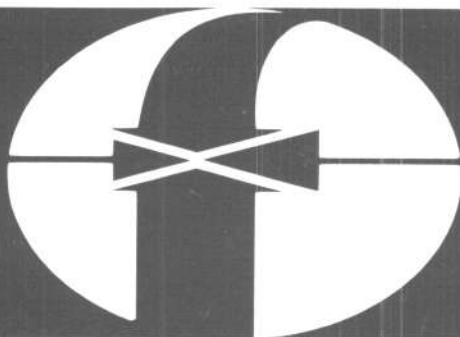


# **Savings and Development**



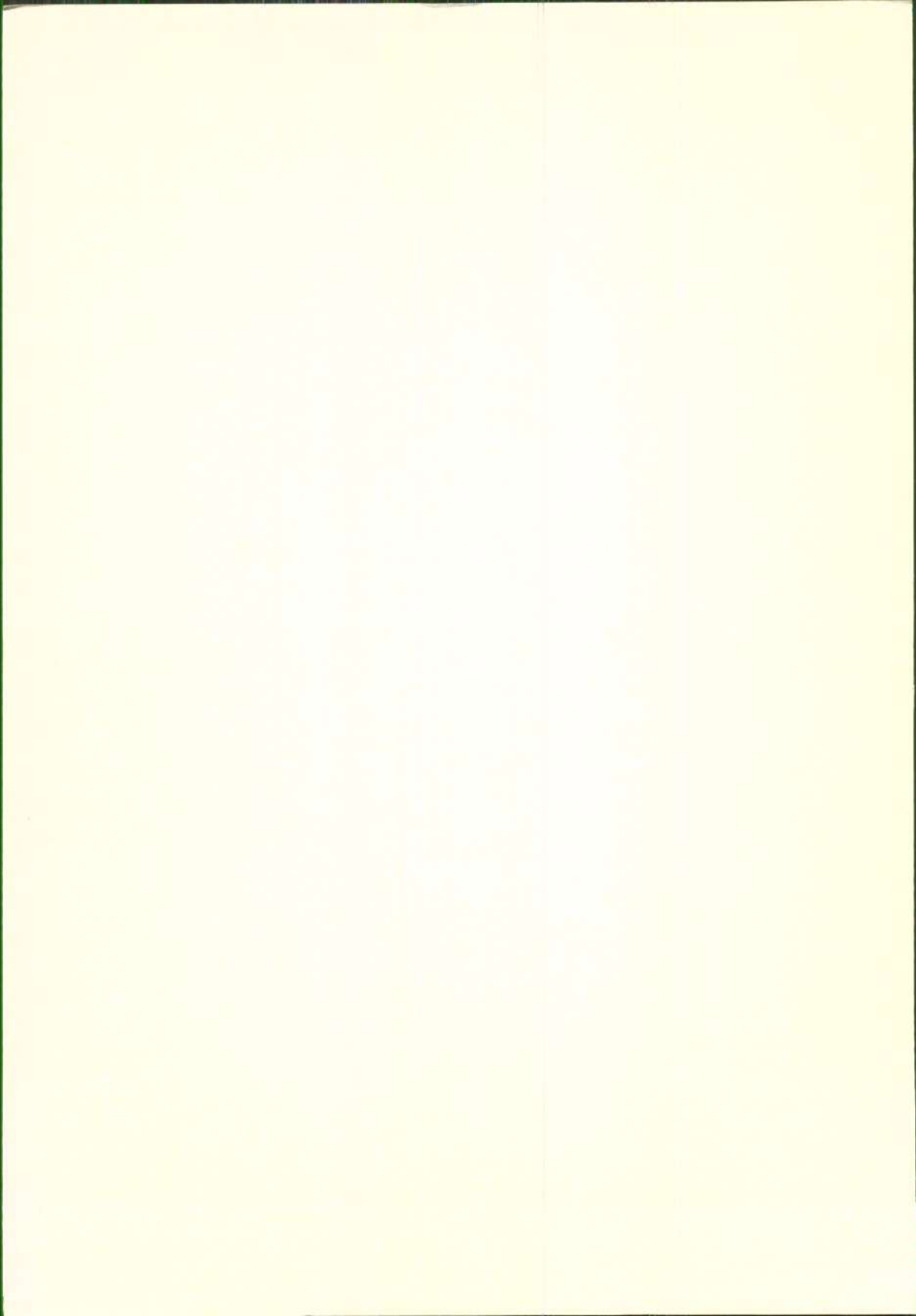
**Finafrica**

Centre for Financial Assistance to African Countries

Foundation established by

**CARIPLO**

Quarterly Review - No. 3 - 1982 - VI



# **Savings and Development**

Editor

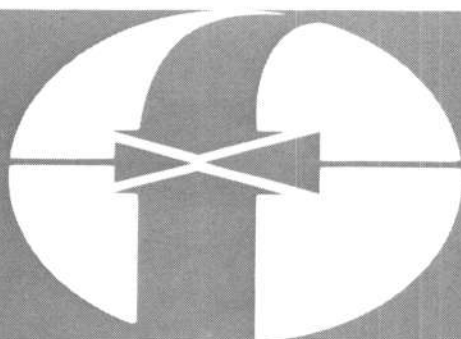
**Arnaldo Mauri**

*Università di Milano*

Co-editor

**Mario Masini**

*Università di Firenze*



**Finafrica**

Centre for Financial Assistance to African Countries

Foundation established by

**CARIPLO**

Milan - Italy

Quarterly Review - No. 3 - 1982 - VI

# Finafrica

## BOARD OF DIRECTORS

Camillo Ferrari	Chairman
Giuseppe Villa	Managing Director
Remo Arduini	Director
Giovanni Battistini	Director
Angelo Caloja	Director
Giuseppe Vimercati	Director

## BOARD OF AUDITORS

Giuseppe Falsone	Member
Enrico Massara	Member
Bruno Tamassia	Member

FINAFRICA is a non-profit institution established by CARIPLO - Cassa di Risparmio delle Provincie Lombarde - Milan (Italy), its goal being the promotion of social and economic development of less developed countries, especially in Africa, through research and documentation on savings mobilization and financial development, technical assistance for the creation and re-organization of financial institutions, training of bank staff.

FINAFRICA est une institution sans but lucratif créée par CARIPLO - Cassa di Risparmio delle Provincie Lombarde - (Milan) Italie. Elle vise à promouvoir le développement économique et social des pays moins développés, en particulier en Afrique, à travers la recherche et la documentation sur la mobilisation de l'épargne et le développement financier, l'assistance technique pour la création et la réorganisation des institutions financières, la formation des cadres bancaires.

Via S. Vigilio 10 - 20142 Milano - Italy  
Tel. 8135341 - Telex 313223 FINAFR I



## Savings and Development

### EDITORIAL BOARD

Antonio Confalonieri	Università Cattolica di Milano
Dale W Adams	Ohio State University
Sergio Bortolani	Università di Torino
David T. Edwards	University of Bradford
Jack M. Guttentag	University of Pennsylvania
Ronald I. McKinnon	Stanford University
Paolo Mottura	Università di Parma
Hugh Patrick	Yale University
Roberto Ruozì	Università Bocconi
Edward S. Shaw	Stanford University
Edward Wieczorek	Warsaw University

### ADVISORY BOARD

Hocine Abed	Directeur Général, Caisse Nationales d'Épargne et de Prévoyance, Algérie
Ali Abdalla Ali	Central Planning Organization, Yemen Arab Republic
Martha A. Eid	Deputy Director, FAO Investment Center
G. O. Nwankwo	Executive Director, Central Bank of Nigeria
Ariffin Siregar	Deputy Governor, Bank of Indonesia
A.B. Taylor	Directeur, Centre Africain d'Études Monétaires, A.B.C.A.
U Tun Wai	Acting Director, I.M.F. Institute
Charles Musama Nyirabu	Governor, Bank of Tanzania

---

## Contents

ARGUMENTS FOR INTEREST RATE REFORM <i>by C. Gonzales-Vega</i> .....	221
ALTERNATIVE STRATEGIES FOR COLLECTING DATA FOR SMALL FARMER CREDIT PROGRAMS <i>by J.D. Longwell - R.L. Tinnermeier</i> .....	231
BANKING AND FINANCE IN AFRICA: A REVIEW ARTICLE <i>by K. Kwarteng</i> .....	247
A TRIAL WITH A DECENTRALIZED SAVINGS AND CREDIT SCHEME FOR VEGETABLE FARMERS IN VILLAGE CO-OPERATIVES IN WEST JAVA <i>by H.A.J. Moll</i> .....	265
A NOTE ON AGRICULTURAL CREDIT IN INDIA <i>by J.P. Chausse</i> .....	283
BOOK REVIEWS .....	305
NEWS FROM FINAFRICA .....	307

---

## Sommaire

POURQUOI LA REFORME DES TAUX D'INTERET <i>by C. Gonzales-Vega</i> .....	221
UNE STRATEGIE ALTERNATIVE POUR LA RECOLTE DE DONEES DANS LES PROGRAMMES <i>by J.D. Longwell - R.L. Tinnermeier</i> .....	231
BANQUE ET FINANCE EN AFRIQUE: UNE REVUE <i>by K. Kwarteng</i> .....	247
L'EXPERIENCE D'UN SCHEMA D'EPARGNE ET DE CREDIT DECENTRALISE POUR LES HORTICULTEURS DES COOPERATIVES DE VILLAGES A JAVA OUEST <i>by H.A.J. Moll</i> .....	265
ESSAI SUR LE CREDIT AGRICOLE EN INDE <i>by J.P. Chausse</i> .....	283
REVUE BIBLIOGRAPHIQUE .....	305
NOUVELLES DE FINAFRICA .....	307

---

# ARGUMENTS FOR INTEREST RATE REFORM

Claudio Gonzales-Vega  
University of Costa Rica

---

## 1. Introduction

Interest rates held below market levels are common in low-income countries and have a variety of undesirable results: reduction in savings, capital formation, and the efficiency of investment; in farm credit programs they reduce small-producer access to productive growth and subsidize a few large producers.

During the 1950s, lack of economic growth in the low-income countries (LICs) was explained mainly in terms of a shortage of physical capital and of a vicious circle of poverty. It was assumed that a small capacity to save results from low income levels which, in turn, reflect low resource productivity. Low productivity was seen as a consequence of the lack of capital, which was explained in terms of the limited capacity to save. Many argued that capital formation plays a key role in economic development as the means of breaking out of the circle.

Given the insufficiency of individual savings, credit was seen as a major tool to promote capital formation. Shortage of credit was recognized as one aspect of the capital shortage problem, as well as a consequence of structural deficiencies of the banking system. In particular, according to a typical LIC, less than 1 percent of the farmers have received about 80 percent of the rapidly expanding credit, about 15 percent have benefited from the remaining 20 percent, while over 80 percent have not shared in this process. In addition, accumulating evidence on the poor results of many rural credit programs has directed increasing attention towards an examination of the impact of credit on agricultural output and productivity, on the rate of adoption of technological change, and on employment and the distribution of income in rural areas. Special emphasis has recently been placed by researchers on the role of low interest rates. This paper attempts to re-examine the most important arguments on the level of interest rates in light of the experience of the past three decades and of new theoretical contributions.

## 2. Importance of Interest Rates

There are several reasons why interest rates have received much attention: (a) interest rates are the most important relative price in a market economy; (b) interest rates have been the most frequently controlled price; and (c) interest rate controls have introduced the most widespread distortions in all markets of the economy. Like other



---

prices in a market system, interest rates are signals which influence decisions: interest rates affect more numerous, diverse, and important decisions than any other price.

### *2.1. The Price of the future*

In the most fundamental sense, interest rates are the price of the future in terms of the present. In this respect, they are a signal influencing the decisions to consume in the present or in the future, i.e., the decisions to save, and also the decisions to produce goods for present consumption or for future production, i.e., capital formation. To be a good signal, interest rates must indicate the rate at which it is possible to transform present resources into future production, a function of technology and of the availability of resources. They must also reflect the rate at which the community is willing to postpone consumption for the sake of more in the future, a function of the tastes and needs of the community.

If interest rates below equilibrium are imposed, the terms of trade between present goods and future goods are twisted. The fact of life is scarce capital; but low interest rates tell savers not to bother with saving, that the future is amply provided for, that now is the time to consume. The same low rates tell investors that savings are plentiful, and that high prices can be bid for investment goods to induce a transfer of resources away from the production of consumables. Unfortunately, there can be no investment without savings. The conflict between the decisions of savers to save very little and of investors to invest much has to be resolved by administrative "rationing," by decisions on some basis other than the willingness of individuals to save and invest. When interest rates are deprived of their role as a price that allocates resource uses, capital remains scarce and resources are misallocated. Higher interest rates, on the other hand, would tell consumers that the future is expensive and that sacrifices in present consumption are well rewarded; and they would tell investors that capital goods are scarce and that they have to be economized.

In summary, interest rates affect the inter-temporal decisions determining savings and investment, and through these they influence the rate of growth of the economy and the levels of activity and employment as well as their stability.

### *2.2. The price of financial assets*

Interest rates are also the prices relevant in financial markets. As such, they are a signal influencing the composition of assets held by individuals. Savings can be incor-



---

porated in gold, jewelry, housing, inventories of goods, and in foreign or domestic financial assets. Wealth holders compare the returns, risk, and liquidity of alternative assets, and choose a portfolio. The interest rates paid on domestic financial assets (bank deposits, bonds, shares, etc.) determine the extent to which these are incorporated into a wealth portfolio. Thus, they influence the nature of domestic savings and the proportion of these savings mobilized for use in investment through the domestic financial system.

In high-income economies with relatively integrated capital markets, rates of return on assets are fairly uniform. In the LICs, characterized by fragmented capital markets, there are large differences among rates of return, reflecting a poor correlation between the investment opportunities and the endowment of resources and access to credit of different people. Many producers with good opportunities to make highly productive investments cannot take advantage of them for lack of access to resources; others, with surplus resources, are forced to devote them to investments with low returns. Given the resulting dispersion of rates of return, one additional unit of savings will have a different impact on growth depending on how it is saved, i.e., depending on the type of asset chosen for saving.

The availability of an easily accessible financial asset like a bank deposit, which earned a sufficiently high interest rate, would induce a revision of a farmer's portfolio decisions. Investments with low returns could be eliminated in exchange for acquiring this rewarding financial asset. The resources thus liberated would, in turn, be channeled by the financial intermediary to other farmers who had better investment opportunities and were willing for this reason to pay a sufficiently high interest rate. Obviously, the elimination of projects with low returns and the financing of better ones would improve the allocation of the nation's resources and promote its growth.

In summary, in LICs the movement of resources from inferior to better uses is as important as the accumulation of capital. Even those with a pessimistic view about the interest-elasticity of aggregate savings, i.e., who doubt that higher interest would bring about much more saving, must recognize the role that interest rates can play in channeling the available savings through the financial system to the best investment opportunities.

### 2.3. *The price of capital*

Interest rates are also the price of capital. As such, they influence decisions concer-

---

---

ning the choice of techniques, i.e., the proportions in which factors of production are combined, as well as the selection of investment projects. This is because capital costs affect total costs in accordance with relative factor intensities. If interest rates are too low, relatively capital-intensive projects will become more profitable, and this will be a signal to reduce costs by diminishing the labor intensity of production. This increases the unemployment and underemployment of labor and tends to concentrate income distribution.

With a given stock of capital for the economy as a whole, a greater capital intensity of the sectors which obtain access to credit, induced by low interest rates, will reduce the availability of capital for other sectors. Thus, while the over-capitalized sectors frequently operate below capacity, the under-capitalization of other sectors leads to their low productivity and low incomes, contributing to economic dualism.

### **3. Interest Rates Have Been Too Low**

Most LICs have regulated the nominal interest rates paid and charged by their banks and the institutions of the formal financial markets. Real interest rates, after inflation was discounted, have not been controlled. Most LICs have kept nominal rates fixed, even in the presence of substantial inflation, and at levels which have frequently been too low.

Interest rates have been too low for several reasons. (a) They have not reflected the true scarcity, opportunity cost, or shadow price of capital. (b) They have not equated the supply and demand for formal credit. Instead, they have created excess demands which have required administrative rationing to clear the market. These rationing processes have not resulted in selection of the best investment projects, because they relied more on noneconomic considerations, such as collateral, than on the profitability of the projects financed; and in any case they have been very vulnerable to the influence of pressure groups and to the abuse of political power. (c) Bank interest rates have been much lower than those prevailing in informal markets. (d) In inflationary countries, they have been negative in real terms, erratic, and unpredictable, thus reducing the capacity of banks to mobilize savings. (e) They have not covered the costs and risks associated with the administration of credit, frequently leading to operating losses and eventually to the decapitalization of financial institutions. To remain financially viable, many intermediaries have restricted their operations to the largest and safest borrowers. The low lending rates, in particular, have not covered the higher costs associa-

---

ted with marginal clients, leading to the exclusion of the small, poor, or innovative borrowers from credit access. (f) Interest rates below cost have transferred a substantial income subsidy to the (not so poor) beneficiaries of institutional loans.

#### 4. Arguments for Low Interest Rates

A long-standing tradition of opposition to usury based on moral, economic, and legal considerations, can be traced from the Babylonian Code of Hammurabi and Deuteronomy in the Old Testament, through Roman Law, the rules of the Koran, and a variety of medieval European prohibitions. Even today this tradition strongly influences attitudes and regulations concerning interest rates. But while marginal rates of return on capital and rates of growth in national economies have risen significantly since medieval times, perceptions about the "correct" level of interest rates have changed little and still influence economic policies in LICs.

The interest rate policies of the LICs have also been, in part, a consequence of the uncritical acceptance of Keynesian theories about unemployment. However, the controversial Keynesian model, even if appropriate for a mature industrialized economy with a saturation of investment opportunities, is not applicable to most LICs. These are characterized, not by excess savings and a lack of investment opportunities, but, on the contrary, by numerous productive opportunities that cannot be taken advantage of because of the insufficiency of savings and the fragmentation of capital markets. Unemployment in the LICs is, in any case, more of a structural problem and a result of market imperfections and incorrect relative-price policies than it is the consequence of excessive savings and lack of aggregate demand. Keynesian theories, however, have served as a convenient rationale for finance ministers wishing to attract a larger portion of the scarce savings towards the public sector at a low cost.

##### 4.1. *Reallocation of resources*

Conceived initially as a tool for the stimulation of total investment, the regulation of interest rates has also become a tool for the reallocation of resources among sectors. Thus, specific interest rate policies, like those prevailing for the agricultural sector, have been justified on the grounds of a need to promote particular activities.

It is frequently argued that underequilibrium interest rates are indispensable if certain investments are to occur. Without the subsidy, it is claimed, such activities would not

---

take place. Few inquire about the reasons why this would be the case. A careful analysis, however, would show that in most cases such activities are not undertaken because they are not profitable enough. Their low profitability may be the result of lack of knowledge of a more productive technology, the unavailability of a key input of its uncertain supply, the absence of a road to take the product to the market, or the very nonexistence of any market. These constraints and bottlenecks cannot be removed by merely granting credit — at equilibrium interest rates or lower ones.

The interest-rate subsidy cannot create a nonexistent technology, the unavailable inputs, the missing roads, or the absent markets. In such circumstances, granting credit at underequilibrium interest rates may make the investment opportunity appear to be profitable from the private point of view of the few privileged borrowers who receive the underpriced loans, but it cannot correct the underlying absence of social profitability.

In summary: if an activity is sufficiently profitable to be worthwhile, its returns will adequately cover the costs of the resources employed. In this case, the subsidy is not needed to promote the activity, and it becomes merely an arbitrary gift for income redistribution. On the other hand, if the activity is not profitable, the subsidy obscures this fact, but does not attack its causes. Many governments in the LICs have found that the interest rate subsidy is an easy way to "promote" unprofitable activities, since the price of loans can be lowered by decree, while the public sector can avoid having to face the more complex task of inducing the creation of the missing infrastructure, markets, technologies, and inputs. Thus, while favoring particular groups with the subsidy, they leave the fundamental problems unsolved. However, since credit is granted to activities which are basically unprofitable, defaults and repayment problems begin to affect the financial institution, which finds that it is increasingly difficult to provide access to the underpriced loans even to the few borrowers favored in the initial stages of the program. Eventually, the program disappears, or the loan funds become concentrated in the hands of a few large borrowers.

Sometimes it is argued that underequilibrium interest rates are required to compensate for market imperfections that lower the private returns of certain activities below their social level. Such imperfections do exist in the LICs, but economic theory shows that when these imperfections are not corrected with the appropriate policies, i.e., when they are not corrected at their source, the attempted compensation introduces other distortions, previously absent, which reduce efficiency and welfare. Few of the distortions prevailing in the markets of the LICs are related to the price of credit; low interest



---

rates, therefore, are very seldom the appropriate policy for correction. They introduce new distortions, particularly in connection with the choice of techniques and the debt-equity ratios of firms, and further fragment capital markets.

#### 4.2. *Redistribution of income*

It is frequently argued that low interest rates are one of the few politically feasible mechanisms for the redistribution of income in the rural areas. Unfortunately, under-equilibrium interest rates, as a redistribution tool, are inefficient, since the same distributive goals could be achieved at much lower social costs by other policies; and their effects tend to be perverse because, instead of actually helping the achievement of equity goals, low interest rates lead to a greater concentration of income.

Interest rates are a price, and as such they should reflect the true social value of the resources transferred in a loan transaction. To the extent that this is not the case, there is a free transfer of resources, an implicit subsidy. When a rate of 10 percent is charged, for example, instead of a correct rate of 30 percent, which covers the opportunity cost of the funds and the expected rate of inflation, for each dollar lent there is a gift of 20 cents. This subsidy influences income distribution in two ways. A direct effect is the amount of the free transfer of resources; an indirect impact relates to the access to credit by different borrower classes and, therefore, to their income growth potential.

The direct impact of the subsidy is regressive. First, in order to receive the subsidy, the beneficiary must be one of the small proportion of the farmers of LICs who have access to institutional credit. Second, the amount of the subsidy is directly proportional to the size of the loan. Since there is a high correlation between loan size, on the one hand, and wealth, social influence, and political power on the other, the large farmers receive large loans accompanied by large subsidies. Medium-size farmers receive smaller loans and smaller subsidies, while the poor farmers get no loans and no subsidies.

The indirect impact of the subsidy may be even more important. In the capital-short LICs, access to credit is a key to income growth. Those with access to external funds can move beyond the constraints of self-financing into the expansion of their productive opportunities and the adoption of new technologies. Access to credit is comparable to access to land.

In the presence of interest rates below equilibrium and of excess demand for loans, access to credit is determined by the rationing mechanisms adopted by financial inter-

---

---

mediaries. Most lenders treat loans to different borrower classes as different products and differentiate among them in terms of administrative costs of lending and of risks of default. On the basis of these risks and costs, and in relation to potential revenues, most lenders determine the proportion of their portfolios to be lent to different borrower classes and the size of loans to grant in each case. Interest-rate policies significantly influence these decisions.

Underequilibrium interest rates tend to separate borrowers into three classes; nonrationed borrowers, usually large and well known, who receive the amounts of credit which they demand at the going interest rate; rationed borrowers, usually smaller producers, who receive loans of a smaller size than they demand at the low interest rate; and excluded borrowers, who are willing to borrow but are not accepted by the bank. When the interest rate charged covers the marginal costs of lending including a premium for risk, borrowers need not be rationed in the sense of being given loans of a smaller size than they wish. Finally, if the interest rate does not cover the average variable costs of lending to a class of borrowers, these borrowers are excluded from the portfolio.

Elsewhere I have called this set of relationships the iron law of interest rate restrictions: as a ceiling of interest rates becomes lower and more restrictive as a consequence of the increased cost of the subsidy, the size of loans granted to nonrationed borrowers increases, since at the lower rate they demand more; the size of the loans granted to rationed borrowers declines, since the lower rate covers risks and costs to a lesser extent; and these views, the established financial intermediaries could not provide agricultural credit because their objectives and institutional organization severely limited their ability to meet the credit needs of the rural sector where productivity, income, and savings levels were lowest.

The credit problem was perceived as structural, and the solution as institutional: "to create special agencies to provide agricultural credit in appropriate forms" (United Nations, 1951). Agricultural banks were created and instructed to expand credit at low interest rates. Thus, although the scarcity of capital was amply acknowledged, credit became "cheap" by decree, while the new financial agencies were given limited powers to stimulate and mobilize savings.

Over the past three decades credit has become one of the major components of strategies for rural development. In most LICs the volume of institutional agricultural credit has grown rapidly, representing increasing shares of total national loan portfolios and absorbing large portions of the external funds channeled by international agencies for

---

---

their agricultural sectors. Despite this expansion of credit volume, however, only a small fraction of the farmers in LICs have received formal loans.

It has been estimated that only about 5 percent of farmers in Africa and perhaps 15 percent of farmers in Asia and Latin America have had access to formal credit. There has been much concentration of these loaned funds in the hands of a few large farmers. Frequently, about 5 percent of the borrowers have received about 80 percent of the amounts disbursed. This means that, more borrowers are excluded altogether from access to credit. As a result, credit portfolios are redistributed in favor of the large borrowers. Thus, the lower the interest rate the larger the subsidy transferred to a smaller number of producers. The reduced access to credit, on the other hand, means fewer resources to use and lower income for the small producer, who finds little consolation in the lower rates charged.

## 5. Conclusions

Except in a few unusual circumstances, the arguments that justify the low-interest-rate policies of the LICs are not valid. What is important is access to credit. The policies that have attempted to keep the price of credit low have modified access in undesirable ways, and have aggravated distortions that work against efficiency and welfare. These policies, therefore, have reduced the allocative efficiency of affected economies and their rates of growth of savings and investment; they have endangered the financial viability of institutional lenders and contributed to the concentration of income in the rural areas of LICs. The revision of these policies is a necessary, although not a sufficient, condition for the progress of the rural poor in many low-income countries.

## POURQUOI LA REFORME DES TAUX D'INTERET

### RESUME

*Des taux d'intérêt inférieurs aux niveaux de marché sont une expérience courante dans maints pays en voie de développement (PVD) et causent une série de résultats indésirables.*

---



---

*Dans les années '50, on essayait d'expliquer le manque de croissance économique des PVD en termes de manque de capital et du cycle vicieux de la pauvreté. On supposait que le faible taux d'épargne était dû aux faibles niveaux de revenu qui, à leur tour, indiquaient une faible productivité de ressources. Cette faible productivité était considérée le résultat du manque de capital, qu'on expliquait en termes de faible capacité à épargner. Beaucoup d'économistes soutenaient que la formation de capital a un rôle fondamental dans le développement économique puisque elle interrompt le cycle.*

*A cause de l'insuffisance de l'épargne individuelle, le crédit était vu comme l'instrument principal qui aurait pu favoriser la formation de capital et le manque de crédit suffisant était considéré comme un aspect du problème du manque de capital et comme une conséquence des insuffisances structurelles du système bancaire. De plus, d'après l'opinion de ces économistes, les intermédiaires financiers établis ne pouvaient pas octroyer de crédit agricole, parce que leur organisation et leurs objectifs limitaient beaucoup leur possibilité de faire face aux besoins de crédit du secteur agricole où la productivité, le revenu et le niveau d'épargne étaient plus faibles que dans les autres secteurs.*

*Le problème du crédit était vu comme un problème structurel qui nécessitait d'une solution institutionnelle: "créer des organes spéciaux pour l'octroi du crédit agricole dans une forme appropriée". On créa alors des banques agricoles en leur donnant comme but l'expansion du crédit à des taux réduits.*

*Les résultats de ces politiques ont été partout décevants. Les causes de cette faillite ne dépendent pas tellement d'une mauvaise approche politique, mais des principes théoriques qui en sont à la base.*

*A l'exception de quelques circonstances particulières, les arguments avec lesquels on cherche de justifier les politiques de taux d'intérêt réduits dans les PDV ne sont pas valables. Le point important est l'accès au crédit. Les politiques visant à garder le prix du crédit à un bas niveau ont modifié l'accès au crédit de façon indésirable et ont causé des distorsions qui entravent l'efficacité de l'allocation des ressources dans les économies concernées et leur taux de croissance de l'épargne et des investissements, elles ont miné la viabilité financière des instituts de crédit et contribué à la concentration du revenu dans les zones rurales des PVD. Une révision de ces politiques est donc une condition nécessaire, même si insuffisante en soi, pour la promotion des couches les plus pauvres de la population rurale dans ces pays.*

---