

RURAL FINANCIAL MARKETS:
A REVIEW OF LITERATURE*

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STAFF PAPER SERIES NO. 8702***

* A Paper presented at the Workshop on Rural Financial Market Research jointly sponsored by the Technical Board for Agricultural Credit (TBAC) and the Philippine Institute for Development Studies (PIDS), in cooperation with the Agribankers' Club and the Quedan Guarantee Fund Board, 6 January 1987, Central Bank of the Philippines, Manila, Philippines.

This research undertaking is made possible through the support of TBAC. The authors are grateful to Ms. Meliza H. Agabin, Executive Director (TBAC), Mr. Leopoldo de Guzman (Luzon Development Bank), Dr. Douglas Graham (OSU), Dr. Richard Meyer (OSU), Dr. Carlos Cuevas (OSU), and Dr. Patalinghug (UP-CBA) for sharing their comments and insights at various stages of the research. Thanks are also due to Ms. Josephine Rodriguez (TBAC) and Kristine Chua (PIDS) for research assistance, and Ms. Juanita E. Tolentino (PIDS) and Merle Gonzales (PIDS) for typing the draft.

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*** This is also circulated as TBAC Working Paper.

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EXECUTIVE SUMMARY: "RURAL FINANCIAL MARKETS:
A REVIEW OF LITERATURE"

This paper attempts to make a survey of existing literature and research works which would shed light on the issue of rural finance.

The paper starts off with a discussion of LDC economies and the importance of the financial markets in the development of a Third World Economy. The role of the Central Bank in this development process is highlighted as its concentration on development and deficit financing is contrasted with its perceived role in economic and monetary stabilization.

The paper also reviews the various schools of thought in the area of rural finance. The old and the new approaches are contrasted and the surplus school studied. The theoretical and empirical studies concerning savers, lenders (both formal and informal) and borrowers in the rural areas are analyzed thoroughly. The macro environment and institutional framework that affects rural financial markets are discussed, and the previous government's ambitious credit subsidy programs (particularly the Masagana 99) are evaluated.

In general, the paper agrees with the new approach to rural finance, particularly with regard to the view that massive credit subsidy to the rural areas will not work and cannot compensate for a depressed rural economy. Direct subsidies to agriculture,

the promotion of rural employment, the termination of anti-agriculture policies, land reform, liberalization of industrial inputs to agriculture all these would create the environment for the rural economy to develop and grow, and subsequently for the rural finance sector to expand and thrive. Credit subsidies cannot substitute for failures in agricultural development.

The paper also agrees with the new view that rural savings are far from minimal and that financial liberalization as well as correct institutional support would create a good atmosphere for rural savings mobilization and allocation of credit to the most productive projects.

The paper also shows a lot of evidence that rural borrowers borrow more from informal lenders and that informal lenders are more efficient and more flexible than formal lenders. In particular, the informal lenders can reduce administrative and risk costs, and provide smaller loan sizes at the time they are needed. More flexible repayment schemes and "rollovers" are allowed. The paper, however, takes a cautious position in calling for the expansion of informal loans or formalizing these informal loans because of interlinked markets. Informal credit markets are usually linked with factor and output markets and some researchers claim that this interlinkage causes imbalances in the economic power between lenders and borrowers. Thus, informal lending may be efficient but not equitable. More research work is recommended to resolve this issue.

Finally, apart from liberalization of interest rates, a move away from specialized, supervised and subsidized credit, and the scrapping of unnecessary and often harmful state intervention in the rural banking sector (such as the agri-agra requirements and the deposit retention scheme), the paper calls for a state policy of free entry and exit in the rural banking sector and the selective rehabilitation of rural banks limiting them to honest, viable and efficient banks.

CHAPTER I

INTRODUCTION

A. Rationale and Objectives of the Study

The emphasis of the present government on rural development is understandable. It came into power with broad support from the masses, so it has to respond by directing a greater share of its energies and resources to areas where majority of the people live and to economic activities on which majority of the people depend for their livelihood. The government has committed itself towards dismantling those policies biased against the rural sector, in general, and agriculture, in particular. Programs in support of rural development are envisioned to be launched, without, however, shelving industrialization. The strategy for economic development has been changed, in recognition of the country's resources.

The rural financial markets (RFMs) definitely play an important role in the mobilization of the rural sector. But it can be asked: what specifically has been the role of RFMs in the development of the rural sector? Knowledge of this is important for policymaking and planning. Unfortunately, no comprehensive study can give a direct and more complete answer to that question. However, there are quite a number of studies done by various institutions and individuals which deal with certain aspects of rural finance. Among them are Sacay et al.

(1985) and TBAC (1985). Thus, this paper hopes to integrate the findings and policy recommendations and, at the same time, identify research gaps needed for policymaking and planning which are important steps towards a comprehensive study on the role of rural financial markets in rural development.

The general objective of this paper is to provide a comprehensive review of existing literature on rural finance with the end in view of integrating findings and policy implications of existing studies on rural finance and identifying future directions for policy-oriented researches on rural finance in the Philippines. Specifically, the project attempts to:

- (1) discuss theoretical issues on rural finance with special focus on the strengths and weaknesses of traditional and new views on rural finance;
- (2) put together and draw lessons from the varied experience of other less developed countries applying certain views on rural finance;
- (3) critically evaluate monetary and credit policies which have direct and indirect bearing on rural finance in the Philippines;
- (4) highlight and integrate the findings and policy recommendations of research studies on rural finance in the Philippines; and finally,

- (5) identify weaknesses and gaps of existing research studies on rural finance with the purpose of drawing up policy-oriented research agenda on rural finance in the Philippines.

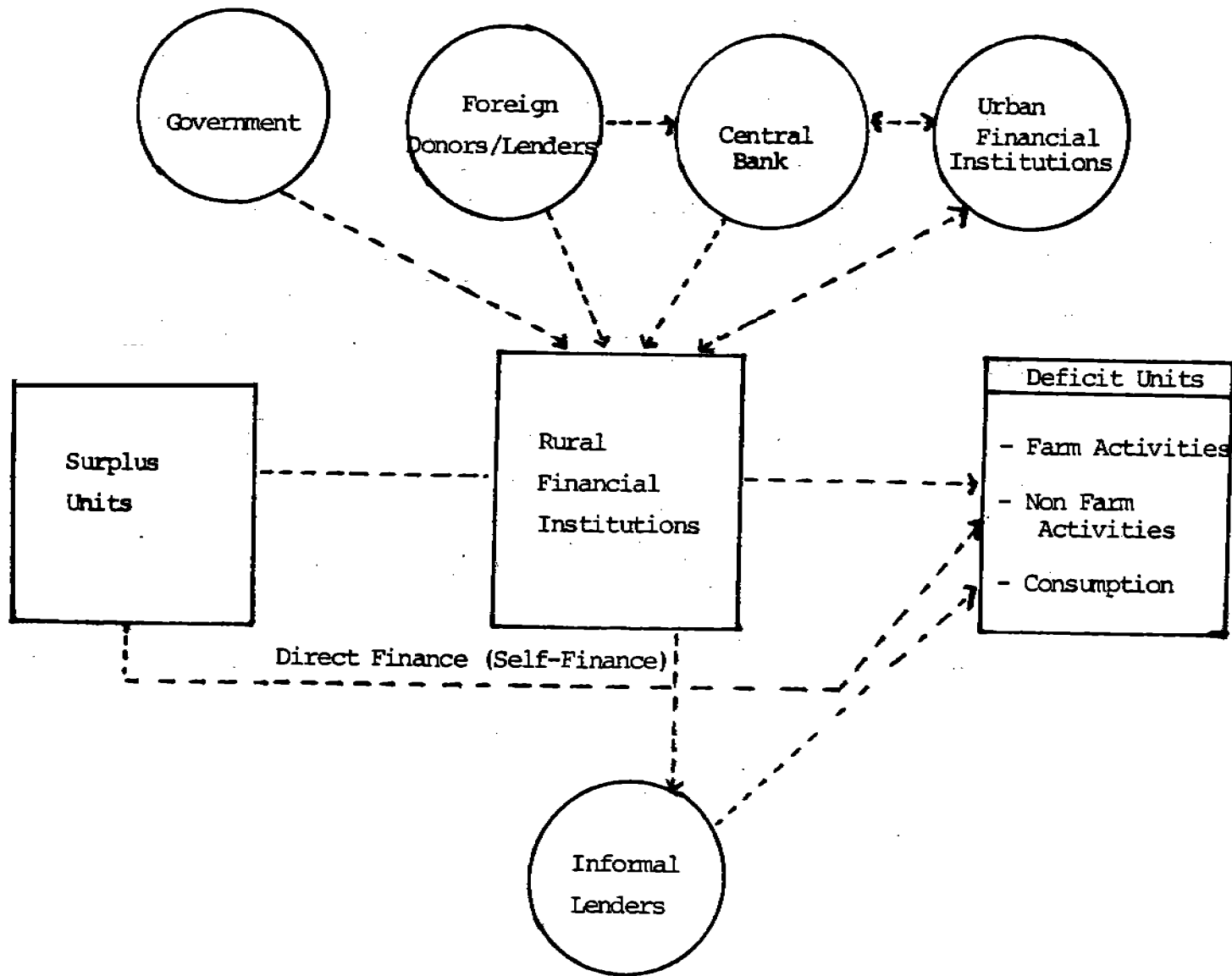
B. Framework for the Conduct of the Review

In identifying studies to be included in the review, a simplified framework of rural financial markets is used. Funds are used for productive and/or non-productive activities (i.e., consumption). Productive activities include agricultural and non-agricultural activities.* The reason for including non-agricultural activities in the framework is twofold. One is that income from non-agricultural activities has been partly responsible for narrowing the gap between urban and rural household incomes (see ILO Report [1973]). A study by TBAC (1981) shows that income from non-agricultural activities comprised about 40 percent of the total income of farm households in 1978. This means that non-agricultural activities are becoming important economic activities in the rural areas and as such, they are an important aspect in the rural financial markets. The other reason is that there is a need to recognize the complementary roles played by agricultural and non-

The use of the concepts agricultural and non-agricultural activities instead of farm and off-farm activities is appropriate for our purpose. For a clearer definition of these concepts, see H.T. Oshima, "Levels and Trends of Off-Farm Activities at Different Stages in Monsoon Development", Seminar Paper, UP School of Economics (May 1985), pp. 1-2.

agricultural activities in rural development. Bringing together the findings of studies on non-agricultural credit and linking them with the findings of studies on agricultural credit can certainly give us a better picture of the demand side of rural financial markets. It can be conjectured at this stage that studies on rural finance are lopsided in favor of agricultural credit. This should not be surprising in view of the special attention given to agricultural activities in the rural sector.

So far, the demand side of the financial markets has been discussed. Studies on the supply side of the financial markets are equally important. There are at least three ways by which rural entrepreneurs/households can finance their activities. One is through self-financing; that is, entrepreneurs/households use their own surplus funds to finance their activities. As pointed out by McKinnon (1973) and Shaw (1973), entrepreneurs/households in low income areas are more likely to engage in self-financing. Lack of collateral and/or proven credit track record may be one reason why they do not have access to sources of funds in their locality has forced them to engage in self-financing. However, self-financing may not always be a matter of course. It may well be that entrepreneurs/households have made this choice after considering alternative choices. Studies that can shed light on this issue are therefore included.



RURAL FINANCIAL MARKETS

The second direct source of funds is the informal credit market. A recent study has reviewed the literature on informal credit markets and has found, among others, that the composition of informal lenders have been changing through time (see Sacay et al. [1985]). However, most studies reviewed have examined the informal credit market from the borrowers' point of view. It is equally interesting to include studies on informal credit market from the point of view of informal lenders themselves. Knowledge of their economic behaviour will certainly clarify policy issues concerning informal lending.

The third direct source of funds is the formal rural financial system. In the Philippine setting, the rural financial system is dominated by rural banks. However, other financial institutions (e.g., branches of commercial banks, thrift banks, development banks, credit unions) are fast becoming important financial institutions in the rural areas especially after the policy of branching was extensively promoted starting in 1972 and the financial deregulation in 1980. It is clear then that the review does not limit itself to studies regarding the behavior of rural banks. Studies dealing with the varying behavior of different rural financial institutions are included in the review. However, at this point it can be said that there is less research done on the behavior of branches of commercial banks which are operating outside Metro Manila.

Aside from studies examining the performance of rural financial institutions as conduits of Central Bank funds, studies

focusing on the intermediation function of rural financial institutions are also given attention. Corollarily, studies dealing with the saving-investment behavior of surplus units in the rural sector are included.

Special attention is given to the behavior of the major participants of the rural financial markets, namely the ultimate users of funds, formal financial institutions, informal lenders and surplus units. However, in the Philippine setting, the shape and character of rural financial markets are to a large extent conditioned by the monetary and credit policies of the Central Bank. For example, the interest rate and rediscounting policies of the Central Bank have certainly altered the behavior of borrowers, financial intermediaries and savers. It is therefore important to weave together the findings of studies dealing with the impact of monetary and credit policies on the rural financial markets. This also necessitates the inclusion of a critical review of monetary and credit policies in the Philippines with special focus on those policies that have bearing on the behavior and operations of the rural financial markets.

The study does not limit itself to reviewing key findings of existing studies on rural finance. In certain cases, a re-analysis of data presented in existing studies is necessary to draw more insights on rural finance. Also included are new information or data to further enrich the review.

In the course of the review, it has been found that many of the research materials on rural finance, especially the latest ones, were done by TBAC. Access to these research materials has greatly facilitated work. In particular, the work of Sacay et al. (1985) serves as the take-off point for the review.

C. Organization of the Study

This study is composed of five chapters. Chapter I gives the rationale, objectives and the framework for the conduct of the review. Chapter II discusses some theoretical issues on finance and development. The traditional and new views on rural finance and the behavior of the participants of the RFMs are extensively treated in this chapter. In Chapter III, empirical findings regarding the behavior of the major participants of the RFMs are critically reviewed. Chapter IV re-examines the macroeconomic policy and institutional environment that have conditioned the workings of RFMs. Some specific banking policies are also discussed in this chapter. The last chapter presents some policy recommendations and the agenda for future research on rural finance.

Chapter II

THEORETICAL ISSUES ON FINANCE AND DEVELOPMENT

This chapter starts with a discussion on general theoretical issues on finance and development, and then goes on to review specific theoretical issues on rural finance.

A. Description of the Economies of LDCs

To fully appreciate the literature on rural financial markets, it is necessary to start with a brief description of the economies of LDCs.

It is a common characteristic among LDCs to have an agrarian economy. In this economy, agricultural output comprises a significant proportion of total gross domestic product. The agricultural sector absorbs between 60 to 70 percent of the labor force and shares between 70 to 90 percent of total exports. The economy is usually punctuated with small industrial and commercial enclaves whose links with the outside world are stronger than with the rest of the domestic economy. Labor productivity is generally low and unemployment rate very high. Aside from low per capita income, income distribution is severely skewed. Land concentration is one cause of income concentration.

Shaw (1973) and McKinnon (1973) have described the economies of LDCs as highly fragmented. That is, "firms and households are so isolated that they face different effective prices for land, labor, capital and produced commodities and do not have

access to the same technologies." The economy then consists of several markets. Prices for land, labor, capital and produced commodities are determined solely by demand and supply conditions in that market, with no reference whatsoever to demand and supply conditions in other markets. More concretely, urban markets are segmented from rural markets. Prices for the same commodities or factor inputs, adjusted for transportation cost, do not tend to equalize in these markets. Even within urban or rural areas, markets are fragmented. Investors have rigid investment preferences and do not deviate from these preferences no matter how attractive the yields for other investment opportunities. Formal and informal markets coexist.

The capital market is singled out as the most fragmented among the various markets. In a fragmented capital market, one's endowment or deployable capital, peculiar productive or investment opportunities and market opportunities for external lending or borrowing over time are badly correlated. MacKinnon points out that "fragmentation in the capital market causes the misuse of labor and land, suppresses entrepreneurial development, and condemns important sectors of the economy to inferior technology." What is unfortunate is that government policies and institutions have unwittingly given rise to market fragmentation.

In addition to market fragmentation, Shaw mentions other peculiar characteristics of LDCs' economies. Temporal horizons in LDCs are relatively short due mainly to scarcity of

capital and instability in real rates of return to physical and financial assets. Also, information regarding yields for both physical and financial assets is expensive and incomplete; hence it does not flow easily and quickly to all markets. Diffusion of technology is usually slow and expensive. The new literature on rural finance emphasizes the interlinking of credit market with output and input markets. Imperfections of the rural markets, which are oftentimes aggravated by government regulations, encourage market interlinking. This brings altogether different economic arrangements in the rural sector, which implicitly means that characteristics of LDCs should be seen from perspectives different from those provided by Shaw and McKinnon. This will be discussed in greater detail below.

B. Economic Development and Finance

Given the conditions in LDCs, the task at hand is to stage a rapid economic development. Todaro (1977) defines economic development in "terms of reduction or elimination of poverty, inequality and unemployment within the context of growth." In view of the main concern of this paper, the question that must be posed is: What is the role of finance in economic development? Historical experience and logic seem to point out that finance has an important role in economic development. This issue deserves more detailed discussion.

According to Gurley and Shaw (1967) the historical experience of a number of countries shows that as income per

capita increase, financial assets usually grow more rapidly than national wealth or national product. Empirical evidence seems to support this view (see Table II.1). Comparing countries at any moment of time, it can be observed that countries which have high incomes per capita also have higher financial assets to national product ratios (or financial ratios), while countries which have low incomes per capita have lower financial ratios.

To investigate the main determinants of financial ratios in eight Asian countries, Cole and Patrick (1986) estimated a linear model and obtained the following regression results:

$$\begin{aligned}
 \text{MTwo} = & .228 \text{ YDPC} - .003\text{DP} + .169(\text{HK}) \\
 & + .009(\text{IN}) + .000(\text{KO}) + .044(\text{MA}) \\
 & + .013(\text{PH}) + .074(\text{SG}) + .002(\text{TA}) \\
 & + .050(\text{TH}); R^2 = .90
 \end{aligned}$$

where MTwo = Ratio of M2 to GDP

YDPC = GDP per capita in thousands of 1980 US dollars

DP = Percentage change in the GDP deflator during the previous year (a proxy for price expectations); the only variable having no significant effect on MTwo.

HK = HongKong

IN = Indonesia

KO = Korea

MA = Malaysia

PH = Philippines

SG = Singapore

Table II.1

Bank Loanable Funds in Typical Semi-industrial LDCs
(ratio of M2 to GNP)

	1960	1965	1970	1975	1980	Mean 1960 - 80
Argentina	0.245	0.209	0.267	0.168	0.234	0.225
Brazil	0.148	0.156	0.205	0.164	0.175	0.170
Chile	0.123	0.130	0.183	0.099	0.208	0.149
Colombia	0.191	0.204	0.235	-	0.222	0.210
Mean ratio of M2 to GNP to four Latin American countries						0.184
India	0.283	0.262	0.264	0.295	0.382	0.297
Philippines	0.186	0.214	0.235	0.186	0.219	0.208
Sri Lanka	0.284	0.330	0.275	0.255	0.317	0.291
Turkey	0.202	0.223	0.237	0.222	0.136	0.204
Mean ratio of M2 to GNP for four Asian countries						0.247

Bank Loanable Funds in Rapidly Growing Economies
(ratio of M2 to GNP)

	1955	1960	1965	1970	1975	1980
West Germany ^a	0.331	0.294	0.448	0.583	0.727	0.913
Japan	0.554 ^b	0.737 ^b	0.701 ^b	0.863	1.026	1.390
South Korea	0.069	0.114	0.102	0.325	0.323	0.337
Taiwan	0.115	0.166	0.331	0.462	0.588	0.750
Singapore	-	-	0.542 ^b	0.701	0.668	0.826

Notes: a As well as deposits and currency the German series includes bank bonds sold directly to the public.

b The bias is downward because deposit information on specialised credit institutions was not collected.

Source: R. I. McKinnon (1986).

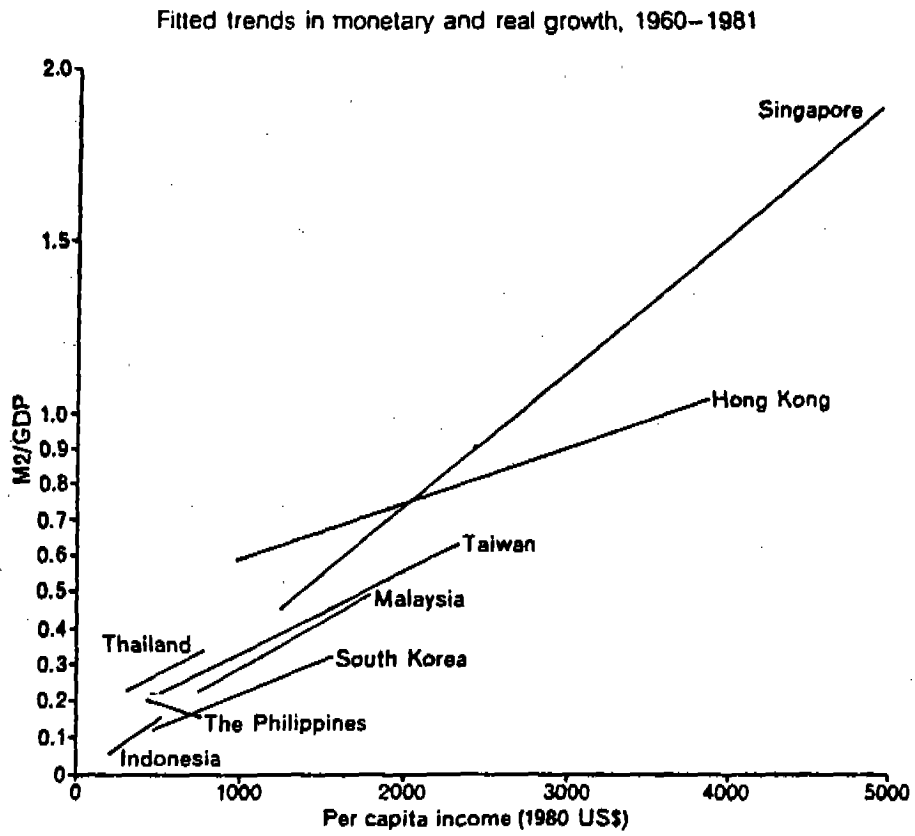
TA = Taiwan
TH = Thailand

As expected, per capita income has a strong and positive effect on MTwo. Figure II.1 shows the fitted trends of MTwo relative to YDPC using individual country regressions. Generally, the results show a strong positive relationship between economic and financial growth. Curiously enough, Philippines is the only country which shows a negative relationship. This could be due to some measurement problem. Patrick and Cole used M2 instead of M3 (=M2 + deposit substitutes). In the 70s, there was a significant shift from traditional deposits to deposit substitutes due to substantial interest rate differential. Using M3 as the measure of financial ratio, a positive relationship between financial and economic growth can be observed.

According to Gurley and Shaw, the secularly rising financial ratios to finance is being associated with division of labor in production, in saving and investment, and in intermediation. What Gurley and Shaw and others who followed their ideas had demonstrated is that financial development is indeed crucial for successful economic growth. Yet, one may venture to ask this critical issue: Which sector, financial or real, leads in the dynamic process of economic development?

Patrick (1966) has attempted to settle this issue. He hypothesized two patterns of causal relationship between financial development and economic growth. Under the "demand-

Figure II.1



Source: Cole and Patrick (1986).

following" phenomenon, the financial sector develops as a response to the demand for their services by investors and savers in the real economy. The underdevelopment of the financial sector indicates the lack of demand for their services, which in turn reflects the anemic growth of the real sector. Thus, finance is essentially passive and permissive in the growth process. The ability of the financial sector to respond quickly to the demand for their services depends on the assumptions that the supply of entrepreneurship in the financial sector is highly elastic and that there is generally favorable, legal, institutional and economic environment.

The "supply-leading" phenomenon, on the other hand, posits a causal relationship running from financial sector to the real sector. Specifically, it suggests that the creation of financial institutions and the supply of their financial assets, liabilities, and related financial services be done in advance of demand for them, especially the demand for entrepreneurs in the modern or growth-inducing sectors. The two main functions of supply-leading finance are: (1) to transfer resources from traditional (non-growth) sectors to modern (high-growth) sectors; and (2) to promote and stimulate an entrepreneurial response in the modern sectors. The problem most commonly encountered by supply-leading institutions is that initially they cannot lend profitably to nascent modern sectors. This problem can be circumvented if: (1) supply leading financial institutions are government-owned, using government capital and receiving direct government subsidies; (2) they are private institutions receiving

direct or indirect government subsidies; or (3) they may initially lend a large proportion of their funds to traditional sectors profitably, gradually shifting their loan portfolio to modern industries as they emerge.

As pointed out by Patrick, a country may not follow one approach all throughout. Instead, he hypothesized the following sequence: Before sustained modern industrial growth gets underway, supply leading may be able to induce real innovation-type investment. As the process of real growth occurs, the supply-leading impetus gradually becomes less important, and the demand-following financial response becomes dominant.

McKinnon (1973) and Shaw (1973) treated the discussion on the causal relationship between financial development and economic growth in a more rigorous manner. Specifically, they attempted to show that finance has an impact not only on the movement of the economy over the business cycle but also on economic growth.

In a neoclassical growth model, the savings rate and the output/capital ratio affect the growth in output. Money is included in this model by assuming that it is part of wealth. The accumulation of money is an alternative for savers to accumulation of physical capital. In other words, money and capital are substitutes. The implication then of the neoclassical growth model is clear. The accumulation of additional money leads to a reduction in growth of physical

capital, which in turn causes a reduction in the growth in output. This is indeed a curious result!

McKinnon has proposed an alternative model. In an underdeveloped economy where self-finance and indivisibilities in investment are pervasive, monetary accumulation is a complement to physical capital accumulation, not a substitute. Because of lumpiness in investment and absence of external finance, people lead to accumulate purchasing power equal in value to the investment before making an investment.

McKinnon's attempt to demonstrate that money and physical capital are complements presupposes that money is part of wealth. Shaw approached the problem in a somewhat different context. He argued that money, whether currency or demand deposits, is debt and therefore it is not part of national wealth. When the aggregated balance sheet for the entire economy is considered, only physical capital remains since money, like other financial assets, is cancelled out against financial liabilities. Thus, the accumulation of money and other financial assets can never be a substitute for the accumulation of physical capital. Shaw then went on to suggest that the financial system should be viewed as a service sector employing inputs to produce outputs. The latter are in turn used as intermediate inputs in the production process of the real sector. Thus, producing more of the financial services outputs would enhance the growth of the real output. Money should not receive special treatment since it is only one of the financial assets produced by the financial sector.

The studies of Patrick, McKinnon and Shaw prompted some economists to empirically test their hypotheses. Fry (1978) tested McKinnon's complementarity hypothesis and Shaw's debt-intermediation hypothesis using data from ten less developed Asian countries. The empirical test rejected McKinnon's hypothesis in favor of Shaw's hypothesis. Fry explained that McKinnon's assumptions that investment is, in the main, self-financed and money is the predominant financial repository of domestic savings do not apply any more to these countries. In another empirical test, Fry claimed that the result supports McKinnon's and Shaw's point regarding the importance of financial conditions in the development process. However, his model cannot really produce unequivocal results regarding the direction of causation. Further, the exclusion of the historical experience of developed countries at their earlier stages of development weakens the argument that the financial sector leads the real sector in the development process.

Jung (1986) tried a more rigorous approach in determining the causality between financial and real development. He applied the Granger causality test to 56 countries, of which 19 are developed, industrialized countries. Two measures of financial development were used, namely: the currency ratio (i.e., the ratio of currency to M1) and the monetization variable (i.e., the ratio of M2 to GNP). Jung's results are as follows:

- (1) the hypothesis that LDCs have a supply-leading causality pattern more frequently than a demand-following pattern is supported by the data;

- (2) the hypothesis regarding the changing causality pattern, i.e., from supply-leading to a demand following causality pattern, during the course of development is moderately supported by the data; and
- (3) the hypothesis that high-growth LDCs are characterized predominantly by supply-leading financial development is also moderately supported by the data.

Jung was less committed in his second and third results. Indeed, a number of objections that could weaken the validity of his results can be raised. For instance, the use of the same time period for both DCs and LDCs to test the hypothesis on the changing causality pattern between financial and real developments is inappropriate. The appropriate procedure is to take the historical experience of DCs, divide it into two sub-periods namely, the early stage of development and the later stage of development, and apply the causality test in each period. Aside from dealing with the second hypothesis correctly, this procedure can also yield results that could strengthen his first and third findings. As it is now, his first result can also be interpreted differently. That is, LDCs remain underdeveloped because they employ supply-leading finance. Multiple interpretation of a result can be prevented by applying the correct test procedure. Although Jung's results are not robust, nevertheless, they have provided us a way of dealing with the issue of the causal relationship between financial and real developments.

Ranis (1977) approached the issue of the causal relationship between financial and real developments in a different manner. He argued that there is "relatively little mileage in analyzing the role of financial institutions in the developing economy irrespective of time or place. In fact, an awareness of such typological and/or historical differences may be an essential ingredient if we are to be in a position to treat the financial sector as an integral part of the development problem rather than as an isolated, if fascinating, afterthought." In other words, the economy will have different requirements as it moves from one sub-phase to another sub-phase in the transition process. This implies that financial institutions will have different roles to play for each sub-phase.

Ranis started his analysis by defining "development problem as an attempt at transition from a long epoch of agrarianism to a long epoch of modern growth." Between these two economic states are several distinct sub-phases: the economy first moves out of dependent (or colonial) agrarianism into independent (or post-colonial) primary import substitution; from there into either secondary import substitution or export substitution; and finally, if successful, into modern growth.

The typical historical experience of LDCs is that once independence was gained, they tried to achieve rapid economic development. The general prescription for rapid economic development was to strive for economic characteristics of the industrial West. Hence, primary import-substitution. Ranis sees some merits in this strategy as long as it is well managed by

authorities. After all, the overall purposes of import substitution are the maturation of a newly emerging industrial entrepreneurial class and the construction of missing infrastructures in industry, agriculture and in the field of intermediation. During the primary import-substitution regime, the main role of the financial system is to "shift resources, domestic as well as foreign, into the hands of the nascent industrial entrepreneurial class (or possibly into the government's own hands whenever the public sector is involved in overhead construction and/or in directly productive activities)." Quantity, not quality, of saving and investment, is the main concern of financial intermediation. Usually, successful import substitution is accompanied by increases in agricultural productivity and saving. Ranis seems to agree with Patrick that during this stage of development, supply-leading finance plays a greater role.

Once the primary objectives of primary import substitution are attained, the economy can either move to export substitution phase or to secondary import-substitution phase. In Ranis analysis, successful countries like Japan, Taiwan and Korea, chose the former, while unsuccessful countries like the Philippines and Brazil chose the latter. During the export substitution regime, the economy is exposed to foreign competition. Traditional land-based exports are supposed to give way to non-traditional labor-based exports in the foreign trade. This requires liberalization in a number of markets previously controlled, directly or indirectly, by government,

mainly on behalf of the new industrial class. More importantly, the financial system should be liberalized which includes freeing of the interest rate and reduction of subsidies and the role of credit rationing in investment decisions. Thus, the financial system will now be able to pay attention to the quality of saving and investment, rather than to quantity. Under this sub-phase, demand-following finance is given more emphasis. The economy has new requirements that need corresponding response from the financial system. Specialized financial institutions will emerge in response to the varied needs of the real sector and portfolio holders. Thus, the sustained increase in the financial ratios will be realized.

Countries that followed the secondary import substitution strategy are bound to perform dismally. To continue protecting the inefficient industrial sector, foreign exchange controls and terms of trade are turned against the agricultural sector. This is tantamount to extracting forced savings from the latter. The increasing capital requirement of the protected industrial sector and the provision of more infrastructures and facilities in urban areas place additional burden on the financial sector. Continued financial repression and the inadequate infrasture in the rural areas weaken the ability of the agricultural sector to increase productivity and provide surplus funds to the industrial sector. Hard pressed for funds, the government often resorts to inflationary financing and external borrowings.

McKinnon (1973) seems to disagree with Ranis, specifically on the latter's argument that the financial system assumes different roles for different sub-phases in the transition process. He defines "economic development as the reduction of the great dispersion in social rates of return to existing and new investments under domestic entrepreneurial control." A society solely dependent on self-finance is bound to have a stagnant economy. The reason is that in a fragmented economy, resource endowment, productive/investment opportunities and opportunities for external lending and borrowing are badly correlated. External finance is thus called for. This means a revision in financial policy. Specifically, a high interest rate regime will induce other surplus units to disinvest from inferior technologies and invest in high yielding deposits which can be used by investors who have higher investment opportunities. "The release of resources from inferior uses in the underdeveloped environment is as important as new net saving per se." Thus, financial institutions will have a greater role in mobilizing domestic savings and allocating the funds to the most profitable ventures in the early stages of development.

McKinnon reminds us that saving and investment should not be treated independently with the reward system. This is one area where McKinnon's view differs from that of Ranis. The former places a premium on quality of saving and investment even at the early stage of development, while the latter stresses on the quantity of saving and investment. The other area of disagreement concerns the import substitution phase which Ranis

believes to be a meritorious strategy. McKinnon, on the other hand, has pointed out that authorities do not have superior wisdom in determining which industry has long-run comparative advantage. In many cases, trade and fiscal policies are initiated to deal with what is essentially a financial problem. For instance, tax subsidies designed to develop certain industries cannot substitute for a financial system where borrowing and lending are undertaken freely at high rates of interest. Indeed, efforts of the government to get results quickly by adopting import substitution policy will merely result in the creation of new forms of fragmentation.

According to McKinnon, the key to economic development is the unification of the capital markets through financial liberalization. "The unification of the market which sharply increases rates of return to domestic savers by widening exploitable investment opportunities, is essential for eliminating other forms of fragmentation."

McKinnon has advanced several arguments with corresponding empirical support that are surprising to neoclassical economists. For instance, he argues that foreign aid and capital inflows encouraged through special incentives given to foreigners would be harmful to the development process as long as the domestic financial market is repressed. Also, he believes that even poor rural folks do save in financial form so long as the reward for saving is attractive. This view has indeed revolutionized the thinking regarding rural financial markets and agricultural credit.

The McKinnon view has not gone unchallenged. At the macro level, Wijnbergen (1985) found that in Korea, increases in time deposit rate are contractionary in the short-run, because they trigger tightened credit conditions and cause higher costs of financing working capital; people shift out of the curbmarket rather than out of cash. The higher cost of financing working capital also pushes up inflation, making the increase in time deposit rates inflationary, at least in the short-run. However, the medium to long-term net effect on economic activity could be positive if the increase in the savings rate dominates the short-run output depressing effect. Indeed, this is what Dowling (1984) found out for Korea. The possible explanation suggested by Cole and Park (1983) is that the formal and informal credit markets may be viewed as complementary on the demand side. That is, Korean industries finance their fixed capital through the formal financial institutions and the residual working capital requirements from the informal sector. The flow of funds into the formal financial system stimulates business investment, resulting also in greater loan demand for working capital in the informal credit markets. The main lessons we can draw from these studies is that high interest rate policy may have different output effects depending on whether formal and informal credit markets are substitutes or complements. Of course, size of the informal credit markets also matters a lot. This is one area where more in-depth studies are needed.

At the micro level, McLeod (1984) challenged the view that small firms are forced to rely on either very limited self-

finance or exorbitantly expensive moneylender loans. His findings show that the means by which small firms are financed are in fact quite diverse, and the cost of informal finance is not unreasonably expensive and that small firms financing options steadily widen over time as they build up their assets and their reputation. In other words, McKinnon's view that entrepreneurs with potential production opportunities lack resources of their own, as well as access to external finance is overly exaggerated. The evidence Ross gathered tends to show that small business firms do not necessarily suffer from capital market imperfections.

McLeod's findings are rather weak in supporting his hypotheses. The study focused only on successful firms, and that makes it a self-fulfilling prophecy. To strengthen his results, stillborn or unsuccessful firms which lacked access to external funds should have been included. Indeed, the issues that Ross brought out need more research.

C. Central Banking in LDCs

A very important and, perhaps, the most influential institution any country in this modern world has set up is the Central Bank. Views on what role central banks should play differ across countries because of their varying economic characteristics and dominant political framework. However, the diverse views can be divided into two general views: the orthodox and the unorthodox views.

The orthodox view considers stabilization of the economy as the only role of the Central Bank. This view is usually espoused in advanced industrialized economies where the banking system and the securities markets were already developed long before the creation of their Central Bank. The main concern in these countries is to regulate the banking system, in general, and credit flows and money supply, in particular. Central banks mainly rely on quantitative credit controls, such as open market operations, changes in reserve requirements and rediscount rates, to affect the overall monetary and credit climate of these economies. Recently, however, the literature on Rational Expectations have challenged the effectiveness of these monetary instruments in stabilizing the economy. The controversies generated by the rational expectations hypothesis are not the main concerns of this paper, however; thus, they need not be discussed here.

The conditions in LDCs are different from those of the developed countries. The financial system is underdeveloped and highly fragmented. Perhaps in most cases, the informal financial market is large compared to the formal financial market. The market for securities hardly exist at all. It is believed that the orthodox central banking approach cannot be effective under this environment. Hence the emergence of the unorthodox view. According to this view, the Central Bank in LDCs should also assume a developmental role in addition to its regulatory role (Bhatt [1974]). It should create banking institutions in areas where there are no banking institutions operating. It should direct credit to economic activities deemed vital to the

development effort. It should not merely be a lender of last resort; it has to be a lender of early resort and in some cases a lender of primary resort. Essentially, the central banks in LDCs are required to adopt a supply-leading posture. This is indeed a tall order for central banks in LDCs.

A related issue in central banking is the degree of independence of the Central Bank from the executive branch of the government (see Tan [1972]). The so-called "right-wing" central bankers emphasize the advantages of having an independent Central Bank. The Central Bank can perform its function more effectively without being hampered by political interference. Credit could be directed by the Central Bank to well-deserving economic activities, not to pet projects of politicians.

The "left-wing" central bankers, on the other hand, emphasize the merit of coordinating monetary and fiscal measures. If the Central Bank were development-oriented, rather than stabilization-oriented, then some of the measures it is going to initiate would be very much related to those of the fiscal sector. Thus, it has to share some of its functions and responsibilities with the executive branch of the government, especially in determining which economic activities credit should flow.

In LDCs, it seems that the "left-wing" central bankers are winning. The close coordination between the Central Bank and executive branch of the government is accomplished in various ways. For example, the Finance Minister may be a member of the

Monetary Board. Another example is that the Monetary Board which is composed of full-time members reports directly to the Finance Minister. The interesting question that must be asked is: Under this kind of arrangement, does the Central Bank perform better in terms of achieving its mandated objectives? This is indeed an important issue that must be examined in the context of the Philippine experience.

To achieve its mandated objectives, a development-oriented Central Bank relies on two sets of policy instruments, namely: quantitative credit controls and selective credit controls. Quantitative credit controls are the traditional tools of any central bank. These include: reserve requirement ratio, rediscounting, open market operations and moral suasion. Among these instruments, open market operations are virtually ineffective in affecting the levels of credit and money supply in LDCs since the securities markets are virtually nil (Tan [1972]). This is usually compounded by the tendency of governments to price their securities at below market rates. Oftentimes, government securities are made attractive by adding sweeteners to them, like reserve eligibility. But this has serious limitations since banks treat them mainly as habitat of the required reserves, not of free reserves.

A development-oriented Central Bank usually puts more emphasis on selective credit controls (SCCs). These instruments are used by the Central Bank to direct credit towards certain economic activities considered as "high-priority" areas.

Selective credit instruments include: interest rate ceilings applied to loans to priority sectors, differential reserve requirement ratios among various categories of banks, preferential rediscount rates for papers originating from "high-priority" sectors, loan quotas or portfolio regulations, and loan insurance and guarantee schemes.

The effectiveness of SCCs as instruments of development policy has been debated. The opposing views are summarized in Johnson (1974) and Khatkhate and Villanueva (1978).

The first issue is whether there is a strong case for an interventionist policy in the credit markets. Johnson and Khatkhate and Villanueva argue that LDCs' imperfect and inefficient markets require state intervention. In an imperfect market, private profitability and social profitability differ in respect to loans granted to the different sectors. The divergence is attributed to the following three factors. First, commercial banks may underestimate the risk, administration, and collection costs associated with extending loans to "high-priority" sectors, such as agriculture. Second, commercial banks' desired rate of return on loans may be higher than the correct marginal social rate of time preference. Third, commercial banks may not take into consideration the external benefits which expansion in the "high-priority" sectors will yield for the rest of the economy.

McKinnon (1973) criticized the interventionist policy because of the fear that it would only succeed in

institutionalizing or in strengthening market fragmentation instead of unifying markets. In his view, a more liberal policy would pave the way for a unified capital market which is essential for eliminating other forms of fragmentation. A high interest rate policy should be pursued in order to lure funds away from less productive opportunities to more productive opportunities.

For those who espouse the interventionist policy, one issue still remains: what form of intervention would do the trick? Selective credit policy or selective fiscal policy?

Johnson criticized the use of SCCs as instruments of development policy. He pointed out that SCCs are actually implicit tax-cum-subsidy schemes which seek to alter the market-determined allocation of real resources. The reallocation may be done in two ways. One is through inflation tax. Preferential rediscount rates increases the volume of credit going to the "high-priority" sectors without necessarily decreasing the volume of credit going to the "low-priority" sectors. This results in an increase in money supply. Having more financial resources now than before, "high-priority" sectors bid away resources from "low-priority" sectors, ultimately resulting in higher prices for those resources. The additional cost that "low-priority" sectors have to bear is actually equivalent to a tax. Thus, the "low-priority" sectors are taxed to subsidize the "high-priority" sectors.

The other way of reallocating real resources is by altering the profits of banks and their traditional clients vis-a-vis the "high-priority" sectors. This may be accomplished by imposing portfolio ceilings and/or differential reserve requirements which would force banks to increase the ratio of loans going to the "high-priority" sectors. This reduces the liquidity and profitability of banks' earning assets. The reduced profitability of their earning assets is the implicit tax on banks.

Johnson argued against the use of SCCs for at least three reasons. First of all, there are welfare costs associated with SCCs. The inflation tax exacts welfare loss. Apart from this, the reduced profitability of bank earning assets causes disintermediation, with low returns on saving and investment as the ultimate consequence. SCCs also cause marginal rate of substitution of capital for noncapital factors of production to alter. Most likely, the marginal rate is higher for the "low-priority" sectors than for the "high-priority" sectors. Moreover, tax incidence is non-neutral to the "low-priority" sectors.

Secondly, SCCs weaken the ability of the monetary authorities to control money supply. Specifically, differential reserve requirements among different types of banks and differential rediscount rates virtually leave monetary aggregates uncontrollable by monetary authorities. Thus, although SCCs have allocative effects, they also have indirect quantitative effects.

The third reason is that SCCs are inferior to other alternatives, notably explicit tax-cum-subsidy scheme and the creation of special credit institutions which have comparative advantage in assessing the credit worthiness of individuals and institution.

Khatkhate and Villanueva, on the other hand, defended the selective credit policy. They pointed out that the criticisms hurled against SCCs arose from inadequate understanding of their mechanism and that most of them focus on the faulty design and implementation of selective credit policy, rather than on their intrinsic value. In their view, the alleged automatic relationship between SCCs and inflation has no logical basis. Even if money supply increases with SCCs, prices would not correspondingly increase if there are idle resources. The relationship between SCCs and inflation observed in certain countries was mainly due to the fact that preferential rediscount rates were given to almost all sectors so that SCCs have literally lost their selectiveness. Curiously enough, Khatkhate and Villanueva did not mention that this usually occurs in countries where the Central Bank is subservient to the executive branch of the government. The party in power also views SCCs as political instruments to win more votes or confidence of the people, at least those of the targeted beneficiaries.

SCCs generate welfare loss if they halt the process of intermediation. But according to Khatkhate and Villanueva, financial intermediaries in LDCs have not been necessarily the best allocators of mobilized savings. That is why intervention

is necessary to improve allocation of resources. Any adverse effects of SCCs can hardly be a cause for concern. The reasons given by Khatkhate and Villanueva are rather weak. In the first place, they seem to presume that the authorities have superior knowledge, and therefore, they can determine which sectors should be highly favored. Secondly, countries which according to them were found to have inefficient banking system have already a repressed financial system. Thus, before any conclusion can be made, the inefficiency due to financial repression should be isolated first from that which arises from pure market imperfection.

Perhaps, the most devastating attack against selective credit policy is the claim that credit is fungible. It means that borrowers may use loans for purposes other than the ones stated in the loan contract. Thus, it is useless to direct credit to the preferred economic activities. Khatkhate and Villanueva countered by saying that the effectiveness of SCCs depends on where the controls are applied and the conditions required for the effective controls. The conditions are: existence of inadequate substitutability among assets in the eyes of both lenders and borrowers when controls are imposed on lenders; presence of a large degree of substitutability among securities available to lenders when controls are placed on borrowers; absence of desire, both on part of borrowers and lenders, for a particular pattern of financial assets and liabilities; and finally, the same degree of interest elasticity of different investment expenditures.

If banks were mere conduits of Central Bank funds, as is often the case in LDCs, then control should be imposed on borrowers and the necessary requirements for the effective control boil down to the following: poor substitutability among different categories of securities and different interest elasticities among different categories of expenditures. Unfortunately, these requirements are not always met in LDCs. For example, a farmer who obtains subsidized credit for rice production may use the loans for consumption or for house repairs. Although, poor substitutability among securities can be policy-induced, e.g., close surveillance, the cost could be enormous, especially if a large number of geographically dispersed small borrowers are involved. Even lending in kind would not neutralize the fungibility of credit because borrowers can sell the borrowed goods in the informal market and use the proceeds to buy other inputs or goods that satisfy their needs.

D. Various Theoretical Approaches to Rural Finance

After discussing general issues, we come now to a more specific issue, i.e., agricultural credit. As mentioned earlier, a large part of the population of the predominantly rural economy is engaged in agriculture. Therefore, any rural development strategy, should devote substantial efforts at agricultural development. To increase the outputs in agriculture, funds are needed to provide improved seeds, better livestock, new farm implements, fertilizers, etc.

The main issue at hand is whether cheap agricultural credit should be considered as an essential part of rural development in general and of agricultural development in particular. There are two main opposing views on this issue. The "traditional" view espouses the cheap credit policy, while the "new" view rejects it. These views are extensively discussed in the two volumes, one edited by Von Pischke, Adams and Donald (1983), and the other by Adams, Graham and Von Pischke (1984). A newly-emerging and still less known view is the "surplus" view. All these views will be discussed here.

1. The Traditional View

The "traditional" view describes the plight of farmers in the following manner: they have low income because they have low productivity; they have low productivity because they are confined to the traditional methods of farming; they are confined to the traditional methods of farming because they do not have any savings that could be used to acquire the new technology; they do not have any savings because their income is so low; and so on. The only way to break this vicious circle is to let farmers resort to external finance. But the market rate of interest is too high for farmers. Hence, they do not borrow to invest in new technology. It is clear then that the only way to induce farmers to borrow and invest in new technology is to offer them cheap credit. Besides, cheap credit policy would free farmers from the exploitative hands of informal moneylenders who charge exorbitant rates. The cheap credit policy may be

accomplished by imposing a ceiling on the lending rate way below the normal rate and/or by setting up supply-leading financial institutions whose sole function is to deliver cheap credit to farmers. Implied in this policy environment is that savings mobilization is not an essential function of financial institutions, whether private or public, since rural people do not save anyway and do not respond to price incentives. Hence, most, if not all, of the funds should come from the government. The selective credit policy of the Central Bank should be made to support the cheap credit policy.

2. The New View

The "new" view appeals to both logic and facts to dispute the claims of the "traditional" view. In the first place, cheap credit will not make unprofitable activity profitable. A sufficiently profitable economic activity will have returns that will adequately cover the costs of the resource employed. Since in the "new" view, farmers are assumed to make efficient and rational decisions, consequently they also allocate borrowed funds in the most efficient manner. Secondly, interest payments usually comprise only a small portion of the total cash expenses of farmers. A large portion goes to payments on fertilizers, insecticides, transportation. The high price of fertilizers and insecticides could be due to the monopoly rights given to a few importers or to the protection given to local producers of fertilizers. The high cost of transportation could be due to bad farm-to-market roads or their complete absence and to the high acquisition price of vehicles, which is in turn due to the

protection given to importers of vehicles or to local producers of vehicles. Thirdly, credit is not a binding constraint to agricultural development. The "new" view argues that many inputs and technologies are divisible and can be adopted in small amounts. Fourthly, credit is not like any other inputs, such as fertilizers, seeds, etc. Credit is a facilitator in the sense that the borrower who obtains it has a claim over certain resources. An important characteristic of credit is that it is fungible. Thus, a special credit program may not achieve its desired results, say adoption of new rice production technology, for the simple reason that the target borrowers can divert cheap credit to consumption or to non-priority, yet more profitable venture.

The fifth counterargument advanced by the "new" view is that cheap credit provided by formal financial institutions may not be at all cheap to farmers. What is important to farmer-borrowers is the effective cost of borrowing which includes the nominal interest rate and the transaction costs per peso borrowed. The latter arise from out-of-pocket costs and opportunity costs of the borrower's time spent in carrying out loan procedures. Although, the nominal interest rate may be low, transaction costs could be very high, which makes the effective cost of borrowing also high. For instance, farmers incur out-of-pocket expenses on transportation and meals to follow up their loan application. These costs increase with the distance they have to travel and the number of times they have to go to the bank. More often than not, the cost of loan evaluation is shifted to less

creditworthy borrowers instead of being absorbed by the bank. For example, borrowers are required to present guarantors, and they have to pay for their transportation and meal expenses. Sometimes, cheap credit is not available to farmers at the time they need it most. It takes a long time to process a loan, and when the loan is finally released, the planting season is practically over. To go ahead with planting would be more risky and therefore costly to farmers. That is why farmers often turn to informal moneylenders. To them, accessibility and timeliness of credit are more important than the interest rate they have to pay. Besides, interest rate in the informal credit market may not necessarily be very high. It could be lower than the effective cost of borrowing from the formal credit market. Thus, to the "new" view, informal moneylenders are not necessarily evil.

The sixth counterargument of the "new" view is that rural people, however, poor, also save but most of their savings are in the form of unproductive physical assets. They hardly have any financial savings for the simple reason that the real return on financial instruments is most of the time negative due to low nominal interest rate ceiling imposed by government. Thus, this makes unproductive physical assets relatively more attractive to rural people.

And finally, the "new" view argues that cheap credit policy stifles the growth of formal financial institutions. Because of ceilings on nominal interest rates, formal financial institutions

cannot increase their resources through savings mobilization. Therefore, they have to depend largely on Central Bank rediscounting, government budgets, and foreign aid for loanable funds. As such, they are mere brokers of government funds and foreign aid, not full-pledged banking institutions. This is sustainable only if the government constantly runs budgetary surplus, if inflation rate is not disruptive, and if foreign aid keeps on flowing. However, most LDCs run huge budgetary deficits and have relatively high inflation rates. This would make the flow of credit to agriculture more uncertain, as is often the case with countries which encounter periodic economic crisis. In such situation, they have to close the Central Bank rediscount window and effect drastic cuts on expenditures to reduce budgetary deficits macroeconomic imbalances can be arrested. The "new" view therefore favors higher and more flexible interest rates. This would permit formal financial institutions in the rural areas to mobilize via voluntary financial savings a much larger part of their loanable funds than is currently the case.

Aside from being an inducement to invest in new technology, cheap credit to agriculture is considered by the "traditional" view as an income-transfer mechanism. To effect an income-transfer to rural areas where poverty is concentrated is indeed socially desirable. This is warranted if cheap credit really gets through the majority of rural people and if there is no other more effective means of transferring income. But this is not the case according to the "new" view. Access to cheap credit is usually limited to a few, usually big farmers in the rural

areas. Even if small borrowers have access to cheap credit, still the benefits are unevenly distributed between big and small borrowers since the income-transfer effected through this mechanism is proportional to the size of the loan. Further, the Iron Law of Interest Rate Restrictions (ILIRR) advanced by Gonzales-Vega hypothesizes that when interest-rate ceilings become more restrictive to make credit cheaper, the size of the loans granted to the nonrationed borrower classes increases, while the size of the loans granted to the rationed borrower classes decreases. This is redistribution in reverse. This is depicted in Figure II.2. It is assumed that there are two borrower classes, namely the big (nonrationed) and small (rationed) borrowers. D_2 and MC_2 respectively the demand and marginal curves of big borrower, while D_1 and MC_1 are respectively the demand and marginal cost curves of small borrower. Note that MC_1 is steeper than MC_2 , reflecting the higher cost of lending to small borrower than big borrower. At the interest rate ceiling r^* , the big borrower obtains loans, L_2^* while the small borrower gets L_1^* . If the interest rate ceiling is further reduced to r^{**} , the big borrower obtains a larger amount of loans, M_2 , while the small borrower can get only M_1 which is smaller than when the interest rate was r^* . Thus, more loans will be concentrated in the hands of the big borrower at the expense of the small borrower when interest-rate ceilings become more restrictive. Indeed, this has been the experience of several Latin American countries which pursued overly cheap credit policy. (Vogel [1984]).

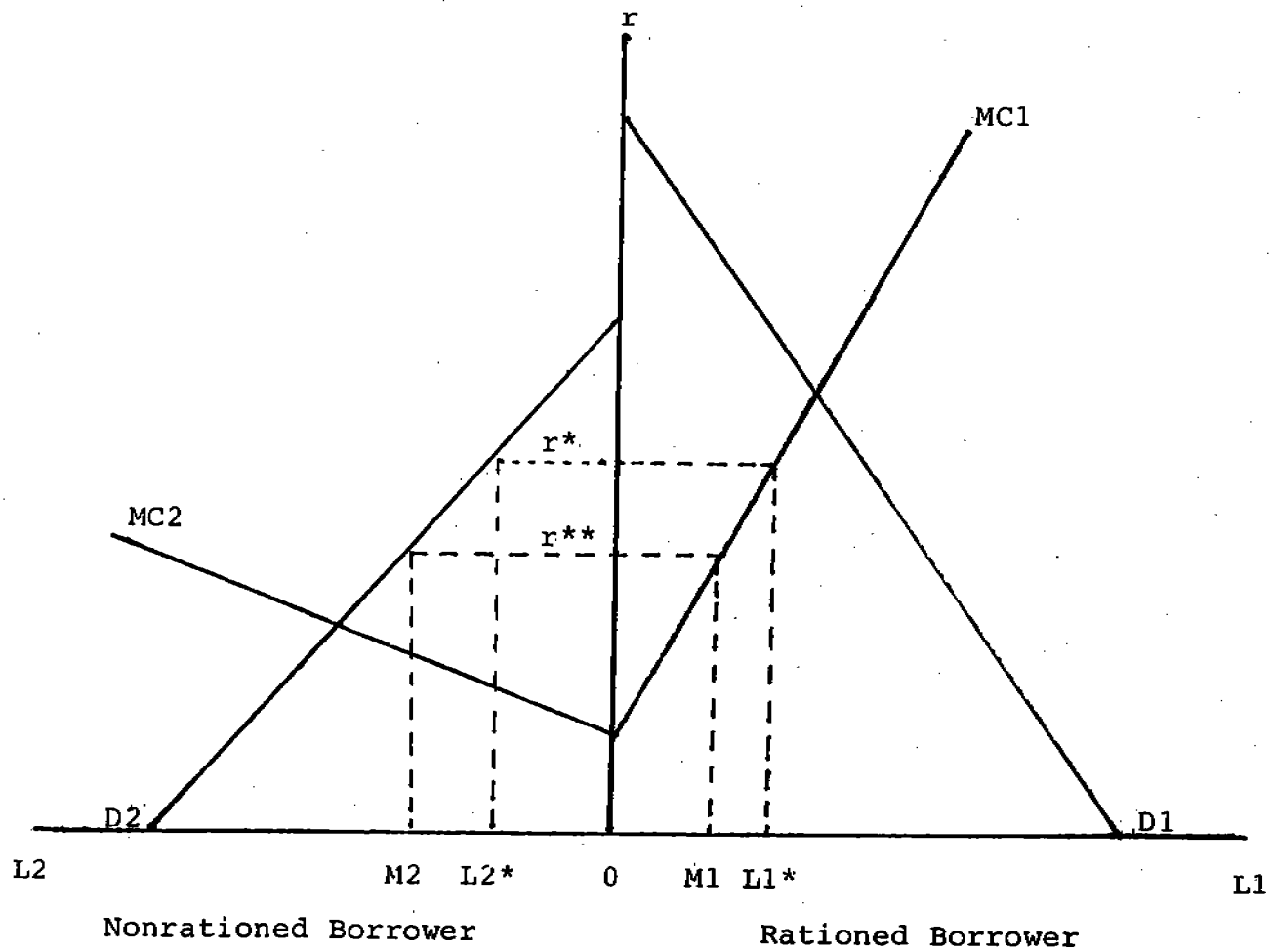


Figure II-2: The Iron Law of Interest Rate Restrictions

The "second best" argument is another justification used by the "traditional" view for cheap agricultural credit. In LDCs, macroeconomic policies usually tend to be biased against agriculture. For instance, industrial protection policy results in higher prices for farm implements and inputs. Overvalued local currency and export taxes penalize agriculture which is the main foreign exchange earner. Food price controls tend to favor urban consumers at the expense of primary food rural producers. Rural areas get very little social overhead capital, like roads and bridges. All these are taxes on agriculture, and as such, they discourage production and reduce incomes in rural areas. So, to neutralize the effects of these policies, cheap credit must be given to farmers. The "second best" argument is rejected by the "new" view. In the first place, targeting loans to specific sector, say agriculture, is a futile exercise because of the fungibility of credit. In particular, cheap agricultural loans may have no impact on agricultural output and employment because they can be diverted to other economic activities, like manufacturing, which are already heavily protected through tariff and exchange rate policies. Thus, cheap agricultural credit policy just creates another form of distortion. Instead of cheap credit, the approach should be to directly deal with the sources of distortion. In particular, macroeconomic policies, which are biased against agriculture should be reformed. The equity implication of the "second best" argument cannot be overemphasized. While all farmers pay the tax, only those who receive the cheap credit receive the subsidy. The tax is

proportional to the amount of the good produced or sold by the farmer, but the subsidy is proportional to the size of the loan received. Thus, the "second best" argument for cheap credit is weak because of the inefficiencies and inequity that results.

The main differences between the "traditional" and the "new" view to RFMs are summarized in Table II.2.

3. The Surplus View

The "surplus" view is another school that can be considered non-traditional for it views the whole credit relation in agriculture as part and parcel of the relations of production and relations of exchange. Thus, the description of the relationship between the informal lenders and the farmers resemble that of the interlinked markets (a concept to be discussed below). But for this school, the market failure and high transactions costs are just manifestations of unequal power relations between poor farmers on one hand and their creditors on the other. The creditors have dominance and power over land (the landlords), trading (traders) and finance capital. The poor tenant has very little bargaining strength and cannot even have the liberty to migrate due to the hold that his landlord and creditors have on him. Bharadwaj (1974) and Bhaduri (1977) represent some of the works done in this field.

Table II.2

DIFFERENCES BETWEEN THE TRADITIONAL AND THE NEW APPROACH
TO RURAL FINANCIAL MARKETS

	<u>Traditional View</u>	<u>New View</u>
Savings	1. Rural savings minimal.	1. Rural poor do save given proper incentives.
Financial markets	2. Subsidized and supervised credit needed for small farmers.	2. Financial markets should be allowed to operate without intervention and interest rate ceilings.
Target borrowers	3. Most farms.	3. Bankable and viable farms.
Purpose of loan	4. In farm production	4. Allow financial market to allocate among uses of loans.
Role of informal lenders	5. Monopolist, exploiters, usurers.	5. Efficient allocator of funds to small farmers usually not reached by formal system.
Interest rate structure	6. Artificially low interest rates for small farmers.	6. Interest rates can be high to cover opportunity cost of money, transactions costs and risk premium.

Recently Floro applied a mix of the interlinked market theory and the surplus approach to study informal credits offered by trader-lenders and farmer-lenders. She found that the net result is that small farmers are slowly forced to mortgage their land to their creditors and that increased tenancy and/or landlessness may arise due to the credit and debt nexus. The informal market may perhaps be efficient as the recent trend claims, but it may also exacerbate gross inequities in the rural areas.

Other non-traditional schools attack both formal and informal credits because they support a system and a technology which to these researchers are not at all consonant with the peasants needs. Particularly, these researchers attack the introduction of the new Green Revolution technology as exacerbating the peasants suffering by: 1) making them more dependent on monopoly capital for industrial inputs to agriculture (fertilizers, pesticides, etc.) and 2) changing relations of production and increasing the number of ways of extracting surplus from the peasants - from one that is merely concentrated on land rent to one that emphasizes surplus extraction via the input and output markets and via the "debt nexus". Such viewpoints occur in varying degrees in the works of Ferrer (1986), Feder (1983), and Keith Griffin (1975).

E. Behavior of Participants of RFMs

The preceding sections have discussed macro issues which have direct bearing on the RFMs. This section will deal with micro issues. Specifically, it will examine models that attempts to explain behavior of major participants of the RFMs, namely, net borrowers, financial intermediaries, and net savers.

1. Behavior of Lenders

According to the description of RFMs given in Chapter I, there are generally two types of financial lenders, namely the formal financial institutions (FFIs) and the informal moneylenders (IMLs). Studies dealing with the volume and types of credit given by the two types of lenders to rural borrowers are quite substantial. Unfortunately, however, less effort is exerted in modelling behavior of FFIs and IMLs. Lack of understanding of or misunderstanding the behavior of these lenders has often resulted in errors in policy making or at least inconsistent credit policies.

a) Formal Financial Institutions

Theoretical models that attempt to explain the behavior of formal financial institutions in advanced economies are quite copious. Baltensperger (1980) has classified these models into "partial models" and "complete models". In the former, "the total size of the bank's portfolio is assumed to be exogenously determined, so that only the question of the optimal allocation

of this portfolio remains to be solved," whereas in the latter, "the joint determination of not only the structure of assets and liabilities and their interaction, but also the total scale of the bank's operation and portfolio" are being explained.

Santomero (1984) on the other hand, has classified the models according to the functions of the FFIs being emphasized by such models. Some models focus on the role played by FFIs as asset transformers. Others emphasize the nature of the liabilities issued by the FFIs and their central function in a monetary economy. Still others emphasize the two-sided nature of FFIs, that of mobilizing savings on one hand and that of allocating mobilized funds to their best alternative uses, on the other hand.

Those models are, however, less useful in describing behavior of FFIs in LDCs, much less in rural areas. As commonly known, market imperfections prevail in rural areas. In addition, FFIs in the RFMs are basically supply-leading financial institutions which exist because of artificial environment created by policies. These factors should be considered in modelling behavior of FFIs in the rural areas.

There are at least two models available to us that attempt to describe the behavior of FFIs in the rural areas. These are basically variants of the "complete" models described by Baltenspenger. Because of the interesting hypotheses derived from these models that are relevant to rural finance, they will be briefly described here.

(i) The Gonzales-Vega Model

The Gonzales-Vega model (1980) was formulated for the purpose of determining socially optimum allocation of credit. The latter is defined as "that allocation which maximizes the aggregate net income of all various participants in the economic activity, including those participating merely as producers as well as those participating as financial intermediaries." The financial institution is assumed to be a multi-product, profit-maximizing firm and can distinguish different classes of borrowers. For our purpose, there are only two classes of borrowers, namely the Large and Small borrowers. There are three components of the firm's lending costs: the opportunity cost of the funds which is exogenously determined and is identical for all borrower-classes; the costs of loan administration which tend to be independent of the size and degree of riskiness of the loan; and risk-reducing costs which are not independent of loan size or of the expected losses due to default. That lending to Small borrowers is relatively costly compared to lending to Large borrowers is reflected in different marginal costs for lending to the Small and Large borrowers, the latter being lower and slowly rising than the former. The condition for achieving the social optimum is that each producer be granted a loan which equates the marginal cost for the bank of lending to him with the value of the marginal product of the variable inputs purchased with the loan. At this socially optimum allocation of credit, the bank has to charge higher interest rates for loans to Small borrowers

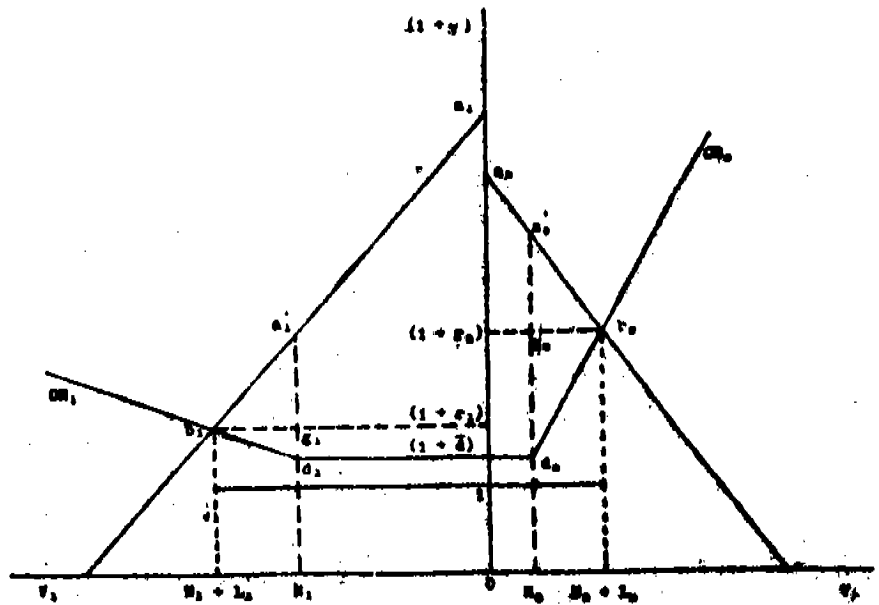
and lower interest rates for loans to Large borrowers. This is depicted in Figure II.3.

Without access to external finance, the Large and Small borrowers' gross income depend on their respective productive opportunities, represented by the curves of the value of the marginal products of the variable inputs employed, D_1 for Large borrowers and D_2 for Small borrowers, and their own resources saved, N_1 for Large borrowers and N_2 for Small borrowers. The net income of the two producers is just the difference between their gross income and the value of the variable inputs employed. The aggregate net income under a regime of self-finance is $a_1 b_1 d_1 - N_1$ and $a_2 b_2 d_2 - N_2$.

With the presence of the bank, which charges different rates for different borrower-classes, aggregate net income increases by $a_1 b_1 d_1$ plus $a_2 b_2 d_2$, of which $a_1 b_1 g_1$ goes to Large, $a_2 b_2 g_2$ goes to Small, and the sum of $b_1 g_1 d_1$ and $b_2 g_2 d_2$ goes to the bank.

Charging different interest rates to different classes of borrowers is essential in achieving a socially optimum allocation of credit. This is so because the bank has different marginal costs for lending to the different classes of borrowers. Consider for example if a uniform interest rate were imposed. This policy intends to subsidize the Small borrowers and tax the Large borrowers. The result is depicted in Figure 4. Here, r is

Figure II.3



Different Interest Rates for Large and Small Borrowers

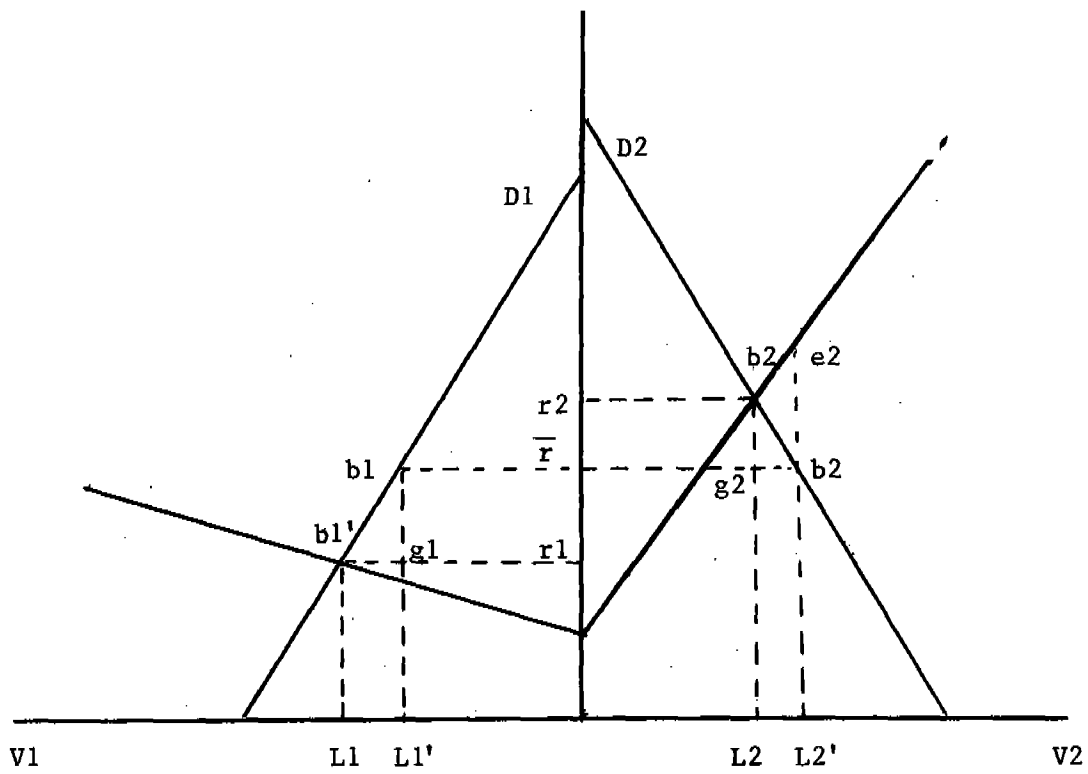


Figure II-4: Uniform Interest Rates for Large and Small Borrowers

the legislated uniform interest rate. It is assumed that while the allocation of credit changes, the total amount lent by the bank remains the same. With the legislated uniform interest rate, r , the amount lent to Large borrowers decreases from L_1 to L_1' , while the amount lent to Small borrowers increases from L_2 to L_2' . But the private gain for Small borrowers, represented by the area $r_2b_2b_2'r$ is less than the sum of the private loss for Large borrowers, represented by the area $b_1b_1'rlr$ and the private loss for the bank represented by the area $b_1'g_1e_1$ plus $e_2b_2g_2b_2'$. Thus, society as a whole suffers a dead-weight loss.

Under the uniform interest rate policy, a bank attempting to maximize profits may not necessarily satisfy the credit requirements of all producers, but instead practise some kind of credit rationing. It is assumed here that the Small borrower represents the rationed borrower whose loan size is smaller than the loan demand while the Large borrower represents the nonrationed borrower whose loan size is always equal to loan demand. A profit-maximizing bank responds to restrictive uniform interest rate policy by increasing the amount lent to Large borrowers at the expense of Small borrowers. This is shown in Figure II.4.

Given the interest rate ceiling, r , the bank lends L_2' to Small borrower which is less than the loan demand, L_2 , whereas the bank lends L_1 to Large borrower which is equal to the loan demand. Lowering the interest rate ceiling further to r_1 results

in less loans given by the bank to Small borrowers and more loans given to Large borrowers.

In summary, the Gonzales-Vega model attempts to show that a profit-maximizing bank responds to interest rate restriction by rearranging its loan portfolio in favor of nonrationed borrowers. Given this bank behavior, any effort exerted by authorities to redistribute income towards the small farmer-borrowers through a restrictive uniform interest rate policy will always be frustrated. Instead, efforts should be directed at lowering the marginal cost of lending to small farmer-borrowers.

(ii) The Tolentino Model

The Tolentino model (1986) is much more limited than the Gonzalez-Vega model in the sense that it does not try to determine the socially optimum allocation of credit. Rather, it focuses on the private profitability of a small bank given a set of regulations and incentives. In his model, Tolentino shows that a small bank will always try to maximize profits given a set of regulations and incentives. If incentives to become small are very attractive, then banks tend to remain small. The model mainly draws inspiration from the New Institutional Economics.

The model assumes a profit-maximizing small (agricultural) bank. Income is mainly sourced from the small bank's lending operations. Its costs consist of fixed and variable costs. Maximum profit is attained by equating the bank's marginal revenue (MR) with its marginal cost (MC).

Under "normal" conditions, the small bank satisfies the profit-maximizing condition by lending at L^* . This is shown in Figure II.7.

Government authorities, however, regard small agricultural bank as a supply-leading institution that must provide cheap credit to the agricultural sector. Usually, an interest-rate ceiling way below the market rate is imposed by authorities. Since the revenue, R , is the product of the interest rate and the the loan size, the interest-rate ceiling has the effect of shifting the revenue line clockwise, from R^* to R' . This has two implications. One is that to maximize profits, the bank has to reduce its loans to farmers from L^* to L' . This is rather an unwanted development. The other, which is worse than the first one, is that the maximum profit rate obtained by the small bank under this condition may be less attractive compared to other opportunities available to owners of the bank's resources. There is then a possibility that bank owners leave the banking industry, thus, leaving the agricultural sector with no banking support. The authorities, however, can prevent this by giving small banks incentives or subsidies which can reduce the bank's cost. Attractive spread between rediscount and lending rates, tax exemption, equity contributions are examples of such incentives/subsidies which have the effect of reducing bank's cost. With these cost-reducing incentives, the bank's cost curve shifts downwards, from C^* to C' , as shown in Figure II.5.

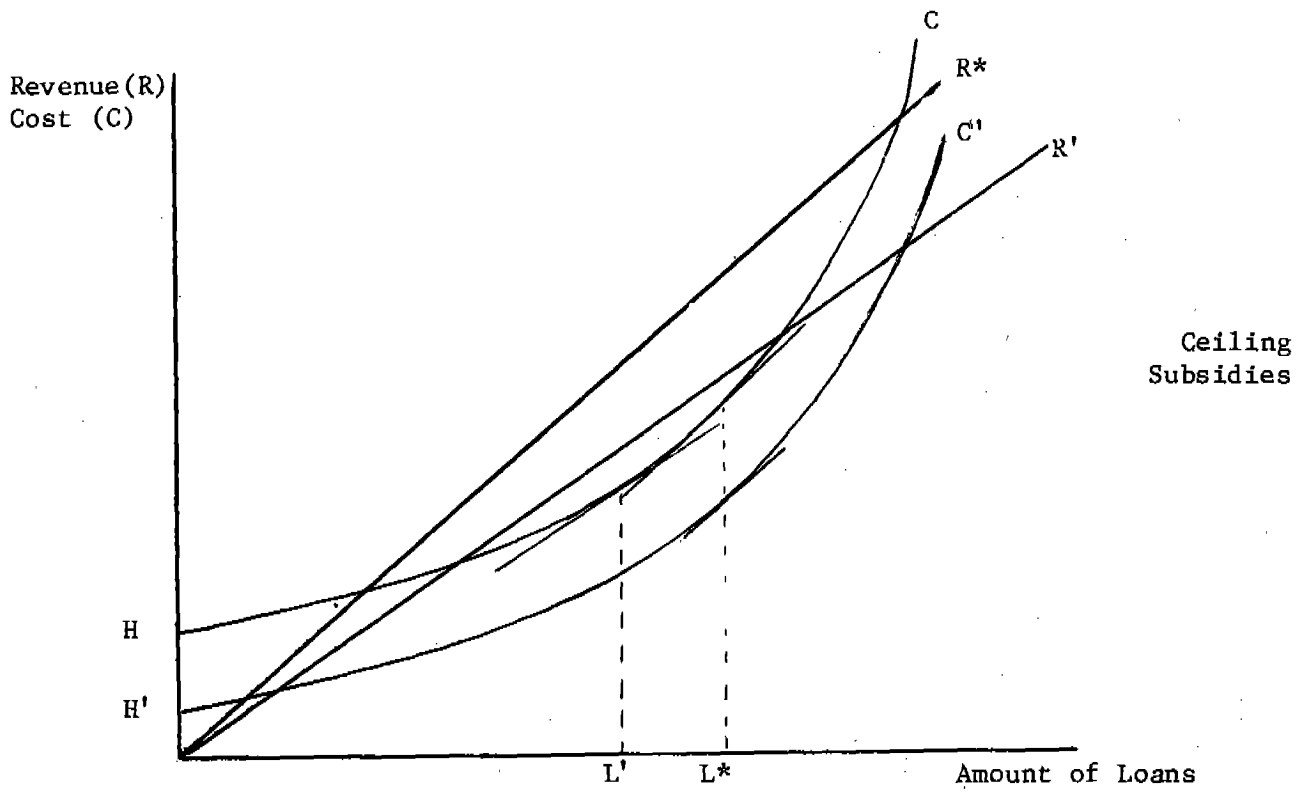


Figure II.5: Behavior of Bank With and Without Interest Rate Ceiling and Subsidies C

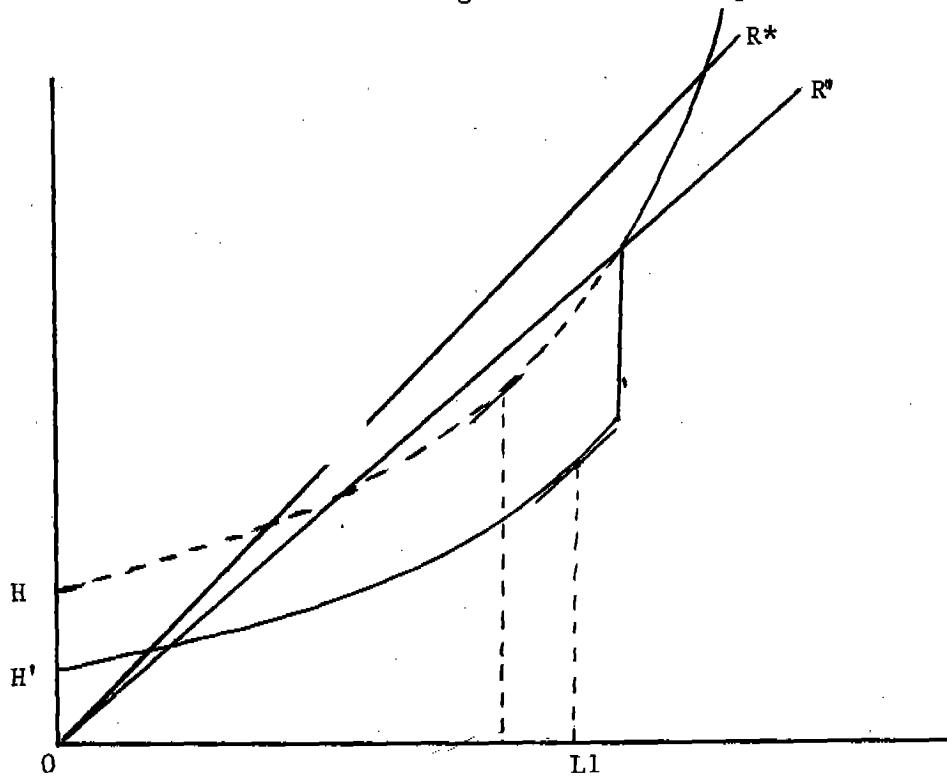


Figure II.6 Behavior of Bank When Incentives are Withdrawn Beyond a Certain Size

Thus, in terms of profit rate and size of loans, the small bank is back to the pre-interest-rate ceiling condition.

The model has been extended to include the effects of other regulations and incentives. For example, if incentives are withdrawn beyond a certain bank size, the total cost curve of a bank will assume the shape as depicted in Figure II.8. Here, the amount of loans is used as an indicator of bank size. It is linked at the output level, L_1 , beyond which the cost-reducing incentives or subsidies may no longer be availed of. Here, there is strong tendency for a profit-maximizing bank to remain small.

The Tolentino model attempts to capture many of the realities of finance in LDCs. The fact that small rural banks still operate despite the restrictive interest-rate ceiling policy is a proof that the subsidies or cost-reducing incentives provided by the authorities are at least enough to put the bank's optimal profit back to the same level as the pre-policy package.

b) Informal Moneylenders and Interlinked Markets

The old view that market segmentation was restricted to isolated barrios and monopoly markets have now given way to the idea that segmentation means different term structures, different characteristics and types of loans that meet certain particular specialized needs not substitutable by other types of loans. The fact that many markets are imperfect in the rural areas provide the basis for understanding the varied credit arrangements between heterogenous lenders and heterogenous borrowers, particularly in the informal market.

The credit market for one is highly underdeveloped. The formal system is wary of lending to small farmers which they perceive to be unbankable and bereft of any marketable collateral. Small-sized loans to the small farmer also have the disadvantage of entailing high transaction costs and high risk of default, aggravated by the fact that no adequate crop insurance scheme exists. Thus, if left alone, informal credit will also be afflicted with the same problem as the formal system, and may become an unprofitable enterprise.

Other markets too are quite underdeveloped. There is hardly a competitive land market to speak of mainly due to sharecropping arrangements and depressed agricultural incomes. The labor market is also not operating competitively again due to sharecropping arrangement and the prevalence of owner-cultivator farming. The lack of a strong futures commodities market and crop insurance scheme mark much of the trading of agricultural crops. Imperfect markets, market failures and missing markets call for very high transaction costs to retrieve proper information flows and monitoring. They also entail high risks on uninsured and uncollateralized transactions. The result is an "internalization" (or creation) of particular institutions and arrangements to meet these unmet needs.

The interlinked markets school share this similarity with the transaction costs school of Industrial Organization. The definition of interlinked markets is given by Braverman and Srinivasan (1980) "(Market Interlinkages) are contracts made

between the same pair of individuals relating exchanges in more than one commodity or service, the contracts being linked in an essential way. -- (Any) delinking (of) contracts would be infeasible or costly for one party --- (thus) linking may constitute a Pareto superior move as opposed to a delinked situation."

Most of the theoretical studies on interlinked markets have studied the landlord as the main informal source of credit. Some of the major works that have been done can be summarized as follows:

1. Braverman and Srinivasan (1981) show how sharecropping arrangement can interlink land, labor, and credit transactions. In an imperfect credit market, a landlord may offer credit to his tenant, oftentimes at subsidized rates without necessarily insisting that the sharecropper borrow only from him. It is to the landlord's interest that the tenant gets his loan from the cheapest source since a lower repayment will increase the landlord's share in rent form.
2. Braverman and Guasch (1984) shows that in a situation of heterogenous labor ability and imperfect information, interlinking credit and tenancy contracts allows the landlord to sort and screen the tenants so that the ones with higher ability will be the ones to get the tenancy agreements. Tenants are compelled to accept the credit terms set by the landlords for the purchase of capital in order to be allocated a plot of land. High ability tenants will be subsidized for larger purchases of capital. The

resulting arrangement is an efficient allocation whereas a delinking of the markets will degenerate into an inefficient allocation.

3. Braverman and Stiglitz (1982) demonstrate that the linking of tenancy and credit relations can be used to intensify the work effort of the tenant. Loan subsidies and indebtedness of the tenants results in higher intensity of work and increase in land rent that more than offsets the decrease in returns to lending. The interlinkage again increases efficiency of production.
4. Kotwal (1985) claims that landlord's provision of consumption loans to their tenants is a means of sharing risk with the latter. This is in response to the lack of crop insurance in the system and tenant's lack of access to capital markets.

The above interlinkages have attempted to show that interlinkages of markets result in more efficient allocation. They also reduce transaction and risk costs yielding positive contributions from the informal lenders.

But some of their results do not jibe with this rosy picture. Braverman and Srinivasan (1981) claim that a landlord who interlinks credit with the size of plot to a tenant ensures that a tenant's utility will remain at that level equivalent to a full time rural wage laborer. To improve the welfare of the tenants no less than genuine land reform will be necessary. Government subsidization of tenants' credit results only in the

subsidization of landlords. Other partial reforms, such as a limit to the landlord's share, only results in using the credit-tenancy link to recoup what was lost in the curtailment of land rent. The tenant's welfare will remain in the reservation utility level.

The surplus approach precisely maintains that the credit relation should not be separate from the relations of production and exchange. The fact that landlords, traders and rich farmers can use interlinked markets reflects their respective dominant positions in the production and exchange processes. Through these mechanisms they can exert influence and control over the borrower. Additional surplus and monopoly rent can then be appropriated. Moreover, because the interlocker can reduce transaction and risk costs, they are in a position to force their competitors to also use interlinkages. But vertical integration and tie-in arrangements can force the borrowers not to deal with other lenders. Thus, interlinked markets can be a way of limiting entry to the credit market.

2. Behavior of Savers

Since the macroeconomic theories of saving, such as the Keynesian current income hypothesis, Friedman's permanent income hypothesis, Ando-Modigliani life cycle hypothesis, Duesenberry's relative income hypothesis are well known, the discussions in this section will therefore concentrate on the microeconomic theories of saving which are relatively less known. Financial instruments are assumed to be the only form of savings.

The Fisherian model is usually used to describe the behavior of savers and borrowers in an exchange economy. In a risk-free world, an individual maximizes his present and future satisfaction given his endowment, production opportunities, and market opportunities for external lending and borrowing. By not consuming part of his present resource endowment, the individual can both be a saver and investor at the same time. If he has low productive opportunities compared to others in the economy, he will be better off if he withdraws his low-yielding investments and instead buys relatively high yielding, risk-free financial assets offered by deficit units who have better productive opportunities. The main idea of this model is that individual savers respond to the reward for holding financial assets. The interaction between savers and borrowers in the economy would lead to an equilibrium interest rate. At this rate, desired saving or lending would be equal to desired borrowing. In this model, income is considered as a shift factor.

The simple Fisherian model described above assumes a riskless world with only one financial instrument and one interest rate. This has been extended to the world with risk. In a world characterized by risk, multiple financial instruments with different rates can exist.

The importance of these models is that they give us prescriptions for mobilizing financial savings. In particular, the McKinnon-Shaw "interest-rate elasticity" approach prescribes high real interest rate to induce potential savers to buy

financial assets. Price stability is essential in maintaining attractive real interest rates. The risk of holding financial assets is mainly attributed to price instability. In view of financial policies that repressed financial markets in LDCs, McKinnon and Shaw recommended the liberalization of financial markets.

The effectiveness of high interest rate in mobilizing savings will be severely constrained by the absence of formal financial institutions offering financial assets. Indeed, this is the case especially in rural areas of LDCs, where only few formal financial institutions exist. The creation of formal financial institutions in rural areas is therefore expected to have greater impact on savings mobilization. The "institution-elasticity" approach, or "supply-leading" approach proposed by Hugh Patrick (1965) emphasizes accessibility to financial services as a determinant of saving. In particular, small savers will be motivated to buy deposit instruments if financial institutions are close to them.

Burkner (1980) criticized the "interest-rate elasticity" approach and the "institution-elasticity" approach for stressing too much on only one feature of the instrument i.e., interest rate in the case of the "interest-rate elasticity" approach and accessibility in the case of the "institution-elasticity" approach. In addition, both approaches attribute the financial repression either to the government or private sector when in reality it can be attributed to both. Specifically, reforms of

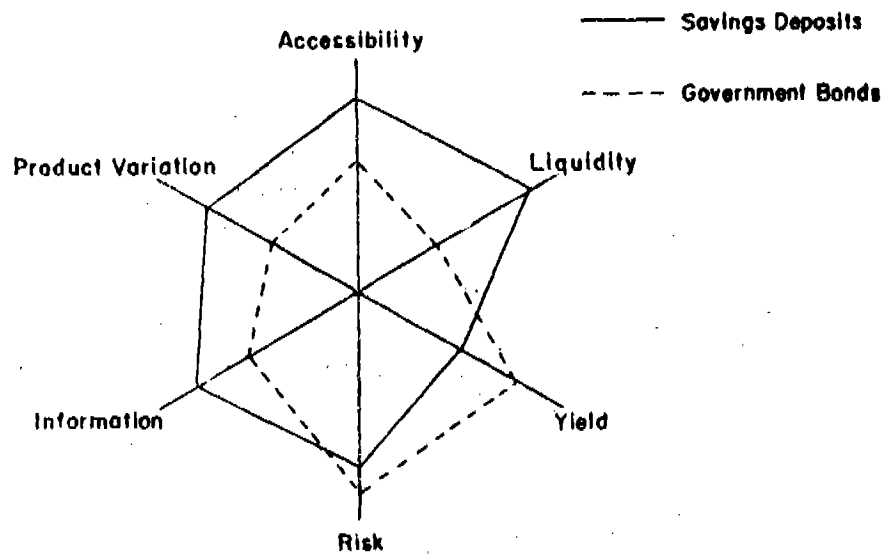
government financial policies, e.g. deregulating the interest rate, would not necessarily make the financial instruments attractive if quasi-monopolistic policies of private banks tend to be repressive. A maximum deposit rate and deposit size prescribed by bankers association are examples of repressive bank policies that would offset the merits of favorable government policies. Hence, surplus units would not be attracted to financial instruments. Burkner then proposed the "financial instrument" approach which considers together several features of financial instruments that surplus units may be looking after.

By regarding yield and accessibility as just two of the many features of financial instruments, the "financial instrument" approach treats the "interest-rate elasticity" approach and the "institution-elasticity" approach as special cases. The set of features of financial instruments to a large extent influences the decisions of surplus units. And the "main channels through which the policy of financial institutions and government authorities exert their impact on savings and portfolio behavior and the distribution of benefits from investment are the financial instruments that are offered and their features."

Burkner identified at least six major characteristics of any financial instrument, namely yield, risk, accessibility, liquidity, information and product variation. For illustrative purposes, a profile of the features of savings deposits and government bonds is presented in Figure II.7. In this example, savings deposits look more attractive than government bonds.

Figure II.7

THE PROFILE OF FINANCIAL INSTRUMENTS



Source: Burkner (1980)

It should be noted, however, that individuals may place different weights on those features.

The implication of the "financial instrument" approach is clear. Both monetary authorities and private financial institutions have to constantly monitor the needs of surplus units and adjust their policies accordingly so as to arrive at features of financial instruments that would meet the needs of surplus units. A financial system that offers a variety of financial instruments will likely succeed in mobilizing savings.

3. Behavior of Borrowers

The most popular model that attempts to explain the behavior of farmer-borrower is that of McKinnon (1973). It is basically an extension of the two-period Fisherian model in which an individual has to make a decision whether to consume all his endowments at period one, or to leave part of them for investment so that he can consume more in period two. Because of insufficient resource endowments and indivisibilities in investments, the farmer has to resort to external borrowing so that he can free himself from inferior technology and acquire a new technique of production. This improves the situation of both the farmer-borrower who have better production opportunities and savers who have relatively inferior production opportunities.

McKinnon's model stresses the virtue of external finance and high interest rate policy to transfer resources from less productive to more productive entrepreneurs. His model can be

criticized in several respects, however. First of all, farmers incur transaction costs in securing a loan over and above the interest they have to pay for the loan. This means that farmers concern themselves with the effective cost of borrowing in making decisions regarding borrowing, not the interest cost only as in the case of McKinnon's model. The effective cost of borrowing includes the nominal interest rate and transaction costs. The latter arises from out-of-pocket expenses and opportunity costs of farmer-borrower's time spent in processing his loans. If the investment in new technology is attractive enough given the interest rate, but that the transaction costs involved in securing a loan are excessively prohibitive, then farmers may not resort to external finance. Secondly, McKinnon stresses too much on the indivisibilities in investment, requiring relatively large amount of loans. As pointed out earlier, the "new" view believes that many of the modern technology are actually divisible, so that farmers need loans smaller than what are usually expected with the assumed indivisibilities. This has to be recognized because the amount required to acquire the divisible technology and the effective cost of borrowing are two crucial factors in making decisions on whether to borrow or not, and where to borrow from if alternative sources of credit are available. The latter is especially important in the rural areas because of the presence of informal credit markets as alternative sources of credit. Unfortunately, these factors are not taken into account in McKinnon's model.

Any model that attempts to explain the behavior of farmer-borrowers has to grapple with the reality that farmer-borrowers concern themselves with the effective cost of borrowing in making decision whether to borrow or not. Ladman's model (1984) has this feature and it yields interesting testable hypothesis. It would be worthwhile to briefly discuss his model here.

The profit equation of the borrower-farmer may be written as

$$P = R - (r.L + BTC) \quad (1)$$

where P = profit in pesos,

R = revenue net of costs of the resources purchased with borrowed funds, but not net of borrowing costs,

r = interest rate,

L = loan size, and

BTC = borrower's transaction costs.

Equation (1) can be rewritten into:

$$\begin{aligned} p &= \frac{L(P)}{L} = \frac{L[R - (r.L + BTC)]}{L} \quad (2) \\ &= L[AR - (r + ABTC)] = L[AR - AEC] \end{aligned}$$

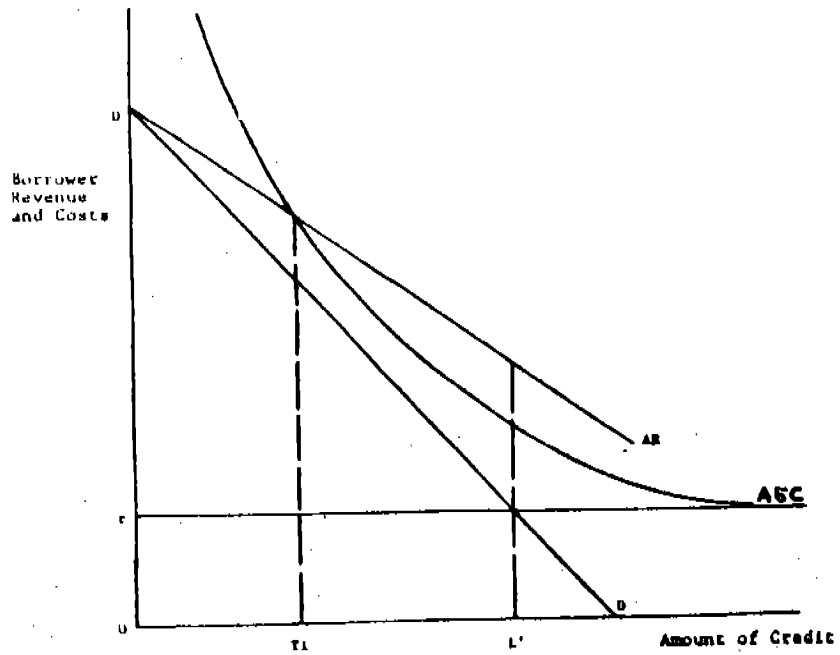
where AR = average revenue,

$ABTC$ = average borrower's transaction cost, and

AEC = $r + ABTC$ = average effective borrowing cost.

This may be depicted in Figure II.8. The demand for credit schedule (DD) consists of the loans of present values of the marginal value products (MVP) resulting from the resources employed using successive loan units. The profit maximizing condition is

Figure II.8

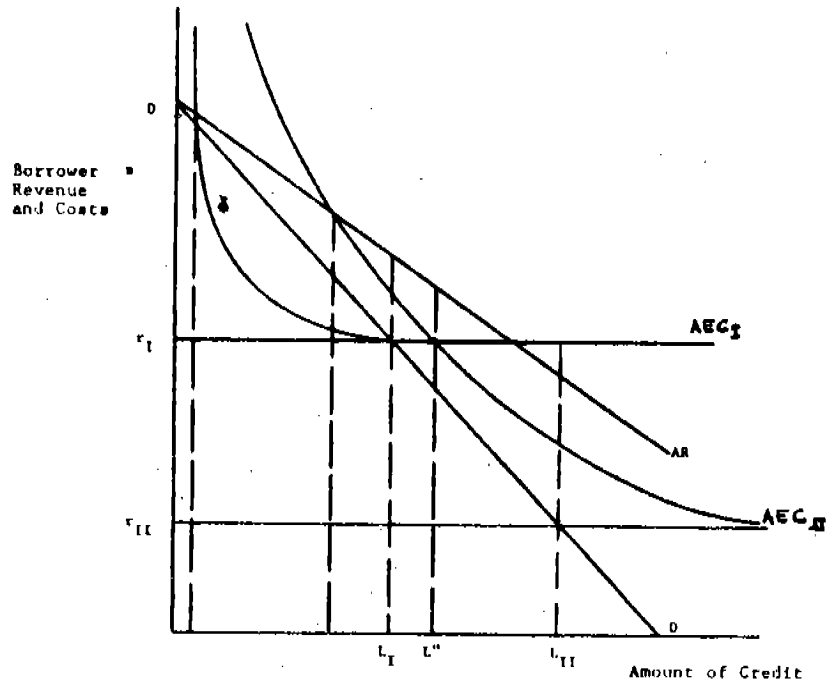


Borrowing Costs and Revenues: One Lender

To maximize profit, the farmer has to borrow L' and his profit would be $L'(AR-AEC)$. Note that T_1 is the borrowing threshold or the minimum loan size below which the borrower would not be willing to borrow from a lender. If ABTC increases while r remains the same, AEC curve would shift upwards. This does two things. One is that it reduces the optimal profit of the borrower. The other is that it increases the borrowing threshold. This means that a farmer confronted with higher transaction costs has to be assured of higher loan size than before the increase in the transaction cost so that he will be induced to borrow.

Ladman extended his model to the case of one borrower and two lenders. This means that the farmer-borrower would have two choices of lenders; namely the formal financial institution which charges low nominal interest rate but demands high transaction cost on the part of the farmer and the informal moneylender who charges high interest rate but otherwise requires low transaction cost on the part of the farmer. Figure II.9 summarizes possible borrowing behavior of a farmer. At L'' , the farmer would be indifferent between the formal financial institution and the informal moneylender. If the loan size requirement is above L'' , then the farmer prefers to borrow from the former. If it is below L'' , then he prefers to borrow from the latter. The optimal loan size for borrowing from the formal financial institution is L_{III} , while the optimal loan size for borrowing from informal moneylender is L_I . Farmers who want to borrow an amount between

Figure II.9



Borrowing Costs and Revenues: Two Lenders

T1 and T2 will definitely prefer to source funds from the informal moneylender, not from the formal financial institution.

One of the main lessons that can be drawn from Ladman's model is that promoting cheap agricultural credit does not necessarily induce farmers to borrow from formal financial institutions. As rational economic agents, farmers compare the effective cost of borrowing from the alternative sources of credit, given their desired loan sizes before making any decision. This partly explains why despite the massive cheap credit program of many governments, farmers still look at informal moneylenders with favor.

Ladman tested his hypothesis using the Bolivian experience. He found that the high transaction costs for borrowing from the formal financial institutions which offer concessionary interest rates forced many potential borrowers to seek loans from informal moneylenders. Whether this has also been the experience of the Philippines is indeed an interesting issue worth examining.

The basic weakness of Ladman's model is that it forces farmers to borrow either from the formal credit market or from the informal credit market. In certain instances, however, farmers view these sources as complementary. In other words, access to one market, say the formal credit market, would facilitate access to another market, i.e., the informal credit market. Or one market, say the informal credit market, may be considered by farmers as a supplemental source of credit. There are several reasons for this. One is that farmers are rationed

by lenders because of certain legal constraint, like the ceiling on the amount farmers can borrow from formal financial institutions or some arbitrary decisions by informal moneylenders. Thus, farmers source credits from both markets so long as there are profit opportunities perceived by them. The other reason is that farmers may finance different assets from different sources of credit. For example, they borrow from formal financial institutions to finance the acquisition of fixed capital and from the informal moneylender to finance working capital, or vice-versa. These aspects must be considered in modelling and in empirically investigating behavior of farmer-borrowers.

Chapter III

BEHAVIOR OF MAJOR PARTICIPANTS OF THE RURAL FINANCIAL MARKETS: EMPIRICAL RESULTS

This chapter reviews empirical results of studies dealing with the behavior of the major participants of the rural financial markets (RFMs). It consists of three sections, namely: a) formal and informal lenders in the rural sector; b) saving in the Philippines and in the rural sector; and c) behavior of borrowers in the rural sector.

A. Formal and Informal Lenders in the Rural Sector

Economic activities in the rural areas are mostly agricultural. It is therefore understandable that studies on rural credit focus on agricultural credit.

The total volume of rural credit cannot be precisely known because of the absence of information about the level of informal credit. Recently, Sacay et al. (1985) put together several studies on rural finance and came up with an indicative size of informal credit vis-a-vis formal credit. In the 50s, informal credit comprised about 80 percent of the total value of loans obtained by farmers. Its share dropped to about 30 percent in the middle of the 70s, then rose to 37 percent in the early 80s. The number of farmers dependent on informal credit market more or less follows the same pattern. The massive agricultural credit programs in the 70s could have temporarily reduced the importance

of informal credit. Their subsequent failure, however, has forced majority of farmers to depend again on informal credit.

1. The Formal Sector

Loans granted by the formal sector to the agricultural sector reached ₦27 billion in 1984. This is only 9 percent of the loans granted to the formal non-agricultural sector which consists mainly of industrial enterprises located in urban centers. The real average growth rate for formal agricultural loans for the period 1966 - 84 was 3.27 percent which was way below the 8.4 percent real average growth rate for non-agricultural loans (see NEDA [1986]). Understandably, the share of agricultural loans to total loans granted by the formal sector declined from 18 percent in 1966 to 8 percent in 1984. Although both the formal agricultural loans to agricultural gross value added (GVA) ratio and formal non-agricultural loans to non-agricultural GVA ratio had been rising, the former averaged only 23 percent during the period 1966 - 84, while the latter averaged 87 percent. This can be interpreted in two ways. One is that it is a reflection of the general policies which are biased against agriculture (David [1982]). The other interpretation is that the agricultural sector is more efficient than the non-agricultural sector with regard to the use of loans. However, this should be taken with caution since a significant proportion of the total agricultural loans come from the informal sector. In contrast, non-agricultural loans mainly come from formal financial institutions in the urban areas.

The formal lending sector in the rural areas consists of rural banks, savings banks, and branches of commercial and development banks. Outstanding loans of banks to agriculture reached ₱25 billion in 1983, then went down to ₱18 billion in 1985 as a result of the credit squeeze. About one-half of the total outstanding agricultural loans was provided by commercial banks, about one-third by the rural banking system, and the rest, by other types of banks.

The segmentation in the rural credit market can perhaps be partially reflected in the set-up of financial institutions in the formal banking system of the countryside. The private commercial banks and Philippine National Bank (PNB) cater to large commercial lending for viable projects which are mainly agricultural exports, like sugar, coconut, banana, etc., and other commercial crops. Their clientele are mostly on big landowners and large agribusiness firms. The commercial banks are, however, the main conduit for bank deposits in the rural areas. But the TBAC-UPBRF study (1981) found that only 1/3 of total resources and borrowings are channeled into agricultural lending, making commercial banks one of the big sources of leakages of financial assets from the rural to the urban areas. This observation may also point to the minimal effect of the credit quota policy which stipulates that 25 percent of total loanable resources be channeled to agriculture (15 percent to agriculture in general, 10 percent to agrarian reform beneficiaries). The deposit retention scheme of the government, which stipulates that 75 percent of total deposits should be

invested in the area where the deposits originated, has not prevented "resourceful" banks (rural, commercial and thrift banks) in circumventing this. As long as the rural financial system is repressed and rural dynamism is absent, funds will always find a way to more attractive and less risky projects outside the rural areas.

The main source of low-cost loans for small farmers in the formal system are the rural banks. They have grown in number since the 1950s. The number of head offices and branches of rural banks reached 1,119 in 1985. These are spread all over the countryside. Thus, they have closer contacts with farmer borrowers. In the mid-seventies, over 70 percent of the total volume of loans granted by rural banks were small loans, i.e., ₱10,000 or smaller. But as the default rate of rural borrowers increased sharply in the late seventies, this trend has shifted in the late seventies to the low-risk medium and large borrowers. In 1979, 57 percent of the volume of loans were more than ₱5,000 whereas in 1976, 75 percent of these were below ₱5,000. As rural banks grew, formal loans in the rural areas grew with respect to informal loans. But as default rates and arrearages to the Central Bank became rampant, a reverse trend ensued.

Rural banks have always been dependent on Central Bank rediscounted funds and special funds, such as the Special Time Deposits (STDs), for their financial resources (see Table III.1). The attractive incentives they used to enjoy practically discouraged them to mobilize their own financial assets via rural savings deposits or capitalization. Their loan-deposit ratio

Table III.1a

AVAILMENTS OF SPECIAL TIME DEPOSITS (STDs) FOR
SUPERVISED CREDIT, 1978-83, RURAL BANKS
(P Million)

Commodity	1978	1979	1980	1981	1982	1983	Total 1978-83		Ave. Share to RB Loans (1978-83)
							Ave. % Share	Growth Rate (%)	
Rice ^{a/}	91.1	90.2	88.9	57.0	53.7	35.9	20.4	(17.0)	8.0
Corn ^{a/}	7.0	6.3	7.1	4.3	26.6	15.6	3.3	17.4	12.7
Fruits & Vegetables	7.1	11.3	12.3	9.7	13.2	8.7	3.1	4.1	8.9
Livestock & Poultry	85.9	131.5	140.0	167.4	175.1	164.7	42.4	13.9	13.2
Fisheries	7.4	13.3	6.7	4.4	7.3	19.6	2.9	21.5	7.4
Cotton	4.5	8.4	11.5	10.4	8.6	3.6	2.3	(4.4)	120.2 ^{b/}
Tobacco	10.5	8.3	8.6	15.1	25.9	27.0	4.7	20.8	82.3
Others	52.4	33.9	116.4	37.3	31.3	154.3	20.9	24.1	6.3
TOTAL	<u>265.9</u>	<u>303.2</u>	<u>391.5</u>	<u>305.6</u>	<u>341.7</u>	<u>429.4</u>	<u>100.0</u>	<u>10.1</u>	<u>9.8</u>

^{a/} Includes Maisagana/Maisan 77 and corn/feedgrains ordinary loans.

^{b/} Participation of banks other than rural banks allowed in the program; hence, data include STDs by other banks.

Source of basic data: CB.

Table III.1b

FREQUENCY DISTRIBUTION OF RBS, BY EXTENT OF DEPENDENCE
ON CD FUNDS (REDISCOUNTING)
As of October 31, 1984

Agricultural loans to total rediscounts outstanding	Regions												All Regions	Percent Distribution
	1	2	3	4	5	6	7	8	9	10	11	12		
0	5	7	6	32	2	6	5	1	-	-	1	2	67	7.2
Less than 25	13	10	18	29	1	20	4	6	2	6	6	6	121	12.9
25.1 - 50	35	14	49	58	9	29	13	12	6	17	13	7	257	27.4
50.1 - 75	39	12	35	54	30	40	17	19	10	30	23	12	321	34.3
Above 75	<u>21</u>	<u>4</u>	<u>7</u>	<u>19</u>	<u>26</u>	<u>10</u>	<u>20</u>	<u>13</u>	<u>3</u>	<u>19</u>	<u>10</u>	<u>11</u>	<u>171</u>	<u>18.2</u>
Total	<u>113</u>	<u>47</u>	<u>115</u>	<u>192</u>	<u>68</u>	<u>113</u>	<u>59</u>	<u>51</u>	<u>21</u>	<u>67</u>	<u>53</u>	<u>38</u>	<u>937</u>	<u>100.0</u>

Sources of basic data: CB-DLC and CB-DRBSLA.

exhibits high rates compared to other banks (see Table III.2). Policies, such as government subsidy in the form of initially paid capital of preferred stocks (which was gradually removed), cheap rediscounted funds, and tax exemptions for smaller rural banks may have unwittingly contributed to this dependence. Thus, the high default rate of farmer borrowers leading to high arrearages to the Central Bank and finally the recent closure of many rediscounting windows in the early 80's have brought most rural banks into near collapse.

The thrift banks (and savings and loan associations) are engaged mainly in medium and long-term financing for large-scale farm operations. Being so, their loans are securely collateralized with real estates.

Other specialized government banks serve specific functions. The Land Bank of the Philippines (LBP) provides supervised credit mainly to targets of the agrarian reform program, while the Development Bank of the Philippines (DBP) engages in term financing. There are many other specialized banks such as those specializing on the coconut industry.

2. The Informal Sector

Floro (1986) and Ferrer (1986) have recently come up with a more detailed study about the behavior of informal moneylenders. Whereas the landlord and storeowner were the main informal creditors before, now palay traders, rich farmers and a host of local moneylenders have arisen to take their place.

Table III.2

LOAN PORTFOLIO TO DEPOSIT RATIO, RURAL INSTITUTIONS
1975-1979
(In Per Cent)

	1975		1976		1977		1978		1979		Growth Rate	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
KBs	103.14	169.50	103.52	159.11	97.46	144.80	106.72	145.41	85.13	141.54	(4.7)	(4.4)
TBs	96.22	90.68	76.43	89.98	81.56	89.62	69.79	73.90	77.00	83.46	(5.4)	(2.1)
	154.38	102.82	132.16	152.59	128.05	143.12	119.00	168.09	122.86	167.11	(5.5)	12.9
	11.35	92.70	22.41	88.05	46.80	88.50	44.08	67.63	58.14	77.91	50.4	(4.2)
	123.84	47.03	101.48	90.56	101.89	83.20	85.71	125.81	84.19	125.87	(9.2)	27.9
RBS	357.22	135.56	312.75	125.05	294.11	115.85	269.10	105.72	266.42	104.59	(7.1)	(6.3)
SGBs	3,990.52	119.18	3551.45	149.66	3,023.75	242.31	1,829.15	224.38	1,291.90	257.13	(24.6)	21.2
Overall Ratio,												
Rural Areas	145.1		146.3		129.5		119.2		122.7			

Source: TBAC-UPBRF, Research Project on the Rural Financial Markets in the Philippines, 1981.

Specialization has still to be achieved as traders, storeowners and lenders are oftentimes the same people. Studies from TBAC also show the same trends (see Table III.3). It seems that linked credits become more and more the order of the day (see Table III.4).

Floro has shown that the most prominent lenders, namely the input dealers, palay traders as well as rich farmers, have various motives for lending to small farmers. The trader-lender is interested in the accumulation of merchant capital and therefore acts as a typical market lender preferring more bankable farmers with higher income and lower default risk (see Table III.5). Effective interest rates are much higher for poor farmers due to high default risks (see Table III.6). The stipulation that farmers should buy inputs from these traders at a price higher than market price and/or sell their output to them at a lower price than market price is a clear use of interlinked markets to ensure the sources and market for their traded products and to be able to manipulate the prices to their advantage. This power of the trader-lender is enhanced since he owns transaction-specific assets, such as warehouses which the poor farmer does not have.

Farmer-lenders, according to Floro, have a different motivation in lending. Collateralized loans, particularly those with land collaterals are their primary concern. They are therefore more willing to lend to lower land-sized and lower-income farmers as long as their land is used as collaterals.

Table III.3

DISTRIBUTION OF TOTAL LOANS OBTAINED BY FARM HOUSEHOLDS
FROM INFORMAL SOURCES, ONE-YEAR PERIOD,
BY SOURCE OF LOAN
(In % of Informal Loans)

Source	BCS, 1960-61 ^{a/} (All Farm Types)		TBAC, 1978-79 (Rice Farming) In % of Informal Loans		TBAC, 1981-82 (All Farm Types Survey Results)	
	No. of Loans	Amount	No. of Loans	Amount	No. of Loans	Amount
Landlords	24.4	23.6	20.0	22.4	7.9	6.1
Palay traders	12.7 ^{b/}	11.3 ^{b/}	26.5	27.2	24.5	31.7
Rice millers			4.1	2.9	5.4	9.6
Store owners/other merchants	16.6	20.7	2.6	1.5	4.9	3.9
Input dealers	-	-	12.4	17.6	3.0	3.2
Fulltime moneylenders (professional lenders)	2.7	3.5	2.0	9.7	-	-
Farmers	-	-	29.8	24.9	17.2	12.0
Relatives	30.1	28.2	<u>c/</u>	<u>c/</u>	-	-
Friends/Neighbors	1.8	1.4	<u>c/</u>	<u>c/</u>	-	-
Loan associations/ Credit unions	0.9	1.			-	-
Professionals practitioners	-	-			7.0	7.2
Others	-	-			30.1 ^{d/}	26.3 ^{e/}
Not Reported	0.4	0.			-	-
Total	100.0	100.			100.0	100.0

^{a/} Derived from BCS, PSSH Bulletin, Series 12, Tables 2 and 12.

^{b/} Includes corn millers and merchants.

^{c/} Study did not indicate number nor amount of loan by relation of affinity but reported relations of farmer-borrowers with sources of informal loans, viz. 15.1 percent were relatives; 10.9 percent were neighbors and 0.4 percent, friends (Table 63 of TBAC study, p. 91).

^{d/} Includes construction contractors, handicraftsmen and professional practitioners.

^{e/} Mostly nonpalay (e.g. copra and vegetable) commodity traders; also includes overseas workers and informal sources not categorized by economic activity.

Source: Sacay, Agabin, Tanchoco, "Small Farmer Credit Dilemma" 1985.

Table III.4

Contractual and Effective Monthly Interest Rates
By Type of Tie-In Arrangement, 297 Commercial Loans
By Area Category, Wet Season 1983-84^{a/}
(interest rate in percent)

Type of Tie-in Arrangement	Marginal Area		Developed Area	
	Contractual Adjusted Monthly Rate (rc)	Contractual Monthly Rate (rm)	Adjusted Monthly Rate (rc)	Monthly Rate (rm)
I. Unlinked Loans	20.0	19.2	14.6	14.4
II. Linked Loans	12.7	17.7	9.7	16.5
A. Linked to Circulation Activities				
1. Required to Sell Output	11.8	17.0	8.4	15.3
2. Required to Buy Inputs	13.5	18.3	19.1	21.1
3. Required to Rent Machinery	10.9	11.1	10.8	10.8
4. Required to Act as Marketing Agent	8.7	9.2	6.3	6.2
4. Both (1) and (2)	14.4	20.7	12.4	15.2
B. Linked to Production Activities				
1. Borrower is Tenant	12.8	11.6	9.2	9.1
2. Required to Transfer Land Rights	-	-	-	-
3. Required to Render Labor Service	13.8	26.1	9.2	31.9

^{a/} Mean for each loan type is the weighted average interest rate for all loans under each category with size of loan as weight.

Source: Floro (1986).

Table III.5

REGRESSION RESULTS^{a/} SHOWING TRADER-LENDER'S PREFERENCE
FOR HIGHER-INCOME AND LOWER-RISK FARMERS
ALL HOUSEHOLDS, WET SEASON
1983-84

$$W_{st} = C_0 + C_1 Y_i + C_2 k_i + C_3 A + u$$

Where W_{st} = value of loan received by borrower i from trader-lenders;
 Y_i = estimated income of borrower i ;
 k_i = borrower's propensity to default; and
 A = dummy variable for area category
 0 if marginal area and 1 if developed area.

All variables are in logarithmic form.

The estimated regression is as follows:

$$W_{st} = -1.739^* + 0.584Y^{***} - 0.049k - 0.344A$$

(1.833) (3.77) (1.045) (1.282)

$$\text{adj } R^2 = 0.163$$

$$F - \text{value } (3, 86 \text{ d.f}) = 6.01$$

^{a/}The estimated t-statistic for the intercept suggests that we reject the null hypothesis that the intercept is zero at 90 percent confidence level. The test also shows that there is a strong positive relationship between income level of the borrower and the loan size granted by the trader-lender. This implies that traders tend to offer bigger loans to farmers with higher income.

Table III.6

Results of Least-Squares Regression Analysis
 Trader-lender Loans, All Households
 Wet Season, 1963-84^{a/}

MODEL	Dependent Variable	Explanatory Variables	Coefficients (t-values) ^{e/}	F-distribution (at k-1, n-k degrees of freedom)	Adjusted Mean R ²
I	14.651 ^{b/} (interest)	Constant	28.457*** (3.83)	5.66*** (2,86 d.f.)	0.11
		Income ^{c/}	-2.181*** (-2.90)		
		Area ^{d/}	3.199 (1.53)		
II	14.65 ^{b/} (interest)	Constant	6.932*** (6.25)	3.37** (2,86 d.f.)	0.05
		Default rate ^{c/}	1.169* (1.93)		
		Area ^{d/}	1.62 (0.72)		

^{a/} There are 97 trader-loans in total. However, due to missing values, only 99 and 89 observations are used respectively.

^{b/} monthly rate

^{c/} in natural logarithm.

^{d/} dummy variable whereby 0 value refers to developed (area)

^{e/} superscript * refers to 10% level of significance.

** refers to 5% level of significance.

*** refers to 1% level of significance.

Floro shows that such loans arise because the land market is imperfect. Credit thus becomes a means of expanding one's land or one's excess to the fruits of another person's land. Farmer-lenders motive is precisely this, thus his interest rate structure is opposite to that of the trader-lender. Lower land-size and lower income farmers, who have high default risk, are given lower effective interest rates (see Table III.7). Farmer-lender loans are found to be the most flexible. They accomodate loan requests at any time of the production period and allow rollovers and rescheduling of loans. These easy terms permit small farmers to accumulate enough debt so that eventually the farmer-lender can force a land mortgage. The description of the trader-lender's and the farmer-lender's behaviors reminds one of the literature of predatory pricing.

Land as primary motive of the farmer lender is not as conclusive. Ferrer's anthropological work points to other benefits the farmer-lender may get from lending to desperate farmers. New "feudal" ties seem to be in the making as farmers are made to render household and farm services (although often with compensation) to the farmer-lender as well as to oversee his land. The development of what Ferrer calls "the debt nexus" in the agricultural activities (particularly in rice production) focuses on the need to study the agricultural credit system in conjunction with the overall technological changes, product and factor markets in the rural areas as well as the shifting relations of production and exchange there.

Table III.7

Results of Least-Squares Regression Analysis
Farmer-Lender Loans, All Households
Wet Season, 1983-84^{a/}

MODEL	Dependent Variable	Explanatory Variables	Coefficients (t-values) ^{e/}	F-distribution at (at k-1, n-k degrees of freedom)	Adjusted Mean R ²
I	19.713b/ (interest)	Constant	-19.482* (-1.85)	4.91 (2,96 d.f.)	0.08
		Income ^{c/}	3.975*** (2.85)		
		Area ^{d/}	1.813 (0.71)		
II	19.713b (interest)	Constant	18.828*** (11.42)	5.27*** (2,96 d.f.)	0.09
		Default rate ^{c/}	-8.320*** (-2.97)		
		Area ^{d/}	3.033 (1.22)		
III	6.833c/ (loan size)	Constant	7.710*** (3.66)	4.57 (3,96 d.f.)	0.16
		Income ^{c/}	-0.27 (-1.22)		
		Default ^{c/} rate	0.510*** (2.51)		
		Area ^{d/}	0.89** (-2.54)		

a/ There are 107 farmer-lender loans. However, due to missing values, only 99 and 89 observations are used respectively.

b/ monthly rate.

c/ in natural logarithm.

d/ dummy variable whereby 0 value refers to developed (area)

e/ superscript * refers to 10% level of significance, ** refers to 5% level of significance, and *** refers to 1% level of significance.

The controversy that rages here is important. The Ohio State University researchers and the World Bank have pushed for channeling funds to informal lenders because they are more efficient and use interlinked markets to reduce transaction and risk costs. In fact, this is already done here in the Philippines, although to a limited extent (see below). Furthermore, there are signs that there have been a lowering of interest rates in the informal sector after the introduction of the Green Revolution technology (see Table III.8). The fall in informal interest rates can be explained by the use of more suppliers of loans such as the rural banks, traders, input dealers, farmer-lenders, rice millers, storeowners, etc., who responded to the increase in the demand for loans due to the high input-content of the new technology. This is further verified as studies show that interest rates are lower in areas where the Green Revolution technology has been applied most.

But perhaps an equally important issue is that raised by the surplus school, particularly the work of Floro. For here it is pointed out that efficiency and equity are two different objectives. Informal lenders may be efficient and may use interlinked markets for this purpose. But, to use the jargon of the transactions school in Industrial Organization, the informal lenders also own specific assets, such as warehouses, access to capital markets and implicit franchises to the industrial inputs to agriculture. Because of this, the resulting agreement between

Table III.8

COMPARATIVE ANNUAL INTEREST RATES ON FULLY-PAID
INFORMAL LOANS, VARIOUS STUDIES

Study/Location and year covered	Annual Average Interest Rate (%)		
	Formal (Nominal)	Informal	
		A. Including zero interest loans	B. Excluding zero-interest loans
Gapud, Nueva Ecija (1957-58)	12.0	98.0	126.8
Sacay, 18 provinces (1957-58)	12.0	82.0	
TBAC (1978-79)	12.0	53.5	73.7 *
Bulacan	12.0	32.6	
Camarines Sur	12.0	50.7	
Isabela	12.0	83.3	
TBAC, Nationwide (1981-82)	14.3	48.2	76.1

Source: Sacay, Agabin and Tanchoco. Small Farmer Credit Dilemma, 1985.

lender and borrower usually puts the borrower at a very weak bargaining position, and thus a great portion of his welfare and even his precious land may be lost in the process. In fact, the process of vertical integration wherein the creditor goes into the area of trading, milling, and selling is very similar to the transaction costs school's explanation of the vertical integration process of large multinational firms (Williamson, Teece).

Another unexplored area, therefore, in both the theoretical and empirical field, is the establishment of cooperatives to answer the imperfect markets in the rural areas. Just like the informal lenders, credit cooperatives can interlink markets, particularly the product, credit and factor markets. Efficiency may be achieved just as in the interlinking of markets by the landlords and traders. But this has an added feature since small farmers themselves own the cooperatives, thereby increasing their access to institutional capital, financial and trading markets.

The history of government-inspired credit and marketing cooperatives have been a dismal failure so far (see Castillo [1983]). But there are various instances of private initiatives in credit unions and cooperatives that have worked. The story of cooperatives in Japan, South Korea and Taiwan are far rosier and more encouraging than our experience. In the main, it seems that the essential variables that affect credit cooperatives ability to succeed are:

1. The level of education and organizing that is done to instill in the farmer a sense of belongingness and

loyalty to the institution (which translates to prompt payment of dues and obligations, productive use of loans, etc.).

2. The effective use of technical assistance and access to formal institutions.
3. The link of other agrarian reforms with cooperative institutions to ensure that the benefits of reforms will be felt by the small farmer.

3. Transaction Costs of Formal and Informal Lenders

Both private formal and informal lenders may have various motives for lending. But the most common objective is to maximize profits. For lenders, the profit margin is the difference between the lending rate and the total cost of lending. The latter may be decomposed into effective costs of funds and transaction costs. Since a greater part of the effective cost of funds, i.e., interest on borrowed funds or deposits, is exogenous to the lender, attention will therefore be focused on transaction costs.

Big banks usually shy away from small agricultural loans because of high transaction costs. Consider for example this representative view:

"An average loan officer can perhaps handle a portfolio of ₱80 million to ₱100 million pesos. If his clients are medium-sized commercial or industrial companies with loans averaging about ₱5 million, the officer would be handling between 16 to 20 accounts. To reach the same loan volume, for sugar producers who average 25 hectares and who each require about ₱200,000 per year,

the same loan officer would have to handle about 400 accounts. When one considers corn producers, who average perhaps 10 hectares and require about ₱50,000 per crop cycle in loans, the officer would have to handle as many as 1,600 individual accounts to achieve a volume of ₱80 million. Clearly these numbers of agricultural clients, to be adequately serviced, require a greater number of staff, meaning more overhead for the bank. The bank considering making agricultural loans therefore would either shy away or have to be satisfied with a lower margin per peso loaned due to the higher overhead." (Dominguez [1985]).

To service small clients, however, small banks apply different technology which is less sophisticated than that of big banks. For instance, they do not hire high-paying bank managers/loan officer as big banks do. In most cases, managers of small rural banks and informal moneylenders know almost everybody in their locality. Moreover, economic activities are less heterogeneous in rural areas than in urban areas. Less efforts will therefore have to be exerted by rural lenders in doing credit investigation. This helps bring down transaction costs of small lenders in the rural areas to an acceptable level.

Saito and Villanueva (1981) estimated transaction costs of some of the financial institutions in the Philippines. Transaction costs were broken down into administrative costs and default risk expenses. As expected, transaction costs decline as the size of the loan recipient increases (see Table III.9). Among those that catered to small-scale agriculture, rural banks appear to have the lowest transaction costs, but this is because of the special guarantee arrangement provided to them by the Central Bank which in effect reduces default risk expenses. In one of their conclusions, Saito and Villanueva pointed out that lending to small-scale sector could be feasible if the

Table III.9

Transaction Costs of Lending By Institution and By Activity and Size of Recipient (In % of Outstanding Loan in Each Category)

	Adminis- trative Costs (1)	Default Risk Expenses (2)
Small-scale agriculture:		
Rural banks	3.5	2.0
Dev. Bank of the Phils.	3.9	3.4
Private development banks	3.0	3.2
Small-scale industry:		
Dev. Bank of the Phils.	3.0	2.5
Private Development Corp. of the Phils.	3.0	3.7
Private dev. banks	4.0	2.3
Large-scale industry:		
Dev. Bank of the Phils.	0.5	1.3
Private Development Corp. of the Phils.	0.2	2.3
Commercial banks	0.4	1.7

Source: K.A.Saito and D.P.Villanueva (1981)

interest rate charged is sufficiently high to cover these costs. This readily fits into the framework of Gonzales-Vega discussed in the previous chapter. In the case of DBP which charged low interest rate to small-scale sector, cross-subsidization occurred from large - to small-scale sector. The Gonzales-Vega model predicts that this kind of arrangement generates a dead-weight loss to society. In addition, the same model predicts that the lower the interest-rate ceiling, the greater the tendency for banks to ration small borrowers. Indeed, the tendency of commercial banks to shy away from small agricultural loans can be interpreted in this manner. Even among farmers, the larger ones especially landowners and amortizing owners are given better access to credit by rural financial institutions than smaller ones (NEDA [1986]).

TBAC (1983) did similar analysis using data from six "good" rural banks, and the results are more or less the same as those obtained by Saito and Villanueva (see Table III.10).

The transaction costs of informal moneylenders reflect the real transaction costs of lending to farmers. Unlike rural banks, informal moneylenders have simple lending procedures and very minimal paper work. They are required to hire "qualified" loan officer to deal with borrowers. Therefore, their administrative costs are not artificially increased. Instead, their flexibility allows them to reduce administrative costs.

Table III.10

Transaction Costs of Formal and Informal Lenders
(In percent)

	Formal Lenders		Informal Lenders
	TBAC	Saito/Villanueva	
Administrative Costs	4.15	3.50	4.12
Default Risk Expenses	1.06	2.00	2.97
Total Transaction Costs	5.21	5.50	7.09

a/ Based on the weighted average of the cost of supervised and regular agricultural loans.

b/ Refers to rural banks' lending to small-scale agriculture.

- Sources: (1) TBAC, A study on Selected Rural Banks Participating in the Supervised Credit Programs (1983).
- (2) Katrine Anderson Saito and Delano P. Villanueva, Transactions Costs of Credit to the Small-scale Sector in the Philippines (1981).
- (3) TBAC, A Study on the Informal Rural Financial Markets in Three Selected Provinces in the Philippines (1981).

Informal moneylenders' low administrative cost can be outweighed by default risk expenses. It is to be noted that agricultural ventures have inherently higher risks. Unlike rural banks, informal moneylenders do not have insurance or special guarantee arrangement provided by the Central Bank for their loans. They are therefore bound to have higher default risk expenses, thereby causing their transaction costs to be very high. But there are other ways to reduce their default risk expenses. One example is interlinking credit to the factor and product markets.

TBAC (1981) analyzed the transaction costs of informal moneylenders (see Table III.10). Surprisingly, the actual administrative costs incurred by informal moneylenders are almost the same as those incurred by rural banks. The extra effort exerted by informal moneylenders in reducing loan defaults could have increased their administrative costs. The actual default risk expenses incurred by informal moneylenders are higher than those incurred by rural banks. They must have been catering to high risk borrowers who are not normally accommodated by formal lending institutions. However, even with these relatively higher default risk expenses, they are still low considering the inherent riskiness of agricultural ventures. In fact, the expected default risk expenses of informal moneylenders was 14.6 percent which is considerably higher than actual default risk expenses of 3 percent. This resulted in higher "extra" profits or unusual monopoly profits for informal moneylenders.

Whether informal moneylenders consistently overestimate the default rate over a period of time to produce those "extra" profits is indeed an open question. Ghate (1985) thinks that the crop in the survey year was unexpectedly and significantly better than usual, hence, the big difference between expected and actual default risk expenses. On the other hand, there seems to be some evidence showing that informal moneylenders enjoy "monopoly profits." Quinones (1982) and TBAC's A Study on the Informal Rural Financial Markets in Three Selected Provinces of the Philippines (1981) both look at the same three provinces and estimated lenders' charges in the informal market. Table III.11 measures the administrative cost and risk premium that would be needed for an informal lender to break-even (with zero opportunity cost of capital). Note that ironically, the "break-even" rate is higher for more "progressive" areas like Bulacan than more "backward" ones like Isabela mainly due to better repayment rates in Isabela.

The TBAC study calculates the annual interest rate on an informal loan in the three provinces based on "at the time the loan was granted," and "at the time the loan was actually paid" (See Table III.12). "Hidden" charges were mainly underpricing from the market price of output commodities that are used as payment in kind.

It is a little difficult to analyze the result since it gives an "ex-ante" estimate and an "ex-post" estimate. There are, however some points that will have to be raised.

Table III.11.

Break-even interest charges of Private Moneylenders (PMLs)
based on full knowledge of borrower's
repayment performance

PROVINCE	REPAYMENT RATE	ADMINISTRATIVE COST	RISK PREMIUM	BREAK-EVEN INTEREST CHARGE*
Ilocos Sur	70.0	1.78	43.62	45.4
Isabela	83.0	4.64	21.41	26.05
Camarines Sur	76.0	5.29	32.34	37.63

*Assumes that PML does not take into account a profit component
in determining his interest charges.

SOURCE: Quinones, Benjamin. Explaining Variations in Interest Rates
in Rural Financial Markets, Unpublished Master's Thesis, 1982.

Table III.12

ANALYSIS OF THE COMPONENTS OF INTEREST RATES ON INFORMAL LOANS
OF 912 FARMER-BORROWERS, 1978
(In Per Cent of the Amount of Loan)

Reference Period/ Province	Adminis- trative Cost (1)	Expected/ Actual Loan (2)	Opportunity Cost of Capital (3)	Potential/Actual Extra Profit (Loss)			Annual Interest Rate (7)
				Explicit (4)	"Hidden" (5)	Total (6) = (4) + (5)	
1. <u>At the time the loan was granted</u>							
Bulacan	2.13	18.78	15.0	(9.67)	-	(9.67)	26.24
Camarines Sur	4.41	20.89	15.0	(10.72)	-	(10.72)	29.58
Isabela	4.37	9.58	15.0	18.00	-	18.00	46.95
Three Provinces	<u>3.47</u>	<u>14.56</u>	<u>15.0</u>	<u>3.60</u>	-	<u>3.60</u>	<u>36.63</u>
2. <u>At the time the loan was actually paid</u>							
Bulacan	2.02	3.93	15.0	7.95	3.70	11.65	32.60
Camarines Sur	5.60	3.17	15.0	22.05	4.85	26.90	50.67
Isabela	4.74	1.81	15.0	47.05	14.73	61.78	83.33
Three Provinces	<u>4.12</u>	<u>2.97</u>	<u>15.0</u>	<u>22.05</u>	<u>7.76</u>	<u>33.44</u>	<u>55.53</u>
3. <u>Difference (2-1)</u>							
Bulacan	(0.11)	(14.85)	0	17.62	3.70	21.32	6.36
Camarines Sur	1.19	(17.72)	0	32.77	4.85	37.62	21.09
Isabela	0.37	(7.77)	0	29.05	14.73	43.78	36.38
Three Provinces	<u>0.65</u>	<u>(11.59)</u>	<u>0</u>	<u>18.45</u>	<u>7.76</u>	<u>26.21</u>	<u>18.90</u>

1. Quinones and the "ex-ante" estimate show high informal rates mainly due to high risk premium. But the "ex-post" result and TBAC's own results show that repayment comes late and as Quinones himself admits all uncollected loans are virtually recovered after 18 months from the date of loan release. The risk premium that is calculated for both studies seem to be grossly overestimated since it is based on repayment rates (see Table III.11). The calculation of the real cost of risk should include only those borrowers who are expected not to pay after 18 months, plus some opportunity cost for the late dues.

2. The "hidden" cost of underpricing output is significant particularly in Isabela (considered a low-income area). This does not even include the underpricing of inputs. In the ex-post estimate (assuming opportunity cost of capital is 15 percent) this hidden cost and explicit extra "profits" are quite high. If, as Quinones says almost all loans are recovered after 18 months, then the amount of extra "profits" is indeed high (unless the opportunity cost of 15 percent is grossly underestimated). The debate therefore as to whether "monopoly profits" exist in the informal sector is far from over. Table III.13 is from a TBAC study which shows that a majority of informal credit (60 percent) exceeds the borrowing cost of M-99 credit program (34.2 percent). Thirty-three percent of informal loans are

Table III.13

INDICATORS OF EXTENT OF "USURIOUS" LENDING FROM INFORMAL
SOURCES, BY VARIOUS NORMS, FULLY-PAID LOANS
(In % of No. of Loans)

	1957-58	1978-79
	Gapud ^{a/} (N = 224)	TBAC ^{c/} (N = 1,260)
I. In excess of legal rate (14%)	71.5	72.0
II. In excess of actual lending cost (22.1%)	67.1	67.9
III. In excess of anticipated cost (36.6%)	59.5	57.9
IV. In excess of farmer's borrowing cost with Bank (34.0%)	62.6 ^{b/}	60.0
V. Loans with interest rate above 75%	49.0	32.7

^{a/} Average interest rate on informal loans, excluding noninterest loans, is 126.8 percent per annum.

^{b/} Estimated from Gapud's data.

^{c/} Calculated from raw data, TBAC, A Study on the Informal Rural Financial Markets using 1,260 fully-paid loans.

Source: Sacay, Agabin, Tanchoco Small Farmer Credit Dilemma, 1981

higher than 75 percent rate of interest. This even as most analyses of the new rural financial school insists that informal credit reduces transaction costs and risk premium. The question is of course far from settled since the formal sector's rates are highly subsidized and does not reflect the true market rate of credit.

One thing, however, is clear. In more backward areas such as Isabela, repayment rates are higher and loan losses lower (see Tables III.11 and III.12). Interest rates charged, however, are higher making "extra profits" much stronger in Isabela. This supports the contention that depressed areas or low income groups are charged higher interest rates; but then not necessarily due to higher risk in default. The higher interest charged in Isabela and Camarines Sur as opposed to the more "progressive" Bulacan may point to the possibility that informal credit is more competitive in the latter province than in the more "backward" areas. This means that competition among informal moneylenders and perhaps even between formal and informal credit would exist in the more dynamic and growing rural areas. "Monopoly profits" may still characterize loans in the more depressed areas.

Indeed, the issue whether the high interest rate charged by informal moneylenders reflects their monopoly power or the high transaction costs of lending to riskier borrowers is far from being settled. This is one area where further research is needed.

Recently, a number of big private banks have intensified their lending operations in the rural areas either by opening up more branches or buying subsidiary banks operating in the rural areas. A study of their transaction costs for lending to agricultural and non-agricultural sectors is certainly of paramount importance for optimal policy intervention.

4. Rural Banks and Cost of Funds

As discussed in Chapter II, Tolentino (1986) pointed out that the existence of small banks can be explained by the fact that they can obtain the best returns on their investment by remaining in banking, given the rules of the game. This seems to be supported by the results of the TBAC studies (1983 and 1984) on the behavior of six "good" rural banks. Non-agricultural loans are the costliest type of loan since they are mainly financed by deposit funds (see Table III.14). Non-supervised agricultural loans are the second costliest type of loans since a modest proportion of it is financed by deposits and the rest by rediscounted funds at relatively higher rediscount rates. Supervised loans have the least cost since almost all of them are financed by rediscounted funds at very concessionary rediscount rate. They yielded the highest profit margins to rural banks. Understandably, rural banks concentrated on this type of loan. In 1983, 60 percent of the loan portfolio of six "good" banks were supervised agricultural loans. Non-supervised agricultural loans comprised about 30 percent. The remaining 10 percent went to non-agricultural loans. The generally tight

Table III.14

Cost of Lending, Returns on Lending and Net Margins of
Six "Good Rural Banks, 1983 and 1984

	Agricultural		Non-Agricultural
	Supervised	Regular	
A. Total Cost of Lending			
1983	8.60	11.50	13.60
1984	11.82	13.00	20.10
1. Cost of Funds			
1983	3.50	6.10	7.40
1984	4.76	7.30	13.65
2. Administrative Costs			
1983	4.24	3.82	3.18
1984	6.86	5.70	6.43
7. Risk Expenses			
1983	0.90	1.60	3.00
1984	0.20	-	0.01
B. Returns on Lending			
1983	10.0	10.3	10.50
1984	13.60	17.33	20.73
C. Net Margins			
1983	1.40	(1.20)	(3.10)
1984	1.78	0.41	0.63

Sources: (1) TBAC, A Study on Selected Rural Banks Participating in the Supervised Credit Programs (1983).

(2) TBAC, Follow-up Report on the Six "Good" Rural Banks Participating in the Supervised Credit Programs (1984)

credit situation in 1984 caused a perceptible upward change in both the cost of funds and the transaction costs of rural banks, but it did not change their cost structure. Hence, banks did not also alter the composition of their loans. There was, however, a scaling down of the volume of loans as a result of the reduced rediscounted funds.

5. Interest Rate Differentials Between Formal and Informal Loans

Before the change in rediscounting policy, the interest rate differential between the formal and informal loans was very substantial, with the latter being 4 to 7 times higher than the former, depending of course on which survey data are being referred to. For example, a TBAC study (1984) showed that informal lenders charged 76 percent per annum while rural banks charged only 14 percent per annum because of the loan rate ceiling on funds sourced by banks from the Central Bank. After the change in rediscounting policy, lending rate on rediscounted funds went up to as high as 34 percent in December 1984 (TBAC [1985]). In view of the absence of information about the informal credit market after the change in the rediscounting policy, it is not known whether the interest rate differential between the informal and informal loans has remained the same, narrowed down, or has widened, although with the interest rate liberalization, narrowing of the differential is most likely expected. If the narrowing down of interest rate differential did not occur, then perhaps the segmentation hypothesis is still

at work in the rural financial markets. This is another interesting area for research.

It should be noted here that borrowers are not interested in the nominal lending rate charged by formal and informal lenders. Rather, they are interested in access to and the effective cost of borrowing from alternative sources. This topic will be further discussed below.

6. Relationship Between Formal and Informal Lenders

How do formal and informal lenders view each other? The commonly-held view is that they are competitors. The decline in the importance of informal credit market concomitant with the proliferation of formal rural financial institutions in the 70s is oftentimes cited as evidence to support this view. But one has to closely examine the emergence of rural banks before accepting this evidence at face value. Many local moneylenders were lured by the Central Bank to establish a bank (Saito and Villanueva [1981]), so that funds that used to be directly lent to borrowers were eventually coursed through the rural banks. In certain cases, owners of rural banks were also found to be informal moneylenders (TBAC [1980]). Given also the fact that there is tremendous excess demand for credit in the rural sector and a considerable degree of segmentation, it is indeed difficult to accept the view that formal and informal moneylenders are competitors. They could be doing some complementary roles in the rural credit markets. For instance, TBAC (1985) found out that formal lenders extended bigger loans mainly for productive

purposes, while informal moneylenders lent smaller loans including consumption loans, probably to complement the credit needs of borrowers that cannot be fully met by formal lenders due to the prescribed loan ceiling and other rigid regulations that prohibit formal lenders from fully satisfying the loan demand of borrowers. Also, the same study shows that formal lenders provided farmers long-term loans (about 7 - 12 months), while informal lenders gave short-term loans (less than 7 months). Perhaps, both have carved out their own niche in the rural credit markets, sometimes complementing each other, and sometimes operating independently of each other.

The pieces of evidence we have cited above are still rudimentary. A study aimed at determining whether formal and informal lenders in the rural sector are competitors or are doing complementary roles should be done in the future in view of the significance of the results to policy making.

The link between formal and informal moneylenders has recently caught the attention of many researchers. There are various channels through which they can be linked. As already mentioned above, the rural banker/informal moneylender channel is one of them. Some informal moneylenders borrowed from their own bank to exploit extraordinary profit opportunities arising from the cheap rediscounting policy of the Central Bank (Quinones [1981]). In this case, informal moneylenders re-priced the loans so as to reflect their real opportunity cost. Thus, there would be less tendency for borrowers to misallocate borrowed funds.

The same thing was observed by Cole and Park (1983) in Korea. However, the attendant equity issue that has been raised in this regard is indeed unsettling. This adds more worries to those who espouse the "surplus" approach.

Aside from the rural banker/informal moneylender channel, Quinones has also described other channels. These are briefly summarized in the matrix below. About half of the sample respondents included in Quinones' study belonged to the upper two cells. The last cell denotes absence of relationship between formal and informal lenders.

	Depositor	Non-depositor
Borrower	1	2
Non-borrower	3	4

Rural financial institutions can innovate by mimicking the behavior of informal moneylenders. However, bank regulations prohibit them from doing so. For instance, they cannot interlink credit with the input and output markets. Another is that they cannot receive loan repayments and deposits outside the bank premises, although this was recently resorted to by some banks to improve their repayment rate in the wake of the economic crisis (TBAC [1984]). One innovative technique that has received official sanction is the strengthening of the link between formal and informal lenders, in which case the bank is the wholesale creditor and the informal moneylender, the retail creditor. The Grains Quedan Special Financing Program of the government and the

special credit program of the Planters Products, Inc., a semi-private firm, have these features. In this arrangement, the financial institution is able to reduce administrative costs and eliminates the risk of default.

Another scheme being tried by a handful of banks is the integration of credit delivery and savings mobilization. This is a scheme followed in the Integrated Rural Financing Program (IRF). The IRF Technical Committee selected ten rural banks to be conduits of IRF funds. The loan repayment rate and the results of savings mobilization have been very impressive (Tumbali [1985]). However, the criteria used in selecting pilot banks seem to be biased towards those banks which are mainly catering to "bankable" clients. The experiments could have been more useful if a wider variety of rural banks, ranging from strong to weak banks, were included.

One common denominator in these schemes is that they are government-inspired and are heavily dependent on government financial support. One has yet to examine innovative techniques which are genuinely devised by rural banks themselves and do not involve substantial government subsidies. As the government phases out its subsidies, the experience of these innovative banks can perhaps serve as a guidepost.

As mentioned at the outset, studies on rural credit focus on agricultural credit. In view of the growing importance of non-agricultural activities as a source of rural incomes, future studies should cover both agricultural and non-agricultural

lending. Perhaps, possibilities for portfolio diversification on the part of lenders and borrowers can be examined in these studies.

Savings mobilization by formal lenders is one area not well discussed in the literature. This is understandable since most banks, especially those engaged in agricultural lending, were very much dependent on Central Bank rediscounted funds. With the freeing of the interest rate and the change in rediscounting policy, savings mobilization will become an important activity of rural financial institutions. Studies should be made to examine innovative techniques applied by some rural financial institutions. Certainly, some banks have already made some adjustments in their lending and savings mobilization policies to adapt to the new policy environment.

Finally, the behavior of other types of formal lenders, like thrift banks and branches of commercial banks operating in the rural areas, should be studied. The study may focus on financial intermediation costs (i.e., costs incurred by lenders in servicing deposits and other funds, and in handling loan transactions) of various types of banks operating in the rural areas is called for. Perhaps, the model of Cuevas and Graham (1983) can be applied here to test some hypotheses that have direct bearing on financial policy. In addition, it would be worthwhile to see whether lenders really compete with each other or they operate in segmented markets.

B. Saving in the Philippines and in the Rural Sector

This section reviews empirical studies on saving behavior in the Philippines. Earlier, Tan (1980) lamented the lack of studies on saving behavior in the Philippines and in the rural sector. Since then, a few studies have appeared in the literature. Unfortunately, however, the recent literature on saving behavior did not put to rest some of the important issues raised by earlier studies. These unsettled issues will be pointed out in the course of the review.

This section is divided into three parts. The first part reviews studies dealing with the determinants of aggregate household national saving rate. The second part discusses results of studies on financial saving. The third and last part reviews studies which focus on saving in the rural sector.

1. Personal/Household Saving Rate

Net domestic savings in the national income accounts is just the difference between total income and total consumption during a particular reference period, say a year. It may come from three main groups, namely households or individuals, corporations and government. In view of the main thrust of this paper, household or personal saving rate will be given more importance. The reason is that financial innovations will have greater impact on household saving than on corporate or government saving.

Table III.15 presents the composition of net domestic savings in the Philippines for the period 1970-85. The ratio of

Table III.15

Net Domestic Savings, 1970 - 85
(In ₪M at Current Prices)

	Total Net Domestic Savings	Persons	Corpo- rations	Govern- ment	Net Domestic Savings GNP (%)	Personal Savings GNP (%)
1970	5,067 (100.0)	2,916 (57.6)	1,142 (22.5)	1,009 (19.9)	12.4	7.1
1975	17,882 (100.0)	11,074 (61.9)	3,185 (17.8)	3,623 (20.3)	15.6	9.7
1980	43,772 (100.0)	15,280 (34.9)	14,524 (33.2)	13,968 (31.9)	16.6	5.8
1985	44,844 (100.0)	8,090 (18.0)	12,076 (26.9)	24,678 (55.1)	7.4	1.4

Note: Figures in parenthesis are percent of total net domestic savings.

Source: National Income Accounts, NEDA (various years).

net domestic savings to GNP had been slowly rising. But it dropped precipitously in 1985 as a result of the economic crisis that started during the early part of the 80s. Historically, household savings comprised a major portion of total domestic savings. This pattern was broken in the 80s when the share of corporate and government savings surpassed that of household savings. About this period, the ratio of personal savings to GNP also declined. Note that in the early 80s, the Philippines encountered economic crisis. Indeed, the burden of the economic crisis fell more heavily on households.

Data from the national income accounts do not tell us which households are saving or dissaving. Such information is provided by the Family Income and Expenditures Survey (FIES). This survey is conducted rather less frequently: 1961, 1965, 1971 and 1985. Note that data on household savings generated by FIES are not directly comparable with those derived from the national income accounts. In the FIES, the sample units refer to families. Private non-profit and unincorporated institutional households are not included in the sample.

Table III.16 gives the saving rates of various income classes. The figures are based on the 1985 FIES preliminary report. Dissaving occurs among families whose average annual income is below ₱15,000. Dissavers comprise about 34 percent of the entire sample. As expected, the saving rate increases as family income increases.

Table III.16

Family Saving Rates by Income Classes, 1985

Income Classes (₱)	Philippines	Urban	Rural
Under 2,000	-0.32	-0.78	-0.21
2,000 - 3,999	-0.36	-0.86	-0.30
4,000 - 5,999	-0.22	-0.22	-0.22
6,000 - 7,999	-0.14	-0.17	-0.14
8,000 - 9,000	-0.08	-0.12	-0.07
10,000 - 14,999	-0.02	-0.07	-0.01
15,000 - 19,999	0.03	-0.02	0.04
20,000 - 29,999	0.05	0.02	0.07
30,000 - 39,999	0.10	0.08	0.12
40,000 - 59,999	0.13	0.11	0.16
60,000 - 99,999	0.17	0.15	0.23
100,000 - 249,999	0.24	0.21	0.36
250,000 - 499,999	0.32	0.33	0.24
500,000 and over	0.65	0.64	0.80
Total	0.13	0.16	0.10
Total No. of Families	95,663	36,024	59,639

Source of Basic Data: NCSO 1985 Family Income and Expenditures Survey, Philippines (Preliminary Report)

In view of our interest in rural savings, we have disaggregated the saving rates of urban and rural households. Dissaving occurs among urban families whose average annual income falls below ₱20,000. For rural families, dissaving occurs if the average annual family income is below ₱15,000. The differential cut-off income class could be due to the relatively high cost of living in urban areas compared to that in rural areas. Note, however, that about 45 percent of the rural families were dissaving compared to only 28 percent of the urban families.

One empirical regularity that can be observed from Table III.16 is that the saving rate of rural households is higher than that of urban households belonging to the same income bracket (except the income bracket ₱250,000 - ₱499,999). The same thing has been observed in India. Indeed, this has a far reaching implication. Improving rural incomes will have greater positive effect on overall saving rate than improving urban incomes. Thus, policies aimed at improving rural incomes should be pursued more vigorously. This conclusion should however be taken with great caution. So far, there is no theoretical explanation why the saving rate is higher for rural households than for urban households. This area certainly needs more research to determine factors that make the differential saving rates.

Now to studies on the determinants of personal saving rate. That income determines personal saving rate has been generally agreed upon. The controversy lies mainly on whether the personal/household saving rate is responsive to

interest rate. This is a very crucial policy issue because if the interest rate has a positive effect on the saving rate, then a high interest rate policy would be justified to increase the saving rate. The results of these studies are summarized in Table III.17. Some studies using pooled time series data are included here because they include the Philippines in the sample. Invariably, the studies include income and interest rate variables as determinants of personal saving rate. Note that the data on personal savings used in these studies come from the national income accounts. They were derived using the residual method. The FIES household saving data would have been ideal for these studies, however, sufficiently long time series data are not available because the surveys were conducted less frequently.

The earliest work on the determinants of personal saving rate is that of Williamson (1968). Individual and pooled time series data of five countries were analyzed in the study. The results show that real personal income per capita has a significant positive effect on real personal savings per capita, while real rate of interest does not have any effect on the same variable. The results have been verified by the studies of Van Atta (1971), Mejia (1979) and Tan (1984). (Tan's study which used semestral data, yielded the poorest results. Even income was found to have no significant effect on personal savings.) Interestingly, the Van Atta study covered the period when the market rates of interest were considered below the interest-rate ceilings, while the Tan study covered the period when the market rates of interest were thought to be way above the interest-rate

Table III.17

Summary Results of Studies Which Estimated a Personal Saving Function

Author(s)	Year Published	Period Covered	Type of Data	Definition of Saving Rate	Independent Variables
Williamson	1968	1950 - 64	Individual countries and Pooled time series-annual (Countries: Burma, Japan, Philippines, South Korea, Taiwan).	Real personal savings per capita.	1. Real Personal income per capita (S) 2. Real Rate of interest (NS)
Van Atta	1971	1947 - 67	Time series-annual	Real personal savings	1. Real disposable income (S) 2. Real rate of interest on savings deposit (NS)
Mejia	1979		Time series-annual	Savings ratio	1. Nominal interest rate (NS) 2. Real interest rate (NS)
Burkner	1980	1950 - 77	Time series-annual	Real personal savings per capita.	1. Real disposable income (S) 2. Nominal time deposit rate (S) 3. Real time deposit rate (S)

Table III.17 (cont'd)

Author(s)	Year Published	Period Covered	Type of Data	Definition of Saving Rate	Independent Variables
Tan	1985	1970 - 82	Time series- semestral	1. National savings ratio 2. Personal Savings Ratio	1. Gross National product (NS) 2. Real rate of interest on one-year time deposit (NS) 3. Number of branches of financial institutions (NS). 1. Gross National Product (NS) 2. Real rate of interest on one-year time deposits (NS) 3. Number of branches of financial institutions (NS)
ADB	1985	1961 - 83	Pooled time Series-annual (Countries: Bangladesh, Burma, China, HongKong, India, Indonesia, South Korea, Malaysia, Nepal, Pakistan, Philippines, Singapore, Sri-Lanka)	Gross National saving ratio	1. Rate of growth in real GNP. 2. Real rate of interest on one-year time deposit (S) 3. Rural population per rural branch of depository institutions.

Table III.17 (cont'd)

Author(s)	Year Published	Period Covered	Type of Data	Definition of Saving Rate	Independent Variables
Giovannini	1985	1962 - 72	Pooled time series-annual (Countries: Burma, India, South Korea, Malaysia, Philippines, Singapore, Taiwan)	Domestic saving ratio	1. Rate of growth in real GNP (S) 2. Real rate of interest on one-year time deposit (NS)
		1962 - 79 (larger sample period)	Pooled time series-annual (Countries: Burma, India, South Korea, Malaysia, Philippines, Singapore, Taiwan)	Domestic saving ratio	1. Rate of growth in real GNP (S) 2. Real rate of interest on one-year time deposit (NS)

Note: Some studies have other independent variables not included in the table above. S = statistically significant; NS = not statistically significant.

ceilings. This seems to indicate that Williamson's findings were robust. This is indeed disturbing to those who believe that financial liberalization can greatly improve the saving rate in LDCs.

Burkner (1980) re-examined the saving function in the Philippines. He used a longer time period, 1950-77, which included the years when the usury legislation was not operative and the years when it placed an effective limit on interest rate charged. Burkner used the rate of interest on time deposits instead of the rate of interest on savings deposits which Van Atta used. Tan used the rate of interest on time deposits in her study, but she used semestral data. Burkner's results show that an increase in the interest rate level, either in nominal or in real terms, has a significant positive effect on the level of personal savings. This finding contradicts the results provided by the studies mentioned earlier. It seems that results of testing the hypothesis regarding the interest-rate elasticity of personal saving rate are sensitive to the length of the data series, the interest rate to be used and to the type of time series data, i.e., whether semestral or annual.

Fry (1978), a strong supporter of the financial liberalization approach advanced by McKinnon, tested a saving function using pooled time series data of seven Asian countries, including the Philippines, for the period 1962 - 72. The study has been expanded to include a total of fourteen Asian countries

covering the period 1961 - 83. The results are incorporated in the ADB (1985) report. Because of the similarity of the Fry and ADB studies, only the results of the latter are reported in Table III.17. To reduce the problem of comparability of data series among sample countries, gross domestic savings were used in the ADB study. In general, results support the financial liberalization view that higher real deposit rates of interest directly raise the national saving rate. Increased accessibility of depository institution branches in rural areas has similar effect on the national saving rate. However, the magnitudes of the effect of these variables on national saving rate are relatively small.

Recently, Giovannini (1985) verified the results of Fry's study. His conclusions could apply to ADB's study as well. He argued that the empirical success of the high interest-rate elasticity hypothesis can be traced down to the presence of cases of financial reforms in the sample. He then re-estimated Fry's model but excluded Korea's 1967 and 1968 observations. The reason for their exclusion is that the observations from the two years following the Korean financial reform of 1965 have disproportionately large influence on the estimated parameters. Giovannini's results have confirmed his suspicion that with the exclusion of the two observations, interest rate has no significant effect on the saving rate. He tried to check whether his results are robust by lengthening the data series from 1962 - 72 to 1962 - 79. The same results hold with the enlarged sample size.

The conflicting results of the studies reviewed above suggest that the issue regarding the impact of an increase in interest rates on total savings still remains unsettled, at least in the Philippines. In view of the significance of the saving function in policy making, more studies are called for. These studies should sort out those factors that produce inconsistent results. In addition, a study should be made to explain the differential saving rates between rural and urban households belonging to the same income bracket.

2. Financial Saving

There are various forms of financial instruments with varying yield, risk, maturity, and degree of liquidity. Among them are cash, deposit instruments offered by banks, stock, bonds and insurance claims. The bonds and equities markets are not well developed in the Philippines (see Lamberte [1985]). Thus, aside from cash, only bank deposits remain an important financial instrument in the country. A sustained and significant rise in bank deposits is an indication of the success in financial intermediation.

The banking system in the Philippines has been dominated by commercial banks. Although there are only 34 commercial banks, three-fourths of the total assets of the banking system belong to them. In contrast, the Rural Banking System, which consists of about one thousand rural banks spread all over the country, owns only 2 percent of the total assets of the banking system.

Is financial intermediation a success in the Philippines? The figures in Table III.18 provide an unequivocal negative answer. The share of bank deposits to total assets of the banking system has been declining since 1960. In 1984, deposits comprised only 40 percent of the total assets, down from 58 percent in 1960. It appears that intermediation of savings has been weakening. This has occurred despite the phenomenal growth of banking institutions during the same period. Studies which examined this issue were unanimous in pointing out Central Bank policy as the culprit for the failure in financial intermediation. In the first place, interest rates were controlled. In addition, the Central Bank provided liquidity credits to banks at very low rediscount rate. This made Central Bank funds a lot cheaper than deposit funds. Thus, most banks were transformed into mere conduits of Central Bank funds.

Several studies have examined the determinants of financial saving. For lack of time series data on household financial savings, bank deposits were used by these studies as proxy for household financial savings. The weakness of this proxy is that it includes corporate, institutional households, and government deposits which are held mainly for transactions purposes. The results of these studies are summarized in Table III.19. Almost invariably, income has a significant positive effect on financial saving. Van Atta (1971) applied the "interest-rate elasticity" approach and found that nominal rate of interest on savings deposits has a significant and positive effect on total savings

Table III.18

Share of Deposits to Total Assets,
Banking System 1955 - 1984

Year.	%
1960	58
1965	50
1970	46
1975	34
1980	39
1984	39

Source: Central Bank Statistical Bulletin, various years.

Table III.19

Summary Results of Studies Which Estimated a Financial Saving Function

Author(s)	Year Published	Period Covered	Type of Data	Definition of Saving Rate	Independent Variables
Van Atta	1971	1947 - 67	Time series-annual	Total Savings Deposits (savings+time+postal deposits)	1. National income (S) 2. Nominal rate of interest on savings deposit (S)
Burkner	1980	1965, 1970 1975, 1977	Cross-section of commercial banks	Total Deposits (all deposits)	1. Number of offices of each bank (S)
Sicat	1984	1970-81	Time series-annual (regional)	Real financial saving (savings +time deposits)	1. Real regional gross national product (S) 2. Weighted real interest rate (S/NS) 3. Regional density of banking institution (NS)

Table III.19 (cont'd)

Author(s)	Year Published	Period Covered	Type of Data	Definition of Saving Rate	Independent Variables
Tan	1984	1970 - 82	Time series- semestral	1. M2/GNP 2. Time + Savings deposits/ GNP	1. Semestral real gross national product (NS) 2. Real rate of interest on one-year time deposits (NS) 3. Number of offices of financial institutions (NS). - same variables and findings as above -
ADB	1985	1961 - 83	Pooled time Series-annual (Countries: Bangladesh, Burma, China, HongKong, India, Indonesia, South Korea, Malaysia, Nepal, Pakistan, Philippines, Singapore, Sri- Lanka)	Rate of change in per capita real money holdings (M3)	1. Rate of change in per capita real permanent income (S) 2. Real rate of inte- rest on one year time deposits (S)

Note: S = statistically significant; NS = not statistically significant

deposits. This finding is supported by ADB's (1985) results. The ADB model used pooled time series data of 14 Asian countries, rate of change in per capita real money holdings (M3) as the dependent variable, and real rate of interest on one-year time deposits as one of the explanatory variables.

Tan (1984) estimated a financial saving function using semestral data for the period 1970-82. Both the "interest - rate elasticity" approach and "institution-elasticity" approach were incorporated in the model. The alternative dependent variables were M2/GNP and the (time plus savings deposits)/GNP. Semestral real GNP, real rate of interest on one-year time deposits, and number of offices of financial institutions were the explanatory variables. The results were disappointing. None of the explanatory variables has a significant effect on financial saving. This may be taken as a rejection of both the "interest-rate elasticity" and the "institution-elasticity" hypotheses.

Sicat (1984) tried three specifications of the financial saving function. These were of linear, semi-logarithmic and double-logarithmic forms using annual time series data covering the period 1970-81. The results generally support the findings of Tan. Sicat further tested his model using regional data. With regard to the "interest-rate elasticity" hypothesis, the results were mixed. For some regions, a significant positive relationship between regional real financial saving and real rate of interest exists, while for others, the relationship is not significant. With regard to the "institution-elasticity"

hypothesis, almost all regions show an insignificant relationship between regional real financial saving and regional banking densities.

The results of Van Atta and those of Tan and Sicat seem to be contradictory with one another. However, one must keep in mind that the Van Atta study used time series data when the interest-rate ceilings were virtually inoperative, while the Tan and Sicat studies used time series data when the interest-rate ceilings became effective. Between 1970-82, the real rate of interest on time deposits was either negative or very low. Thus, savers were not attracted to deposit instruments. This was aggravated by the seeming lack of interest on the part of banks to mobilize savings. The reason is that Central Bank funds were a lot cheaper than deposit funds. The profit opportunities arising from the favorable rediscounting policy of the Central Bank could have induced an unwanted proliferation of banking institutions. This could partly explain why the "institution elasticity" hypothesis is rejected.

The other reason for the rejection of the institution elasticity hypothesis could be due to specification error. Burkner (1980) pointed out that the increase in the branch network is highly correlated with income. The Tan and Sicat studies included both explanatory variables in their models. Interestingly, the ADB study did not include the accessibility variable in its financial saving function, although it was included in its national saving function. In order to exclude the influence of income, Burkner regressed total bank deposits

with the number of bank offices using cross-section data for the years 1965, 1970, 1975, and 1977. His results confirm the "institution-elasticity" hypothesis. He combined the time series-cross section data for 1965 and 1970 together and 1970 and 1975 together and did separate runs. He found that the elasticity coefficient has been declining. In particular, the opening of one additional office during the period 1965 to 1970 led to additional deposits of ₱7 million in total deposits whereas during the period 1970 to 1975, it would add only ₱3.44 million in total deposits. Both Burkner and Sicat pointed out that the increase in the number of offices especially in the 70s was not accompanied by a more even regional distribution of offices. Thus, accessibility was not widely spread to rural areas although a phenomenal growth in branch network had occurred. This is hardly appealing to rural folks who have fewer investment alternatives for their surplus funds.

The main lesson that can be drawn from the results discussed above is that the use of single equation model to test the income elasticity, interest-rate elasticity and institution-elasticity hypotheses is not warranted. Perhaps, simultaneous equation model can be explored by future studies.

Using his "financial instrument" approach, Burkner (1980) also examined the impact of other characteristics of financial instruments other than yield and accessibility on the financial saving rate. Concentrating on bank deposits, he noted that the risk of deposits due to bank closure is real. However, the

deposit insurance scheme which covered about 98 percent of all depositors, especially small ones, has considerably reduced the risk due to bank failure.

With regard to information, majority of the people were found to be aware of the existence of banks and the deposits they offer. However, small depositors do not have access to high-yielding financial instruments due to the minimum deposit requirements. Only big depositors, who do not need the information drive, respond to interest rate changes. Therefore, the observed increase in the volume of deposits towards the second half of the 70s could not be due to the vigorous information drive launched by the government, but rather due to other factors, such as high interest rate, expansion of branch network and improvement in the standard of living.

Product variation is still wanting in the deposit instruments offered by banks. Some financial instruments, like education trust plans that include insurance coverage, special credit terms, etc., have recently emerged, but they are accessible only to large savers because of the high minimum investment requirement.

3. Saving in the Rural Sector

There are at least two excellent studies dealing with the pattern and determinants of household saving in the rural sector. These are the TBAC-UPBRF (1979) and the TBAC-UPBRF (1981) studies. Both extracted information from farm households

themselves. The TBAC-UPBRF (1979) study analyzed data from a sample of 1,215 farm households. The survey was conducted in 1977. On the other hand, the TBAC-UPBRF (1981) utilized the BAECON farm record keeping data of 127 respondents over a three year period, 1976 - 1978. The operational aspect of the BAECON farm record keeping project is discussed in Rodriguez et al (1979). Some of the salient points of these two studies have been incorporated in Sacay et al. (1985).

The TBAC-UPBRF (1981) study provides very detailed saving patterns of farm households. The income class below which dissaving occurred had been rising from the ₱2,001 - 3,000 in 1976 to the ₱5,001-7,500 income bracket in 1978. Interestingly, the proportion of households who had negative savings had been increasing from 24 percent to 37 percent during the same period. The average propensity to save (APS) ranged from 13 to 18 percent.

Looking at savings by tenure groups, the results show that amortizing owners have the highest APS (between 27 to 38 percent), followed by full owners (see Table III.20). As expected, share tenants have the lowest APS. The APS was observed to increase with farm size (see Table III.21). This is to be expected since household income increases with the size of landholdings.

A simple Keynesian model was fitted to the cross-section data. The value of the marginal propensity to save (MPS) ranges between .24 and .50. The unusually high MPS for 1978 could be due

Table III.20

Average Propensity Save by Tenure Group

Tenure Group		1976	1977	1978
1.	Share tenant	13.4	8.5	0.6
2.	Leasehold	-	19.9	10.2
3.	Amortizing Owner	28.1	35.6	26.9
4.	Full Owner	21.1	16.8	19.5
5.	Combination	18.8	20.2	15.1
TOTAL SAMPLE		13.5	18.4	14.1

Source: TBAC-UPBRF(1981)

Table III.2i

Average Propensity to Save and Farm Size
(In percent)

Farm Size (has.)	1976	1977	1978
0 - 1.0	3.5	9.7	-
1.1 - 2.0	4.6	27.8	0.6
2.1 - 3.0	16.3	19.0	14.2
3.1 - 4.0	17.7	29.4	25.0
4.1 -	18.0	9.9	21.8

Source: TBAC-UPBRF(1981)

to the good harvest in that year. The independent variable, household income, was disaggregated into agricultural and non-agricultural income. Agricultural income constitutes 53, 57, and 60 percent of total income for the years 1976 to 1978, respectively. Results show that the MPS out of agricultural income is higher than the MPS out of non-agricultural income. The probable reason given was that income from non-agricultural activities is usually liquid, and therefore ready to spend.

The permanent income hypothesis was also tested using the same data set. The findings consistently indicate that the MPS out of transitory income is higher than the MPS out of permanent income.

Other explanatory variables included in the model did not perform as expected. Specifically, interest rate did not have a statistically significant effect on household saving. This result should not be taken as an outright rejection of the "interest-rate elasticity" hypothesis. In the first place, the interest rate used which is the weighted average interest rate on the loans taken out by each respondent may not necessarily represent the return on saving. It is a variable that most likely affects the borrower. Moreover, cross-section data would not yield enough variability in interest rate across sample units, especially if the rate is administratively fixed. Note that in 1977, the deposit and loan rates were still administratively fixed by the Central Bank. In short, it is very

hard to arrive at definitive conclusion about the "interest-rate elasticity" hypothesis if the data used are cross-section.

The TBAC-UPBRF (1979) study examined the saving behavior of farm households in a much broader context than the TBAC-UPBRF(1981) study. Aside from testing the Keynesian hypothesis, the Permanent Income hypothesis, and the "interest-rate elasticity" hypothesis as was done in the TBAC-UPBRF (1981) study, the TBAC-UPBRF (1979) study also investigated the impact of attitudinal factors on household saving behavior. The most interesting result is that APS is positively correlated with the desire to purchase seeds and/or fertilizers. This may reflect the greater role of self-financing in the rural areas. Other motives for saving, such as for emergencies, children's education, old age, etc., which are usually mentioned as the primary motives for saving are not correlated with the APS.

Aside from analyzing household saving behavior in general, both studies also examined the pattern and determinants of financial saving. The TBAC-UPBRF (1981) study noted that financial assets accounted for a mere 2 percent of total assets. Financial assets consisted only of cash, bank deposits and loans/receivables. Bank deposits accounted for about 40 percent of total financial assets. However, only 24 to 30 percent of total farm households had bank deposits in any given year. Although it was revealed that high income farm households tend to save money with the bank. Nonetheless, a significant proportion of low-income farm households were found to have positive balances with the bank.

The "interest-rate elasticity" hypothesis was tested by regressing bank deposit balances of farm-households with income, interest rate (again, proxied by the weighted average loan rate) and other explanatory variables. Only income was found to have a significant positive effect on bank deposit balances. Again, this cannot be taken as an outright rejection of the "interest-rate elasticity" hypothesis for the same reasons cited above.

The TBAC-UPBRF (1979) went further by examining the effect of non-economic and attitudinal factors on the level of bank deposits. It is revealed that a significant proportion of farm households were ignorant of the true functions of financial institutions. Specifically, many farm households did not know that financial institutions in their locality also offer deposit instruments aside from lending. This is in contrast with what Burkner (1980) claimed. Average educational level of household was found to be strongly associated with the level of bank deposits. Interestingly, those who have larger degree of confidence in the banking system tend to have higher level of bank deposits.

One of the strengths of the TBAC-UPBRF (1979) study is that it was able to cross-check the perceptions of farm households regarding saving with those of rural bankers. Rural bankers pointed out increasing income levels as the most important determinant of the level of bank deposits, followed by promotional activities of banks and safety of deposits and/or stability of the bank in that order. Note that only 5 percent of

the total responses mentioned interest rate as an important determinant. Caution should be exercised in taking this as a support for rejecting the "interest-rate elasticity" approach. It should be noted that during the survey, interest-rate ceilings on deposits were still in place. Since bankers could not alter the interest rate on deposits, they therefore looked for non-price mechanisms to attract deposits. This could be one of the reasons for the low response rate.

Most rural bankers felt that the promotional scheme devised by the government to inculcate saving habit among school children would have no immediate impact on savings. Such program would have short-run effect if it were addressed instead to farm households.

The "institution-elasticity" hypothesis was indirectly alluded to in the TBAC-UPBRF (1979) study. The role of rural financial institutions and credit union^s in raising financial saving was analyzed. The general impression that one can get from the results of the said study is that the presence of these financial institutions in the rural areas has hardly raised financial savings of farm households. The "forced saving schemes" showed potential for raising financial deposits, but the implementation scheme still leaves much to be desired.

The two studies discussed above have provided us a wealth of information regarding saving in the rural areas. As pointed out by Sacay et al (1985), "savings potential not only exists in rural areas; a majority of farmers, in fact, do save." However,

most of these savings are held in physical form, while only a little in financial form.

Sacay et al. do not believe that higher rates on savings and time deposits would increase financial saving rate. To them, the empirical evidence rejecting the "interest-rate elasticity" hypothesis seem to be convincing. However, the pieces of empirical evidence they have cited have not gone unchallenged. There is no need to discuss them here again since they were already thoroughly discussed earlier. It may suffice to say that the issue regarding the responsiveness of saving, in general, and financial saving, in particular to changes in interest rate is far from being settled.

There is great potential for mobilizing financial savings in the rural areas so long as the price for saving in financial terms is right. Receipts and disbursements are not usually synchronized especially among farmers. Specifically, receipts usually exceed disbursement during harvest season, and the reverse is true during planting season. Although at the end of the year, some farmers become net dissavers, surpluses can however be realized during certain months of the year. These surpluses can be transformed into financial savings if financial institutions offer financial instruments whose features suit the farmers' preferences and are accessible to them. Otherwise, farmers hang on to physical assets, like rice inventory. Perhaps, Burkner's "financial instrument" approach can be applied to induce surplus units to save in financial form.

The possibility of mobilizing savings of farmers is shown in the TBAC-UPBRF (1979) study. When asked in what months they are likely to save, a significant proportion of farmer-respondents pointed out the months of October, November, and December (see Table III.22). These are harvest months. Interestingly, variations can be observed in the choices of months when farmer-respondents were classified by province. This shows the potential for moving surpluses from one area to another in the rural sector. This is a role that can be efficiently played by financial institutions.

The TBAC-UPBRF (1981) could have given us a more detailed information on cash flow of farm households, perhaps on a monthly basis. However, only the net position of farm-households at the end of the year was analyzed. It might be worthwhile to go back to the data and analyze the monthly cash flow of farm-households. This would give us a better understanding of the saving behavior of farm-households.

Studies on saving behavior in the rural sector concentrated on farm households. However, non-farm enterprises/households in the rural areas are as important as farm households. And yet, their saving behavior has not been analyzed. This certainly does not give us a good picture of the saving pattern in the rural sector. Note that the cash flow pattern of non-farm households could differ from that of farm-households with whom they have forward and backward linkages. As Meyer and Alicbusan (1984) pointed out, heterogeneity among households in the rural

Table III.22
Months Farmers are Likely to Save

		TOTAL SAMPLE	NUEVA ECIJA	DAVAO	ILOILO
		%	%	%	%
January	Yes	9.5	12.2	4.0	8.2
	No	90.5	87.8	96.0	91.8
February	Yes	7.2	5.9	7.1	9.2
	No	92.8	94.1	92.9	90.8
March	Yes	15.6	12.2	33.8	11.9
	No	84.4	87.8	66.2	88.1
April	Yes	19.9	24.6	38.4	3.7
	No	80.1	75.4	61.6	96.3
May	Yes	8.6	9.1	11.1	6.7
	No	91.4	90.9	88.9	93.3
June	Yes	4.0	4.6	5.6	2.5
	No	96.0	95.4	94.4	97.5
July	Yes	1.3	1.3	3.0	0.5
	No	98.7	98.7	97.0	99.5
August	Yes	3.1	2.8	8.1	1.2
	No	96.9	97.2	91.9	98.2
September	Yes	8.9	5.9	24.2	6.0
	No	91.1	94.1	75.8	94.0
October	Yes	27.2	12.4	30.8	48.1
	No	72.8	87.6	69.2	51.9
November	Yes	29.7	36.5	35.9	16.4
	No	70.3	63.5	64.1	83.6
December	Yes	34.9	49.7	9.6	24.8
	No	65.1	50.3	90.4	75.2

Source: TBAC-UPBRF (1979).

areas (in the sense that they have different economic activities, and hence, different cash flow pattern) could provide opportunities for financial intermediation even in the same locality. Thus, future studies on saving behavior in the rural sector should include as much as possible both farm and nonfarm enterprises/households. Financial institutions can more easily produce those kinds of financial instruments suggested by Burkner if given adequate information about the potentials of rural households to save.

Financial liberalization and correct financial policies may improve the financial savings picture, but part of the problem is the impoverished situation of many areas which discourages the rise of financial services. Policies to increase agricultural incomes and to promote rural dynamism may be necessary because: 1) this will encourage financial institutions to proliferate and compete for farmers' savings and 2) increased monetization will occur as incomes increase. The development of cash crops will favor financial savings over other types of assets.

As empirical evidence show, increased incomes will mean increased total savings. This is indeed vital because 1) even if the rural poor do save, a sizeable portion of them are dissavers, and 2) most data show that the higher the incomes group, the higher the saving rate. This of course is expected as part of some kind of Engel's Law.

C. Behavior of Borrowers in the Rural Sector

The low income position of most of our farmers may explain why the formal sector has always lagged behind the informal sector as a source of credit to the small farmers. Table III.23 shows most studies indicate that farmer-borrowers have always preferred informal sources of credit except during the period of the M-99 program in the mid-seventies.

This preference for informal sources of credit, and perhaps, the formal sector's aversion to lending to small farmers, is a reflection of the depressed incomes and lack of dynamism in the rural areas. The TBAC, Small Farm Indebtedness Survey (SFIS, 1984) reveals that total dropouts from the formal system accounted for 60 percent of all farmers with any formal credit experience. Around one-third of the total number of respondents have availed of formal loans, but in 1981-82, only 10 percent were still availing of formal loans. Share tenants ranked first among the dropouts and proportionately more dropouts are small farmer operators.

It should be noted that many of the dropouts pointed to high arrearages as the single most important reason for dropping out. The section on M-99 will detail the main causes of the high defaults in the formal sector. Other complaints such as burdensome requirements and delayed releases also figure

Table III.23

SUMMARY OF STUDIES INDICATING EXTENT OF BORROWING FROM
FORMAL AND INFORMAL SOURCES^{a/}

1954-55	de Guzman (1957)	2,411 loans	12.0	88.0
1957-58	Gapud (1958)	256 loans	10.0	90.0
1957-58	Sacay (1961)	916 loans	13.0	87.0
1960-61	BCS (1963)	1,679,000 loans	7.8	92.2
1967-70	Mangahas (1975)	151 borrowers	11.9	88.1
1970-71	Mangahas (1975)	297 borrowers	20.9	79.1
1969-70	Almario (1970)	138 loans	37.7	62.3
1969-70	Balagot (1974)	134 borrowers	21.6	78.4
1973	DA (1974)	620 loans	51.3	48.7
1973-74	PCARR-Bacon (1974)	3,304 loans	92.2	7.8
1974	Cigaral (1977)	421 borrowers	94.0	6.0
1975-76	DA			
	Iloilo (Feb. 1977)	341 loans	82.7	17.3
	Ilocos (Jan. 1977)	703 loans	67.6	32.4
	Zamboanga (April 1977)	551 loans	74.6	25.4
1976	DA (1976)	268 farmers	17.2	82.8
1977	UPBRF (1977)	1,079 loans	36.9	63.1
1977	DA (1977)	405 farmers	5.2	94.8
1977	TBAC (1978)	656 borrowers	25.8	74.2
1978	DA (1978)	338 farmers	3.8	96.2
1978	TBAC (1981)	2,110 loans	17.4	82.6
1979-80	NIA-SGV (1980)	299 farmers	20.0	80.0
1981-82	TBAC (1984)	871,600 loans	40.2	59.8
		626,300 farmers	34.0 ^{b/}	58.7 ^{b/}

^{a/} Data comparability is limited by differences in sampling.

^{b/} Some 7.3 percent of the borrower-respondents tapped both the formal and informal credit sources.

Source: Sacay, Agabin and Tanchoco. Small Farmer Credit Dilemma, 1985.

prominently. All these point to the lack of suitability of the present formal system to the needs of small farmers. The policy implications here are clear: 1) macro policies should be adopted to improve incomes of farmers; and 2) changes in the banking policies of the formal sector should be introduced to answer the needs of the small farmers.

One of the adjustments the formal system would have to do is to accommodate small-sized loans. Table III.24 shows that in the 1981-82 survey, informal loans is far better in servicing small loans (P50-999) which comprise practically half the number of all loans. The big demand for small-sized loans gives informal loans a distinct advantage.

Table III.25 also shows that a bigger chunk of loans are for production. Household expenses comprise the next most important use of credit fund. Again, the flexibility of the informal credit system allows it to serve more of the household need of the small farmer than the formal sector.

The priority that farmer-borrowers put on informal credit services can be seen in Table III.26. Informal credit has a higher repayment rate, and a higher percentage of fully paid borrowers on matured loans. Borrowers from the informal sector, however, has a higher past-due ratio than in the formal sector. This means that arrears in informal credit extends through a longer period. The higher repayment rate in the informal system reflects also the effects of interlinked markets and better

Table III.24

DISTRIBUTION OF LOANS, BY SIZE, BY CREDIT SOURCE,
ALL REGIONS, CROP YEAR 1981-82

Loan Size Classes (₱)	Formal		Informal		All Loans	
	Number of Loans	% Distri- bution	Number of Loans	% Distri- bution	Number of Loans	% Distri- bution
50 - 999	115	17.3	913	62.5	1,028	48.4
1,000 - 1,999	210	31.6	270	18.5	480	22.6
2,000 - 2,999	118	17.7	113	7.7	231	10.8
3,000 - 5,999	145	21.8	217	8.7	272	12.8
6,000 - 9,000	46	6.9	25	1.7	71	3.3
10,000 and above	31	4.7	13	0.9	44	2.1
Total	<u>665^{a/}</u>	<u>100.0</u>	<u>1,461^{b/}</u>	<u>100.0</u>	<u>2,126</u>	<u>100.0</u>
Average Loan Size (₱) ^{c/}		3,642		1,228		1,983

^{a/} Excludes 3 formal loans with unspecified amount.

^{b/} Excludes 2 informal loans with unspecified amount.

^{c/} Reported averages adjusted for missing values.

Source: TBAC, Small Farm Indebtedness Survey, June 1986.

Table III.25

PERCENTAGE DISTRIBUTION AND AVERAGE LOAN
 SIZE, BY PURPOSE, BY CREDIT SOURCE,
 ALL REGIONS, CROP YEAR 1981-82

Loan Purpose	Formal		Informal		All Loans	
	Percent Distri- bution	Average Loan Size (₱)	Percent Distri- bution	Average Loan Size (₱)	Percent Distri- bution	Average Loan Size (₱)
Purely production expense	73.8	2,819	56.2	1,472	61.7	1,976
Purely household expense	4.5	2,210	22.3	721	16.7	846
Purchase of farm equipment/ investment	9.5	8,446	4.7	1,498	6.2	4,814
Processing of produce	0.2	4,000	0.1	300	0.1	2,150
Investment in other business	1.6	7,527	2.0	473	1.9	2,413
Household expense/ farm investment	0.5	48,667	0.6	722	0.5	12,708
Production expense with farm investment	3.6	3,634	2.1	772	2.6	2,021
Production and households expenses	4.2	2,961	5.9	1,333	5.4	1,733
Others	1.6	1,925	2.3	1,402	2.1	1,533
Don't know	0.5	5,130	3.8	732	2.8	1,007
Total	<u>100.0^{a/}</u>	<u>3,642</u>	<u>100.0^{b/}</u>	<u>1,228</u>	<u>100.0</u>	<u>1,983</u>

a/ Excludes 3 formal loans with unspecified amount.

b/ Excludes 2 informal loans with unspecified amount.

Table III.26

PROPORTION OF FULLY PAID BORROWERS, AVERAGE REPAYMENT RATE
AND PAST DUE RATIO, BY CREDIT SOURCE,
CROP YEAR 1981-82

	Credit Source		Total
	Formal	Informal	
No. of borrowers	598 ^{c/}	1,159 ^{a/}	1,699
No. of borrowers with matured loans ^{a/}	355	747	1,111
% fully paid	56.1	81.3	73.1
% with past due	43.9	18.7	26.9
Ave. repayment rate ^{a/} (%)	67.5	87.2	77.8
Ave. past due ratio ^{b/} (%)	30.0	48.0	32.9
For CY 1981-82 loans only	11.9	22.2	13.8
For loans prior to CY 1981-82 only	50.6	95.2	56.1
Ave. Amount Past due ^{a/} (₱/person)	1,060	512	801

^{a/} Refers to matured CY 1981-82 loans only.

^{b/} Unless otherwise classified, refers to all outstanding loans, as of end CY 1981-82 regardless of dates when the respondents borrowed.

^{c/} Includes 58 mixed borrowers.

Note: See Annex Table 11 for the regional breakdown.

collection efforts brought about by personal contacts between lender and borrower.

It has been shown in many studies (including the SFIS) that formal borrowers are those with the higher income levels. Within the formal system, it is shown (as in the section concerning the M-99) that more of the lower-income farmers are the defaulters. But the above information complicates the picture. The informal borrowers now have lower incomes and smaller land sizes but they have better repayment rates than their counterparts in the formal sector. This, therefore, accounts for the SFIS result which shows that for the formal and informal sectors taken together, there is no difference in the repayment rates of large and small farmers. It can also account for the SFIS observation that farmers in other cropland areas (which use more of informal loans) performed better in terms of repayment than their counterparts in paddy-irrigated areas (which use relatively more of formal loans).

TBAC (1981) has studied 34 farmers for one crop-season (February-July, 1979) employing intensive record-keeping. The results show clearly that surplus and borrowings have monthly patterns which policy makers should be aware of. Tables III.27a, III.27b, and III.27c show the past surplus (deficit) monthly income, expenses and surplus (deficit) of the respondents broken down into leaseholders, full owners and CLT holders. Tables III.28a to III.28c show similar figures for farms below 1.5 hectares, farms from 1.5 hectares to 3 hectares, and farms above

Table III.27a
AVERAGE INCOME AND EXPENSE FLOW OF A LEASEHOLDER

	February	March	April	May	June	July
Carry-over Balance	290	-1,085	-1,386	873	1,750	2,277
Total Income	453	523	1,268	5,524	2,317	3,905
Total Expense	1,828	824	755	2,901	1,790	1,272
Balance	-1,085	-1,386	-873	1,750	2,277	4,910

Table III.27b
AVERAGE INCOME AND EXPENSE OF A FULL OWNER

	February	March	April	May	June	July
Carry-over Balance	804	190	-243	-201	3,469	4,435
Total Income	1,127	873	1,117	6,642	2,789	2,617
Total Expense	1,841	1,306	1,075	2,972	1,823	1,519
Balance	190	-243	-201	3,469	4,435	5,535

Table III.27c
AVERAGE INCOME AND EXPENSE FLOW OF A CLT
HOLDER

	February	March	April	May	June	July
Carry-over Balance	2,263	615	-180	-257	2,010	2,426
Total Income	690	292	885	4,778	2,230	8,788
Total Expense	2,338	1,087	962	2,511	1,814	1,953
Balance	615	-180	-257	2,010	2,426	9,261

Table III.28a
AVERAGE INCOME AND EXPENSE FLOW FOR FARMS
BELOW 1.5 HECTARES

	February	March	April	May	June	July
Carry-over Balance	554	-372	-683	-723	2,599	2,216
Total Income	467	405	803	5,470	1,208	2,998
Total Expense	1,393	716	843	2,148	1,591	1,127
Balance	372	-683	-723	2,599	2,216	4,087

Table III.28b
AVERAGE INCOME AND EXPENSE FLOW FOR FARM
1.5 to 3.0 HECTARES

	February	March	April	May	June	July
Carry-over Balance	860	-788	-1,181	-586	2,423	2,966
Total Income	344	541	1,400	5,306	1,811	3,900
Total Expense	1,992	934	805	2,297	1,268	1,352
Balance	-788	-1,181	-586	2,423	2,966	5,514

Table III.28c
AVERAGE INCOME AND EXPENSE FLOW FOR FARMS
ABOVE 3.0 HECTARES

	February	March	April	May	June	July
Carry-over Balance	1,779	1,373	816	596	3,314	6,143
Total Income	1,653	591	698	6,103	4,437	9,345
Total Expense	2,058	1,148	918	3,385	1,608	2,130
Balance	1,373	816	596	3,314	6,143	13,358

3 hectares. For all types of farmers (except those with more than 3 hectares for all months and for full owners and CLT holders' position in February, the planting and growing months (February-April) are deficit months. Harvest months (May-July) are surplus months. The level of borrowings made reflects more or less the surplus or deficit position of the farmers. The biggest borrowings are made in February, the planting season; borrowings decline after this even if deficits increase. It is a fact that most informal lenders (particularly palay traders) provide credit funds during the start of the planting season so that the biggest borrowings are made during this time. Harvest time shows the smallest level of borrowings with some slight increase in the last month of July perhaps timed in preparation for the next planting season.

The same study also studies repayment patterns and capacity to pay the farmers. Figures III.1 to III.3 show the graphs for repayment, cumulative current loan outstanding and total borrowings for leaseholders, full owners and CLT holders, respectively. The graphs show clearly that borrowings are highest during the planting season and lowest during the harvest season. The repayment scheme has an opposite pattern and is concentrated during the harvest season.

As to the capacity to repay the debt, the study shows that carry-over obligations comprise a significant amount about 75 percent of the total borrowings made during the season. The study also shows that based on net income, all farmers in all

Figure III.1

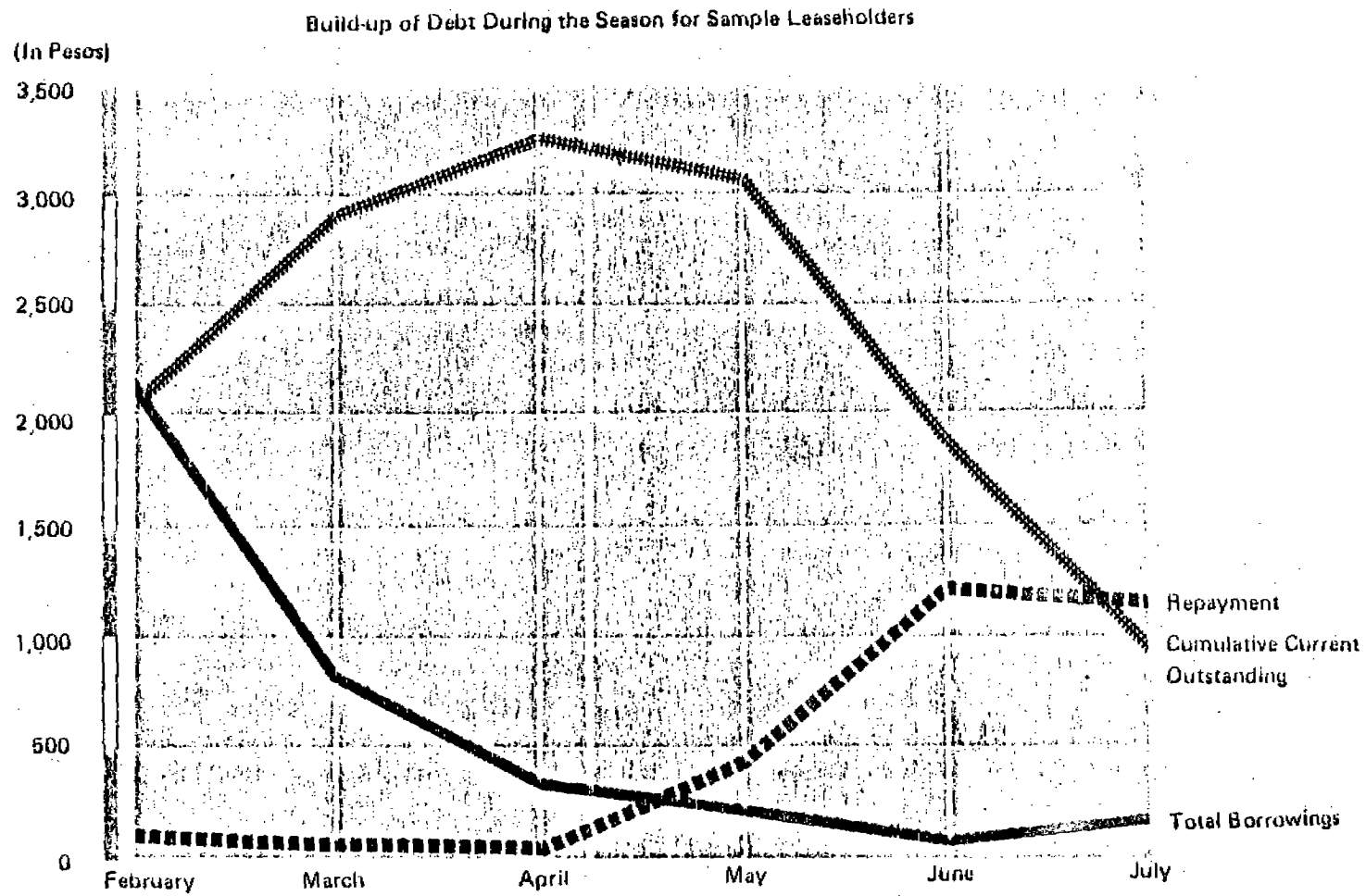


Figure III.2

Build-up of Debt During the Season for Sample Full Owners

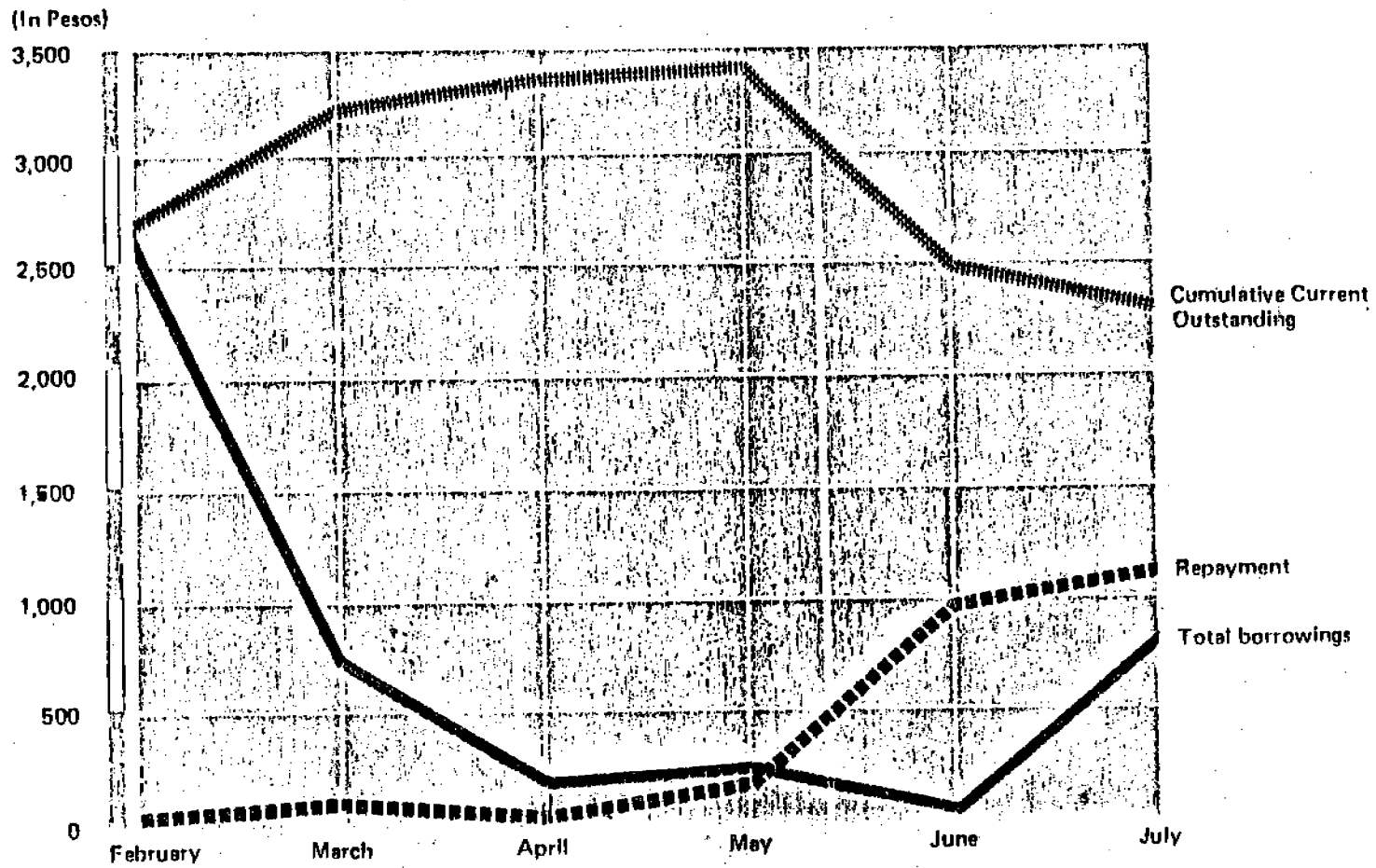
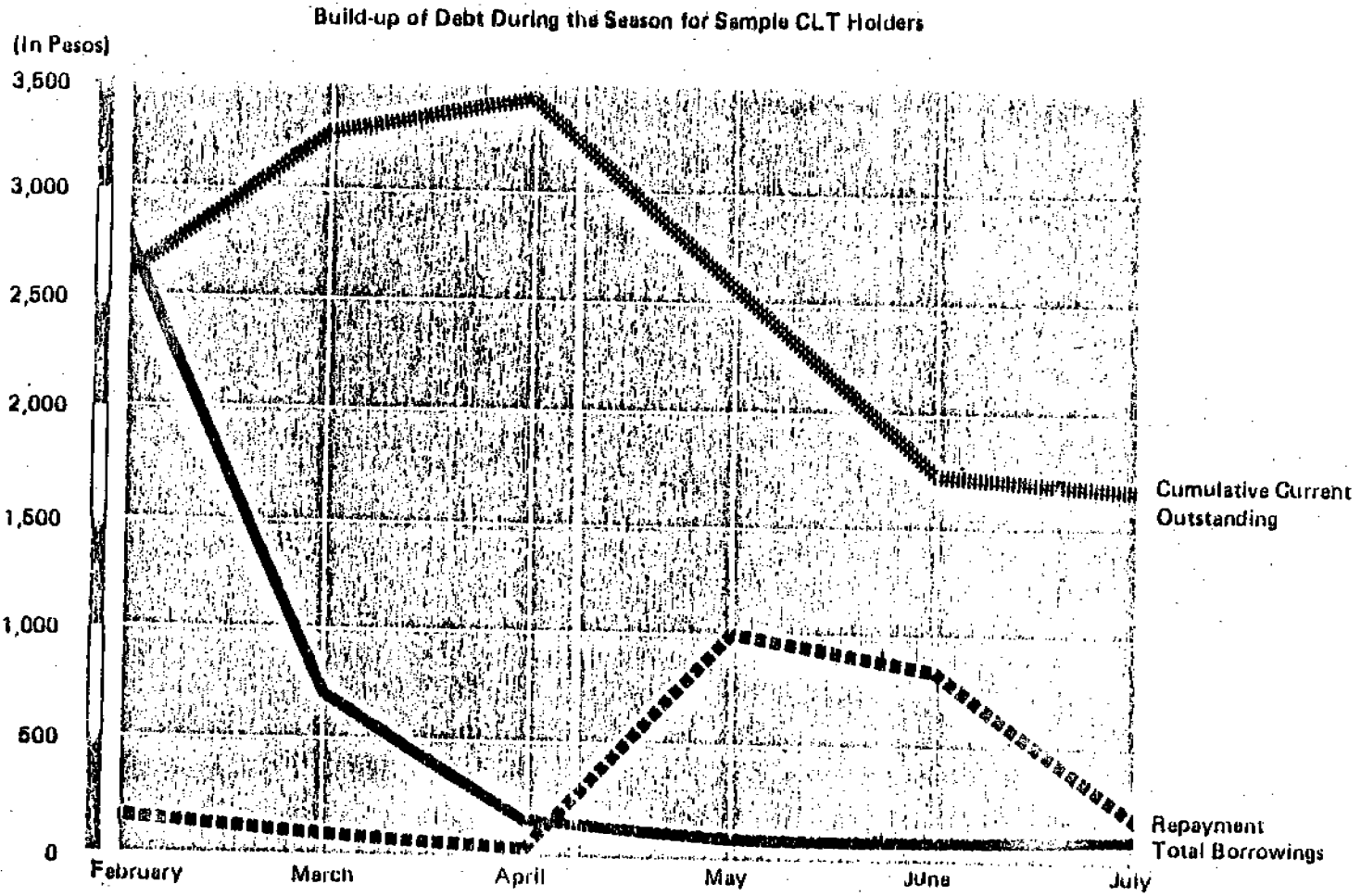


Figure III.3



categories will not be able to pay back their total obligations due (including carry-over obligations). But if net flow is used, that is including additional borrowings versus outstanding loans that will mature, they will be able to pay the loan. This observation can perhaps explain why repayment rates in both formal and informal systems are adequately high while past due ratios are also high.

These observations seems to point to the strong need for borrowings particularly in "deficit months" (particularly in rice areas). This contradicts some studies (particularly those covering wide areas of the country) which show that a significant portion of respondents are non-borrowers (either formal and informal sources). In particular, the TBAC Small Farm Indebtedness Survey (SFIS [1986]) reports that 72 percent of the respondents covering 1981-82 said they were non-borrowers. Non-borrowing was exacerbated by the fact that many who came from credit system, notably M-99 dropouts, decided not to borrow again. In the SFIS this comprised more than 60 percent of dropouts from the M-99 program and total formal system dropouts.

The "trauma" of the formal credit system seems to have some bearing here, especially since majority of the non-borrowers said they do not want to borrow (i.e. non-borrowing was their preference and not due to the lack of access to any credit system).

The NEDA Study (1986) also finds that 52.5 percent of rural families do not wish to borrow. However, only 11.7 percent of these non-borrowers have other sources for financing their agricultural production. A key to the reason for their non-borrowing is the fact that 94.2 percent of those who have never borrowed would prefer interest rates below 15 percent (which is lower than existing credit programs and most informal lenders' rates). A large percentage of farmers borrowers mention freedom from debt as a primary goal in the future.

This phenomenon simply points to the fact that credit for small farmers is looked upon by them as a necessary evil that, if possible, should be avoided. This is completely contrary to the motive of the "healthy" borrower who incurs a debt in order to invest in physical or working capital with the expectations of generating higher profits and income. The credit system for the poor and depressed rural areas will never thrive and prosper in such an environment.

More evidence of this behavior can be seen in "Should the State Run Mang Pedro's Farm?" Crop failures and loan default drove the farmer in the study to drop out from any credit market. He continued using the new HYV technology and increased the frequency of his credit availments once his production and income recovered.

Is institutional cheap credit really cheap to farmers? It should be recalled that what really matters to borrowers is the effective cost of borrowing which includes the basic interest

rate for the amount borrowed, regulated fees or contributions, and transaction costs.

TBAC, in a Review of Supervised Agricultural Credit Programs done in January 1981 tried to calculate the borrowing costs for farmers in the formal Masagana-99 Program. Table III.29 shows TBAC's estimates for 1981. The borrowing cost includes fees for crop insurance premium and the Barrio Savings Fund. Transaction cost was estimated to be 6 percent and includes transportation costs, meal expenses, "facilitator" expenses and others. After accounting for everything, the credit does not become cheap (supporting Esguerra's (1981) claim that the subsidy is mainly on defaulted loans) and discounted rates is as high as 34.2 percent. It should be noted that risk premium is not explicitly included in the calculations. It is not clear whether this is more or less than the various fees for the Samahang Nasyon. Perhaps it is assumed that this is covered by the various fees for the Samahang Nasyon. If Esguerra is correct, that is -- that the interest subsidy is more or less offset by the various fees to the Samahang Nasyon, then the 34.2 percent will not include the risk premium. The interest rate that should be charged to accomodate risk will be much higher than 34.2 percent.

Table III.29

ESTIMATED COST OF BORROWING FOR SMALL FARMERS
(% Per Annum)

	Interest at Maturity			Interest Discounted		
	Rice Farmer		Non-Rice	Rice Farmer		Non-Rice
	SN Member	Non-SN Member	Farmer	SN Member	Non-SN Member	Farmer
Interest Rate	12.04	12.04	12.04	15.38	14.28	13.64
BSF	6.67	-	-	7.69	-	-
Crop Insurance	<u>4.44</u>	<u>4.17</u>	<u>-</u>	<u>5.13</u>	<u>4.76</u>	<u>-</u>
Sub-Total	23.15	16.21	12.04	28.20	19.04	13.64
Transactions Cost	<u>6.00</u>	<u>6.00</u>	<u>6.00</u>	<u>6.00</u>	<u>6.00</u>	<u>6.00</u>
TOTAL	<u>29.15</u>	<u>22.21</u>	<u>18.04</u>	<u>34.20</u>	<u>25.04</u>	<u>19.64</u>

Chapter IV

MACROECONOMIC POLICY ENVIRONMENT AND INSTITUTIONAL FRAMEWORK

This chapter is divided into three sections. The first section discusses the overall policy environment in the Philippines and its influence on the rural economy. The second section reviews the institutional framework operating in the Philippine financial system with special focus on the rural financial markets. The third and last section deals with specific policies that directly impinge on the workings of the rural financial markets.

A. Macroeconomic Policy Environment

The growth and effectiveness of the rural financial markets (RFMs) depend to a large extent on the policy environment within which they operate. In the Philippines, as is also the case in many LDCs, the overall policy environment has not been conducive to the growth of the rural sector. The RFMs do not operate in a vacuum. When rural enterprises are penalized by existing measures, the RFMs are also indirectly penalized. Countervailing policies that artificially make rural financial institutions viable cannot make them effective in pushing or dragging the real sector of the rural economy when the growth of the latter is severely constrained by unfavorable policies.

In the last three decades, the Philippines has initiated several changes in its economic development strategy. Import

substitution policy was prominent during the period 1947 - 69. Development strategy was then heavily biased in favor of the National Capital Region. Export promotion policy was earnestly started in 1970. About the same time, spatial dimension of development was taken into consideration, and the various development plans prepared by government embodied this concern (see Pernia et al. [1983]). In the 80s, the interest shifted towards liberalization of the economy. Thus, the first major tariff reform program took effect in January 1981 and will be completed over a period of five years. Financial reforms were also initiated.

Despite these changes, however, the policy biases against the rural sector in general and agriculture in particular have virtually remained intact. The policy biases against agriculture are extensively discussed in the "Agenda for Action for the Philippine Rural Sector" (1986). Some of these policies will be discussed below.

One macroeconomic price for agriculture and agricultural trade is the exchange rate. The government has consistently pursued an overvalued domestic currency. Ranis (1986) estimated the current overvaluation of the peso to be at the level of 25 to 30 percent. Indeed, "this overvaluation represents a 25 to 30 percent tax on exporters, far greater than the burden of the agricultural export taxes which have just been removed." In other words, farmers receive fewer pesos for every dollar they earn through exports of agricultural products, notwithstanding the zero export tax. Since a greater proportion of the

exportables are agricultural products, the adverse effects of currency overvaluation falls more heavily on the agricultural sector (Intal [1985]). At the other end, the agricultural sector has to face stiffer competition from imported agricultural products (e.g., yellow corn) whose prices are effectively lowered by the overvaluation of the peso.

The import tariff and export tax structures have also placed greater burden on agriculture and agricultural trade. This has continued even after the tariff reform program (TRP). Table IV.1, presents a comparison of the average effective protection rates (EPRs) of agriculture and manufacturing. Medalla (1986) noted that the tariff reform program has succeeded in substantially reducing the EPRs from 24 to 12 percent. However, the EPRs have remained the same in relative terms after the TRP. Specifically, the exportable and primary and agricultural sectors are still penalized although to a lesser extent after the TRP.

The rural/regional development thrust initiated in the 70s has produced very limited desirable results. Many industries still tended to locate in National Capital Region and Central Industrial Region where social overhead capital is mostly concentrated (see Pernia *et al* [1983]). Indeed, the absence of social overhead capital in most of the rural areas is immediately felt once one goes to areas just a few kilometers away from urban centers. The decision regarding where to place social overhead capital was very much influenced by the industrial policy of the

Table IV.1

AVERAGE EFFECTIVE PROTECTION RATES (EPRs)
(In Percent)

	1979 (Pre-TRP)	1985 (Post-TRP)
All Sectors	24	12
Exportables	-3	-3
Importables	44	25
Primary and Agriculture	1	-1
Manufacturing	40	23
Exportables	1	1
Importables	50	33

Source: Medalla (1986).

government. Naturally, other services, e.g., communication, put up by the private sector have to follow.

In summary, the macroeconomic policies pursued by the government have literally made agricultural enterprises unprofitable and in no way have supported rural development. Of course, the government has long recognized this. But instead of undoing those policy biases against agriculture, the government initiated policies aimed at offsetting the adverse effects of those policies mentioned above on agriculture. One such policy is the cheap credit policy (details of this policy are discussed below). However, David (1982) pointed out that the interest rate subsidy to agriculture failed to correct the policy bias against agriculture. "Assuming that interest rate policy has meant a cost of borrowing differential of 6 per cent in favor of agriculture, the effective subsidy rate amounts to only 1 percent. Even if interest rate differential is increased two or three times in magnitude, it is clear that the interest rate subsidy will not alter significantly the unfavorable incentive structure in agriculture vis-a-vis non-agriculture created by price policies." Moreover, the fixing of the interest rate which was done in the past hurt agriculture more than the other sectors because it failed to take into account the greater risk and higher transaction costs of agricultural lending (Intal [1985]). Thus, most big banks shied away from agricultural lending. The result was that the share of formal agricultural loans to total loans granted declined in the last decade despite the massive subsidized credit programs initiated in the 70s. Aside from

this, the cheap credit policy has impaired the growth of the rural financial markets (David [1982]).

The present government has recently initiated reforms in various fronts to achieve economic recovery in the short-run and sustained growth in the long-run. The reforms are embodied in the official document entitled, "Policy Agenda for People-Powered Development" (1986). Essentially, the government is adopting an employment-oriented, rural-based development strategy in the medium-term. This is in direct contrast to the previous development strategies which greatly emphasized industrialization. An important feature in this new development strategy is the removal of policy biases against the rural sector in general and agriculture in particular. In addition, the provision of social overhead capital will be shifted towards the rural sector. Post-harvest facilities will be given due importance. All these would reduce the transaction costs of rural producers/savers and lenders. Under this new environment, the RFMs are expected to perform better. They can respond quickly and strongly to nonfinancial market signals since these signals are genuine ones.

The success of this new development strategy depends on the will and determination of the government and on its ability to stand firm to this new commitment without being swayed by special groups whose interest runs counter to the new development strategy. It also depends on the way it concretizes the new package of policies into programs and the managerial talents it

can pull together to implement the various programs.

B. Institutional Framework

The workings of the RFMs is very much conditioned by the institutional framework operating in the Philippine financial system. It may be worthwhile to review this institutional framework.

Before the establishment of the Central Bank in 1949, several banks had already been operating in the country (see Table IV.2). Some of them were authorized to issue currency notes. Note that only few of them were Filipino-owned or government-owned.

Almost all banks concentrated in trade financing. This is, of course, a familiar feature of the banking system in any colony, like the Philippines. To the extent that most of the tradables were agricultural products, such as abaca, sugar, tobacco and copra, it can therefore be said that banks indirectly helped promote agriculture. But their concentration in Manila did not do much to develop the rural financial markets.

As early as the turn of the 20th century, the government made several attempts to develop the rural financial markets. The government-owned First Agricultural Bank was established in 1908 (Lirio [1986]). It accepted deposits, but specialized in secured agricultural loans.

Table IV.2

BANKS OPERATING BEFORE THE ESTABLISHMENT OF THE
CENTRAL BANK OF THE PHILIPPINES (1949)

Name of Bank	Ownership
A. Commercial Bank	
1. Bank of the Philippine Islands	Ecclesiastical
2. China Banking Corporation	Chinese
3. Peoples Bank and Trust Co.	American
4. Philippine Bank of Commerce	Filipino
5. Philippine Bank of Communications	Chinese
6. Philippine Trust Company	Ecclesiastical
7. Philippine National Bank	Government
B. Savings Bank	
1. Monte de Piedad	Ecclesiastical
2. Philippine Postal Savings Bank	Government
3. Banco Hipotecario de Filipinas	Filipino
C. Agricultural Bank	
Agricultural and Industrial Bank	Government
D. Foreign Branches	
1. The Chartered Bank of India, Australia, and China	British
2. The Hongkong and Shanghai Banking Corporation	British
3. Yokohama Specie Bank	Japanese
4. National City Bank of New York	American
5. Bank of Taiwan, Ltd.	Japanese
6. Nederlandsch Indische Handelsbank	Dutch
7. The Bank of America, NT and SA	American

Source: Lirio (1986).

It was later on absorbed by the Philippine National Bank (PNB) which was established in 1916. Then in 1935, the government-owned Agricultural and Industrial Bank was created. The granting of long-term agricultural loans was transferred from PNB to this bank. But in 1947, it was absorbed by the Rehabilitation Finance Corporation, the predecessor of the Development Bank of the Philippines (DBP).

The agricultural sector was given an added push with the passage of the Rural Credit Law Act (1915) and the Cooperative Marketing Law (1927).

To mobilize savings in the rural areas, the Postal Savings Bank was created in 1904. All post offices in the provinces were considered branches of this bank. Thus, banking was brought to the rural sector for the first time. The Postal Savings Bank lasted up to 1975 when it became irrelevant due to the presence of rural banks in the countryside.

The colonial nature of the economy actually made commerce and trade a profitable venture. So, private banks oriented themselves to these mostly urban economic activities. The relative neglect of agricultural and long-term credit by private banks prompted the government to directly intervene in the financial markets by creating its own specialized banks. Direct government intervention is thus not new in the Philippine financial system. But the creation of a specialized agricultural bank and its subsequent absorption by another bank portrays the

difficulty encountered by the government in financially supporting the agricultural sector.

The establishment of the Central Bank ushered in new era for the Philippine financial system. In view of the underdevelopment of the economy, it was deemed proper to have a development - oriented central bank. Thus, aside from its traditional objectives, the Central Bank was mandated to promote rising level of production, employment, and real income (see Table IV.3). Strong coordination between the Central Bank and the executive branch of the government was to be maintained by including government officials in the Monetary Board.

The policy instruments of the Central Bank were not used to affect the overall monetary and credit climate of the economy. Changes in rediscount rates and reserve requirement ratios were less frequent. Moreover, open market operations of the Central Bank were virtually inoperative due to the absence of marketable securities. This is due to the fact that the government was reluctant to pay competitive rates to their securities (Tan [1980]). The only reason why banks hold government securities was because of the sweeteners attached to them, like reserve eligibility.

The Central Bank vigorously pursued its selective credit policy. It created specialized banks through which credit to favored sectors can be channeled. Because of the urban

Table IV.3

THE PHILIPPINE CENTRAL BANK

	The 1949 CB	The 1972 CB
I. Broad Policy Objectives	1. Maintain monetary stability.	1. - the same -
	2. Preserve international value of the peso into other freely convertible currencies.	2. - the same -
	3. Promote rising level of production, employment, and real income	3. To foster monetary, credit and exchange conditions conducive to a balance and sustainable growth of the economy.
II. Traditional Functions	1. Sole responsibility of currency issue.	1. - basically the same -
	2. Holds and manages the reserves of the banking system	
	3. Discharges banking services for the governments and for the commercial banks.	
	4. Manages the country's international reserves.	

Table IV.3 (cont'd)

	The 1949 CB	The 1972 CB
III. Organizational Structure	<p>Seven members:</p> <ul style="list-style-type: none"> 1 - Governor (appointed by the president) 1 - Secretary of Finance 1 - DBP Governor 1 - PNB President 3 - Private Sector representatives (appointed) 	<p>Seven members</p> <ul style="list-style-type: none"> 1 - Governor (appointed) 1 - Ministry of Finance 1 - NEDA 1 - BOI 3 - Private Sector Representatives (appointed)
IV. Scope of Control	<p>The Monetary Board controls not only commercial banks, but all banking institutions, with the exception of insurance companies. It has both supervisory and policy powers.</p>	<p>The Central Bank has been given a wider scope of authority to oversee not only the monetary and banking system but also the entire financial and credit system.</p>
V. Policy Tools	<ul style="list-style-type: none"> 1. Quantitative Controls: All monetary & credit climate of the country by tightening or easing the availability of credit <ul style="list-style-type: none"> (a) Open market operations (b) Rediscount rate changes (c) Varying reserve ratios 	<ul style="list-style-type: none"> - Basically the same -

Table IV.3 (cont'd)

The 1949 CB	The 1972 CB
<p>2. Selective Controls: Have deliberate allocative effect</p>	<p>- Basically the same -</p>
<p>(a) differential rediscount rates for special projects of government to promote development.</p>	
<p>(b) differential deposit rates and reserve ratio among banks.</p>	
<p>(c) creation of specialized banks thru which credit to key sectors can be channeled.</p>	

bias of private banks, a habit that was inculcated during the colonial period, the Central Bank established rural banks. They were to be owned by the private sector. However, the interest rate ceilings that did not take into account the inherent riskiness of agricultural loans made rural banks a less attractive investment alternative. To encourage potential investors to go into rural banking, the government provided the rural banks substantial government subsidies. They were given extraordinary number of tax exemptions and privileges which are still being retained today. Interestingly, smaller rural banks get more tax exemptions and privileges than bigger ones. The Central Bank matched every peso put up by owners of rural banks as equity. These were placed in preferred shares which earned only 2 percent per annum. This subsidy has recently been phased out. The reserve ratios applied to deposit liabilities were lower for rural banks than for commercial banks. This is an added competitive edge to small rural banks over the commercial banks which can exploit economies of scale due to their size. This policy still exists today, although it is being gradually phased out.

The rediscounting policy of the Central Bank also reflected its bias towards priority sectors. Specifically, rural banks were charged lower rediscount rates than commercial banks. This was intended to develop the rural banking system and increase the flow of funds to the rural areas.

Major financial reforms were effected in 1972. The reforms included the overhaul of the Central Bank (see Table IV.3). The

stabilization role was given prominence over the developmental role of the Central Bank. It was recognized that economic growth is the main responsibility of the regular government agencies, not that of the Central Bank alone. The supervisory function of the Central Bank has been broadened to include not only the monetary and banking system but also the entire financial and credit system.

Strong coordination between the Central Bank and the executive branch of the government is being maintained. However, the DBP Governor and PNB President were replaced by the NEDA Director General and BOI Chairman as members of the Monetary Board to avoid the conflict of interest between the regulator and the regulated one. Today, the Budget Minister is made a member of the Monetary Board to further strengthen the coordination. This was done despite clamor from various sectors to make the Central Bank a truly independent one. So far, the experience in the past was that the Central Bank was made subservient to the whims and caprices of the political leadership (PIDS [1986]).

Despite the radical change in the policy objectives of the Central Bank, specifically in its avowed policy to make itself a lender of last resort rather than a lender of first resort as happened before 1972, the Central Bank still continued its selective credit control. This is one glaring example of inconsistency between policy and actual practice. This was even blown out of proportion when both the Central Bank and the various government agencies launched a number of special credit

programs. Table IV.4 presents a seemingly endless list of agricultural credit programs. The prescribed maximum lending rates for these programs which ranged between 3 to 17 were substantially below the market rates. A good number of them allowed rediscounting with the Central Bank.

Special credit programs seemed to be in vogue in the 70s. Even international funding agencies like, the World Bank and ADB, joined the bandwagon by supporting a substantial number of credit programs (see Table IV.4). Both the Central Bank and various non-financial government agencies were directly involved in managing special credit programs using rural financial institutions as conduits. They prodded rural financial institutions, especially the rural banks, to support their credit programs by offering them attractive spread between the cost of funds and the maximum lending rate (see Table IV.5 for an illustration). This literally hindered the development of rural financial institutions as they became overly dependent on these low cost funds. In fact, performance of the rural banking system in terms of mobilizing savings was better before the 70s than after the 70s (see Lamberte [1985]).

The agricultural credit programs were originated from and implemented by various government agencies. The impressive number of government agencies involved shows that these credit programs were in the main uncoordinated. Even non-banking government entities were directly involved in lending. This has indeed blurred the distinction between loans and outright fiscal

Table IV.4

SUMMARY LIST OF AGRICULTURAL CREDIT PROGRAMS, BY SOURCE
OF FUND CATEGORY

PROGRAM	YEAR IMPLEMENTED	YEAR PROJ. -AGMT TERMINATED	NO. OF YEARS IN OPERATION	IMPLEMENTING AGENCY	LENDING CHANNEL(S)	LOANS GRANTED AMOUNT (PM)	%SHARE	REPAYMENT RATE(%)
I. Government Funded with CB Rediscounting (GFR)								
1. M-99	1973		12	MAF/NFAC	PNB, RBs, LBP	5807.6	48.11	82.3
2. Cotton Financing Program	1974		11	PCC, CB-SES III	RBs, TRB, LBP, Thrift Banks(TBs)	88.0	0.73	77.7
3. CB-MECS Supervised Experienced Education Program	1974		11	MECS, CB-SES III		3.3	0.03	98.2
4. Gulayan sa Kalusugan	1975		10	NFAC	RBs	62.0	0.51	80.4
5. Bakahang Barangay						972.2	8.05	n.a.
a. Fattening	1978		7	BAI, CB-SES III	RBs			
b. Cow/Calf	1981		4	BAI, CB-SES III	RBs			
6. Biyayang Dagat	1979		6	BFAR	RBs, DBP, PNB	101.7	0.84	25.0
7. Supervised Credit for Orchard Crops	1982		3	CB-SES III	RBs	36.1	0.30	n.a.
8. Maisagana	1982		3	MAF/NFAC	PNB, RBs, LBP	192.3	1.59	62.1
9. Pukyutang Barangay	1982		3	CB-SES III	RBs			
10. Kalabaw ng Barangay	1983		2	BAI, CB-SES III	RBs, TBs	3.7	0.03	n.a.
11. GFSME	1984		1	KKK-PCA, CB, Accredited Banks	Accredited Financial Institutions	149.5	1.24	
SUB-TOTAL						7416.4	61.44	

PROGRAM	YEAR IMPLEMENTED	YEAR PROJ AGMT TERMINATED	NO. OF YEARS IN OPERATION	IMPLEMENTING AGENCY	LENDING CHANNEL(S)	LOANS GRANTED AMOUNT (PM)	%SHARE	REPAYMENT RATE(%)
II. Government Funded, No Rediscounting but Administered by CB (GFNR)								
A. Domestic								
1. IAF Virginia/Burley Tobacco Financing Program	1976		9	PVTA, CB-SES III	RBs, SLAs	112.6	0.93	87.4
2. SARF	1978		7	MAF	RBs, PNB, LBP	106.6	0.88	66.6
3. KASAKA	1982		3	CB, MAF/NFAC	RBs	6.0	0.05	n.a.
4. IRF	1983		2	CB, MAF/NFAC	RBs	5.5	0.04	97.4
5. IRPP	1984		1	MAF/NFAC	NFA, Input Suppliers (Cyanamid)	336.4	2.79	32.2
6. ECPAP	1984		1	MAF/NFAC	PNB, RBs, LBP PPI, Cyanamid	193.0	1.60	60.3
7. KKK	1982		3	MHS	PNB, DBP, LBP	833.7	6.90	n.a.
SUB-TOTAL						1593.8	13.20	
B. FOREIGN SOURCES								
1. MAR Second Rural Dev't. Land Resettlement Project	1978		7	MAF, MAF, MLGCD MPH, MPW, MOH, CB, NFA, NIA	RBs, CRBs, SLAs	24.3	0.20	n.a.
2. CMP	1979		6	BCOD	RBs	42.9	0.36	n.a.
3. Fourth CB-IBRD Rural Credit Project	1979		6	CB	RBs	681.1	5.64	n.a.
4. Aquaculture Development Project	1984	1990	1	CB, MAF, BFAR	RBs	8.2	0.07	n.a.
SUB-TOTAL						756.5	6.27	

PROGRAM	YEAR IMPLEMENTED	YEAR PROJ AGMT TERMINATED	NO. OF YEARS IN OPERATION	IMPLEMENTING AGENCY	LENDING CHANNEL(S)	LOANS GRANTED AMOUNT (PM)	ZSHARE	REPAYMENT RATE(%)
III. Government Funded but Administered and/or Channeled through Other Banks (GFDB)								
A. Domestic Sources								
1. Pagkain ng Bayan	1973		12	Exec. Committee, National Advisory Council, Ministry of Finance, NFA, MAF, MAR, BED, BAEcon, Prov'l. and City Gov'ts.	PNB	21.7	0.18	41.4
2. KKK-Local Government Special Fund Program	1982		3	Ministry of Loc. Gov'ts., MHS	PNB	164.3	1.36	27.0
SUB-TOTAL						186.0	1.54	
B. Foreign Sources								
1. Agrarian Reform IEDP	1978		7	LBP, MAR, MLGCD, MAF, DBP	LBP, DBP	179.3	1.48	39.3
2. DBP-IBRD Smallholders Tree Farming	1978			DBP	DBP	40.6	0.34	
3. Small Farmer Dev't. Field Action Project (MAD-FAO-ASSARD)	1979		6	LBP/MAR	LBP	2.9	0.02	
4. SNSP	1979		6	BCOD	CRBs/PNB	5.8	0.05	
5. Third Livestock and Fishery Dev't. Proj.	1980	1984	5	DBP	DBP	547.0	4.53	
6. Laguna de Bay Fishpen Development Project	1979		6	Laguna Lake Dev't Authority	DBP	67.1	0.56	
SUB-TOTAL						1614.7*	13.38*	

*Includes the DBP-IBRD Livestock Dev't. Project, the DBP-IBRD Fishpond and Marine Project, and the Rehabilitation Program of Fishing Industry in the Philippines.

PROGRAM	YEAR IMPLEMENTED	YEAR PROJ AGMT TERMINATED	NO. OF YEARS IN OPERATION	IMPLEMENTING AGENCY	LENDING CHANNEL(S)	LOANS GRANTED AMOUNT	%SHARE (PM)	REPAYMENT RATE(%)
IV. Government Funded but Administered and/or Channeled through Non-bank Institutions (GFNB)								
A. Domestic Sources								
1. PTA Supervised Farm Credit Assistance	1975		10	PTA	PTA	10.3	0.08	60.7
2. Sugar Worker's Fund	1982		3	MOLE	BRW	1.7	0.01	
3. BRW-RPB Livelihood Prg. for Sugar Workers	1983		2	MOLE, RPB	BRW	1.3	0.11	
4. CDLF	1973		12	CDLF/MAF	CDLF/MAF	147.0	1.22	16.4
5. MAR Loan Assistance Program				MAR	MAR	0.4	<0.005	
SUB-TOTAL						160.7	1.33	
B. Foreign Sources								
1. FSDC Irrigation System/ Infrastructure Dev't.	1975		10	FSDC	FSDC	58.8	0.49	39.9
2. FSDC KAISA Enterprise Development	1980		5	FSDC	FSDC	248.2	2.06	
3. AITTP	1983		2	TRC	TRC	36.4	0.30	100.0
SUB-TOTAL						343.4	2.80	
GRAND TOTAL						12071.5	100.00	

Source: National Economic Development Authority (1986).

Table IV.5

GROSS SPREADS BETWEEN COST OF FUND AND LENDING RATES, AGRICULTURAL CREDIT PROGRAMS IN THE PHILIPPINES, AS OF JUNE 30, 1986
(In Percent Per Annum)

Name of Program	Pure Cost of Fund to Channel ^{a/}	Prescribed Lending Rate	Gross Margin to Bank
(Note: STD funded programs not rediscountable since November 1985)			
<u>Purely-Locally Funded</u>			
<u>A. Crops</u>			
M-99*	3	15	12
IRPP	3 (6) ^{b/}	15	12 (9)
Maisagana	3	15	12
ECP	3 (6) ^{b/}	15	12
GSK*	3	15	12
Supervised Credit for Orchard Crops	3	15	12
National Soybeans Production Program	3 (6) ^{b/}	15	12 (9)
Cotton Financing Program*	6	15	12
IAF Tobacco Financing	3	12	9
PTA Supervised Farm Credit Assistance	3	6-9	3-6
National Rootcrops Production	3 (6) ^{b/}	15	12 (9)
<u>B. Livestock</u>			
Kalabaw ng Barangay*	3	15	12
Bakahang Barangay (Fattening/Cow/Calf)*	3	15	12
Kambingang Barangay*	3	15	12
<u>C. Fisheries</u>			
Biyayang Dagat*	3	12	9
FSDC: CARE	direct lending ^{c/}	(15% for approval) 10 (capital outlay) 4 (working capital)	-
Taal Lake Development Program	direct lending	16	-
Laguna Lake Cooperative	direct lending	14	-
<u>D. Cooperative Development</u>			
CDLF ^{d/}	10 (thru CRBs)	15	5

E. Others

KKK	direct lending ^{e/}	12	-
CB-MECs Sup. Exp. Educ'l. Program	3	12	9
Pagkain ng Bayan	direct lending	10-16	-
KASAKA	none ^{f/}	12	-
IRF	3	12	9
		16	-
Quedan Financing		(emergency loans)	-
GFSME	12.75	Variable	-
FSDC's Programs	Variable ^{g/}	17	-
°Irrigation System/ Infrastructure Development	direct lending	6 (PIP/SWIP)	-
		Interest-free (CIP)	-
°Adaptive Farm Technology	direct lending	9 (farm animal)	-
		12 (farm mechanization)	-
°Gasifier/Woodlot Project	direct lending	12	-
°KAISA-Agro Industries Projects	direct lending	12 (fixed assets, trading capital)	-
		6 (operating capital)	-

II. With External Assistance

SNSP	none ^{h/}	3 (farm/bodega/office equipment)	-
		8 (marketing loan)	-
CMP	4 (short-term)	9	5
		(short-term)	-
	5 (long-term)	8	3
		(long-term)	-
Palawan IAD Project	7	14	7
AITTP	3	8.75	5.75
ALF	Variable ^{i/}	market rates	-
First Aquaculture Development Project	10.5	17 (including 3% service charge)	6.5
Northern Palawan Fisheries Development Project	direct lending	12	-
Laguna de Bay Fishpen Development Project	7.7	15-21	7.3-13.3

*STD funded programs eligible for rediscounting up to November 29, 1985 only (CB Circular 1986). However, banks can rediscount loans under these programs if they use their own funds as starter funds.

a/ This represents STD rates for CB-administered programs, while for foreign-funded programs channeled thru other banks, this refers to the interest rate paid by implementing bank to fund source.

b/ Cost of fund under direct agency assistance scheme/direct bank lending scheme is 3 percent, while under a trader-miller/end-user/input supplier assistance scheme, cost of fund is 6 percent inclusive of service charges of agent bank.

c/ FSDC taps KAISAs to lend to small fisherman-farmers and full time small fishermen.

d/ CDLF loans if granted direct to borrowers costs 15 percent per annum, but if channeled thru CRBs, 10 percent per annum.

e/ Governmental banks are utilized as disbursing agents only for a fee.

f/ RBs get commissions instead.

g/ Banks lend their own funds; interest subsidy provided to banks by GFSME.

h/ CRBs are used as disbursing agents at no cost.

i/ Rate is 12.8 percent per annum effective July 1, 1986.

Sources: CB-SES III, FSDC, LLDA, BFAR, CDLF, MAF-Planning Services, NFAC, CB-OLC, MAF-LDA BCOD, GFSME, TRC..

subsidy/transfers. Loans, no matter how low their interest rates are, have to be repaid, whereas fiscal subsidies/transfers need not be repaid. It is not then surprising that the repayment rates of almost all these special agricultural credit programs have been dismal (see Table IV.4). Thus, in terms of repayment rate, it can be said that these credit programs have met a crashing failure. And a great majority of rural financial institutions which heavily depended on these credit programs have been dragged down.

The output and equity impacts of these credit programs are given less attention by researchers, except in the case of Maagana-99 which is discussed in greater detail below. It is not clear from results of existing studies whether formal credit is really the overriding bottleneck in agricultural product. In fact, only the agricultural sector posted a positive growth rate in the last two years despite the severe credit squeeze that hurt the agricultural sector more than other sectors. However, the equity impact of these subsidized credit programs is even more unsettling. Neri and Llanto (1985) found that low-income farmer-borrowers who accounted for as much as 73 percent of total number of loans were given only 32 percent of total amount of subsidized loans granted, whereas the high-income farmer-borrowers accounting for 27 percent of the total number of loans granted availed themselves of 68 percent of the total amount of subsidized loans granted. Thus, they concluded that the "financial system has apparently been subsidizing large scale farmers who qualify for subsidized loans although they can afford to pay the real cost of financial resources. In effect, there

was a real income transfer to high income farmers from small income farmers..." All these seem to refute the "traditional view" of farm credit.

The Central Bank opened many rediscounting windows to support the special credit programs. This policy, of course, impinge on certain macroeconomic variables. From 1949 to 1972, the ratio of outstanding rediscounts to domestic liquidity averaged only 9 percent while the annual inflation rate averaged 6 percent. But during the period 1973-82, when special credit programs proliferated, the average ratio of outstanding rediscounts to domestic liquidity went up to 13 percent. The average annual inflation rate likewise increased to 14 percent during the same period. Indeed, this result challenges those who claim that selective credit control has nothing to do with liquidity and/or inflation.

As for Masagana-99 (M-99), it is so far the most ^mambitious credit program that was introduced in the seventies together with the land reform package and Green Revolution technology. The program covered around 48 percent of the total financing of the programs listed in Table IV.4. The amount of total subsidy borne by the government has been estimated to be anywhere between a low of ₱1.2 billion (TBAC [1981]) to ₱2.1 billion (Herdt and Gonzales [1981]). The benefits reaped have been estimated to be between ₱1.7 billion (Herdt and Gonzales [1981]) and ₱4.7 billion (TBAC [1981]).

The extent to which M-99 contributed to self-sufficiency in rice and the adoption of a more productive technology will be debated for sometime to come. Some claim that adoption of the technology started in the late sixties and would have become prevalent even without the program. But a more realistic assessment would be that the new technology is highly capital-intensive and input-dependent and for it to be widely accepted some form of subsidy will have to be given. The main question therefore is whether credit subsidy had contributed its share to the goal of self-sufficiency in rice. Sacay et al. (1985) seem to suggest that direct subsidies, particularly fertilizer subsidies, might have better impact than credit subsidies.

Herdt and Gonzales came up with their estimates of the breakdown of subsidies of the program for 1973-1979. This includes some "hidden" subsidies such as the market price subsidy and the losses due to defaulted loans. The estimate of credit subsidy is close to the estimates of Esguerra (1981) of around ₱946.6 million even if both differ substantially in the way the figures were derived. Since the credit subsidy is the major component of the total subsidy of the program, one question to be asked is: Was it worth it? Based on whether it did give rise to the initial adoption of the technology and towards self-sufficiency in rice, perhaps the problem will never be resolved.

But there definitely would be more concrete answers to the following two questions. These questions are: 1) Is the credit subsidy program a viable one that can be sustained over the long-

run without depleting the Treasury? and 2) Is the credit subsidy program successful in redistributing income and/or wealth to the small farmer?

There has been a dearth of literature on the first question. Looking at the way the program was implemented, it seems that the long-run viability of the M-99 program is questionable. Table IV.6 shows the depletion over time of the number of small farmers borrowing in the program. The total farmers covered by the program at its peak covered 36.4 percent of the small rice farmers and 47.2 percent of the potential rice farmers. By 1980, the actual coverage has fallen to 3.7 percent of the total small rice farmers and 4.8 percent of the potential farmers.

The move of farmers away from subsidized institutional credit derives mainly from high default rates that have made them ineligible for most loans from the formal credit system. Many farmers have also expressed reservations at the rigid and high transaction costs (paperwork, delay in disbursement of funds, restriction to the uses of loan funds, etc.) of such types of credit which offsets partly the low-interest features of the loans. Thus, there is a shift from informal to formal sources of credit from the fifties and sixties to the mid-seventies, and a shift back to informal sources starting in the second half of the seventies. It must be noted, however, that most of these studies are biased towards rice-producing areas which was the sector affected most by the M-99 program. The shift therefore to the formal credit system in the seventies may be overestimated for the entire agricultural sector.

Table IV.6

NUMBER OF BORROWERS OF M-99, BY CROP YEAR
1973/74-1982/83

Crop Year	Wet Season	Dry Season
1973/74	400,342	234,965
1974/75	528,747	355,716
1975/76	303,580	154,215
1976/77	142,696	89,198
1977/78	139,600	91,120
1978/79	120,404	88,188
1979/80	117,986	70,119
1980/81	82,586	72,053
1981/82	69,402	48,596
1982/83	68,822	39,600

Source: TBAC Files.

Table IV.7

LOANS FOR RICE PRODUCTION, PNB AND RBs
As of December 31, 1982
(Pm)

	3-year Period		
	1974-76	1977-79	1980-82
<u>Rural Banks</u>			
M-99	1,2629.2	631.4	458.9
Regular	1,031.5	1,699.9	1,956.8
Total	2,300.7	2,331.3	2,415.7
<u>Philippine National Bank</u>			
M-99	1,347.0	562.7	444.8
Regular	508.6	57.7	244.1
Total	1,850.6	620.4	688.9
<u>Total</u>			
M-99	2,616.2	1,194.1	903.7
Regular	1,535.1	1,757.6	2,200.9
Total	4,151.3	2,951.7	3,104.6

Source: Sacay, Agabin and Tanchoco. Small Farmer Credit Dilemma, 1985.

The government has also found it difficult to sustain the credit subsidy program of M-99. Table IV.7 shows that rice production loans have shifted from the M-99 credit loans to regular agricultural loans. This is particularly true in the case of rural banks.

Although repayment rate is still respectable at 82 percent, the fall in the volume of loans in the latter part of the seventies and early eighties and farmers' difficulty in paying past due loans have made the past due ratio a very high 84 percent. Since an estimated 70 to 90 percent of all borrowers have dropped out of the program, the losses of much of the past due loans is a substantial cost to the government and to taxpayers.

The single most important issue that puts in the entire viability of the program is the issue of loan defaults. It is therefore important that the reasons for defaults are discussed to see how policy can be improved to tackle this problem. Most of the studies on credit for the M-99 program devote their attention mainly on this point. Table IV.8 summarizes the various studies and the various significant reasons of default. Except for Sacay (1966) and Quinones (1982), most of the studies concentrated on (or have a large part of their respondents from) rice-producing areas where the M-99 is strongest.

Many of the studies found multicollinearity problems in the explanatory variables. Karim (1976) shows that the Pearson

Table IV.8

SUMMARY OF FACTORS AFFECTING LOAN DELINQUENCY

Factors	Studies where Cited ^{a/}
<u>FARMER-RELATED FACTORS</u>	
1. low income/poverty/poor	: Sacay, O.J. (1961, NFAC-SGV (1975), PCARR-Baecon (1975), TBAC (1975), TBAC (1976), SSD-DA (1977), Karim, A. (1976), Best, B.A. (1977), Matienzo, R. (1977), TBAC (1982).
2. low volume of produce sold	: TBAC (1976), Octavio, G.G. (1975), Matienzo, R. (1977).
3. level of indebtedness	: Sacay, O.J. (1961), PCARR-Baecon (1975), TBAC (1976), Best, B.A. (1977).
4. misapplication of loan proceeds/sales proceeds	: Sacay, O.J. (1961), NFAC-SGV (1975), PCARR-Baecon (1975), TBAC (1975), TBAC (1976), SSD-DA (1977), Octavio, G.G. (1975), TBAC (1982).
5. negative attitude toward credit/dole-out mentality	: Sacay, O.J. (1961), NFAC-SGV (1975), PCARR-Baecon (1975), TBAC (1975), Octavio, G.G. (1975), Karim A. (1976), Best, B.A. (1977).
6. unfavorable attitude toward	: PCARR-Baecon (1975), Octavio, G.G. (1975), Best, B.A. (1977), TBAC (1982).
7. low educational attainment	: Karim, A. (1976)
8. tenurial status	: Sacay, O.J. (1961)
9. household size	: Octavio, G.G. (1975)
<u>BANK-RELATED FACTORS</u>	
1. bank experience and management	: Octavio, G.G. (1975), Best, B.A. (1977)
2. inaccurate loan information	: Sacay, O.J. (1961)
3. inadequate collection policies:	: Sacay, O.J. (1961), NFAC-SGV (1975), PCARR-Baecon (1975), Octavio, G.G. (1975)
4. delayed release of loans	: Sacay, O.J. (1961)
5. lack of supervision	: Sacay, O.J. (1961), Karim, A. (1976)
6. double financing of borrowers	: NFAC-SGV (1975)

Table IV.8 (Cont'd.)

Factors	Studies where Cited ^{a/}
<u>PROGRAM IMPLEMENTORS</u>	
1. inefficient technicians	: NFAC-SGV (1975), Octavio, G.G. (1975), Best, B.A. (1977).
2. lack of incentives to pay	: Best, B.A. (1977)
3. "selda" system	: TBAC (1976), SSD-DA (1977), Octavio, G.G. (1975)
4. unfavorable policy environment:	TBAC (1975)
5. unavailability of irrigation water	: Octavio, G.G. (1975)
<u>OUTSIDE THE CONTROL OF PROGRAM PARTICIPANTS</u>	
1. calamities	: NFAC-SGV (1975), PCARR-Baecon (1975), TBAC (1975), TBAC (1976), SSD-DA (1977), Octavio, G.G. (1975), TBAC (1982).
2. farm size	: Sacay, O.J. (1961), Best, B.A. (1977), Matienzo, R. (1977)
3. high prices of inputs	: Matienzo, R. (1977)
4. low market prices of produce	: SSD-DA (1977), Octavio, G.G. (1975)

^{a/} See references.

Source: Sacay, Agabin and Tanchoco. Small Farmer Credit Dilemma, 1985.

coefficients among the explanatory variables are high. In general, one consistent indicator of repayment is income and related variables (such as farm size, volume of produce, level of indebtedness, educational and tenurial status and household size). Even other variables may be related to income. The dole-out mentality may affect depressed areas more substantially. Bank experience and management, loan information and collection policies as well as technical supervision may be much better in more progressive and higher income areas and so on. It is therefore quite difficult to separate out the true causes of defaults and their magnitudes.

But it is clear that the capacity to pay is the single most important factor in explaining loan default. Any subsidized and supervised credit program will have to make sure that their target borrowers can pay back the loan. Another important factor is the incentives and motivation that are given to the farmer to pay his loan properly. The dole-out mentality and simple pragmatism may work against the viability of a subsidized credit program. Bruce Best (1977) simulates a hypothetical situation and shows that a farmer who does not pay his loan will be better off than one who regularly pays his loan (assuming that the unpaid original loan is recovered through higher production and can be "rolled over" into the next periods). The best position is a farmer who pays his loan in the beginning until such time as he can avail of a large amount of loan. After he gets this, he can default. Bank management and experience, the efficiency in disbursement of loans and adequate collection and technical

supervision policies are the next set of important variables. The repayment rate seems to be worse for supervised credit borrowers and borrowers without collateral compared to ordinary credit borrowers with collateral (Sacay et al. [1985]).

All of the arguments given above support the new view that heavily criticizes the traditional approach. To the new school, depending heavily on credit subsidy is self defeating because eventually it will still be the more viable farmers, the more viable enterprises that will retain their credit line. Furthermore, credit is fungible. If it is forced to be put in unprofitable activities, ways and means will be found to siphon funds off to more profitable ventures or to consumption spending, whichever yields a higher utility. Thus, a situation arises wherein the target borrowers - the small farmers - will lose access to credit, and funds will be spent on items other than for agricultural production, the complete antithesis of the original intent of subsidized credit.

This perception goes back to the question raised earlier. Did the M-99 actually improve equity by providing subsidies to the small farmer?

Perhaps the most extensive study that has been done on this area is that by Esquerro (1981). He cites two main types of credit subsidy. One is the intended subsidy that is, the amount of subsidy the government provides so that the farmer borrower will pay a lower-than-market interest rate for his loan. The second is the unintended subsidy, which is actually losses in

unpaid loans which the farmer will never pay back and so becomes a subsidy to him.

With respect to the intended subsidy, Esguerra claims that the service charges and the compulsory fees for the Barrio Savings Fund and the Barrio Guarantee Fund will offset whatever intended subsidy (difference between the market interest rate and the subsidized rate) was given. Furthermore he claims that transaction costs are usually higher for smaller farmers since they have to return more often to secure a loan (thus incurring higher transportation costs) and they also incur higher unwarranted charges due to lack of experience.

Thus, for Esguerra, the main form of credit subsidy given to the farmer is the subsidy in the form of defaulted loans. The question therefore branches into who availed of most of the defaulted loans?

Table IV.9 shows that at the height of the M-99 program in 1974, 72 percent of the total volume of formal credit went to farmers with more than 5 hectares of land. Assuming (quite strongly) that M-99 followed the same pattern as the features of formal credits, Esguerra concludes that most of the M-99 credit did not go to small farmers. Even if the default rate of small farmers was higher than that of the big farmers, it will have to be two and a half times bigger in order for the small farmer to

Table IV.9

DISTRIBUTION OF FORMAL CREDIT BY FARM SIZE,
PHILIPPINES, 1974

Farm Size (In hectares)	Percent Share to $\frac{1}{}$ Total Farms	Percent Share to Total Volume of $\frac{2}{}$ Formal Credit
< 1	14	0
1 - 3	47	19
3 - 5	24	8
> 5	15	72

Source: Esquerra (1981)

equal the subsidy (through defaulted loans) given to the big farmer (since the latter got almost 80 percent of the volume of loans). Esguerra does not believe that the default rate of small farmers is this much bigger than the big farmers. Thus, his conclusion is that big farmers got more of the credit subsidy. David (1983) also adds that the M-99 program favors irrigated rice farms which are in general the richer farms. Studies by Panganiban (1979) and Cañete (1981) show that M-99 participants have significantly higher incomes and yields than nonparticipants. But this is a chicken-or-egg problem: M-99 supporters claim that it is precisely because of the program that the incomes and yields of participants have increased. Esguerra further claims that the formal financial institutions, particularly rural banks, have benefited from the subsidized credit particularly since pieces of evidence show that rediscounting availments had exceeded loans granted.

The M-99 program, therefore, which is a heavily subsidized program, may have used taxpayers' money to finance mainly big farmers projects and rural banks' hidden profits. Given that the tax revenue is highly regressive (based on indirect taxation) and falls heavily on the low income groups in both urban and rural areas, the M-99 program may indeed have been a regressive program in terms of equity distribution. If money increases were used to generate funds for the uncovered budget deficit, the low fixed income groups may bear an unproportional share of the burden of "inflationary taxation".

In a more general level, if credit subsidy was used to introduce the Green Revolution technology, many studies (among them Ferrer [1986] and Panganiban [1979]) point to the fact the increased yield in production is offset by higher capital investments and input requirements for the small farmer so that there is no general improvement in the economic welfare of the poor farmers (particularly the smaller ones, the lessees and share tenants). Inasmuch as urban consumers benefit from increased food production, the credit subsidy of M-99 and, more importantly, industrial price policies biased against agriculture, provide mechanisms of redistributing income from rural to urban areas.

Finally, apart from equity, some authors notably Feder (1983) point to the "trauma" that small farmers may have experienced after the program has been "forced" upon them. The necessity of credit with technical and managerial supervision could have given many a farmer some difficulties in adjustment. The policy of the "selda system" has transformed a plan that was supposed to cultivate group support among farmers into complaints about having to shoulder somebody else's debt and brought on the rise of "fake" seldas just so that loans can be gotten. Panganiban also points to complaints about the rigid nature of the loans (in Jaen, Nueva Ecija) wherein loans were disbursed 45 percent in cash 55 percent in seedlings, fertilizers, and pesticides. The farmers maintained that the 45 percent cash loan is not enough to pay for other farm production costs (e.g. labor and tractor costs, irrigation fees). The lack of flexibility

that the farmer is given in allocating the loan fund has resulted perhaps in higher defaults and in the practice of selling part of the 55 percent share of the loan for cash. As one farmer in the study said: "Bakit binibigyan ng pantang ang bukid ngunit and nagtratabaho, wala"? (Why does the government give credit support only to the farm but none to tillers?)

A TBAC study (1976) also found that many farmers were willing to make partial repayment but were not allowed by rural banks. All these point to the fact that the farmers have reacted negatively to the rigid, formal impersonal transactions that dominate institutional credit. Could it be a wonder then that many farmers felt no tinge of regret when they dropped out of M-99?

Esguerra's work and the new school of rural financial markets have shed light on the assessment of the M-99 program. Subsidized credit, especially on a massive scale as that of M-99, may not be sustained for long if the formal credit system would be used as the conduit of cheap funds. Farmers have been classified into four categories, (1) those already operating as reasonably profitable commercial enterprises with access to commercial credit, (2) those with the potential to become profitable commercial enterprises if access to technology, inputs and markets at fair prices were possible, (3) those with the potential to become commercially viable but need special incentives - subsidies - during unspecified periods of time, (4) those with such poor resources that improved access to existing or even new technology would not provide a viable farm enterprise

capable of supporting the farming unit without permanent subsidy".

The target of any subsidy program should be those in categories (2) and (3). But it seems even now when the Green Technology has been widely used, that majority of farmers still belong to category (4). The TBAC-UPBRF study shows that 65 percent of farmers fell below a threshold income of ₦5,000 a year and 50 percent of peasants are dissavers. The NEDA Poverty study reports that, in 1985, 71.7 percent of peasant families fell under the category of class C (their own categorization) which indicates a perennial deficit (see Table IV.11). Another 13 percent falls under the category of class B which indicates an income just enough for subsistence level. Only 15.3 percent fell under class A which would be the potential viable customers of the rural banking system.

This all points to the fact that to solve the rural credit dilemma, the best policies would be those that will ensure the increased incomes and well-being of the majority that is in category (4) or class C. Only when the majority of farms become viable enterprises will rural credit (even without subsidies) become stable and dynamic.

This means that subsidies to the rural areas should be given in terms of direct subsidies to production. Government and private initiatives in infrastructure building (irrigation seems to be one very direct method of increasing farm yields) and in

Table IV.10

TYPES AND NUMBER OF FAMILIES BY FINANCING
CLASS CHARACTERISTICS

Financing Class Characteristics	Type of Families	No. of Families (Thousands)	Percent Distri- bution
<u>Financing Class A:</u> P24,000 and over		<u>170.4</u>	<u>15.3</u>
- credit-worthy	- Families in Non-Agriculture: with Entrepreneurial profits and salaries		
<u>Financing Class B:</u> P12,000 - P17,000		<u>329.7</u>	<u>13.0</u>
- with subsistence savings	- Entrepreneurial plus subsistence plus salary: crops, fishing, forestry		
- 25% probability of surplus			
- need rural development policies to induce additional farm investments, improve farming profitability			
<u>Financing Class C:</u> Less than P12,000			
- income deficit			
1. <u>P6,000 - P11,000</u>	1. Entrepreneurial with family subsistence: crops, fishing, forestry	<u>1,473.6</u>	<u>56.6</u>
- 10% chance of income surplus	- purely salary: non-agriculture		
- need rural development policies to increase employment of family members/increase incomes	- purely entrepreneurial livestock and poultry		
2. <u>Below P6,000</u> Welfare Clientele	2. Those without economic activity, strictly family subsistence activities, purely entrepreneurial without subsistence activities in crops, fishing and forestry	<u>38.7</u>	<u>15.1</u>
		<u>2,360.7</u>	<u>100.0</u>

Source: Chapter 4, NEDA Poverty Study, 1986

research and development for agricultural production should be continued and expanded; agricultural and price policies that do not discriminate against agriculture should be implemented immediately. The encouragement of off-farm employment and multicropping arrangements will spur higher income and reduce risks of default.

Perhaps more painful structural changes will have to be implemented. Esguerra points to the fact that one big drain in income for the farmer (and which could make a difference in the viability of the farm) is land rent. We can add that the underpricing of palay prices by the traders and the overpricing of fertilizers and pesticides by input dealers (oftentimes in interlinked market transactions discussed later) are also a big drain in the farmer's income. All this leads to the conclusion that a comprehensive agrarian reform program should be planned and executed to make a majority of farmers viable and reduce their default risks. Structural reforms may be painful but one should not ignore them in the list of policy recommendations.

C. Specific Policies Directly Related to RFMs

This section discusses the implications of certain policies on the workings of the RFMs. Rodriguez's (1986) compendium of major policies affecting the RFMs of selected Asian countries is one of the best sources of information.

Financial liberalization is the general policy being pursued by the government. Interest rates on deposits and loans of all

maturities have been floated. Treasury bills, the prime government securities, are now being auctioned while CB bills are slowly being phased out. The rediscounting policy of the Central Bank has been restructured. Selective credit control already became a thing in the past. Today, there is only one rediscount rate which is market-oriented. The discussion below will focus on the remaining controversial policies directly related to RFMs.

1. Bank Entry and Branching. There is a dearth of literature on bank entry and branching. In the Philippines, there is no such thing as free entry into banking. There is only free exit. Since 1972, the Central Bank has been encouraging branching. The reforms in 1980 has further pushed this policy forward by allowing unit banks, like rural banks, to acquire branches. However, current branching regulations seem to go the other way.

The prescribed minimum paid-in capital for thrift banks operating outside Metro Manila is ₱10M while for rural banks, ₱500,000. If they wish to open up branches in certain areas, they have to purchase for each branch special 5-year government securities, the minimum amount of which depends on the service area where the branch is going to be located. For thrift banks, the schedule is as follows:

- | | |
|---|-------|
| a) Service Area I
(Heavily overbranched areas) | ₱20 M |
| b) Service Area II
(Overbranched areas) | 25 M |
| c) Service Area III
(Ideally branched areas) | 10 M |

- d) Service Area IV
(Under branched areas) 5 M
- e) Service Area V
(Encouraged)

Rural banks are required to purchase special five-year government securities worth ₱500,000 for each branch opened. In addition, they are not allowed to put up branches in Service Areas I and II.

These regulations are indeed onerous especially to rural financial institutions. A rural bank wanting to open a branch in Service Area IV will have to raise ₱500,000 to start with. This means that the branch will have to be at least as big as the main office! Definitely, only few rural banks can comply with it.

Since the interest rate on the special government securities is usually lower than the interest rate on secured loans, then the interest rate differential can be treated as an additional license fee. Most of the time, however, the interest rate differential reaches 10 percent per annum. This means that a rural bank has to pay a license fee of ₱50,000 annually for each branch it operates! This is indeed an exorbitant license fee. This could be one of the main reasons why banks are reluctant to open up or acquire branches in rural areas.

The requirement to purchase a minimum amount of special government securities for each branch opened is indeed a form of entry barrier that in effect appropriates rents to

banks or branches of banks already operating in a certain locality. Moreover, the criteria used to determine whether a locality is considered underbranched or overbranched seem to favor inefficient banks. Localities are classified into Service Areas I to V according to the following criteria: (1) the density of banking units as of end of calendar year, and (2) the trend of deposits within the area during the last three consecutive calendar years preceding the date of application. If the deposits growth is low, then the locality will most likely be classified under Service Areas I and II. It is known, however, that growth of deposits depends on a number of factors. One is growth of the real sector in the locality. Another is the efficiency of financial institutions in mobilizing savings. A locality served by inefficient banks or branches would surely be experiencing low deposit growth even if the real sector is growing fast. Inefficient banks will have no incentive to improve savings mobilization since it would just make entry easy for others.

The situation would certainly change if bank entry is more liberal. Perhaps, an ordinary uniform license fee could replace the requirement to purchase a minimum amount of special government securities for each branch opened.

Patten and Kern (1986) are even more emphatic in this regard. They point out that the idea that there is overbranching is the same as saying that there is too much

competition, which is not the case especially in rural areas. They also point out that the "economies-of-scale" approach to banking in the countryside should be re-examined, lest the rural areas end up with banks serving only big clients. In the rural areas, a full-sized branch bank complete with all banking facilities and personnel may not be necessary. What may be needed would be 2 - 3 persons, a desk, and a chair. They may not open for 5 days a week and eight hours a day since transactions are less frequent as in the urban areas, and mostly they are seasonal. This kind of flexibility would allow banks to reduce transaction costs and thereby offer banking services to small depositors/borrowers in the rural areas. Perhaps, the experience of Philippine Commercial and International Bank (PCIB) with their money shop operations is worthwhile studying.

2. Loan Quota Schemes. There are actually two credit quota schemes in the Philippines. One is the sectoral loan quota scheme or the agricultural loan scheme and the other is the geographic loan quota scheme or the deposit retention scheme. So far, much attention has been devoted to the former.

- (a) The Agricultural Loan Quota Scheme. This scheme was designed to augment funds for agricultural lending by mandating all banking institutions to set aside 25 percent of their net incremental loanable funds for agricultural lending, 10 percent of which is to be lent to agrarian

reform beneficiaries and 15 percent for general agricultural lending. As pointed out by several studies, namely TBAC (1985) and Lamberte and Bautista (1986) among others, this scheme had very little impact on the flow of credit to the agricultural sector. Most urban-based banks which do not have the capability to lend to the agricultural sector complied with the requirement by buying eligible government securities.

The current discussions on the agricultural loan quota scheme are going in two opposite directions. One side focuses on how it could be made more effective. Institutional innovations, like having a lead bank which can issue securities eligible for the agricultural quota, are being proposed. The contention here is that the policy is appropriate but the implementation is defective. The other side argues that the policy itself is defective and only results in unduly penalizing non-agricultural borrowers. Its continuation would then be inconsistent with the current liberalization efforts and the overall direction of making policies neutral to all sectors. The policy environment being proposed does away with the biases against agriculture. This is expected to improve the profitability of agriculture. Thus, more credit is expected to flow into the agricultural sector despite the removal of the agricultural loan quota scheme.

The analysis on this issue has so far been descriptive. More rigorous studies looking at the micro- and macro- level

implications of the agricultural loan quota scheme are therefore necessary to put quantitative support to the different arguments. At the micro level, the impact of the scheme on bank profitability and loan pricing should be examined. At the macro level, its impact on economic activity should be studied. Here, a full-blown macroeconomic model is required.

b) Deposit Retention Scheme. This regulation requires all branches and extension offices of commercial banks and thrift banks operating outside of Metro Manila to allot at least 75 percent of the total deposits generated in a particular region or service area for investment in the same area. The intention of this scheme is to prevent the flow of resources from rural to urban areas. Curiously enough, it implicitly accepts that investments in urban areas are more attractive than in rural areas. It was already mentioned above that the scheme was ineffective, i.e., banks were still able to divert funds to urban areas. But much more than this, the scheme has some undesirable effects.

Plainly, the regulation is a form of financial repression that penalizes banks, borrowers and savers alike. Under this environment, the RFMs will never attain its full potentials despite the financial reforms already initiated.

Consider, for example, a predominantly rice-producing region. Farmers' demand for credit and supply of deposit

funds are seasonal. During harvest season, farmers receive cash well in excess of their requirements for the immediate period. Of course, they will have several choices with regard to what to do with their surplus funds. One is to lend their surplus funds to banks provided the deposit rates are attractive enough. However, banks cannot offer them higher deposit rates. The reason is very simple. During harvest season, the demand for credit is usually low while the supply of deposit funds is high. Since banks are required to lend 75 percent of total deposits to the same locality even if the demand for credit is low, they will have to offer loans at bargain rates to stimulate demand. They may even resort to financing less worthy projects just to fulfill the requirement. Naturally, low effective yields on these assets will be passed on to savers in terms of lower deposit rates. Potential depositors respond by looking for alternative outlets. But in the rural areas, there are only few alternatives. One is cash which is less attractive during inflationary period. The other is unproductive physical assets, a hedge against inflation. As long as banks are constrained to offer to savers financial instruments with competitive rates, they will never be able to mobilize funds more effectively.

During planting season, demand for credit increases. But banks will have difficulty in meeting the demand since they can transfer only a limited amount from other branches with excess funds. The excess demand for funds exert upward

pressure on lending rates. In the end, borrowers will have to content themselves with higher interest cost.

Indeed, one who is a net saver in one period and a net borrower in another period will be doubly penalized.

The situation would be different if there is no deposit retention regulation. Banks can position their branches in different localities or regions such that the increase risk in the demand for credit in one locality can be supported by the increase in deposit funds in another locality. In this case, banks can offer attractive deposit rates to surplus units and lower lending rates to borrowers.

The same conclusion can be derived if the analysis is extended to the case where one locality or region is a perennial surplus unit while the other is a perennial deficit unit. If unhampered, banks can mobilize and allocate funds much more efficiently. Thus, to develop the RFMs, it is necessary to re-examine the deposit retention regulation.

The concern often expressed by authorities that with the abolition of the deposit retention scheme, funds would just flow from the rural areas to urban areas would indeed become real if policies that artificially make agriculture and other rural activities unprofitable while making manufacturing and other urban activities artificially profitable and if financial repression are continued. As already mentioned above, the government is committed towards

undoing those policy biases. Hence, the deposit retention scheme will be rendered superfluous.

Again, studies are required to provide empirical content to the different views on this issue. Specifically, the impact of this scheme on bank competition in general and savings mobilization and lending activities of branches of commercial banks in particular should be examined.

3. Interlinking of Markets

The new school of rural finance is correct in criticizing the "supply side" approach to rural finance. Credit subsidies can never be the main policy in creating rural growth and dynamism. There should be a program package including macro policies and structural reforms (among them the proper financial policies and institutions) which will ensure the vitality of the rural areas and would ensure that most farmers would be bankable. Only then will a formal credit system thrive.

But structural reforms and macro policies may take some time to accomplish or the positive effects may have a long time lag. What is to be done in the meantime?

The previous chapters have shown that informal loans have fared much better in delivering financial credit to the small farmers. Should the informal sector therefore be developed and expanded by consciously allocating more funds to the informal lender? It seems that informal lenders seem

to be embarking on profitable ventures which the formal system can share. Or should the formal sector instead be allowed to branch out of pure banking activities to go into trading, marketing and distribution activities to compete with informal lenders.

The latter policy has been suggested due to the fact that interlinking of markets seem to make lending profitable. The current banking regulations do not allow formal financial institutions to interlink credit with input and output markets. However, the mimicking of informal lenders by the formal sector will most likely legitimize informal lending since in actual fact, many informal lenders are already connected to rural banks, aside from being informal creditors, traders, millers, etc.

The twin policies of channelling formal credit to informal lenders or allowing the merging of formal and informal lenders by expanding banks' activities will enhance the present situation of interlinked markets. If one views this phenomenon as contributing to efficiency and to channelling credit to the small farmers, this will lead to improving rural productivity and output, and the policies should be adopted.

But the surplus school has come up with legitimate questions concerning equity in the rural areas. The theory of interlinked markets and the transaction cost schools can help in the discussion.

Precisely, informal lenders find it profitable to go into credit delivery because interlinked credit provides means of coping with imperfect markets.

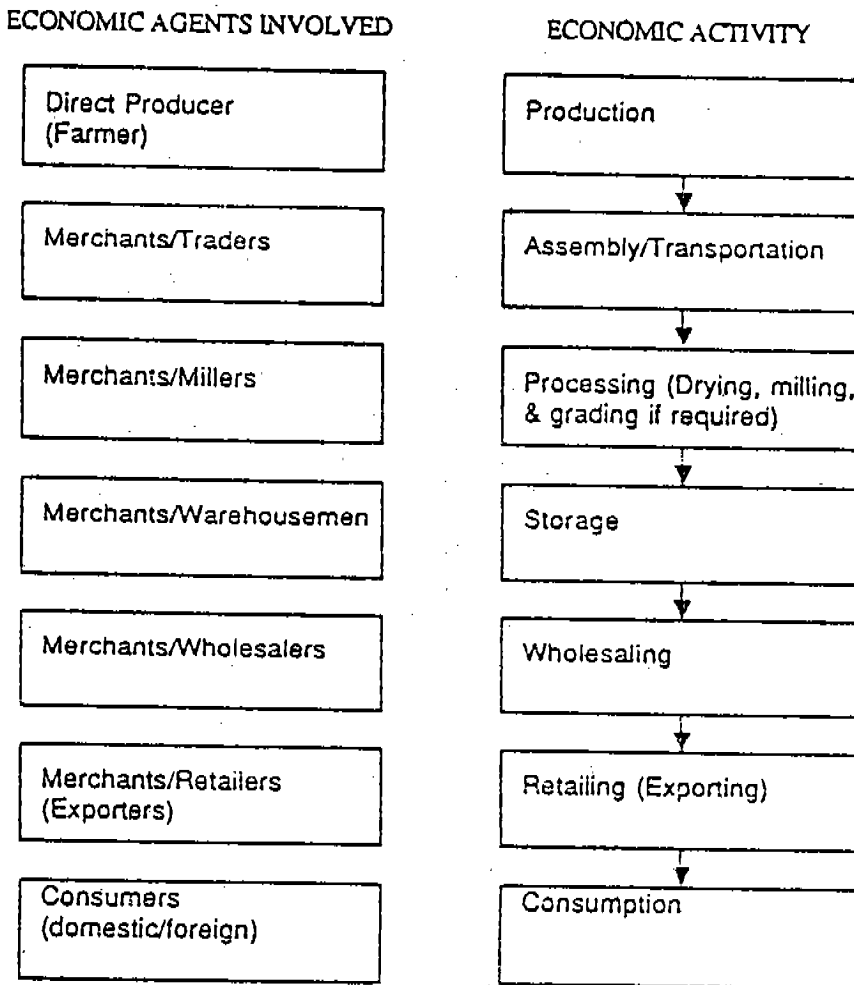
The entire trading process in the rural areas require high transaction costs due to bad transportation system, lack of warehouses and milling facilities near the production areas. Unstable production conditions and the lack of crop insurance schemes imposes much uncertainty on the traders' supply of agricultural crops.

Thus, the absence of adequate financial credit to the farmer is used as a mechanism to answer these imperfections in the trading markets. Linking the two markets will result in farmers getting credit and the traders getting a relatively sure supply of cheap agricultural output (and some more profits to boot from the interest and pricing of products).

So far the picture looks good. If one, however, examines the relationships closer, one may discern some inequities that may arise. First of all, traders usually have information about market prices which the farmers do not have. More importantly, the traders possess transaction-specific assets which strengthen their bargaining power. Figure IV.1 is lifted from Floro's (1986) paper. It can be seen that traders with access to transportation, milling, storage, wholesale and retail outlets as well as credit funds would have much stronger

Figure IV.1

MARKETING STRUCTURE OF AGRICULTURAL OUTPUT ^{a/}



The marketing operations may all be performed by the same merchants (through forward linkages) or may be performed by different groups, depending upon the specialization of labor and the extent of backward or forward linkages. For example, in rice marketing, millers may also be engaged in transporting, storing, wholesaling, and even retailing. In addition, the final market destination may be foreign and/or domestic, depending on the type of agricultural crop.

Source: Floro (1986).

bargaining strength compared to the small farmer. It has been noted that informal loans have a lower risk and an administrative cost close to that of the formal sector. The possibility of "extra" profits in the rural areas is enhanced as agents with transaction-specific assets can charge a return for the ownership of these specific assets. The practice of underpricing palay output and overpricing input costs would be due more to asymmetric information access and specific-asset ownership rather than risk payment (especially since informal loans have low default rates). The transaction cost school can explain the rationale of vertical integration wherein market imperfections encourage institutions to take over many economic activities. Thus, there are many instances wherein creditors, traders, millers, warehouse owners, storeowners and even landlords are one and the same people. If the government is to legitimize this, would it turn a blind eye to the underpricing of output and the overpricing of inputs? For surely, this is partly what makes informal lending profitable.

The lending by farmer-lenders are not that different. The imperfection in the land and labor markets may encourage richer farmers with access to credit funds to go into market interlinkage to gain access to land and cheap labor. The sorting or screening phenomena wherein nobody would want to lend out to the poorest of farmers again create an advantage to the farmer-lenders. Since land and labor markets are

imperfect, land and cheap labor may be attained through credit interlinkage without any market clearance.

This "inequitable" relationship perhaps explains the farmers' aversion to borrowing. The widespread phenomenon of non-borrowing discussed earlier (and the farmers' explicit wish "not to borrow") should call attention to the "trauma" they feel towards formal and informal credit. Although, it is possible that farmers did not wish to borrow simply because they know that nobody would accommodate them anymore due to their non-repayment of previous loans - a case of self-selection process.

It is perhaps time for the Philippines to follow the path of many successful countries (such as Japan, Korea, Taiwan, France) in developing credit and marketing cooperatives for farmers. Today is the most opportune time to do this especially since the proposed Constitution explicitly encourages the development of cooperatives throughout the country.

Cooperatives and credit unions, once successful, can go into market interlinkages just like the informal lenders. But unlike the informal lending system, there is no unequal relationship due to asymmetric information access and ownership of transaction-specific assets. The farmers themselves own and control the credit unions and marketing arms. They therefore gain access to credit and marketing which increases their bargaining strength vis-à-vis

landlords, traders and rich farmers.

Shoddy experience with government-imposed cooperatives should not discourage farmers to organize themselves into associations and unions that will lead them towards self-reliance. This has been the successful experience of many countries. Of course, this strategy also calls for government help and support in terms of providing the right institutional network and control as well as technical assistance and support for market outlets.

Indeed, it is worthwhile to study the experience of cooperative rural banks which currently integrate lending with input and output markets. Apart from looking at efficiency, the study should also examine equity issues where a few are still able to control the cooperative. Here, the mechanisms for control and sharing of benefits may be different from an ordinary rural bank and may be advantageous or disadvantageous to ordinary members. The analysis can be further enriched if a comparison will be made between the performance of cooperative rural banks and other financial institutions (e.g., rural banks, branches of commercial banks) operating in the rural areas.

The other complementary approach is to allow more competition in the rural areas. Once interlinking of markets is perceived by many as profitable, many are expected to enter the market. The form of organization would be secondary to the decision to enter the market.

This is where entry barriers or entry regulations need to be liberalized.

4. Rehabilitation and Strengthening of Rural Banks

The dismal plight of the rural banking system (RBS) has currently received greater attention from the public. About 80 percent of the 877 rural banks are in a financial bind (TBAC [1986]). This is not the first time that the RBS suffered financial difficulties. The huge rediscounting arrearages piled up by many rural banks in 1980 had prompted the Central Bank to introduce rehabilitation measures for rural banks.

There seems to be a general agreement that erroneous policies, such as cheap rediscounting policies, special credit programs, liberal past due ratio rules, and laxity in bank supervision, have unwittingly undermined the health of many rural banks. But the economic crisis in 1983 has certainly compounded their present problem. Even banks located in urban centers, especially small ones, were not spared of the crisis.

Several studies have examined the plight of the RBS and have also proposed certain rehabilitation schemes. Among others are Lamberte (1985), Bajada (1986), TBAC (1986), Lamberte and Bautista (1986), RBAP (1986) and Patten and Kern (1986). There is agreement

on the need to rehabilitate the rural banking system. Infrastructures are already in place and to do away with them would be more costly, not to mention its debilitating effect on the rural people's confidence in the banking system. Majority favor selective rehabilitation to weed out badly or unprofessionally managed rural banks from the system. This does not necessarily mean that a locality whose rural bank is closed will not be served by a bank. With the accompanying proposed deregulation scheme, new entrants may be allowed to operate. In areas, where a full-sized bank cannot operate profitably, perhaps an extension office may be opened to serve the community 2-3 days a week as suggested by Patten and Kern.

Some proposals are also advanced to strengthen rural banks. One proposal is to encourage commercial banks to have formal tie-ups or management contracts with rural banks for a limited period or until such time the rural bank is completely rehabilitated and has gained sufficient management skill. Still another proposal is to adopt a modified form of area of responsibility system employed in India to improve the rural financial markets. That is, a commercial bank's men be given sole franchise to operate in a certain area, say a province, for a specific period. Implicitly, rural banks will be directly under the responsibility of a commercial bank.

The views regarding the specific measures to be adopted to rehabilitate and strengthen rural banks are indeed diverse. It means that more discussions are needed to arrive at the best rehabilitation scheme. Perhaps, agreement on basic principles and assumptions regarding the policy environment for the next ten years should be arrived at first. Some indicative figures on costs and benefits will also be needed.

The Central Bank has a big role to play in any rehabilitation scheme that may be adopted. But it has to redirect its energy. As suggested by Patten and Kern, it should intervene at the bank level, not at the borrower level. That is, it should concentrate on bank supervision and provide training program to improve the quality of management of rural banks, and should not tell banks whom and where to lend. It should also relinquish its responsibility to manage certain credit programs. The Central Bank as an institution is not designed to assume this responsibility. The current problem with the ALF program should be enough to convince authorities. Funds of the various credit programs managed by the Central Bank including those managed by non-banking government entities may be consolidated and placed under the responsibility of another agency.

Chapter V

POLICY RECOMMENDATIONS AND RESEARCH AGENDA

This last chapter is divided into two sections. The first section discusses some policy recommendations based on the research materials reviewed above. The agenda for future research on rural finance are presented in the second section.

A. Policy Recommendations

There is no intent here to present a comprehensive policy agenda for the improvement of the entire economy or of the rural sector. Those who are interested in comprehensive agenda may consult the following two documents: "Economic Recovery and Long Run Growth: Agenda for Reforms" (PIDS[1986]) and "Agenda for Action for the Philippine Rural Sector" (PIDS-CPDS[1986]). Some of the commentaries on these two documents appeared in leading newspapers. Others were circulated in mimeograph form. One notable commentary is that of Ranis entitled: "The Economics of the Aquino Government: Policy Agenda, Actions and Prospects" (1986).

The objective of recommending some policies in this paper is very modest, that is, to strengthen the rural financial markets (RFMs). Strengthening the RFMs means making them efficient mobilizers of savings and allocators of funds. Thus, the policy recommendations are not only intended to improve the credit delivery system in the rural areas, but they are also aimed at

improving the other function of RFMS - that of mobilizing savings. It should however be noted that strengthening the RFMS is not an end in itself. Rather, it is only one of the means of truly developing the rural sector.

1. Macroeconomic Policy Environment

This is one area where more reforms are needed. Just by making macroeconomic policies neutral to all sectors of the economy would have already greater positive impact on the rural and agricultural sector. In this regard, the overvaluation of the peso which usually hurts agriculture more than other sectors must be avoided. The present estimate of the overvaluation of the peso more than offsets the gains derived from the removal of export taxes on agricultural exports.

Trade policies must likewise be re-examined. In 1984, the domestic price of urea was 100 percent higher than the the border price. The quantitative restrictions allowed a few domestic firms to charge higher prices for fertilizer. This is unfortunate since the cost of fertilizer has the biggest share in the total production cost of farmers. Liberalizing the importation of fertilizer and other farm implements, such as hand tractors, is essential in reducing the cost of producing agricultural products. In this connection, farmer-cooperatives may be allowed to directly import fertilizers and other farm implements. In the same manner, protection given to local producers of road vehicles and tires must be removed because it has unnecessarily increased the price of transport vehicles. The high transport cost

currently absorbed by farmers/entrepreneurs is partly due to this.

The inadequacy and/or lack of farm-to-market roads in most parts of the rural areas is also one factor making rural enterprises unprofitable. This is where the infrastructure program of the government needs some refocusing. For instance, there is greater social and economic value in building more farm-to-market roads and ports facilities in the rural areas than building another LRT in Metro Manila.

The implementation of genuine and comprehensive land reform, the encouragement of multicropping arrangements, the setting up of institutional and physical infrastructures that will increase agricultural productivity (e.g., irrigation systems, honest and efficient local governments) and a sensible price stabilization policy all contribute to rural development and dynamism that will be conducive to the healthy growth of a rural credit system.

2. Government's Planning and Administrative Machineries

The government's planning and administrative machineries at the regional and provincial level must be strengthened. Socio-economic characteristics substantially vary from one region to another, and national planning bodies located in Metro Manila usually do not take this into consideration in their planning exercises. Policies and programs formulated at the regional and provincial levels would be more effective and responsive than those prepared at the national level. The reason being that most

of those would come from residents who are more knowledgeable of their locality than several bureaucrats holding office in Metro Manila. Citizens would be more interested in policy making and planning if they have a relatively inexpensive government machinery.

The presence of licensing boards at the regional and provincial levels will greatly help potential entrepreneurs, especially exporters. Currently, exporters residing in the provinces are intimidated by the high transaction costs of obtaining a license permit from government agencies located in Metro Manila. The regional and provincial offices should also be tasked with collecting and disseminating vital economic information, especially information on prices of commodities predominantly produced and/or consumed by residents.

Social services should likewise be extended to the rural areas. For example, if government health services were available in the rural areas, then farmers would not borrow anymore from the informal moneylenders to pay for relatively expensive health services provided by private institutions/individuals. Thus, borrowing will be limited to productive purposes.

3. Monetary and Credit Policies

The freely floating interest rate, the uniform and market-oriented rediscount rate and the gradual withdrawal of CB bills which partly caused disintermediation in the last two years are steps in the right direction. Studies reviewed above have

pointed out that subsidized credit did not have a visible contribution for the adoption of new technology. Entrepreneurs/farmers adopt new technology if they think that it is profitable. Moreover, subsidized credit is not at all cheap to borrowers. Aside from this, it favors only big, low-land irrigated farms, while losses from subsidized credit programs due to loan defaults have to be borne by all taxpayers, including those who were denied access to cheap credit. The interest rate subsidy to agriculture even failed to offset the incentive structure that was biased against agriculture. The best approach is still to change the incentive structure itself. The cheap credit policy has only succeeded in impairing the growth of rural financial markets. Delivering subsidized credit to the rural sector was looked upon as the main function of rural financial institutions.

Having a uniform rediscount rate is indeed a welcome development. This means that the Central Bank will not anymore dictate to rural financial institutions on where, whom and how much to lend per project. It can instead focus on its stabilization and bank supervision functions. But one question is how to determine the rediscount rate. The rediscount rate should not be based on the weighted average of time deposit and MRR90 rates but rather on the rate offered to prime borrowers (maybe a little lower than the prime rate). If the rediscount rate were based on the weighted average of time deposit and MRR90 rates, then rediscounted funds would still look very attractive to banks since they do not have to put up

reserves against them, unlike in the case of deposit funds. This would just make banks continue depending on the Central Bank for rediscounted funds, while savers continue to miss the opportunities offered by a well-functioning financial market.

The Central Bank is not designed to manage special credit programs. Unlike an ordinary bank, its staff is not trained to evaluate individual loan requests. Therefore, it should stop managing credit programs.

4. Banking Policies and Regulations

This is now the opportune time to push more reforms in the banking system. The policy of stressing on bank size, rather than bank competition, needs to be re-examined. There is no clear indication that profitability is largely determined by size. A study shows that medium-sized private commercial banks also enjoyed higher profits. The emphasis on size would just hurt the rural, agricultural sector. Big banks tend to accommodate only big accounts, and small accounts in the rural sector will be left out in this setting.

The policy of disallowing new entrants into the banking system is detrimental to the development of the financial system. New entrants usually bring in innovative techniques, otherwise they cannot survive the competition put up by existing banks. Likewise, existing banks have to stay in competitive form in order to survive the growing competition. This is one factor that puts dynamism into the banking system.

Liberal bank entry and branching are certainly beneficial to the rural areas which are currently starved of banking services due to the failures of many rural banks. In some instances, rural banks failed because of mismanagement, and potentially good clients may completely leave the banking system if no alternative bank in the same locality is available to them. It should be noted that many rural banks have emerged because of the incentive structure provided them. With the new policy environment mentioned above, it would be quite hard for many rural banks to internalize new banking habits, whereas new entrants enter the market with the notion that rural banking itself is profitable, not that subsidies make rural banks profitable. While entry is liberalized, the Central Bank should strengthen its supervisory function so that bank failures can be minimized.

Some rural banks want to increase their equity. But the ceiling on equity participation by each stockholder has sometimes undermined this effort. The intention of putting a ceiling on equity participation is to avoid undue concentration of wealth, especially if most of the profits derived come from government subsidies. This is meritorious so long as only one bank is allowed per town. But with liberal bank entry and the phasing out of subsidies, the ceiling on equity participation becomes unnecessary.

There is more merit in giving banks greater flexibility to operate branches in the rural areas. The minimum branch size, or

the requirement to buy government securities the amount of which depends on whether the service area applied for is overbranched or underbranched needs to be re-examined. It seems that the current regulation might result in the creation of bigger but relatively fewer bank branches in the rural areas serving very few bigger clients. Currently, it is deemed cheaper to buy existing banks in the rural areas than to open a new branch. While there are merits to this, its main drawback is that it stifles competition since the high entry cost technically deters potential entrants from entering the market. Branches may not necessarily operate five days a week depending on the demand for their services. In this case, the same staff can be transferred from one branch to another, thereby reducing administrative costs.

Loan quota schemes, i.e., the agricultural loan quota and deposit retention schemes, should be removed not because they are ineffective, but because they violate sound banking principles. Under these schemes, banks are compelled to hold low-yielding assets, which consequently impair their ability to mobilize funds. Although some banks are able to circumvent these regulations, there are dead-weight losses incurred in circumventing them.

5. Credit and Marketing Cooperatives

Experience with government-imposed cooperative movement has not been that pleasant, but it should not deter us from

taking a second look at it. A number of countries are successful in their cooperative movement. The advantage with cooperatives is that they can go into interlinking just like the informal lenders. So, they can reduce administrative and risk costs. But the similarity ends here. With cooperatives, there is no unequal relationship between lender and borrower arising from asymmetric information access and ownership of transaction-specific assets since the farmers or borrowers themselves own and control the cooperative bank and marketing arms. Of course, this strategy calls for government help and support in terms of providing the right institutional network and control as well as technical assistance and support for market outlets. But the error of providing cooperatives with cheap funds to entice farmers and other individuals to join the movement should never be repeated. Also, membership to cooperatives should be open to any interested individuals in the community, not only to bona fide farmers.

6. Rehabilitation of Rural Banks

This is one area where a clear policy statement is urgently needed. The longer a decision is made regarding what to do with failing rural banks, the more uncertain the health of the rural financial system will be. For example, a strong rural bank may assume that all arrearages with the Central Bank will be condoned, and therefore it starts delaying payments for its borrowings from the Central Bank. If its assumption turns out to be wrong, then it is just unnecessarily putting itself in a difficult situation. A weak bank may have the same expectations,

and therefore it does not exert any effort to introduce changes or innovations. In the meantime, those rural banks which are good candidates for rehabilitation continue to suffer, and they might reach a stage where they are already beyond repair.

It is therefore necessary that the Central Bank immediately declare a selective bank rehabilitation policy. This is to impress upon banks that not all of them will be rehabilitated. As a first step, the Central Bank has to conduct a thorough bank examination to be completed within two months. Independent auditing firms and commercial banks interested in buying rural banks may be contracted to help the Central Bank in examining the status of rural banks. Rural banks involved in fraud should immediately be closed. While bank examination is ongoing, a specific rehabilitation scheme should be devised. As a general principle, the rehabilitation scheme should be anchored on the new policy environment. That is, rural banks can survive without enjoying preferential treatment from the Central Bank.

B. Research Agenda

There is currently a tremendous interest in rural financial markets research. Interestingly, many of the proposed researches attempt to address some of the research gaps identified in the previous chapters. Some of them have in fact benefitted from the preliminary draft of this review. We will first highlight the objectives of major research efforts which are going to be launched shortly and then suggest additional research topics.

1. Major Research Efforts

- (a) The CBP/WB - Sponsored Research Project: "Strategies for Expansion of Banking Services in the Rural Areas."

This is perhaps the most ambitious research project in rural finance. The expected output of this project is a set of "recommendations for monetary and regulatory measures including short term and longer term implementation programs to rectify current short fall and inadequacies, and to promote development of a sound and financially viable banking and financial services in the rural areas." The research project includes the following specific areas (see the document: "Request for Proposal," CBP [1986] for more details):

(i) Banking Operations (Unit and Branch Banks)

- (1) To review and evaluate the organizational structure and manpower, and assess their adequacy in performance of current operations;
- (2) To examine the scope and limitations of the types of financial services offered and assess the procedures adopted to carry out various banking transactions;
- (3) To assess the nature, scope and quality of supervision and technical assistance provided by regional and head offices;

- (4) To assess the adequacy of internal control and management on overall operation and particularly in ensuring the quality of loans and other investments, including deposit and other cash operations; and
- (5) To evaluate the policies and procedures involved in bank planning and budgeting, promotion and banking services, technical assistance and community relations.

(ii) Legal and Regulatory Framework

- (1) To review existing laws, banking regulations, circulars and other government policies affecting branch/unit banking operations;
- (2) To document the changing regulatory milieu during the past years as it pertains to banking activity. Among other items, this should include reserve requirements, interest rate regulations on deposits and loans, rediscount policies, branch banking regulations, lending quotas, restrictions on portfolio diversification, the composition of liability, capital subscription, tax regulations, and supervision regulations;

- (3) To determine the incidence of the impact of these regulations in different banking entities, thereby explaining the role of policy measures in the structure, conduct and performance of the banking system;
- (4) To identify the new regulatory environment that has resulted from the evolving deregulation measures recently embarked upon by the Central Bank and government; and
- (5) To forecast the probable influence and impact of these new regulations on the evaluation of the banking sector servicing clientele outside major metropolitan areas;

(iii) Other Possible-Considerations

- (1) To evaluate training facilities, plans and programs for staff development in all phases of branch/unit operations;
- (2) To identify and examine the role of supporting institutions (e.g. Ministry of Agriculture and Food, National Food and Agriculture Council, National Food Authority, Philippines Crop Insurance Corporation, etc.) in the areas of lending, supervision, technical assistance and collection, with the objective of improving coordination and

harnessing services available from such institutions.

(3) To assess the role of non-bank and other non-institutional financial intermediaries in relation to the expansion of rural credit delivery system and other forms of financial services.

(4) Recent trends whereby larger banks invest in the equity of smaller banks and merging of rural banks may warrant further investigation.

One can immediately observe that the study focuses only on the formal sector. This is understandable since the Central Bank which is the main sponsor of the study has direct responsibility only on the formal sector. It might however be useful to comment that the limited time allotted for the entire study, which is five months, may compel the research agency which is going to carry out the research undertaking to treat rigorously only a few objectives.

(b) The Ohio State University (OSU) and Philippine Institute for Development Studies (PIDS) Sponsored Study on Comparative Bank Studies in Rural Areas.

The overall objective of this study is to examine the comparative performance of rural banks (RBs) and branches of private commercial banks (PKBs). It seeks

to provide answers to the following specific questions:
(see Graham [1986] for more details):

- (1) To what extent does the PKB branch activity in a given rural area complement or substitute for the RB activity?;
- (2) To what extent and in what ways does the behavior and performance of the PKB branches influence the behavior and performance of the RBs and vice-versa in the same overlapping market area?
- (3) To what extent does the indirect "downstream" on-lending through informal networks (i.e., input suppliers, product buyers, processors, moneylenders, larger farmers, etc...) occur with a greater multiplier effect through liquidity channelled through PKB branches vs. the RBs?
- (4) To what extent may the PKB branches and RBs be servicing different (or similar) informal lending networks on-lending to a different set of (or the same) final borrowers?
- (5) To what extent are there different levels and incidence of lending costs (i.e., non-interest operational costs) for PKBs and RBs in servicing their rural clientele?
- (6) To what extent is the regulatory and supervisory environment (from the Central Bank [CB]) different

from the PKB branches and RBs? And to what extent does the regulatory environment play an instrumental role in explaining their comparative performance, either in terms of influencing the operational costs of lending or risk exposure, among other features?

(7) To what extent could a change in the CB regulations governing RB behavior (e.g., allowing more portfolio diversification, different capital subscription regulations, internal operational procedures and reporting regulations, etc.), allowing them more freedom to act like a small commercial bank, improve their financial performance and viability?

(8) To what extent could a new set of incentives induce PKBs and their branches to serve a wider range of lower income rural clientele?

(c) The Technical Board for Agricultural Credit (TBAC), Ohio State University (OSU) and Philippine Institute for Development Studies (PIDS) Sponsored Study on Rural Savings Mobilization.

This study will focus on savings mobilization in the rural sector, an issue which is grossly neglected by past studies. Rural banks are the main financial institutions included in this study (see Tolentino

[1986] for more details). The specific questions addressed by this study are the following:

- (1) What factor or factors determine the number and level of savings deposit accounts held by a rural bank?
- (2) Which factor or factors are the most influential determinants of the level of savings deposits held by a given rural bank?
- (3) What factors lie behind the differential (if any) ability of rural banks in deposit mobilization, as compared to the operations of commercial banks?
- (4) To what extent are savings deposit accounts interest-elastic or service-elastic?
- (5) To what extent are the savers served by a given rural bank affected by "money illusion", or respond to nominal, or not real, interest rates?
- (6) What specific strategies may rural bankers implement to accelerate to growth of the number and level of accounts their respective banks hold?
- (7) Which specific activities mentioned in no. 6 have the greatest effects on the deposit mobilization effects of rural banks?

The entire study will be carried out in two stages. The first stage makes use of balance sheets and income statements of rural banks to answer some of the key questions outlined above. The second stage uses experimental design. Data on deposit status and performance of selected rural banks before and after they implement specific schemes to increase the level of deposits. The same approach will be applied in analyzing saving behavior of households located in the service areas of selected rural banks. This is going to be the first in-depth study on savings mobilization utilizing simultaneously information collected from rural banks and from the communities served by the rural banks.

This study will be implemented by TBAC with some support from OSU and PIDS.

(d) The ADB-Sponsored Research on Informal Credit Markets.

This research project aims to provide a better understanding of the behavior of the informal credit markets, both urban and rural. It intends to cover many important areas, as may be gathered from the following indicative terms of reference for the study (see Ghatge [1986] for more details):

- (1) Estimating more accurately than existing estimates the size of the informal sector, both rural and urban.

- (2) Trends in size, and factors contributing to the growth or contraction of the informal sector in the short and long term, (such as financial "repression" or liberalization in the formal sector, growth of the volume of formal sector credit, growth of urban informal enterprises, growth in the demand for consumption credit, remittances from workers abroad received through non-banking channels, etc.).
- (3) Establishing the major structure of the informal sector; its segmentation and sub-markets, each with its own size, sources and uses of funds, market participants, interest rates, documentary instruments, linkages with each other, and with the formal sector. In particular, a classification of markets into homogenous borrower groups/borrowing purposes with a view to assessing the existing role and potential contribution of the informal sector in meeting them.
- (4) The policy and legal environment (usury laws, debt moratoria, registration requirements, restrictions on deposit taking, etc.).
- (5) The savings mobilization role of informal credit markets. An analysis of the sources and uses of funds to assess the net additive contribution of ICMS to savings, by offering savers a higher

return than formal sector institutions. The role of Roscas (known as "paluwagan" in the Philippines) in mobilizing household savings in particular. The impact on the saving mobilization role of the informal sector by restrictions placed on deposit taking on NBFIs and other informal intermediaries.

- (6) The allocative efficiency role of the informal sector credit; its private and social productivity, and in particular the extent to which it alleviates inefficiencies that stem from too tightly or inappropriately controlled credit allocation by the formal sector.
- (7) The equity impact of ICMS in making credit available to small borrowers, (the small enterprise sector, marginal farmers, women entrepreneurs, etc.).
- (8) The role of informal credit in meeting consumption needs.
- (9) The efficacy of monetary policy, credit policy and selective credit controls in the presence of an informal sector.
- (10) Interaction between formal and informal credit and the extent to which they are substitutes or complementary.

- (11) Channels of linkage between formal and informal sectors (e.g. trade credit, access by informal lenders to the banks).
- (12) The informal sector and depositor security. The incidence of fraud and "failures" as compared to that in the formal sector.
- (13) Interest rate formation in the informal sector. The relative importance of (i) transactions costs, (ii) risk premia, (iii) cost of funds and (iv) monopolistic (or obligopolistic) profits stemming from market power.
- (14) Trends in interest rates. How they compare with formal sector rates when "hidden" costs in the former and borrower transactions costs in the latter are included. The relationship between interest rates, collateral, the purpose, size and duration of loans, and borrower and lender type.
- (15) Where monopoly profits exist, the feasibility and design of policy action to engender more competitive conditions (e.g. through more effective competition from the formal sector, changes in the legal environment, encouraging new informal entrants through refinancing facilities, etc.)

- (16) A documenting of the many advantages of informal credit as a source of possible innovations in the formal sector.
- (17) Regarding transactions costs and risk premia, the behavioral characteristics, practices, and mechanisms through which informational links are formed and maintained with borrowers, and debt service ensured, with their advantages and disadvantages. In particular the importance of interlinkage of transactions in credit with those in land-lease, labor and product markets. The extent to which interlinkage is taking different forms (e.g. the increasing importance of input-dealers and output traders with land reform and the commercialization of agriculture). Is the dearth of, and control over, credit, used to obtain more favorable terms in other markets, or is the existence of contracts in other markets an enabling condition for credit transactions too, serving to increase the availability of credit and perhaps even lowering its costs?
- (18) Where competitive conditions exist, but the opportunity cost of funds is high, the feasibility and design of refinancing schemes to reduce the cost of funds and take advantage of the lower transactions costs of informal lenders

(whether on account interlinkage or otherwise) by using them as retailers of credit.

- (19) An optimal legal and policy environment towards the informal sector.

The Philippine Institute for Development Studies (PIDS) and the Social Weather Stations, Inc. (SWS) are going to implement this study. Some of the aspects mentioned in the terms of reference will not be rigorously treated in view of the budget and time constraint. As an approach towards meeting most of the objectives, the study is broken up into five major topics:

- (i) Monetary and credit policies and the response of banks to the challenge put up by the informal moneylenders.
- (ii) Overall scope of the informal credit markets: the urban sector.
- (iii) The response of the informal credit market to new market opportunities: a case history of the overseas employment boom.
- (iv) Interaction of the informal and formal credit markets in the development of the rural sector: comparative case histories of traditional and cash crops.

- v) Market conditions within the informal credit market and linkages to the formal credit market: a design for a system of economic monitoring.

2. Additional Research Topics

(a) Market Segmentation in the Rural Areas

It has become fashionable to say that the financial markets in the rural areas are highly segmented. And yet, there is no study analyzing in greater detail the extent and causes of financial market segmentation. Are they due to imperfections inherent in a rural economy or to financial policies and regulations? Different causes of segmentation certainly require different policy prescriptions. Knowing the extent of segmentation will more or less tell us the amount of policy actions required to deal with the segmentation problems.

It might be useful to start with a detailed description of the financial markets in a certain area or region. Then, a model of financial market segmentation has to be devised and tested. Modelling the financial market segmentation is one area grossly neglected in rural finance. Perhaps, the empirical model developed by Acharya and Madhur (1983) can be a useful starting point.

The study may be enriched by complementing the usual economic analytical approach with anthropological approach.

(b) Other Formal Lenders in the Rural Areas

Past studies on rural finance focused on the rural banks. The proposed studies discussed above will include branches of commercial banks, aside from rural banks. But these are not the only formal financial institutions operating in the rural areas. Registered credit unions numbering more than one thousand also operate in the rural areas. Some of them are attached to social action centers of the Catholic/Protestant Church, while others operate independently. They are small but their presence in a small community is quite significant. They operate like a rural bank, but their deposit mobilization and lending operations are limited to their members only. As of this moment, they are outside the control of the Central Bank. In view of the problems encountered by many rural banks, the growth potentials of these credit unions should be explored. Here is where a study about the performance of credit unions and impact of some regulations on their behavior is badly needed. To date, no scholarly study on credit unions has been made.

Another group of formal financial institutions operating in the rural areas is the cooperative rural banks (CRBs). Presently, there are 29 operating in as many provinces. Previous studies lumped them together with rural banks. This is hardly justifiable on at least two grounds. First, CRBs are controlled by member cooperatives, whereas

RBs are owned by individuals or a few families. Secondly, it is institutionally and functionally linked to Samahang Nayan and Area Marketing Cooperative, a classic case of market interlinking. This feature is at least legally absent in rural banks. Thus, efficiency may be achieved by CRBs just as in the interlinking of markets by the landlords and traders. But this has an added feature since small farmers themselves own the cooperatives, thereby increasing their access to institutional capital, financial and trading markets. Thus, it is worthwhile to have a study more focused on the CRBs.

The study may include a comparative analysis of the performance of CRBs and other types of rural financial institutions and the advantages/disadvantages in having them operate under the Rural Banking Act. A comparison of the benefits (in terms of higher income) derived by a CRB member and a borrower from an ordinary rural bank or from an informal lender is extremely useful to shed light on equity issues.

(c) Transaction Costs and Market Interlink

It has been mentioned by several studies reviewed above that informal lenders in the rural areas have an advantage over rural banks because they can use interlinked markets to reduce transaction and risk costs. In fact, this is the main reason given for the suggestion to allow rural banks to go into allied and non-allied activities. Unfortunately,

however, there is no study providing estimates of the transaction costs incurred by lenders and borrowers in interlinked markets. There is a study that shows that a trader-lender tends to undervalue the price of the produce of borrowers. But what is his cost of jointly undertaking lending and marketing? On the part of a borrower, what is his cost of using interlinked markets as compared to unlinked markets? It should be noted that a farmer incurs a search or marketing cost if he does not enter into a pre-arranged marketing agreement. The price undervaluation by trader-lenders may just be equal to the net price farmer-borrowers obtain after subtracting the marketing from the gross unit price of the product. These issues are not clearly dealt with by existing studies.

There is therefore a need to study the transaction costs in an interlinked markets, both from the point of view of lenders and borrowers. Perhaps, a multiproduct joint cost function can be utilized here as an analytical technique (see Lamberte [1982]). The main idea is to find out whether cost savings are realized by having both lenders and borrowers engage in interlinked markets. Aside from informal lenders, the cooperative rural banks (CRBs) may be included in this study.

(d) Differential Saving Rates Between Urban and Rural Households

It has been observed that the average saving rate of

rural households is higher than that of urban households for the same income bracket. This has come as a surprise since normally, the reverse is to be expected. What if the marginal propensity to save also follows the same pattern? It means that society will be better off if a scarce resource is employed in the rural areas to increase household income since it would have greater impact on aggregate savings than if it were employed in urban areas. In view of this policy implication, it is indeed important to examine the urban and rural households' saving rates separately and determine factors that can explain the differential saving rates.

(e) Financial Saving

As pointed out in the review, past studies yielded conflicting results regarding the "interest-rate elasticity" and "institution elasticity" of financial saving. The conflicting results could be due to differences in the definition of dependent and independent variables, time periods, and coverage of financial institutions. In addition, the problem of simultaneity has not been dealt with adequately by sticking to a single equation model. Perhaps, a study will be made to sort out those factors that produce the conflicting results so that we can have a definite answer whether the "interest-rate elasticity" and "institution-elasticity" hypotheses work here in the Philippines.

The TBAC-OSU-PIDS study on savings mobilization will try to deal with this issue, but it will focus only on rural banks. We suggest a study to be done for the entire banking system since the presence of other banks in the rural areas could have greater impact on savings mobilization.

The saving potentials of rural households must be studied. Previous studies on rural saving have concentrated on the farm households only. As pointed out above, non-farm households in the rural areas are as important as farm households. But their saving behavior has not been analyzed. We suggest that a study employing the record-keeping data gathering technique be utilized to study the saving potentials of farm and non-farm households. The objective is to find out whether there are different cash flow patterns among households in the same community that can provide opportunities for financial intermediation. Financial institutions operating in the area where sample farm and non-farm households are located must likewise be examined to determine the extent to which they exploit the different cash flow patterns of various households. The impact of the deposit retention scheme on the savings mobilization performance of rural financial institutions can perhaps be examined here.

(f) Behavior of Borrowers

Studies dealing with the behavior of borrowers and loan

repayment rates mainly focused on farmer-borrowers. Among the farmer-borrowers, rice and corn farmers were the most popular subjects on these studies. This is understandable since many of these studies were designed to evaluate credit programs, and most of the credit programs, even guarantee schemes, were addressed mainly to rice/corn producers. In addition, land reform has so far been confined to rice and corn farms. Indeed, little is known about the demand for credit of non-rice/corn producers, say vegetable growers, who are not beneficiaries of land reform and their repayment rates. How did they finance their farm enterprises? Are the credit instruments or arrangements including price and tenor of credit substantially different from those normally used among rice/corn farmer-borrowers? Here, we expect that the kind of commodity influences to a large extent the credit arrangements used by borrowers and lenders, whether formal or informal. For example, vegetables have shorter crop cycle and, unlike rice, cannot be stored for long. What is their effective cost of borrowing from formal and informal lenders? Is interlinked credit also prevalent between lenders and producers of other crops other than rice and corn? Alexander's (1985) anthropological study of the Indonesian chili market yield some useful information above commodity-specific credit arrangements.

Similarly, virtually nothing is known about the demand for credit of non-farm households in the rural areas. Do non-farm rural households borrow to finance consumption or

production? Are the enterprises being financed through credit have forward or backward linkages with the agricultural sector? Do they have relatively easy access to formal and informal credit markets? What is their effective cost of borrowing from alternative lenders? What is their repayment rate?

The answers to these questions are extremely useful for designing policies aimed at developing the rural financial markets. Future researches on rural finance should therefore take them into account.

Some of these studies may make use of data collected by previous studies such as those conducted by TBAC (see Annex A).

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ANNEX A

VARIOUS SURVEYS CONDUCTED BY TBAC AND
PRIMARY DATA GATHERED

Title of Survey/ Study	Date of Survey	Survey Area	No. of Respondents	Data Set
1. Study on Non-Repayment of Agricultural Loans in the Philippines	1975-1977	Nationwide	1,113 farmers 82 financial institutions	Magnitude and Trends of Loan Operations and Collections Comparative Repayment Performance - Within the Entire Credit System - Within the Agricultural Credit System Factors Associated with non-repayment of Loans Impact of Loan Collections on Bank Operations Impact of Past Due Loans on Bank Operations
2. Study on the Informal Rural Financial Markets in the Philippines	1978	Bulacan, Camarines Sur and Isabela	163 Private Money-lenders (PML's) 912 farmers	<u>PMLs</u> : general information (personal/business profile), opportunity cost of capital, sources and uses of funds, credit and collection records, attitude towards lending and non-repayment <u>Farmers</u> : personal profile, farm enterprise profile, household income and expense profile, loan availment and repayment records
3. Socio-economic survey on Landless Rural Workers in 3 Selected Barangays in the Philippines	Feb.-May 1978	Bgy. Alangay in Dingle, Iloilo; Bgy. Bahaypare in Candaba, Pampanga; Bgy. Tinawagan of Tigaon, Camarines Sur	227 households	Personal and family profile, employment, income levels and sources, level of material condition, mobility, perceptions and aspirations, credit behaviour, attitude towards credit.
4. Farm and Household: Micro-world of the Farmer	Feb. 1980	Nueva Ecija	34 farmers	Cash/Kind Inflow Credit Inflows Credit Outflows

Various Surveys Conducted by TBAC and Primary Data Gathered
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Title of Survey/ Study	Date of Survey	Survey Area	No. of Respondents	Data Set
5. Six Good Rural Banks	1980-1982	4 Rural Banks in Luzon, 1 in Visayas and 1 in Mindanao	6 Rural Banks	Financial condition of sample banks with respect to Standard Financial Ratios/Evaluation Intermediation Index, Funds Sourcing and Lending Cost Structure Other Explanatory Variables for Successful RB-Operations
6. Farm Indebtedness Survey	September- December 1982	Nationwide	6,066 farmers	Extent and Level of Indebtedness, Formal and Informal Sources and Nature of Borrowings Loan Repayment Practices Production, Income and Expenses Attitudes and Perceptions Towards Credit <ul style="list-style-type: none"> - By Region - By Land Resource Type - By Size of Respondents Operations - By Tenure - By Major Crop Grown - By Type of Borrower - By Credit Experience
7. A Study on the Cooperative System: Focus on the Cooperative Finance Structure	1983	Nationwide	189 cooperatives	Nature and Functions of Cooperatives Membership/Ownership Structure of Cooperatives Review of Operations <ul style="list-style-type: none"> - Lending - Sales and Marketing Financial Viability Manager's and Member's Perceptions/Attitudes Review of Cooperative Finance Program <ul style="list-style-type: none"> - Samahang Nayon Funds - Cooperative Loan Funds (SNSP, CMP, CDLF) - Other Cooperative Funds (CMSP, CISP, RCDP-C)

Title of Survey/ Study	Date of Survey	Survey Area	No. of Respondents	Data Set
9. A Study on the Framework of the Cooperative Finance Program	1982	Nationwide	1,175 cooperatives	Review of Cooperative Development and Finance Policies <ul style="list-style-type: none"> - Review of Cooperative Development Policies - Review of Rural Credit and Cooperative Finance Systems - Synthesis of Case Studies on Performance Evaluation of Cooperatives Concepts of a Cooperative Finance Program (CFP) <ul style="list-style-type: none"> - Objective and Strategies of the CFP - Organization Aspects, Lending Policies and Procedures - Credit Requirements and Fund Sources - Area Enterprise Planning and Financial Budgeting for the CFP - Training Program for the CFP - Framework for Program Monitoring and Evaluation
9. Rainfed Agricultural Development Iloilo Project I (RADIP I)	May-June 1982	Iloilo	499 farmers 32 banks 30 technicians	Profile of KABSACA Farmers Status of KABSACA Program' Program and Income Profile of Sample Farmers Credit Record of Sample Farmers <ul style="list-style-type: none"> - Amount of Loan - Credit Sources - Credit Terms and Conditions - Repayment Practices - Perceptions/Attitudes in Borrowing/Other Credit Indicators Operational Performance of Sample Banks <ul style="list-style-type: none"> - Lending Performance - Repayment - Analysis of Bank Margins - Lending Cost Structure - Financial Ratio Analysis

Various Surveys Conducted by TBAC and Primary Data Gathered
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Title of Survey/ Study	Date of Survey	Survey Area	No. of Respondents	Data Set
10. RADIP II	Aug. - Sept 1985	Iloilo	100 farmers	Performance Indications of Sample Technicians Proposed Strategies for Expending Credit Assistance to KABSACA Farmers Farm Household Simulation Cost and Return Analysis of Farm Operations Profile and Evaluation (On Credit Absorptive Capacity) of All Municipalities Serviced by KABSACA Credit Demand and Supply Estimation
11. An Evaluation of Biyayang Dagat Program	March 15- April 6, 1982	Nationwide	30 banks 28 BFAR technicians 335 fishermen- borrowers	Fishermen: profile of sample borrowers, production volume and practices, marketing practices, credit profile, attitudes and perceptions Bank: profile of sample banks, credit performance indicators, managers' attitudes and perceptions Technician: profile of sample technicians, nature and extent of involvement in the program, attitudes and perceptions
12. Integrated Rural Financing Program Evaluation Survey	Sept. - Oct. 1985	Pangasinan, Nueva Ecija, Pampanga, Cavite, Laguna, Iloilo, Davao Norte	232 IRF farmers 222 Non-IRF farmers 8 Rural Banks 8 Area Management Team Chairmen 7 CB Agricul- tural Credit Supervisors 10 MAF Technicians	Farmer: personal profile, farm enterprise profile, household income and expenses profile, credit profile and practices (formal and informal), attitudes and perceptions Banks: bank profile, financial condition, lending operations, bank management attitudes and perceptions AMT Chairmen: personal profile, nature and extent of AMT's involvement in the program, attitudes and perceptions CB-ACS/MAF Technician: personal profile, nature and extent of involvement in the program attitudes and perceptions

Title of Survey/ Study	Date of Survey	Survey Area	No. of Respondents	Data Set
13. Countryside Banking Survey	Semestral	Nationwide	500 rural banks	Agricultural Loans Granted Rediscount Availments Deposits Generated Interest Rates Charged in Loan and Paid in Deposits Income and Expenses Statement Perceptions on other Farm Credit Indicators - By Type of Respondent Bank - By Region

THE ROLE OF FINANCIAL INSTITUTIONS
IN RURAL DEVELOPMENT

Keynote Address Delivered By
Mr. Antonio H. Ozaeta, President
of the Philippine Commercial International Bank,
On the Occasion of
The Workshop on Rural Financial Market
Research Held at the Central Bank Building
On January 6, 1987

Allow me first to congratulate the organizers of this workshop, namely, the Technical Board for Agricultural Credit, the Philippine Institute for Development Studies, the Agribankers' Club and the Quedan Guarantee Fund Board for bringing about this worthwhile activity. It is indeed reassuring that discussions about such a crucial subject as rural financial markets continue to be pursued with unrelenting vigor by multi-sectoral groups like this.

The timing of this workshop should condition to a large extent the general perspective that its participants should be inclined to adopt. Financial institutions, in recent years and up to the present, have been subjected to the toughest of tests and have undergone a most excruciating catharsis. This crisis though has not been without benefits for it has challenged the more creative and dynamic financial institutions to reexamine and, consequently, rewrite their strategic plans and overhaul their war rooms. The crisis has been bloody yet cleansing, damaging yet strengthening, painful yet replete with lessons.

I have been asked to give my thoughts on the role of financial institutions in rural development. Years ago, especially during the lethargic pre-crisis period, this would have sounded like a hopelessly uninteresting and irrelevant subject. At that time, so much remained to be addressed with respect to the urban markets that any talk about involvement in rural development would have, from the purely business standpoint, appeared wasteful to most financial institutions. Moreover, it then seemed that rural development was not among the priorities of government and could not therefore have attracted private sector interest and support. Simply put, the task of rural development seemed hopelessly unexciting then.

DEFINITION OF TERMS

For the purpose of our discussion, we shall view financial institutions as encompassing only rural banks, countryside branches of commercial banks and thrift banks and rural-based operations of development finance institutions.

Our perspective of rural development shall be so broad as to include both agricultural and non-agricultural activities. The technical papers about to be presented to you today by Drs. Mario Lamberte and Joseph Lim confirm that non-agricultural activities account for a significant portion of rural incomes. Nonetheless, most of our insights on rural development draw heavily from our actual involvement in agricultural activities.

HISTORICAL ROLE

Hindsight will aid us tremendously in understanding the role of financial institutions in rural development. It would therefore be helpful to retrace the historical scenario and identify the factors that have either constrained or enhanced the activities of financial institutions in rural markets.

Informal Credit Sector. It has often been pointed out that the existence of an active and efficient informal credit sector composed of traders, processors, input suppliers and private moneylenders in the rural areas has generally constricted the demand for financing from the financial institutions (often referred to also as the formal sector.) The other side of the observation though is that these informal credit sources in fact simply emerged as viable, necessary, and much-preferred alternatives to the less efficient formal sector.

That these informal credit sources are more efficient can be easily explained. Firstly, because of their essentially local and indigenous operations, they have access to more credit information. Thus, their loan processing is necessarily quicker and their credit decisions are made on-the-spot. Secondly, their flexibility allows them to lend for interim consumption needs of their borrowers. Thirdly, their lending operations are unregulated and are therefore not subject to reporting and monitoring bureaucracies. Lastly, their lending operations are merely peripheral activities (except for the moneylenders and usurers), their bread and butter being their trading margins and

not their financing income. This is significant because in agricultural lending (which accounts for the bulk of rural lending volume), one must have a strong organization for controlling commodity flows (i.e., tracking the goods from harvest to processing to storage up to marketing) and for enforcing field controls. The cost of maintaining this organization can be easily accommodated by the substantial trading margins but not by the thin financing spread that financial institutions have to live with.

Rural Environment. The dearth of bankable rural-based projects has kept financial institutions away from rural markets. Searching for causes, one sees generally low productivity, lack of organization among smallholders to achieve economies, poorly-disseminated technology, and severe infrastructural limitations.

On the macro-level, these limitations are compounded by an overvalued foreign exchange which has been shown to hurt the agricultural sector most, the absence of a genuine and comprehensive land reform, inefficient local governments, and a few policy disincentives.

Business Focus. There is little doubt that many of the rural banks that are now immobilized were either bled by their owners to prop up their own individual business concerns or were forced by fiat to retail specialized agricultural credit funds from the government, mostly crop-specific credit programs that were poorly monitored and administered, had no consistency in implementation, and had ambiguous objectives from the very start.

These problems were aggravated by poor management and weak organizations.

Rural-based branches of commercial banks and thrift banks were primarily established to scoop up deposits in the countryside for lending to their clientele in the urban areas. As a result, their branch organizations often had strong deposit generating capabilities but had regrettably inadequate, if not zero, lending skills.

But even if the lending expertise in the commercial/thrift banks' head offices were moved out to the countryside branches, they would, just the same, not have been able to undertake rural lending with as much conviction, confidence, determination and commitment as would normally be required for such activity. The reasons are varied.

Rural lending is largely agricultural lending. In the past, commercial banks have never really been looked upon as sources of agricultural financing. By their basic functions, even as defined in the charter which created them, commercial banks were expected to provide trade finance and working capital loans. A typical commercial bank's sources of funds would be predominantly short-term (current accounts, savings deposits, short-term time deposits, etc.) and could therefore be expected only to support a short-term portfolio. Unfortunately, most of the financing requirements of agriculture partake of the nature of project finance, essentially medium to long-term. This effectively

prevents banks from massively infusing funds into agricultural projects.

Apart from not being institutionally geared for aggressive agricultural lending, banks are also ill-equipped technically to handle agricultural projects. In order to evaluate agricultural projects intelligently, a banker must have sufficient grounding in the technical aspects of the project and the special risks involved. Likewise in order to monitor and supervise projects effectively, the banker must adequately understand the workings of the business. Lastly, in order to expertly handle post-default work-outs, the banker must have the capability to move in, manage the project and preserve the value of the company's assets until they are disposed. Many banks are sadly lacking in these capabilities.

Because agriculture is vulnerable to such unpredictable elements as the weather, pests and diseases and other environmental problems, the credit risk rating of the sector has been traditionally poorer than the commercial and manufacturing sectors. Lacking familiarity with the ways of handling and managing the peculiar risks in this sector, some commercial bankers have often conveniently dismissed agricultural projects as something "speculative".

Because of these perceived constraints, most commercial banks have chosen to stay in the periphery as far as rural financing is concerned. A common practice is to finance only the traders and processors. Production credits are oftentimes

limited only to such mature and highly-organized industries as sugar, hog-raising, broiler contract-growing, milkfish and prawn culture, etc. Since financing is normally extended on the basis of a strong balance sheet rather than on the strength of projected cash flow, start-up projects hardly ever survive the rigorous credit evaluation by a commercial bank.

THE CHALLENGE OF THE TIMES

Given the current focus on rural development, particularly on the agricultural sector, financing institutions might have to take on new initiatives if they are to remain major players in the rural markets. The choice is between vertical growth which means intensifying their existing role of mobilizing rural savings and channelling these resources to worthwhile projects or horizontal expansion which means assuming new responsibilities vis-a-vis rural development.

The scenario in a vertical growth situation is one of increased specialization. Financial institutions cannot forever use ignorance as an excuse for not lending to agriculture. They will thus have to beef up their rural/agricultural lending desks and acquire, if painfully, a mastery of the nuances of agricultural credit. Not only must they learn agricultural credit evaluation, they must also thoroughly tool up for project supervision and default handling.

However, it is not enough merely to supply credit - which is merely vertical growth. A good number of agricultural projects

do not only need credit to make them viable but also marketing and technology linkages, joint venture equity and project development and management assistance. True, these are resources that financial institutions may not directly have; but these they can easily locate and have access to with some additional effort because of their exposure to a wide variety of clientele. There is therefore every opportunity for financial institutions to graduate into agricultural development corporations engaged not only in lending but also in trading, broking, merchant banking, financial consultancy, project management/development, joint venture promotion, venture capital/equity financing and the buying/selling of bankable agricultural loan papers. By adding these services to their product counters, financial institutions can improve their revenue mixes and hopefully bring down the basic financing cost to the borrower. Likewise, by offering these additional services, financial institutions can directly influence and/or determine the viability of projects. They can thus create new, bankable markets. With this type of horizontal growth, financial institutions can evolve into more relevant rural organizations.

TO SUMMARIZE:

The past environment was not too encouraging for banks, or the formal financial structures, to aggressively go into agricultural lending. That was for a variety of reasons, as I have tried to review for you, all quite valid at the time. Now, however, the opportunities - and in fact, the moral

responsibilities - are such as to challenge all of us to creatively explore new ways and means of expanding agricultural lending and rural development.

That is the challenge, and the work cut out for you, in this workshop.

Thank you.

COMMENTS ON THE REVIEW

by

Dr. Cristina David
International Rice Research Institute

First, let me commend the authors for their excellent work in integrating the large body of literature on rural finance and rural credit related to the LDC's and the Philippines in particular. As they have pointed out, a significant part of the Philippine literature was produced by TBAC. Many of them, however, remain unpublished and confidential in nature.

My comments are very brief and are meant to be constructive.

The organization of the paper and presentation of the arguments can improve substantially if the section on the "Framework for the Conduct of the Review" is expanded to include not only the components, or actors or activities in the RFM but also equally important features, such as (a) the special features and attributes of the production relations as well as the behavioral factors - riskiness, risk aversion and lack of information - which determine the nature of output and factor markets including the financial market; (b) the major features of financial policies that also influence the character of the financial market and institution and (c) the major issues confronting the rural financial market today.

The section on Description of the Economies of LDC's has to go beyond McKinnon-Shaw view to bring out the characteristics of the agrarian economy, specifically, the interlinking of credit

markets to other output factors markets, that determine the nature of credit market. I am referring to the recent articles by Binswanger and Rozenwig and Stiglitz and Weiss, etc. The explanation of market fragmentation simply describes what it is but it does not sufficiently explain the causes which may be due both to the nature of agrarian economy and behavioral factors, as well as to policy. One should be able to distinguish the two in order to derive appropriate policy recommendation for reducing the "fragmentation." In any case, my perception is that within the Philippines, output and factor markets are surprisingly relatively well-integrated rather than fragmented. Returns to labor and land are surprisingly similar across regions of the country. Differences could be accounted for by differences in real factors, quality of land and labor.

Factors are relatively mobile so that factor prices tend to equalize. Contracts and tied transactions or market interlinking are institutions that enable output and factor markets to cope with imperfect information, riskiness, and other imperfections in the market. Recognition of the complexity of those markets can greatly enrich the analysis.

The significant fragmentation is between domestic and border prices caused by government policies. The wide differences in cost of credit faced by the population of poor farmers and the rich capitalists is not only due to repressed financial policies but also due to the very unequal distribution of wealth and to high variability in prices and yields faced by farmers.

I am very happy to see many more general economists working on agriculture related issues. As many of us have been stressing many of the government policies that have had adverse effects on the welfare of the rural population are macroeconomic in nature. I am specifically referring to trade, fiscal, and monetary policies. Much of the strength of the paper stems from the treatment of macroeconomic policies and issues related to formal financial institutions. The weakness lies in the treatment of the microeconomic issues, specifically, the behavior of rural lenders and borrowers and the nature of rural financing institution and the informal market. However, this is easily remedied once it is recognized. Let me encourage interaction among farmers, agricultural economists, lenders, bankers, at the field level, i.e., at the farm and at the bank level. This will also be aided by the fact that analytical studies on the workings of informal market incorporating the interlinked nature of rural transaction written by researchers knowledgeable about the nature of agrarian structure, behavior of participants, and institutions are now available. The review has pointed out much of this originated from interests in explaining behavior in the land tenancy market and thus focused on the interlinked credit and land market. With changing production relations, theoretical efforts need to be directed or extended towards understanding the behavior of millers, traders, and private moneylenders who presently form a more significant segment of the informal market. In modelling the behavior of savers and borrowers, there has been too little explicit attention paid to the fact that

borrowers and savers in the rural areas undertake simultaneous production and consumption decisions. Thus, theoretical efforts need to focus on this and on integrating the effect on saving and borrowing behavior in the presence of fragmented or interlinked markets. In terms of empirical literature and review of literature of the informal market, the recent work by Floro and to some extent Serrano, in addition to TBAC's studies, are very valuable.

Aside from being too brief relative to its importance, the review did not sufficiently cover the neoclassical approach to understanding the informal credit market as compared to the "surplus view."

Another area where much more theoretical work is needed is on the issue of cooperatives. There has just been too many failures but we need to better understand the basis of the successes so that we can promote them.

COMMENTS ON THE REVIEW

by

Mr. Leopoldo P. de Guzman
President, Luzon Development Bank and
Development Bankers Association of the Philippines

Overall

The authors must be congratulated for an exhaustive review of published literature on the key elements of the Rural Financial Markets (RFMs), and more importantly in their own observations and conclusions.

The section on theoretical issues on finance and development was impressive in showing how econometric models can be applied to studying rural finance. However, rural finance is a product of many variables that I feel the production coefficients at best will be useful to show trends or directions.

Major Relevant Findings

As a private development banker with an agricultural loan portfolio above the industry, and with branches all outside Metro Manila, let me summarize the findings in the study which appear to me relevant, and my reaction to these findings:

1. The issue of whether financial development and economic growth is caused by either "demand-following" or "supply-leading" phenomenon is not as crucial as insuring that there are action programs to develop the rural economy.

A bank operating in the countryside responds to both "demand pull" and "supply push;" "demand pull" when it matches competition by offering current accounts; and "supply push" when it markets special program loans like GFSME, IGLF, etc.

The issue of the traditional view of subsidized agricultural credit versus the new view of a market-oriented agricultural credit is a very important one.

The poor record of subsidized agricultural credit programs in the past twenty years; the finding that informal credit has a higher repayment rate and a higher percentage of fully paid borrowers on a matured basis; the findings that the cheap credit are not really cheap after all the transaction costs are taken into account and the present situation where there are not enough borrowers to avail of the cheap special credit program - all these point to the need to re-examine the demand for credit in the rural sector and how best to meet this demand.

Another relevant finding of the study is the fact that a substantial portion of the rural sector have inadequate incomes to guarantee loan repayments, and that loan defaults are primarily due to inability to pay. The TBAC UPBRF findings that 65 percent of farmers fell below a threshold income of ₱5,000/year and 50 percent of peasants are dissavers is disturbing for we are looking at social welfare patients using formal lending institution standards.

Personal Views

The following are the key questions facing us in the rural sector:

- (1) Given the present state of the economy in the rural sector, what developments are needed to accelerate the increase in the standard of living?
- (2) What are the means to deliver credit to the rural sector?

As was reported by Dr. Lamberte and Dr. Lim, credit does not make a non-viable enterprise viable. In short, credit is not the vital resource which will spell the success or failure of the rural enterprise.

I fully support the observation that "to solve the rural credit dilemma, the best policies would be those that will insure the increased incomes and well-being of the majority that is in category (4) or Class C. Only when the majority of farms become viable enterprises will rural credit (even without subsidies) become stable and dynamic. This means that subsidies to the rural areas should be given in terms of direct subsidies to production."

A nagging problem we have today is how to deliver credit to small farmers who are viable but whose circumstances are not tailored to the formal lenders' requirements - or vice-versa, where the formal lenders have not come up with a tailored-fit

program. (I am not sure how serious this problem is, because although there was a supposed drop in agricultural loans in 1986, as the authors pointed out agriculture still posted a positive growth).

The development of multi-purpose marketing credit cooperatives is one answer. However, our experience with this is that it is successful only if the members are commercial farmers whose products have to be packed or processed by a central facility such as sugar cooperatives, livestock cooperatives. But organized among rice farmers who have only 30 to 50 cavans disposable surplus at harvest time, and disposable right at the "patio," the chance for a cooperative's success are small.

If cooperatives will be long in coming to help the small farmers, there are still the following favorable developments, although coming in indirect and a more expensive manner:

- (1) financing of traders, merchants, processors who in turn will finance the producers on a forward contract basis.
- (2) growth of integrators that we find in the poultry industry, now branching into aquaculture and hopefully into other non-farm rural industries such as handicrafts.

There is a pressing need to come up with a sound and practical program to rehabilitate the rural banking industry in the shortest possible time. This is an asset which needs to be rehabilitated as an instrument in rural development.

However, in rehabilitating the rural banks, we need to focus on how Rural Financial Institutions can be encouraged to serve the rural sector. The withdrawal of subsidies to rural banks and development banks needs to be studied, because most financial institutions are reluctant to engage in rural finance - given its high risk, long gestation period and unfamiliarity with the enterprise and borrowers.

Financial institutions generally look at three factors, namely: Risk - Liquidity and Profits. Without any subsidies or regulations, the rural sector will come out poorly compared to the urban sector. The fact that the banking system recently bid $\text{P}27$ billion for $\text{P}4$ billion worth of Central Bank Bills at a net yield of 8.5 percent per annum, reflects the poor credit rating of the rural sector.

Comments on Policy Recommendations

Of the 12 policy recommendations contained in the Report, I am in full agreement with the 10 recommendations but disagree on two of them, namely:

(1) Need for Land Reform

The problems of lack of security of tenure and high land rentals can easily be solved by existing regulations which protect the tenants' right to the land, and by fixing lease rentals. Because of the cost of buying land is prohibitive - $\text{P}100,000/\text{ha}$. in San Isidro, Nueva Ecija as the farmers present here can

attest - the returns on land ownership is low compared to the returns if the money is invested in livestock and non-farm ventures (e.g. tricycle, sari-sari store, handicrafts, etc).

Also, the fact that Land Bank is experiencing a very low collection rate on land reform areas - 4 percent collection in San Isidro, Nueva Ecija, while the Rural Bank of San Isidro, Nueva Ecija has over 85 percent collection rate - is a jolting experience (LBP has 8 percent collection rate on loans to land reform beneficiaries).

(2) Renewal of Loan Quotas (P.D. 717)

Unless commercial and thrift banks are required to devote 25 percent agri-agra loans they will avoid agri-agra projects for reasons cited above. What is wrong is the implementation of the policy: CB allowed the bank to buy substitutes at low yields.

If P.D. 717 is retained and enforced strictly, what may develop is a secondary market for mortgages of agri-agra loans originated by countryside banks purchased by city-based banks. Thus, rural banks and thrift banks which have good records in agricultural lending can sell their agri-agra loan portfolios to commercial banks with unfilled agri-agra loan quotas.

Lastly, I would like to add one policy recommendation, that is: Government must undertake programs to reduce the risks in

rural credit, so that banks will be encouraged to lend more funds to it. These risks cover the following:

- (1) risks from drought/floods --- irrigation and drainage system
- (2) risks from pests/disease --- plant quarantine and pest and disease control
- (3) market risks --- price support
- (4) post harvest facilities --- driers, warehouses, mills, to be encouraged by Government.

Research Needs

Finally, may I make a comment on research on rural credit. It would be a great help to both the policy planners and the private financial institutions if more studies can be made on why some financial institutions succeed and some fail. For example, out of the 1,000 rural banks I understand that 10 percent to 15 percent have done very well. Let us study these "survivors" for they have the "genes" or virtues which other rural banks might be able to copy.

Case studies on the rehabilitation of some rural banks, on the success and failure of some cooperatives will be valuable to planners and practitioners alike in meeting the credit needs in agriculture.

COMMENTS ON THE REVIEW

by

Ms. Purita F. Neri
Director, CB-DER (Domestic)

The paper essentially achieves what it sets out to do. As a matter of fact, the thrust of most of its policy recommendations is being pursued in recent Central Bank policies. This is seen in the move away from credit allocation functions towards stabilization functions, market orientation and competition rather than credit subsidies and arbitrary ceilings. A flexible exchange rate policy and a market determined interest rate policy are already being pursued while proposals to do away with loan quota schemes are being supported. These moves were made in recognition of the over-riding importance of and need for increasing efficiency and rising productivity in developing economies to provide the main means by which sustained advancement can be achieved through self-reliance.

Experience has shown only too well that credit subsidies only lead to misallocation and non-rational use of resources, general inefficiency and inflation. It is bad enough when such subsidies are funded by taxes. It becomes disastrous when funded by new money or credit creation by the Central Bank that only results in inflation and destabilization. It is generally agreed that the agricultural sector, particularly the farmers should be given assistance but it is also important to note the growing consensus that such assistance would be best extended not through

credit subsidies but through production subsidies, i.e. means that would directly help the farmer enhance his productive capacity, improve his efficiency, productivity and selling capability to make him creditworthy. The rehabilitation of ailing banks should also be done not so much through such painless means as continued subsidies, concessions but by programs which would develop and enhance their equity and deposit base to make them mobilizers of funds.

The paper questions the use of the weighted average savings and time deposit rates as basis for determining the rediscount rate and instead proposes the "prime rate" as base rate. For the information of the group, it is not the weighted average of savings and time deposit rates which is used as base rate but the weighted average of time deposits and MRR 90 which best indicates the point at which banks would be indifferent as to whether or not they would source their funds from the rediscounting window. Since the "prime rate" is a "lending" and not a "sourcing" rate, it is seriously doubted whether it would be more appropriate than deposit rates. Moreover, statistics on the prime rate are not available and are difficult to get. Previous attempts to produce a series on prime rates including one in cooperation with the BAP were unsuccessful because of difficulties in definition (e.g. what are prime customers, would it include collateral business) and the reluctance of banks to disclose the rates they charge prime customers, etc.

The paper concludes that financial intermediation is a failure in the Philippines and summarily indicts Central Bank policies as the culprit for disintermediation. This conclusion was based on the declining share of deposits to total assets of the banking system from 1960 to 1984. A check of the figures indicated that deposits here included only traditional deposits i.e. demand, savings and time deposits and did not include deposit substitutes. As such, the picture would be distorted inasmuch as deposit substitutes became an increasingly important component of banks' deposit liabilities on the late sixties up to the early eighties as banks tried to take advantage of differentials in reserve requirement, interest rate ceilings, taxes, etc. However, when interest rate ceilings were lifted and reserve requirement and taxes were equalized (i.e. deposits substitutes no longer enjoyed differentials) interest shifted from deposit substitutes to traditional deposits. Recent statistics indicate this. The inclusion of deposit substitute could change the picture and is strongly urged.

This paper also stated that the CB created specialized banks through which credit to favored sectors can be channeled. This does not seem to be accurate since the Central Bank Charter, I believe, does not empower it to create specialized banks. One specialized bank, DBP, was already existing at the time the Central Bank was established and the two others, PNB and Land Bank, have their own charters. As far as I know, the Central Bank has disapproved or resisted proposals to put up specialized

COMMENTS ON THE REVIEW

by

Dr. Carlos E. Cuevas
Assistant Professor
Ohio State University

These notes are primarily a "first reaction" to the excellent review of literature and discussion of issues presented by the authors. My comments and remarks attempt to follow the order of chapters in the paper, even though sometimes they refer to issues addressed in more than one chapter. General comments are mixed with specific remarks or questions, I apologize for this.

Treatment of Finance in Formal Models.

There appears to be a gap between macro and micro models in this area. Models are defined either in terms of major macro aggregates (money, wealth, savings, investment) or as behavioral models of the firm (farmer, lender) or the individual (borrower, saver). There is no "in between." Multi-sector models of development usually ignore finance and financial issues. It seems to me that there is "unexplored" research ground here.

"Traditional" Views versus "New" Views

It is interesting to note here that both schools have shown some evolution in recent years. Of particular interest is the position of the "new view" with respect to "supply-leading" finance.

On the one hand, the new school has been usually critical of supply-leading finance strategies, on the basis that these schemes are associated with cheap credit policies, heavy subsidization of government banks, and credit controls. On the other hand, recent works by "new viewers" have been emphasizing the importance of reducing transaction costs to improve savings mobilization in rural areas and to reduce costs of borrowing. In fact, the work by Srinivasan and Meyer found the availability of rural branches to be the most important factor affecting rural savings. These results point towards the implication that making financial services available in remote (rural) areas is important, a result that sounds "supply-leading" to me. Maybe someone should write a "state of the new view" to get these things sorted out.

The "Iron Law" and the Gonzales-Vega Model

There is no strong empirical support for the prediction of this model as originally formulated. The basic prediction that lenders adjust their loan portfolio in favor of large borrowers through quantity restrictions has not received clear support.

Instead, the empirical work supports the notion of "price" adjustment, when the rationing effect of transaction costs is taken into account, and transaction costs are considered as part of the total price of borrowing. As originally formulated, the model ignores transaction costs (they do not appear anywhere in the diagrams, do they?). Gonzales-Vega has revised this for his

lectures. The related issue of consistency with the "law of one price" is not addressed in the model either.

I think that the more general prediction that interest rate restrictions will induce concentration in the distribution of credit is still correct. The mechanism of adjustment however is primarily through transaction costs (for borrowers), rather than explicit quantity restrictions by lenders. The source of the adjustment is the ability of lenders to apply different loan practices to different borrowers ("selective application of the loan procedure").

Interlinked Markets

The interaction of formal and informal financial markets may be one of the most promising research topics here. Whether formal and informal financial intermediaries are "competitive," "complements" or "substitutes" are questions that can be addressed very rigorously with theoretical and empirical models.

I guess one possible starting concept is that, even though finance is fungible, financial services are not. Financial services may be conceived as the specific way in which finance is "packaged" by suppliers. Those provided or offered by institutions (e.g. formal loans) may be seen as different "commodities" vis-a-vis those offered by informal suppliers. The idea is that the attributes or the vector of characteristics of financial services are not homogeneous across different suppliers. A formal model could be casted in terms of utility

maximization (i.e., household approach) or profit maximization (i.e., farm firm approach) or some combination of the two, on the demand side (there is a book edited by Clifton Wharton [1967] with several theoretical models "Subsistence Agriculture...").

Complementarity or substitutability could then be addressed empirically by estimating substitution parameters between formal and informal financial services.

Transaction Costs

The "Agricultural Credit Study, 1986" by TBAC is a good source here. They make a good distinction between "risk expenses": insurance/guarantee fees and bad debt/litigation expenses, i.e., actual expenses, and "opportunity costs of funds locked in arrears," i.e., imputed costs.

Savings Rates

A distinction should be made between average and marginal propensities to save. Increases in income in rural versus urban areas will have different effects on aggregate savings depending on the different marginal propensities to save out of income.

COMMENTS ON THE REVIEW

by

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The paper is definitely an excellent effort at integrating the various studies (published and unpublished) on rural finance, particularly those that refer to the Philippine setting. The authors have done a tremendous job in producing this desirable output. However, I would like to comment on the substance of the review.

The paper talks about the three theoretical approaches (or main tendencies) in the study of rural financial markets (RFMs): (1) the traditional approach, (2) the new views on RFMs and (3) the surplus approach. Actually, the so-called three approaches are really just two groupings: (1) the traditional approach and (2) the non-traditional approach. (i) New views on RFMs or the OSU-WB view, (ii) Transactions cost school or the interlinked market view, and (iii) the surplus view are simply considered sub-categories under the non-traditional approach.

It is quite surprising that beyond the discussion on "theoretical approaches," nothing has been mentioned on various methodological approaches employed in rural finance. The reader will get the impression that only survey and regression techniques are relevant in rural finance studies. Yet there is a growing literature on the use of (i) discriminant analysis in predicting agricultural loan repayment performance, (ii) models

on utility-maximizing borrowers faced with various options' such as to repay or to become delinquent, and (iii) benefit-cost studies on RFMs. The work of Best (1977) which is discussed in the paper can easily be discussed under "Various Methodological Approaches." Likewise, the works of Gonzales-Vega, Tolentino, Williamson, Van Atta, Burkner, Mejia, Tan, Fry, Sicat, and Giovannini are also good materials for a discussion on different approaches employed in rural finance studies.

Most researchers have pointed to the inadequacies and lack of comparability of data on rural finance in low income countries. It might be interesting to point out under a section on "Nature of Data" whether the Philippine setting is relatively better off as far as data availability is concerned. Comparability of data on savings has already been discussed in the paper under the section on "Saving in the Philippines and in the Rural Sector."

Conclusion

I want to reiterate that the above suggestions do not, in any way, diminish the laborious achievement of Dr. Lamberte and Dr. Lim in producing an excellent paper that synthesizes existing studies on rural finance with relevance to the Philippines. Such an undertaking deserves much appreciation and encouragement.

CAN MONEY BE MADE IN RURAL FINANCING?

Closing Remarks
Workshop on Rural Financial Market Research
Central Bank, 6 January 1987

by RAMON K. KATIGBAK
Deputy Minister
Ministry of Finance

I am not sure if what I have to say can properly be called closing remarks. Closing remarks for a conference such as this should consist essentially of a commentary on the preceding discussions, and I missed most of them, so I have very little idea what the preceding discussions were.

What I will offer instead is some thoughts inspired by the long and impressive paper -- which is really a complete book -- prepared by Dr. Lamberte and Dr. Lim as the starting point of this conference. Since I was not here most of the day, there is some danger that I will just be repeating what some of the reactors have said before. But our dynamic Executive Director and Organizer, Mrs. Agabin, has told me not to worry about that. In fact, she said it might even be a good thing, because independent repetition on my part would reinforce conclusions reached at this conference.

However, my experience leads me to believe that what I have to say will not entirely be a repetition. Rural credit is one of the most important policy areas, and there have been many conferences and discussions on it, some of which I have attended. But it occurred to me on reading our conference paper that there

is one very basic question that I have never heard asked at any agricultural policy conference, and I am willing to bet that it wasn't asked today.

The question is very simply, Can money be made in rural financing? The object of the exercise is after all to make resources flow into rural financing rather than say real estate or some other commercial or industrial venture, and the way to do this is to make investors perceive it as profitable.

By rural financing I of course don't mean financing of commercial scale agri-business ventures. In terms of loan processing and administration these are not very different from other commercial and industrial operations, and I have the impression that the present commercial banking system handles them fairly well. At least, at one agricultural policy conference, when I asked agri-business interests what they wanted from the government, the reply was, "Just leave us alone."

I mean the financing of the type of operation we usually have in mind when we talk about the lack of agricultural financing and indeed about the agricultural problem in general: the prevalent small-scale farm run by low-income farmers.

To me the most interesting things about our conference paper are that it presents evidence that there is a large and profitable market for this type of rural financing; it provides indications of the nature of this market; and it gives suggestions on the type of operation that might be designed to tap this market more systematically and effectively.

When we say that the volume of agricultural lending is low, both in absolute terms and as a proportion of value-added, and that the interest rates charged by informal agricultural lenders range up to 83 per cent, or even more, what we are saying is that in this market there is plenty of room for expansion and the prices are very good. In the present state of our economy, which is still depressed even though the recovery has started, there are not many products about which this can be said. So why isn't there more of a rush of investment into rural financing?

There are three commonly cited reasons.

The first is that the average size of loan is small, so that administrative cost per loan is high.

The second is that the average size of farm is small, so that the collateral value available to the farmer is small, and his title may be imperfect to begin with.

The third is that agriculture is subject to uncertainties of weather and other things, and is thus inherently more risky than other businesses.

The important thing to keep in mind about the new government agricultural policy is that it's not going to change any of this.

The main thrust of the new agricultural policy is to remove policy biases against agriculture, and its effect will hopefully be an inflow of investment into the agricultural sector. But these will be commercial-scale ventures, of the sort that can be

financed by the present banking system and thus outside the scope of our discussion. On the other hand, the government also plans to expand the land reform program, and one effect of this will be to reduce the average size of farm still further.

Thus, the present characteristics of the type of farm we are concerned with can be expected to continue indefinitely, and a rural financing operation must be designed to take them into account. In particular, it must consider that the two main bases of conventional credit evaluation, namely good collateral value and a track record of consistently successful past operation, cannot be applied.

The informal credit system provides an alternative to conventional credit evaluation in the form of local knowledge and ties of kinship or friendship, but this is of course not a good basis for attracting outside investment.

Fortunately, our conference paper reports other alternatives for developing good credit relationships between the rural lender and the small farmers. These are the sale of inputs to the farmer and the processing and purchase of his output, with all these operations involving the provision of credit. This has two additional advantages for the rural financier. First, it opens up additional profit opportunities, in the form of mark-ups on the input sales and trading margins on the output purchases. Second, it is much easier to get financing for a fertilizer dealership or a rice milling or trading establishment than for a pure moneylending operation.

We are of course already moving in this direction, with rural moneylenders going into trading and traders and dealers expanding their businesses by providing credit. But what I would like to see is the application of modern sophisticated business methods to the provision of integrated agricultural services, meaning providing inputs, credit and an output market under one roof. This would provide additional scope for increasing in size and realizing scale economies. Our conference paper suggests that if properly designed, such an operation could be very attractive to enterprising managers and investment bankers.

Providing integrated agricultural services is of course what was done by the oldest rural financing system, that of the landlord; and the role of government policy here is to protect the farmer from similar domination by commercial interests. This can be done in two ways. The first is to encourage competition among the providers of services so that the farmer will have a choice and costs will be bidden down. The second is to ensure, through a sound price stabilization policy, that the relationship between input costs and output prices provides the farmer with a decent income. Such a price stabilization policy will certainly be the most important and effective support for the small farmer.

This suggests that we need two further studies, both of which are of great practical importance and neither of which appears explicitly in the policy agenda of our conference paper, although elements of both are to be found in various places in the paper.

The first is a sound price stabilization program, and this should be coordinated with the work now being done by the National Food Authority. I should mention that various international institutions have expressed interest in supporting such a program, so this study could have immediate practical application.

The second is a project feasibility study for an integrated input, credit and trading operation. Since the objective would be to explore profit possibilities and attract possible investors, this would also have immediate practical application. For example, it would be a natural for financing by the private agricultural investment corporation being developed by the Agriculture Ministry with AID.

I suppose I should now make the conventional closing remarks and congratulate the participants for a useful and stimulating conference. As you know, I was absent for most of it, but judging from the quality of the conference paper and the reputation of the participants, I am sure it must have been excellent.

Finally, since the objective of my remarks has been to suggest new topics for study, they have really sounded more like the introduction to a new conference rather than the end of an old one; but I think this is also a legitimate function of closing remarks.

Thank you.



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