconnectible to other subsystems. Because of their broad consumer base, some element of regulation is also necessary to protect the consumers from oligopolistic tendencies.

### **Principles of Bank Supervision**

We will now review the reasons for bank supervision, the basic approaches to bank supervision, the extent of the coverage of the supervision, and the questions of whether central banks should supervise the securities industry.

#### *Why banks should be regulated*

Ian Giddy (1984) lists four major reasons why banks should be regulated:

- |                               |   |
|-------------------------------|---|
| 1. monetary policy            | - the power to create money   |
| 2. credit allocation          | - channel of credit/investments   |
| 3. competition and innovation | - to prevent cartels  |
| 4. prudential regulation      | - depository of private savings, operators of payments mechanism; vulnerability to collapse |

As can be seen from the money supply equation, the ability of banks to create money through credit creation requires their supervision and control, if only to prevent excessive monetary creation and inflation. Central banks often manipulate money supply through market operations via the commercial banks, and their supervisory powers over the banks reinforce the efficacy of monetary policy.

Because the commercial banks are also the major source of consumer and enterprise credit in the economy, central banks in developing countries often issue credit allocation guidelines to the banks, in the form of credit rationing, directives to channel funds to priority or socially important sectors, with or without interest rate caps or ceilings.

In addition, because of the limited entry into the banking market (restricted by licensing) and the high cost of operating and maintaining the payments mechanism through large branch networks and automation costs, banks are only efficient if they achieve a certain minimum size and enjoy economies of scale. However, in most economies where large banks emerge, they have tendencies to operate as cartels and can retard competitiveness and innovation. Central banks have to regulate them to protect the consumer, and to ensure that the banks remain innovative and efficient, providing low-spread intermediation costs.

Finally, as a depository of public savings and the operators of the payments mechanism, the commercial banks must maintain public confidence in the total convertibility of deposits with them without capital loss and the certainty that receipts and payments will be made for and on behalf of customers with no loss and at low cost. In other words, as Giddy puts it, the central

bank has to preserve “continuity in the stock of money, or to preserve continuity in the flow of credit.”

As indicated earlier, public confidence in banks can be fragile because the banks are particularly vulnerable to collapse. The vulnerability of banks to sudden collapse can be attributed to the following characteristics:

- high gearing/leverage
- mismatch of maturities between assets and liabilities
- lack of transparency
- subject to settlement risk
- contagion and systemic failure

Because of their broad deposit base, commercial banks are inherently highly geared, so that the degree of capital available to absorb risks is relatively low. Commercial banks also make profits fundamentally by riding the yield curve, mobilizing short-term deposits at lower rates of interest, and lending or investing such funds in longer term assets at higher rates. This inherent liquidity mismatch is potentially dangerous, and banks have to maintain a relatively high proportion of liquid assets (between 20 and 25 percent of total assets) to meet the normal liquidity needs of their customers. To preserve the liquidity of the banking system, central banks also provide lender of last resort facilities to commercial banks to meet their cash needs, provided that insolvency is not involved. Without such facilities, liquidity problems of banks can quickly deteriorate into a solvency problem, since immediate liquidation of long-term assets inevitably involves large capital loss.

A peculiar feature of banks is that they suffer from a lack of transparency, in that the true value of their assets, and thus solvency, is not readily apparent to either the public or the bank regulators. The transparency problem arises first from a lack of information disclosure, and second from the fact that valuation of long-term assets can fluctuate significantly depending on the urgency of the disposal, the quality of security, and sudden changes in the cash flow/earnings of the asset, as well as fluctuations in market conditions. For example, large holdings of apparently secure government securities could suffer large losses due to sharp rises in interest rates. Apparently secure loans could be worthless if there are defects in legal documentation. The quality and valuation of bank assets would therefore depend very much upon honest and competent bank management that is continually subject to checks by either external auditors or government bank examiners. However, without good information disclosure, problems are more often than not discovered *ex post*, when the damage is already done.

Lack of transparency also occurs because the assets of a bank can become more and more tenuous in relation to real assets. In sophisticated markets, banks increasingly hold financial assets that almost bear no relation to real assets, being claims upon claims, so that failure in one part of the chain can cause a rapid collapse of claims in the whole chain. One reason for the Great Crash of 1929 was the pyramiding of shares. Shares would be floated on the New York Stock Exchange by companies that had assets comprising solely of quoted shares backed by other shares. The failure of one company in the chain triggered off a series of failures. The depositors or customers of the bank can only assume that the assets as stated in the disclosed balance sheet are worth what they are reported. The minute there is doubt that this is not so, usually through market rumors or failure to honor deposit withdrawals, the lack of transparency changes into a stampede, leading to a run on deposits, which no bank can withstand without strong lender of last resort facilities.

The fourth category of risk faced by banks as operators of the payments mechanism is the danger of settlement risk, where failure of the counterparties to honor their obligations in time can cause the payments mechanism to seize up and threaten the banks' liquidity (through no fault of their own), and the chain reaction in delays or failures of settlement down the line results in contagion. This happens when the lack of transparency triggers the domino effect—the failure of one bank is associated in the public's mind with the failure of all banks, and the

whole process, if not promptly stopped, results in a systemic failure. In such circumstances, the payments system collapses, and its failure causes also the failure of the enterprises and possibly the total collapse of the economic system.

### *Approaches to bank supervision*

There are four basic approaches toward bank supervision:

1. information disclosure
2. self-regulation through internal audit and controls; external auditors; and board audit committees
3. government bank examination (implicit guarantee of deposits)
4. deposit guarantee scheme (explicit guarantee of deposits)

Richard Dale (1986) distinguishes between preventive regulation and protective regulation. In the former category, he includes measures taken by the authorities to restrict entry into the banking business by licensing; the restriction of types of businesses in which banks can engage; capital adequacy requirement; controls of liquidity and statutory reserves; limits in which banks can lend or invest; and, finally, bank examination. Under the category of protective regulation are included deposit insurance schemes and central bank assumption of control of banks, both of which aim to protect depositors from the failure of banks.

Information disclosure requirements involve two basic types: disclosure to the public through regular audited financial statements or announcement of operating results; and detailed disclosure to bank supervisors in which public disclosure may not be appropriate because client secrecy is involved. Although public information disclosure has improved over the years, the quantity and quality of disclosure are highly inadequate because of lags in the information released, the non-homogeneity of accounting standards and treatment, especially international comparisons, and the obsession of most banks with secrecy (to add to the mystique of banking). Even if the bank regulators can demand better quality information from the banks, the integrity of that information can be suspect either because of fraud or deliberate suppression of information, or the bank management itself is not aware of the implications of certain types of business operations. It is almost a dictum in bank supervision that bank management is more often than not blind to large losses, not only because these are detrimental to their ego, but also because of the fear of sparking off bank runs or affecting their access and costs in borrowing in the interbank market.

If one believes solely in market discipline and competition, then self-regulation by banks would be deemed sufficient. This could take the form of elaborate internal controls and checks and balances, such as double custodians for assets, double signatories for payments, regular internal audit checks, self-imposed limits on lending to particular sectors and authority limits, and controls over management through an independent board audit committee.

Self-regulation appears to work well in mature, advanced financial markets, where strong market discipline is imposed by the market leaders, built up through long traditions of integrity and professionalism. In such markets, the weaker institutions would have been weeded out by competition, or forced out if their value systems are considered inappropriate by the market leaders. However, self-regulation fails during times of great change, either when the market leaders themselves are weak or when new competition and innovation change the rules of the game. At the point that the market discipline breaks down, rogue banks with weak, incompetent, or aggressive/fraudulent management can play havoc with markets, and self-regulation becomes paralyzed through indecision and self-interest considerations.

A large part of self-regulation today relies on the use of external auditors, who satisfy the corporate law requirements by expressing an opinion on the financial condition of the bank audited. Unfortunately, the quality of professional firms varies greatly between auditors, and their scope of work can be markedly different from that conducted by national bank examiners. This is particularly true in the area of bank fraud and adequacy of provisions. Traditionally, auditors see themselves not as bloodhounds whose duty it is to expose fraud, but only as those

who express an opinion based on a review of the internal controls and the quality of records kept, that the accounts reflect a true and fair view of the state of affairs of the firm audited. This may be wholly inadequate in this modern age of rising computer fraud and fluctuating markets in which changes in assets conditions can have material impact on the solvency of a bank.

Moreover, the fact that audit fees are paid by the bank and that the fees' size limits the scope of work done, place the audit firms very much under the influence of bank management. Further, smaller firms of auditors are not professionally equipped to inspect large complex financial institutions; neither are they always free from pressure from bank management. Depending on the national circumstances, bank supervisors can either rely exclusively on audit opinions of external auditors or supplement them extensively with regular inspections by teams of highly trained bank examiners.

Typically, the scope of bank examinations is the onsite verification of a bank's financial condition, to ensure that the reporting of the bank's performance to the central bank is accurate, and that it is operating in a sound manner in compliance with the laws and regulations. When a bank examination reveals deficiencies, remedial steps would have to be taken depending on the seriousness of the deficiencies. At its most extreme, this could involve assumption of control of the bank by the supervisory authorities to prevent further deterioration of financial conditions and to protect the depositors.

It has often been confused that a deposit insurance scheme protects the depositors and is a substitute for further bank supervision. This is a fallacy. Deposit insurance schemes enhance public confidence in the banking system by assuring the small depositor that his savings are intact, irrespective of the quality of the bank concerned. In most deposit guarantee schemes in existence, only small deposits are insured, since the large depositors are assumed to be aware of the risks involved in banking with small or weak banks. In the United States, for example, deposits of not more than US\$100,000 each are insured by the Federal Deposit Insurance Corporation. In practice, this has meant that most large deposits are broken down into parcels of less than US\$100,000 each so that they also can be covered under deposit insurance.

However, by removing the danger of bank runs triggering banking contagion and systemic failure, the problem of moral hazard is enhanced with the existence of deposit insurance schemes. Bank management can take higher risks with bank assets, and supervisory authorities usually have to step up monitoring systems and increase punitive measures against abuses in the system.

A key issue with deposit insurance schemes is the quantum of the premium and how it should be funded (levied *ex ante* or levied *ex post*). Most deposit insurance schemes use a flat uniform premium; this avoids assigning risk quality to any particular bank and is easy to levy and collect. Unfortunately, this method punishes the prudent and well-managed banks, and rewards the weak banks. A risk-based premium scheme has the disadvantage of ascribing a bank that pays higher premium as weak and such an announcement has the effect of informing the public that they should avoid risking their deposits with this particular bank. Most existing deposit insurance schemes are funded *ex ante* or on a pay-as-you-go basis. However, some schemes, such as the British Lifeboat scheme that operated in the mid-1970s for the secondary banking crisis, was assessed successfully on the large clearing banks after the fact.

### *The coverage of bank supervision*

One major issue in bank supervision is the scope of coverage: how far should the central bank's supervision of the banking system and its lender of last resort facilities cover? There are two extreme views to this. At one end of the spectrum, the supervisory authority should confine itself only to the clearing banks, protecting specifically the money-creation process and the clearing/payments mechanism only. Since the clearing banks are at the core of the financial markets, problems at the periphery are often relegated to be resolved by the banks (who are the primary financiers of these markets). The supervisory authority only extends moral guidance plus liquidity assistance to the banks so that system-wide liquidity is not affected.

At the other extreme, the supervisory authority is directly responsible for almost all aspects of the financial system, covering not only the banking system, but also foreign exchange markets, capital markets, and the securities industry, including in some cases the insurance industry. The Monetary Authority of Singapore, for example, has wide-ranging powers to regulate the whole financial system, and was instrumental in developing the securities industry and the offshore banking center, including the futures and commodity markets. This approach calls for wide powers of supervision and inspection, monitoring, and forward planning capabilities.

Whether countries should adopt one or the other approach would depend largely on the philosophy of bank supervision in that country—to rely on the market or on central planning and supervision. Dr. Goh Keng Swee, the Deputy Chairman of MAS and a prime architect of Singapore's economic growth, was known to have remarked that the regulation of banks should be "like frying small fish: it must not be overdone." There is always a cost to bank supervision; not simply the logistics costs of maintaining teams of bank examiners, but also the indirect costs of mounting rules and regulations that cost time and money for the banks to follow, as well as the immeasurable costs of retarding innovation and efficiency through over-regulation. Historically, the monetary authorities hover between excessive prudential regulations usually imposed after a financial crisis on the one hand, and excessive deregulation on the other, which could sometimes precede a financial crisis. The art of maintaining the middle way is not easy to achieve.

#### *Should central banks supervise the securities industry?*

Related to the problem of coverage is the traditional separation of the banking industry from the securities industry. One lesson drawn from the banking failures of the Great Depression of the United States in the 1930s was that the banks failed because of their excessive lending or investments in shares. The Great Crash caused substantial losses in investments and failed loans, thus triggering off the chain of failure of small rural banks that did not have the capital reserves to sustain such losses. The Glass-Steagall Act of 1933 was enacted to separate the American commercial banks from investment banking. However, it should be pointed out that universal banks in Switzerland and Germany had for many years successfully operated, loaned, and invested in the securities industry with little apparent harmful effects.

It is recognized generally that the securities market is much more volatile than traditional banking business. Since banks usually finance securities trading, and the two areas of business are linked directly by the clearing and settlement mechanism operated by the banks, repercussions in one area are bound to be felt in the other market. The key issue is therefore whether the banks are capable or equipped to withstand such shocks and whether it is legally possible or practical to build safety trigger points or firewalls to insulate one market from the other.

With the present mood for deregulation in financial markets worldwide, and pressure from the commercial banks, there is now greater acceptance of the view that perhaps commercial banks should be allowed to enter the securities market, with appropriate safeguards. If this is so, there will be greater reasons why one central supervisory authority should oversee the developments in both markets. Although there are some supervisory authorities that already oversee both markets, whether this would be the wave of the future remains to be seen.

To summarize, bank supervision has the following primary objectives:

- to promote and develop a sound and wide range of financial services to meet the needs of the economy
- to ensure that the banks are efficient, secure, and responsive to consumer needs and complaints
- to ensure compliance with laws and regulations conducive to fostering high standards of banking and professional conduct

- to ensure that the behavior of the banking system complies with monetary policy and credit allocation policies, bearing in mind that prudential regulations sometimes conflict with monetary policy/credit allocation objectives

## The Practice of Bank Supervision

The process of bank supervision takes two forms. One is the regulatory or off-site monitoring process, while the other is the on-site inspection or bank examination process. Bank regulation usually deals with the formulation and implementation of specific rules and regulations for the conduct of banking business, including the monitoring of the compliance with such rules. Bank examination, on the other hand, ensures compliance with the rules and regulations and assesses the soundness of individual institutions. Sometimes, the function of bank regulation and examination are centered in one department, while in some central banks, such as Bank Negara Malaysia, they are separated into different departments as a matter of policy.

### *The bank regulation process*

The regulatory process can begin even before a bank or deposit-taker commences business. The licensing process (called sometimes anti-competitive regulations to limit entry into banking) usually involves the following:

- Minimum capital requirements – This could be set at relatively high levels to deter entry, or as a matter of policy, the number of licenses issued are limited.
- Fit and proper persons – The management and board of directors or promoters of the bank are security or financially vetted to ensure that no bankrupts or persons with criminal records are allowed to own or manage banks. The experience and integrity of the chief operating officer are often examined to ensure that only competent professionals are allowed to manage banks.
- Ownership limits – In many countries, the ownership of banks is either wholly or majority restricted to nationals, or are widely held. Some countries limit individual ownership to not more than 5 percent of total paid-up capital of a bank, and would require that any concerted effort by a group to control a bank is reported to, and approval sought from, the authorities if they owned more than, say, 15 or 20 percent of the capital of the bank.

After a bank satisfies the pre-operating requirements, the regulatory process then involves the monitoring and control over the activities of the bank according to laid-down rules and regulations. These may be divided into the following categories.

**INFORMATION DISCLOSURE.** The banks are required normally to submit a whole host of statistics for monitoring by the central bank, from daily foreign exchange positions, overnight clearing, and weekly and monthly deposits/loans growth, to quarterly and annual balance sheet and profit and loss statements. From these, the regulatory authorities monitor the banks' performance, and compliance with the rules. Usually peer group statistics are developed and the performance of each bank is matched against that of the peer group, and early warning systems and ratios are developed.

Some central banks also approve annual accounts and use the leverage of delaying such approval to ensure that banks comply with public disclosure requirements or provide adequately for asset losses. An important area of information disclosure to overcome the problem of lack of transparency is to develop uniform accounting standards and disclosure requirements and also an efficient computerized data submission, collection, and analysis system. This provides the industry with recent data on its performance and allows for the public to be alerted to changes in the industry.

A common mistake in the area of banking secrecy is for the supervisors to concur in not disclosing the extent of damage in an ailing institution. This places great onus on the supervisor

to bear some responsibility for the failure when it is finally announced. For example, when a bank runs into deposit withdrawal problems, there is pressure on the bank supervisor to state there and then that the bank is sound in order to calm depositors. Such a statement without adequate assessment of the extent of insolvency places a moral responsibility on the supervisor to implicitly guarantee that bank's deposits.

**RESTRICTIONS OF BUSINESS ACTIVITIES.** Another preventive measure is to restrict not only the entry into banking to highly competent or capitalized enterprises, but also the types of business activities in which banks are allowed to engage. To protect against conflict of interest situations, for example, banks are often prohibited to enter into nonbank business, that is, commerce, industry, or agriculture, in direct competition against their customers and where their financial muscle would give them the added advantage. Sometimes, banks would only be allowed to invest in these fields to assist in the recovery of their loans and are required to divest their shares as soon as expedient. The most dangerous field of lending is connected lending, that is, credit to enterprises that are directly or indirectly connected to the shareholders, directors, or staff of the bank, where objectivity in credit assessment is thrown out the window, and abuses of authority are common.

**CONTROLS OVER CHANGES IN OPERATIONS.** To prevent sudden changes in bank management and its policies from disrupting bank operations, some supervisors require prior notification or approval for changes in control, ownership, or management of banks, including changes in the appointment of directors, chief operating officers, or auditors. An early warning sign of problems in banks is abrupt changes in such key personnel, either indicating serious disagreements over policy, rats deserting a sinking ship, or intention to influence management to finance connected lending. In many developing countries, large business conglomerates often seek to acquire stakes in banks for the sake of giving an impression of financial strength, or to finance the group ventures. If this is prohibited by law, then the groups may engage in "scratch my back" activities, whereby "your bank lends to my enterprise, while my bank will lend to your enterprise," to circumvent the rules.

There is also a need to shield banks from giving politically motivated loans, where funds are used for political purposes with no means of repayment. Some authorities control this by preventing active politicians from serving on the boards of banks. Another control over operations is the control over bank-branching, which limits to some extent local politicians' access to deposits. The supervisor would only allow a new branch to be opened if he or she is satisfied that the bank has the capital base and qualified management to operate additional branches.

It is also important to supervise and control the branching of banks overseas, to prevent outflow of funds and opportunities to evade exchange control regulations. Some banks use branches overseas to borrow interbank to fund domestic activities in a situation of tight liquidity to avoid monetary restrictions, or engage in round-tripping by taking foreign deposits that do not require statutory reserves. Control over the banks' ability to open branches is a powerful tool to restrict weak banks from overextending themselves, to control their growth, and to limit the damage that an ailing bank can do before the supervisor assumes control to prevent failure.

**RISK CONTROL LIMITS.** These controls typically limit the extent of risk a bank is allowed to assume, such as:

- **Credit risks** – Limits on how much a bank can lend to a particular economic sector, such as real estate or shares. *Single customer credit limits*, restricting loans to one customer or group of customers not exceeding say, 15 to 20 percent of capital of the bank. This encourages diversification of portfolio. *Limits on or prohibition of connected lending* prevents connected lending.

- Foreign exchange risks – Normally the central bank determines the maximum net open foreign exchange limits that a commercial bank is allowed to hold, so as to discourage excessive speculation or exposure to exchange rate risks.
- Interest rate/maturity risks – Controlled by requiring minimum liquid assets ratios and disclosure of maturity mismatch.

**LIQUIDITY REQUIREMENTS.** To meet the day-to-day cash and deposit withdrawal needs of their customers, banks have to maintain minimum liquidity assets—these usually comprise 5 to 10 percent of total deposit liabilities held in cash, deposits with central bank and other banks, and another line of 10 to 15 percent in first-class bills of exchange, treasury bills, or short-term government securities that can be readily sold without capital loss.

**CAPITAL ADEQUACY REQUIREMENTS.** Capital is maintained by banks to support their fixed assets, to ensure the financial commitment of the shareholders, and to cushion depositors against unexpected losses faced by the bank. In the drive for profits, the capital base of the banks have tended to erode over time. There are many ways of calculating the capital adequacy ratio: a simple capital to total assets or deposits ratio, the free capital ratio and the risk-based capital ratio. The free capital ratio assumes that all investments in fixed assets and long-term assets should be funded by capital, and the free component is the one that is used to cushion the bank against unexpected risks. The risk-based capital ratio is more finely tuned to the risk profile of the bank, but is more difficult to calculate. The latter approach, recently adopted by the Basle Committee of Bank Supervisors, gives risk weights to different categories of assets, and requires that a bank should have a minimum standard of 8 percent capital base by 1992. This approach also takes into consideration off-balance sheet risks.

One difficulty that is associated with the Basle approach is the controversy of whether revaluation reserves and hidden reserves should be counted as part of capital. The Basle Committee resolved this by having a two-tier capital: a core capital comprising paid-up capital and earned reserves; and a second tier capital (limited to not more than 100 percent of core capital), which comprises preferred stock, general provisions, subordinated loans, and up to 45 percent of hidden and revaluation reserves.

The most difficult part of assessing capital adequacy and solvency is the assessment of adequacy of assets loss provisions, particularly bad debts. Here, the supervisors have to be very clear and firm in introducing standard accounting treatment on interest-in-suspense and loan provisioning (including valuation of security) procedures to be followed by the commercial banks. The greatest controversy between supervisors and bank management is the size of provisions required, which can be subjective and open to question.

**INFORMATION POOLING AND COORDINATION.** Because of the banks' penchant for secrecy and reluctance to exchange or reveal information to their competitors, especially on exposure to large borrowers, there is considerable economies of scale and advantage in the supervisors developing a central credit information bureau to monitor large loans or poor loans, assess the adequacy of provisions, detect problem areas in the economy, and improve the banks' credit evaluation information base. Other pools of information, such as methodology of fraud, blacklist of dishonest staff, training methodology, and systems procedures and manuals, can be centrally stored with the bank supervisor to be shared by the industry to great advantage.

**MORAL SUASION.** Many central bank governors feel that the moral leadership and guidance of the central bank are the right approach to set the right tone for correct bank conduct. Mature central banks tend to rule the industry through lifting the governor's eyebrow or a regular chat and exchange of views with the bankers' association or market leaders. However, in less disciplined markets, moral suasion has to be accompanied by tough laws and measures, where guidance is seen as an iron hand in a velvet glove.

**PREVENTIVE MEASURES.** Moral suasion works well with highly principled and professional bankers, but is unlikely to work with rogue banks and fraudulent managers. The bank supervisor

must therefore have a sufficiently good early warning system to detect such behavior, and to have sufficient legal clout or “teeth” in the form of punitive measures to jail fraudulent bank staff and deter them from straying off the straight and narrow. The strict enforcement of rules and regulations has often been neglected in regulation work.

**POLICY AND LEGAL DEVELOPMENT.** Finally, a major duty of the bank regulator is to regularly review the performance of banks, the developments in the market, and the complaints of the public and to update regulations and legislation to effect reforms and to change these with the times. More often than not, outdated policies and regulations have been major causes of banking inefficiencies and retarded development of financial deepening.

### *The bank examination process*

In general, the examination process involves frequent on-site examination of bank operations to ascertain that the bank is operating in a sound manner, to determine the accuracy of financial reports to the regulator and the public, and to ascertain compliance with the law and regulations. Bank examinations are usually conducted on a surprise basis (without prior notice to the bank concerned) and at random, on either selected branches or aspects of the operations of a bank. The examination could either be a routine inspection or a special in-depth investigation to uncover fraud or risk exposure.

Most bank examination activities would cover the following:

- Determine financial position of bank and quality of operations, including assets and cash counts, verification of internal control procedures, their documentation and compliance.
- Assessment of management quality
  - covers integrity, training, and experience level of bank staff
  - monitors how tightly management is supervised by the board
  - examines the degree of discretionary powers given to management staff and the way such powers are exercised
  - examines adequacy of staff and staff training.
  - assesses management succession and dual controls.
- Ascertain compliance with laws and regulations: Includes tests of documentation and compliance with laid down laws and procedures.
- Testing accuracy of books, accounts, and records: Verifies that all transactions are properly and accurately documented and that all audit trails and authorizations are properly maintained.
- Verification of asset quality: Includes a complete review of credit policy laid down by the Board to cover areas such as
  - proportion of loans to sectors and individuals
  - types of securities acceptable to the bank
  - procedures to be followed in valuation
  - margin of advance
  - credit appraisal methodology
  - credit monitoring and recovery
  - aging of loans, suspension of interest, and loans provisioning.

Also included should be risk exposure reviews on other assets such as land and buildings, holdings of long-term bonds, foreign exchange positions, investment in unquoted shares, and other assets. Depending on materiality, large and unusual assets should be examined and verified, if need be, through independent sources such as professional valuers.
- Assessing solvency of bank: After all provisions have been made, the solvency of the bank would be assessed, and the truth and fairness of the financial statements of the

bank commented on. This usually involves detailed discussions with the banks' top management and auditors.

Increasingly, bank examiners assess bank performance according to the U.S. Federal Reserve's "CAMEL Test": C for capital adequacy, A for asset quality, M for management depth and competence, E for earnings levels, and L for liquidity. In the assessment of earnings levels, many examiners have adopted an efficiency performance criteria, including examination of spreads, productivity of bank staff, return on assets and overall profitability.

Other areas of bank examination include the detection of the existence of bank fraud, either perpetrated by bank management or shareholders on depositors, and illegal activities such as the laundering of illegal funds. Because of international links in this type of activity, especially when the bank fraud perpetrators tend to siphon funds abroad, there is greater cooperation among banking supervisors in exchanging information on the modus operandi of such fraud and illegal activities and the persons or institutions involved.

#### *Remedial measures on what to do when banks fail*

For one reason or other, banks fail. They can fail because of illiquidity, insolvency, mismanagement, sudden shocks to the system, such as violent fluctuations in interest rates or exchange rates, or fraud. Although macro-economic conditions can be ascribed as the broad reasons why some banks fail, in general, mismanagement plays a large role.

De Juan (1991) has characterized bank mismanagement into four phases:

- technical mismanagement
- cosmetic mismanagement
- desperate management
- outright fraud.

The mismanagement leading to bank failures can be caused by any or a combination of the following factors:

- inappropriate macroeconomic problems leading to large-scale enterprise failures
- sudden changes in market conditions such as a devaluation, natural disaster, or stock market crash
- errors in judgment or market strategy by bank management
- internal management, disputes or labor problems
- inexperienced staff operating in new fields
- violation of regulations
- connected lending to interested shareholders, managers, or bank staff
- imprudent lending and asset acquisition
- poor internal accounting records
- poor bank supervision

Depending on the severity of the problem of the failing bank, the remedial measures open to a central bank are limited to one or a combination of the following:

- direct that the problem be remedied, with follow-up inspections
- fine the bank or person responsible
- use moral suasion by publicizing the misdemeanor
- restrictions on branching, or loans growth, or investments
- change bank management
- call for capital increase
- assume control of bank
- merge or consolidate institution with stronger institutions
- liquidate the bank.

A first point to remember is that bank restructuring or rescue is quite a different specialization from normal bank supervision. This is where an ailing bank is moved from the outpatient casualty ward to the intensive care unit, and the consultant specialist has to diagnose the problem, determine whether it is chronic or terminal, and recommend the appropriate dose of medicine.

Two aspects in bank restructuring are vital: solvency and management.

**SOLVENCY.** Because of lender of last resort facilities, banks seldom fail because of illiquidity. They can show signs of illiquidity due to ailing assets (large nonperforming loans greater than the capital base) and can easily replace this lost liquidity from the market by borrowing in the interbank market or raising deposit rates and increasing branches. Because of lack of transparency, they can easily hide their non-performing loan losses or other failures through rolling over credits, lending more loans to bloat the balance sheet, and undertaking high-risk ventures. The detection of this phase of desperate management is usually not easy.

The examiners have to undertake an extensive evaluation of the extent of losses, value of assets, internal controls, and accounting records in place, and come up with an estimate whether the bank is solvent or insolvent (negative shareholders' fund).

The dictum is that when a bank is insolvent, the depositors lose money to the extent of the shortfall. Normally there follows a period of great hiatus as the regulators and the bank shareholders/management argue back and forth the quantum of provisions required. The common argument by management is the need to buy time, not to show losses, and that profits are just around the corner. It is never a convenient time to raise capital to meet the shortfall, either because of poor results or the prospects of poor results. A lesson from experience is that staggering of loan losses provisions is usually a "cop-out," it rarely solves the problem and it delays recognition of the true extent of losses. If not properly re-capitalized, banks become "zombies"—the living dead—not bleeding enough to die immediately, but not strong enough to live. The more effective way is to reduce capital by the full extent of the losses, inject new capital by existing shareholders, new shareholders through invitation, or merger/acquisition or new capital from a deposit insurance scheme or government trust fund. Without adequate new capital, even the best management cannot turn around an ailing bank.

**MANAGEMENT.** Management is the key to bank turnarounds, and mismanagement is one of the key causes of bank failure. A difficult area is the assessment of the integrity and competence of management. It is always a mistake to retain old management either because of the need to recover old loans or because they know the business. New brooms sweep cleaner because they can be more objective in assessing the extent of the damage and may be able to address the need to:

- recognize the extent of the losses
- secure new lines of bank credit because of improved confidence
- stem old losses
- reduce overheads and staff, with retrenchment if necessary
- put in improved controls and accounting systems
- introduce new profit opportunities.

A temptation to resist is the assumption that supervisors make the best bankers. More often than not, it takes an experienced market-oriented banker to inject new profit sources to turn around the bank. Regulators are good conservators of existing assets, not necessarily creators of new profit sources. Both aspects are vital in a bank turnaround.

#### *Rogue banks and early warning system*

A condition that most bank regulators must learn to watch out for is the rogue bank, where a bank runs wild and behaves completely contrary to sound banking principles.

This usually occurs when the bank is close to insolvency, and the bank management or owners deliberately or recklessly decide by fraud or otherwise to "double-up or nothing" in order to

recover losses, and enrich themselves through fraud since they realize that a return to solvency is futile.

It has sometimes been argued that distressed banks occur because of macroeconomic maladjustments. Large doses of inflation, recession or deflation, and devaluation all create the environmental conditions that can lead banks to lose money. But rogue banks can occur often in conditions of great prosperity and are only detected in conditions of recession. Bad macroeconomic conditions are necessary but not sufficient conditions for failing banks.

The theory of sound bank risk management calls for an expansion of credit at the bottom of a recession and in its recovery phase, and a restraint of credit at the height of the boom and the downside of the trade cycle. Profits are always made at the recovery stage and should prudently be set aside to make additional provisions for loan/asset losses during a recession.

The mirror image of this is the desire for liquidity by enterprises. At the recovery stage, internal funds and profits of enterprise are adequate and funds are required only during a downswing, when debtors slow down in payment and working capital/cash flow shrinks. Deteriorating enterprises begin to borrow heavily in a recession to shore up their own liquidity.

Banking is sometimes likened to playing musical chairs. The weakest bank with the most bad loans drops out when the music stops. Banks fail usually because a large portion of their loans fail. When borrowers or their financiers get into situations of insolvency, their behavior changes from rational to irrational for market, but rational for self. That is, the rogue enterprise or bank will do anything to buy time and involve everyone in a safety net to protect itself from failure.

Two aspects of bank and borrower behavior need some elaboration. The first is the black hole effect of borrowers in distress. Distress borrowing is strictly suicide, that is, borrowing at higher rates than the real earnings the enterprise can afford. The borrower or bank is decapitalizing fast, but a small insolvency has the same effect as a large insolvency, and when it reaches a too big to fail situation, the inverse psychology works. The insolvent enterprise or bank has to be bailed out by its creditors or the public because of the high social costs involved. Reasons for the bail-out then include the rationale of strategic industry or to protect employment.

The black hole effect is that the rogue bank diversifies its liabilities by borrowing heavily and widely, attracting deposits at high rates of interest. If necessary, the rogue bank will drag in the social consequences of its failure, including pulling in political influence to ward off supervisors. Pressure is then put on the regulators to bail out the bank. The black hole effect accounts for the situation where many enterprises in developing countries try to buy banks, and use connected lending to bail themselves out of the problems. The insolvency of the bank is spread to society and sucks the rest of society into the black hole of insolvency.

The second effect is Gresham's Law applied to banking. Gresham's law states that bad money drives out good. In an economic downturn, good bankers inevitably consolidate by squeezing their poorer credits for repayment thus driving out their bad money. On the other hand, weak or less agile bankers welcome such credits. Desperate borrowers also seek out desperate bankers. The insolvent banker willing to pay high deposit rates can always grant his loans to distressed borrowers who are willing to pay high rates with no intention to repay. In due course almost all bad credits end up with the weakest or most corrupt bank. It is the duty of the vigilant bank regulator to detect and catch the rogue bank before it runs amuck.

A senior American bank supervisor has said that in his 35 years of bank supervision, banks were observed to fail under three conditions:

- when they grow too fast
- when they engage in collateral lending
- when they hire consultants to tell them how to run their business.

The phenomenon of fast asset growth is a sure formula for bank failure. This is because evaluation of credit depends on the good experience of the market and tight credit evaluation, monitoring, and documentation procedures. New or inexperienced banks with poor or weak staff and desire for fast profits inevitably fall into the trap of lending to poor credits, which will

only surface one to two years later. In most countries' experience of bank failures, the incidents have fallen heavily on new entrants. In Malaysia, many of the smaller finance companies in the ailing list were new licensees that did not have enough resources to build up experienced staff or enough capital to withstand recession. A tentative conclusion drawn from this is that deregulation of banking without adequate supervision results in failed banks, especially when new bankers ride their learning curve.

Collateral lending is lending against pure security, with no visible cash flow to support the loan servicing and repayment schedule. Collateral lending is against sound banking judgment and is normally given by good banks only to the best customers.

Unfortunately, collateral lending is deceptively easy to understand and appears to have an infallible logic: the loan is adequately secured, so why worry? This infallible logic results in lending to finance speculation or non-tradables, which is poor credit allocation. Distressed enterprises in dire need of cash flow would offer assets (often at inflated values) to banks as collateral. If the banking system as a whole engages in massive collateral lending to finance speculation in land and shares, it can build a speculative bubble, which will bring down many lenders when the land or share boom goes bust. This is because the borrower is speculating on future cash flow from the future sale (at high prices) of the security to service the loan. In a downturn, forced selling of shares or land by banks almost always triggers large borrower failures. The black hole effect works here. When banks have lent collectively too much to finance shares and land, they cannot sell without depressing their own collateral and affecting their own profits and solvency. They therefore become part of the conspiracy to keep afloat the problem borrowers.

The third observation relates to inexperienced bank management that is not clear about its own corporate objectives. Banks are natural bureaucracies and have a tendency to bloat the number of staff and spend on prestigious buildings and benefits on staff. The prestigious buildings are symbols of stability and confidence. They are unfortunately also a drain on earning assets. Since the lending and borrowing rates of banks are usually determined by the market place, or by central bank fiat under strict credit allocation and monetary policies, the most profitable banks are usually those banks who can minimize their bad loans and have the lowest overheads. Most ailing banks have overheads disproportionate to their size of operations.

The regulators therefore have to build early warning systems to detect the surfacing of rogue banks. These include:

- Corporate rating agencies to monitor bank performance
- Central credit information bureaus to detect ailing borrowers
- Computerized bank performance indicators on: capital adequacy ratios, liquidity ratios, risk profiles, profitability indicators, and staff productivity indicators
- Market information sources, such as market talk, consumer complaints, and industry dialogue.

## Conclusions

As creators of money, custodians of public savings and operators of the payments mechanism, banks have to be regulated in the public interest. The objective of bank regulation is to have a sound, secure, efficient, and innovative system that is responsive to consumer needs and market forces and free from oligopolistic tendencies. The bank supervisors' job is to monitor the performance of banks and to verify such performance in order to detect the emergence of ailing banks that can threaten to disrupt the whole banking system. Banks can fail in good times as well as bad and tight supervision in itself cannot wholly prevent the occasional rogue bank, but can effectively manage damage control and help resurrect or cut out insolvent banks. Because the banking system is so important to macroeconomic management, sound supervision is a vital component of overall central bank management of the financial system and the economy.

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